COMMERCE DEPARTMENT

MN Energy Efficiency For All

CIP Planning Low-Income+ Meeting #3

WELCOME! We will start at 2:05 pm

AGENDA

- **Recap and Refresh** (5)
  - Who are we and why are we here?
  - Recap of previous two meetings
- **Fuel Switching** (25)
  - Q&A
- **Financial/Performance Incentives** (25)
  - Q&A
- **Pre-weatherization** (25)
  - Q&A
- **Next Steps and Close Out** (5 min)

VIRTUAL HOUSEKEEPING

- **Please mute yourself** during the presentation portions
- **Use the chat and "Q&A" feature** to ask your questions
  - There will be an opportunity for Q&A after each topic
  - We welcome questions or comments throughout the meeting – facilitators will monitor
  - Any unanswered questions will be responded to after the meeting

WHO WE ARE

Organizing Group:

MN Energy Efficiency For All

WHO WE ARE

Donte Curtis (he/him)
Owner/Lead Consultant
Catch Your Dream Consulting

Arlinda Bajrami (she/they)
Policy Manager, Stakeholder Engagement
Midwest Energy Efficiency Alliance

RECAP OF WHY ARE WE HERE?

Overall Goal: create a process for **non-utility participants** to influence decisionmakers in the design and access of **utility energy efficiency programs** and propose new solutions or programs in an informal context prior to the formal regulatory review process.

Non-utility participants:

- Advocates
- Program implementers
- Community organizations or members
- Local gov't
- Anyone else interested

Focused on:

- Programs designed for under-resourced customers (incl. "Low Income")
- Multifamily residents
- Renters
- Black, Indigenous, People of Color*

WHAT IS THIS?

Overall Goal: create a process for **non-utility participants** to influence decisionmakers in the design and access of **utility energy efficiency programs** and propose new solutions or programs in an informal context prior to the formal regulatory review process.

PHASE I (Current)

Build groundwork for goal, focused on providing *high-level* recommendations to **INVESTOR-OWNED** utility energy efficiency planning currently underway

(Jan 2023 – April 2023)

PHASE 2

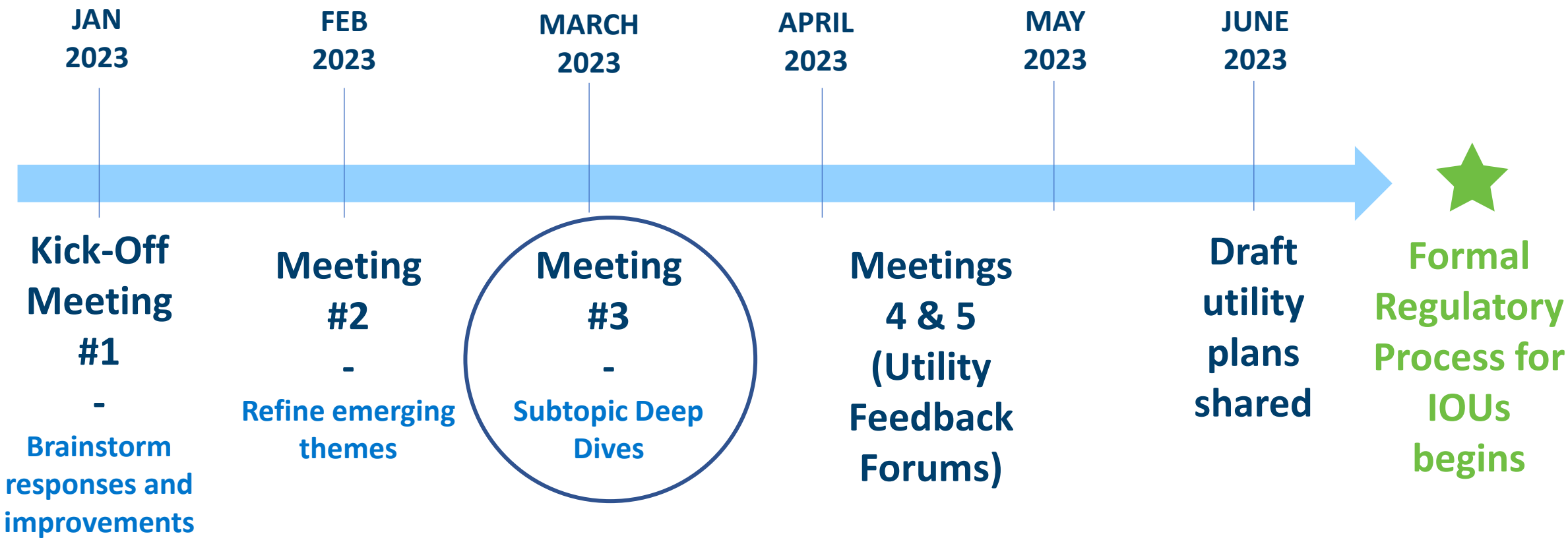
Permanent "Low-Income+" Energy Efficiency Working Group **(ALL UTILITIES)**

(Summer/Fall 2023)

EMERGING THEMES FROM MEETINGS 1&2

1) Consumer-Owned Utilities (cooperatives/munis)
2) Making it easier for Energy Service Providers to implement energy efficiency
3) Making it easier for customers to participate in programs
4) Workforce Development and Contractor Training
5) Specific improvements for “low to moderate” income CIP programs

TIMELINE FOR PHASE I (this process)



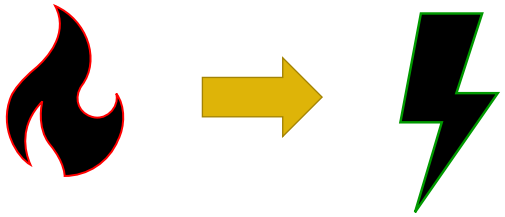
Efficient Fuel-Switching in the Conservation Improvement Program

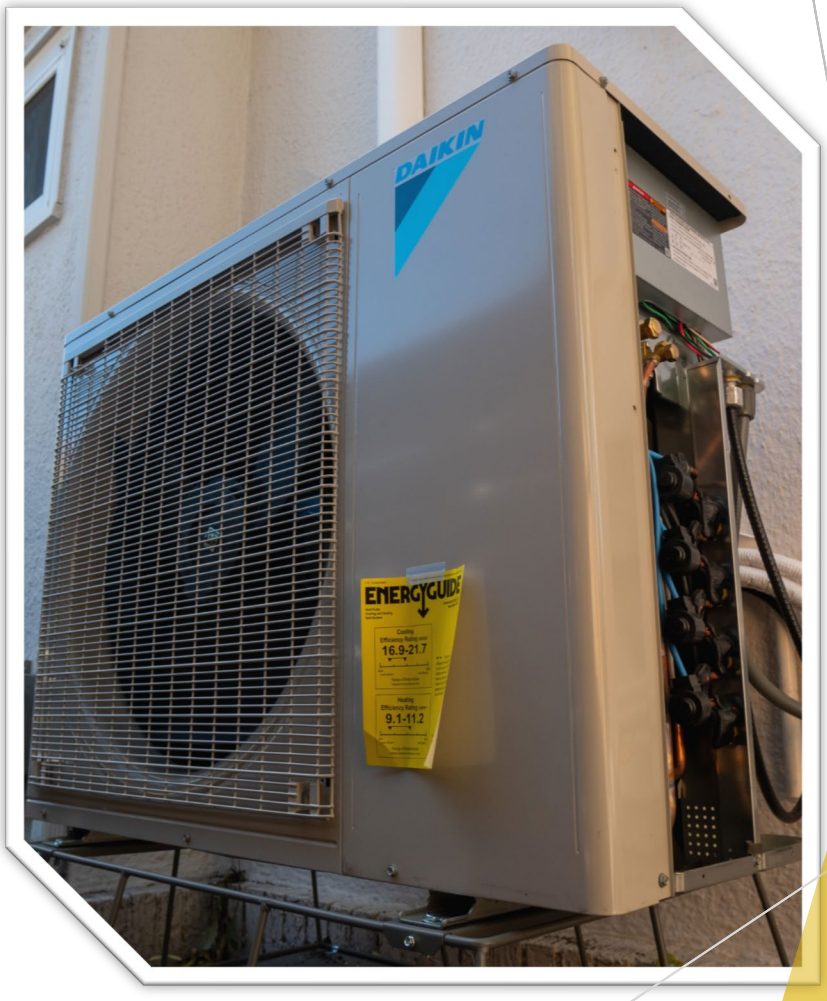
March 30, 2023 | Prepared for CIP LI+ Workshop #3

Caitlin Eichten (she/her)
Senior Policy Associate, Buildings

Efficient Fuel-Switching – Definition

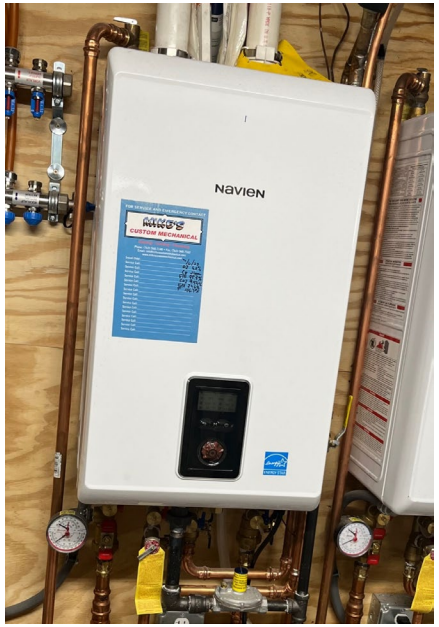
- A utility program that enables customers to switch from one fuel type to another
  - E.g., switching from a gas- or propane-fired furnace to an electric heat pump for heating
  - Primarily used to accomplish **strategic electrification**





Fresh Energy

Efficient Fuel-Switching – Definition

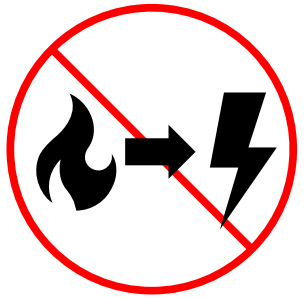


Fresh Energy

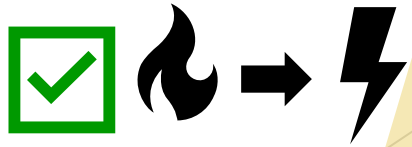
Efficient Fuel-Switching – Brief Context

- Before passage of the Energy Conservation and Optimization (ECO) Act in 2021, utilities were **prohibited** from fuel-switching via CIP
  - CIP focused on ensuring that utilities sold fewer units of energy
- ECO Act now also allows utilities to propose efficient fuel-switching (EFS) projects in their CIP plans and receive equivalent energy savings credit
  - **Electrification** is a major tool as we work to reduce carbon emissions; the prohibition on fuel-switching was becoming a barrier to deeper decarbonization

Before ECO Act



After ECO Act



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Efficient Fuel-Switching – ECO Criteria

- ECO Act, codified in Minn. Stat. § 216B.241, requires a fuel-switching improvement to:
  - Reduce amount of energy used
  - Reduce statewide greenhouse gas emissions
  - Be cost-effective
  - Improve the utility's system load factor
- ECO Act **incentivizes electrification** by allowing some utilities to claim energy savings from fuel-switching toward their goals

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Efficient Fuel-Switching – Energy Savings Goals

	Qualify toward energy savings goal?	Qualify toward spending requirement?	Maximum allowed spending for EFS*
Electric utility (IOU)	No X	Yes ✓	0.35%
Natural gas utility (IOU)	Yes ✓	Yes ✓	

*Percent of gross annual retail sales; effective until July 1, 2026

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Efficient Fuel-Switching – Energy Savings Goals

	Qualify toward energy savings goal?	Qualify toward spending requirement?	Maximum allowed spending for EFS*
Electric utility (IOU)	No X	Yes ✓	0.35%
Natural gas utility (IOU)	Yes ✓	Yes ✓	
Electric and natural gas COU	Yes**	Yes	0.55%

*Percent of gross annual retail sales; effective until July 1, 2026

**Of 1.5% energy savings goal, a minimum of 0.95% must be met from energy conservation; EFS qualifies for remaining 0.55%

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Efficient Fuel-Switching – Department Guidance

- Department's March 2022 ECO Technical Guidance (CIP-21-837) provides a detailed step-by-step process that utilities proposing CIP programs must follow to incorporate EFS measures into programs
- Department led an advisory committee that worked on updating cost-effectiveness methodologies for the upcoming triennial
  - Included developing a technical guidance help Minnesota's electric and gas IOUs conduct cost-effectiveness evaluations of their EFS programs (CIP-23-46)

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Efficient Fuel-Switching – Opportunities

- Ensure that **efficient fuel-switching** in CIP furthers the state's energy and climate goals and promotes the deployment of electrification in our homes and businesses
- Natural gas is primary heating source in many electric service territories
- Further incentivize gas utilities to promote efficient fuel-switching via the CIP DSM financial incentive
- These workshops leading up to the Triennial are a great opportunity to provide input to utilities; additional opportunities to weigh in after utilities file their plans in June

Fresh Energy

Thank you!

- Additional resource:
  - https://fresh-energy.org/the-conservation-improvement-programs-legacy-in-minnesota

Caitlin Eichten

eichten@fresh-energy.org

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Appendix

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Efficient Fuel-Switching – Department Guidance

- Department's March 2022 ECO Technical Guidance (CIP-21-837) provides a detailed step-by-step process that utilities proposing CIP programs must follow to incorporate EFS measures into programs
  - Electric and gas utilities (IOUs and COUs) offering EFS measures and programs with an electric ending fuel type are explicitly permitted in statute
  - Utilities wishing to propose EFS programs with a natural gas ending fuel type may do so on a custom basis
  - EFS improvements may include both electricity and gas components (e.g., gas supplemental heating for an air source heat pump)

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Efficient Fuel-Switching – Cost-Effectiveness

- Department's Proposed Cost-Effectiveness Methodologies (CIP-23-46) includes a Technical Guidance for the cost-effectiveness of EFS
  - Intended to help Minnesota's electric and gas IOUs conduct cost-effectiveness evaluations of their EFS programs
  - In their triennial plans, IOUs should:
    - Create an EFS segment that contains only EFS measures
    - Consider cost-effectiveness of EFS improvements at the program level based on the Minnesota Test and secondary tests
  - Deputy Commissioner's Decision on the proposal is expected March 31, 2023

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Efficient Fuel-Switching – Benefit/Cost Example

Table 6a. Program Benefit/Cost Ratios, 2021-2023

Project	Ratepayer Impact Test	Utility Cost Test	Societal Test	Participant Test
Residential Segment Projects				
Home Efficiency Rebates	0.59	3.41	2.51	3.19
DIY Home Efficiency	0.58	3.06	4.76	N/A
Home Insulation Rebates	0.54	2.13	0.96	1.27
Home Energy Reports	0.47	1.38	2.00	N/A
Home Energy Squad	0.31	0.54	0.72	4.90
High Efficiency Home	0.49	1.58	2.19	3.57
New Home Construction Rebates	0.52	1.83	1.71	2.69
School Kits	0.50	1.62	2.49	N/A
Subtotal	**0.55**	**2.45**	**2.08**	**3.09**

*Example from CenterPoint Energy's 2021-2023 Triennial Plan, illustration only

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Financial/Performance Incentives for Utility Energy Efficiency Programs

THE CASE FOR INCLUDING LOW INCOME METRICS

Chris Neme

March 30, 2023

Energy Futures Group

Vermont-based clean energy consulting firm established in 2010

Areas of Expertise

- Energy efficiency & renewable energy
- Program design
- Integrated resource planning
- Policy development
- Expert witness testimony
- Building codes
- Evaluation
- Cost-effectiveness

Range of Clients

- Government Agencies
- Advocates
- Regulators
- Utilities

Clients in 45 states and provinces plus regional, national and international organizations.

The Purpose of Utility Financial/Performance Incentives

- Encourage/reward exemplary performance
  - Lots of anecdotal evidence that this works
  - Some limited empirical evidence that it works
  - Increase in benefits to customers should be bigger than utility reward
- Encourage focus on all important policy objectives for EE
  - Total savings achieved
  - Longevity of savings achieved
  - Economic net benefits achieved
  - Emission reductions achieved
  - Evidence of transformation of important market segments
  - Reducing low income energy burdens
  - Addressing historic inequities
  - Others…

Common Examples

Financial/Performance Incentive Design Considerations

- Size – what's the max $ utilities can earn
- Selection of performance metrics
  - Address key policy objectives
  - Address trade-offs – objectives that pull you in different directions
  - Ideally reward outcomes, not spending or process
- How much weight ($) to put on each metric
- Performance bands
  - Performance threshold to start earning must be high enough so not "slam dunk"
  - Performance required for max incentive should be a "stretch" – not always reached

Why Low Income Metrics?

- Low income households need good utility EE performance the most
- Low income households often historically underserved
  - Both single family and multi-family
- Low income goals will compete with other goals
  - Whole building low income programs are expensive…
  - …and typically contribute only small portion of total EE plan savings
  - Maximizing total savings across all customers w/in a budget creates incentive to spend only as much as necessary on whole building low income programs
  - Low income metrics force balancing and more equity within of utility goals and energy efficiency portfolios

Example: DTE Electric (Michigan) 2022-23

Lifetime Savings (MWH)		Income Qualified Spend ($1,000)		Income Qualified Electrically Heated Buildings & Wx Measures	
Minimum (50%)		Minimum (85%)		Minimum (50%)	
YR 2022	4,210,210	YR 2022	$27,041	YR 2022	200
YR 2023	4,222,152	YR 2023	$28,751	YR 2023	Higher of 200 or 2022 Actuals (max 400)
Maximum (100%)		Maximum (100%)		Maximum (100%)	
YR 2022	8,420,420	YR 2022	$31,813	YR 2022	400
YR 2023	8,444,303	YR 2023	$33,825	YR 2023	Higher of 600 or 2x 2022 Actuals (max 700)
Weight	80%	Weight	12.5%	Weight	12.5%

Low Income Metric Observations

- Spending metric – would be better to make spending a minimum requirement to earn any $, make earnings a function of program outcomes
- Metric on major measure installations – DTE had lifetime savings metrics in the past, created perverse incentives to invest in light bulbs and other low cost measures that do less for low income customers and which DTE already had an incentive to install to meet portfolio savings goals. Other previous low income metrics include number of MF efficiency assessments, but current designs seem to be addressing that issue well now (so less importance for metric)

Example: DTE Gas (Michigan) 2022-23

Lifetime Savings (MCF)		Income Qualified Spend ($1,000)		Income Qualified Wx Measures (Count)	
Minimum (75%)		Minimum (85%)		Minimum (differs by year)	
YR 2022	16,127,512	YR 2022	$13,808	YR 2022	2,250
YR 2023	16,160,389	YR 2023	$14,658	YR 2023	3,250
Maximum (100%)		Maximum (100%)		Maximum (100%)	
YR 2022	21,497,973	YR 2022	$16,245	YR 2022	3,250
YR 2023	21,541,799	YR 2023	$17,245	YR 2023	4,500
Weight	80%	Weight	10.0%	Weight	15.0%

Low Income Metric Observations

- Spending metric – similar to electric, but less weight on spending because of longer history with promoting major measures (good!)
- Metric on major measure installations – much higher goals because of greater number of gas heated homes; focus on Wx measures (excluding gas equipment) because of historically low levels of investment in such measures

Example: Enbridge Gas (Ontario) 2023

Program and Offering(s)	Metric	DSMSI Allocation	2023 Scorecard Targets			
			Metric Weighting	Lower Band (75%)[1]	2023 Target (100%)	Upper Band (125)[1]
Residential Program Scorecard						
Residential Whole Home	Net Annual Gas Savings (m3)	22%	100%	16,601,933	22,135,911	27,669,889
Residential Single Measure						
Residential Smart Home						
Low Income Program Scorecard						
Home Winterproofing	Single Family Net Annual Gas Savings (m3)	22%	50%	2,154,597	2,872,796	3,590,995
Affordable Housing Multi- Residential	Multi-Residential Net Annual Gas Savings (m3)		50%	3,761,703	5,015,604	6,269,505
Commercial Program Scorecard						
Commercial Custom	Large Customer Net Annual Gas Savings (m3)[2]	22%	50%	11,580,961	15,441,281	19,301,601
Prescriptive Downstream						
Direct Install	Small Customer Net Annual Gas Savings (m3)[2]		50%	6,685,547	8,914,062	11,142,578
Prescriptive Midstream						
Industrial Program Scorecard						
Industrial Custom	Net Annual Gas Savings (m3)	22%	100%	37,782,673	50,376,897	62,971,121
Large Volume Program Scorecard						
Direct Access	Net Annual Gas Savings (m3)	3%	100%	6,975,000	9,300,000	11,625,000
Energy Performance Program Scorecard						
Whole Building Pay For Performance	Number of Participants	1%	100%	19	25	31
	Net Annual Gas Savings (m3)		0%	0	0	0
Building Beyond Code Program Scorecard						
Residential Savings By Design	Number of Energy Star Homes	8%	30%	1,088	1,450	1,813
	Number of Net Zero Ready Homes		0%	0	0	0
Commercial Savings By Design	Number of Participants		30%	21	28	35
Affordable Housing Savings By Design	Number of Participants		30%	14	18	23
Commercial Air Tightness Testing	Number of Participants		5%	4	5	6
	Number of Qualified Agents		5%	8	10	13

Low Income Metric Observations

- Entirely focused on lifetime gas savings – program history of comprehensively treating building envelop in homes eliminated need to call out “major measures”
- Separate metrics for single family and multi-family – deemed important to ensure equitable treatment by building type
- Performance band of 75% to 125% of budgeted savings goals – hits “sweet spot” where utility performance is uncertain

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Focusing on our core utility businesses

Pre-Weatherization Measures in CenterPoint Energy's CIP Low-Income Programs

Marty Kapsch, Regulatory Analyst

Thursday, March 30, 2023

CenterPoint Energy

What is Pre-Weatherization?

- As defined by the Energy Conservation and Optimization Act (“ECO”), a **pre-weatherization measure** is “an improvement that is necessary to allow energy conservation improvements to be installed in a home.”
- **Health, safety, and structural barriers to energy efficiency improvements** include asbestos, vermiculite, radon, mold, roof leaks, plumbing leaks, basement water leaks, sewer problems, and defective or substandard electrical wiring
  - If these issues are not addressed, projects are deferred and households miss out on energy and cost saving measures

Pre-Weatherization and ECO

- ECO allows utilities to spend CIP dollars on pre-weatherization measures
  - Caps pre-weatherization spending at 15 percent of total CIP low-income spending
- Pre-weatherization spending counts towards the statutory minimum low-income spending requirement
  - ECO requires utilities to spend the equivalent of at least 1 percent of gross operating revenue from residential customers on CIP programs directly serving low-income customers

Pre-Weatherization Measures in CenterPoint Energy's CIP Low-Income Programs

- In 2022, CenterPoint Energy added budget to its CIP low-income programs for pre-weatherization measures
  - Programs serve low-income homeowners and renters, rental property owners with 1-4 unit buildings and 5+ unit buildings occupied by low-income households, and nonprofit affordable housing agencies
  - Program offerings include home energy audit, heating and water heating system replacement, air sealing and insulation, and direct install measures

2024-2026 CIP Triennial Plan

- No changes expected, except for **modifying pre-weatherization budgets to match anticipated demand**
- 2022 pre-weatherization measure counts and spending are still being finalized, however CenterPoint Energy is expecting they will be lower than plan
  - Final numbers will be in CenterPoint Energy's 2022 CIP Status Report, which will be filed May 1

Questions?

Pre-Weatherization Funds

AN IMPLEMENTERS PERSPECTIVE

Kendrick Paulson

Assistant Director of Operations

CAPRW Energy Conservation Department

Community **Action**
Partnership of Ramsey
& Washington Counties

PARTNERING WITH PEOPLE TO OVERCOME POVERTY
SERVE. EDUCATE. TRANSFORM.

Minnesota
Weatherization
Assistance Program
Policy Manual

MANUAL
Updated January, 2023

produced with
U.S. Department of Energy
Weatherization Assistance Program Funds

COMMERCE DEPARTMENT
DIVISION OF ENERGY RESOURCES

No cost services for EAP approved clients:

- Energy audits
- Mechanical system upgrades
- Insulation & air sealing

What is Pre-Weatherization?

Examples of pre-weatherization measures from Dept. of Commerce program

Allowable Repairs:

- Mold and Moisture
  - Grading/landscaping repairs for seepage control
  - Gutters/downspout repair, replacement, or addition
  - Sump pump repair, replacement, or addition
  - Black mold removal
- Structural
  - Foundation repairs
  - Roofing repairs
  - Roof replacement including, replacing decking material and roof, and/or changing roof material (e.g., shingles to metal)
  - Window/door repair or replacement
- Mobile home skirting
- Interior and exterior wall repairs
- Ceiling and floor repairs
- Plumbing/sewer repairs
- Electrical repairs or upgrades such as knob and tube replacements and panel upgrades
- Inaccessible crawl spaces
- Remediation of excessive clutter or hoarding
- Chimney liner repair and replacement

Updated January 2023

Benefits

- Allows for less deferrals
- Agency can work with trusted contractor
- All work is inspected for quality
- Improves health of client
- Increases structural longevity of the home

Challenges

- Limited number of contractors that perform specialized work
- Difficulty on-boarding new contractors with policy requirements
- Inability to guarantee adequate supply of work
- No standard process or allowable measures across funding sources

Questions?

CLOSING OUT

- **What to expect next:**
  - Will share a follow-up email with today's slides and compiled responses from Q&A
    - Additional comments are also welcomed after today's meeting
  - Save the dates for meetings 4 & 5
    - April 17, 1:30 – 3pm
    - April 25, 3 – 4:30pm

- **For any questions or comments after this meeting, please email:**
  - Laura Silver at laura.silver@state.mn.us OR
  - Anjali Bains at bains@fresh-energy.org

THANK YOU!

END OF MEETING