



## Weatherization Program Bulletin 23-5

Effective Date: October 1, 2023

**Subject:** Low-Income Home Energy Assistance Program (LIHEAP) Weatherization Funds Savings-to-Investment Ratio (SIR) Reduction for audited buildings.

**Purpose:** This bulletin explains the Energy Audit process revisions associated with reducing the *Measure* SIR implementation requirement for LIHEAP from 1.0 to 0.5, the *Cumulative* SIR is greater than 1.0.

The SIR modification would still provide Weatherization clients with a savings on future energy costs of costs 50% of the installation cost of the Measure (within the estimated life of the measure.) While including the 1.0 Cumulative SIR requirement provides a “back-stop” that ensures that the combination of all of the work in the home will still provide the homeowner with a future energy cost savings equal to the total installed cost of the work in the home. It allows the SIR’d measures greater than 1.0 to help fund the installation of cost of measures with SIRs of between 0.5 and 0.99.

**Scope:** The provisions of this bulletin apply to LIHEAP Funds used in the Low-Income Weatherization Assistance Program by program sub-grantees.

**Procedures:** Designated LIHEAP Funds used in-conjunction with the Low-Income Weatherization Assistance Program, unlike DOE Weatherization funds, do not have to meet the 1.0 SIR requirement established by DOE statutes.

Sub-grantee Energy Auditors will:

- Modify the *Minimum Acceptable SIR* value in the *Economics Section* of the *Key Parameters Section* of the *NEAT/MHEA Library* from 1.0 to 0.50.
- Complete an on-site Inspection of all home(s) as per the latest *DOE Approved NeWAP Policies and Procedures* and *Field Guide and Installation Standards*.
- Complete an Energy Audit of single-family and small multi-family units (2 to 4 units) as per the latest *DOE Approved NeWAP Policies and Procedures* and *Field Guide and Installation Standards* and review the resulting audit *Recommended Measures Report* to ensure that the Cumulative SIR “backstop” requirement of 1.0 or greater.
- Utilize the Department of Energy (DOE) Approved NeWAP priority list for multi-family buildings (5 to 24 units).

Once the Energy Auditor has completed the above steps for the project, the work order can be developed, and the project can proceed to implementation.

The following are example *Recommended Measures Report - Energy Savings Measure Economics* Sections indicating the impact on this home of the SIR modification and the funding options available for implementing the *Recommended Measures*.

### *Energy Saving Measure Economics*

<i>Index</i>	<i>Recommended Measure</i>	<i>Components</i>	<i>Measure Savings (\$/yr)</i>	<i>Measure Cost (\$)</i>	<i>Measure SIR</i>	<i>Cumulative Cost (\$)</i>	<i>Cumulative SIR</i>
1	Infiltration Redctn		25	25	8.4	25	8.4
2	DWH Pipe Insulation		24	3	83.5	28	16.4
3	Lighting Retrofits	LT1,LT2	18	22	8.7	50	13.0
4	Attic Ins. R-30	A2	42	481	1.8	531	2.9
5	Door Replacement	1	57	750	1.2	1281	1.9
6	Attic Ins. R-30	A1	9	181	1.0	1462	1.8
7	AC Lineset		0	50	0.0	1512	0.0
8	Air Seal Kneewall Doors		0	125	0.0	1637	0.0
9	Blower Door		0	50	0.0	1687	0.0
10	Filter Cover		0	20	0.0	1707	0.0
11	H&S Water Heater		0	2442	0.0	4150	0.0
12	Mastic		0	55	0.0	4205	0.0
13	Vapor Barrier		0	200	0.0	4405	0.0

#### **Economics Using a 1.0 SIR – 6 Energy Efficiency Measures**

- All Measures with an SIR of 1.0 or greater are “listed” above the blue line.
- Health & Safety and mandatory work have no Measure SIR and are shown below the blue line. The cost associated with this work would be billed to Health & Safety or General Heat Loss.
- The Cumulative SIR for the energy efficiency work to be completed on the home is 1.8 and is eligible for implementation. The costs associated with completing this work would be billed to Energy Efficiency using either DOE or LIHEAP funds.

## Energy Saving Measure Economics

Index	Recommended Measure	Components	Measure Savings (\$/yr)	Measure Cost (\$)	Measure SIR	Cumulative Cost (\$)	Cumulative SIR
1	Infiltration Redctn		25	25	8.4	25	8.4
2	DWH Pipe Insulation		24	3	83.5	28	16.4
3	Lighting Retrofits	LT1,LT2	18	22	8.7	50	13.0
4	Attic Ins. R-30	A2	42	481	1.8	531	2.9
5	Door Replacement	1	57	750	1.2	1281	1.9
6	Attic Ins. R-30	A1	9	181	1.0	1462	1.8
7	Attic Ins. R-30	FA1	14	332	0.9	1794	1.6
8	Fill Ceiling Cavity	A3	2	69	0.7	1863	1.6
9	Refrigerator Rplcmnt		47	900	0.6	2763	1.3
10	AC Lineset		0	50	0.0	2813	0.0
11	Air Seal Kneewall Doors		0	125	0.0	2938	0.0
12	Blower Door		0	50	0.0	2988	0.0
13	Filter Cover		0	20	0.0	3008	0.0
14	H&S Water Heater		0	2442	0.0	5450	0.0
15	Mastic		0	55	0.0	5505	0.0

### Economics Using a 0.5 SIR – 9 Energy Efficiency Measures

- All Measures with an SIR of 1.0 or greater are “listed” above the orange dotted line.
- All Measures with an SIR of 0.5 to 1.0 are “listed” between the orange dotted line and the blue line.
- Health & Safety and mandatory work have no Measure SIR and are shown below the blue line. The cost associated with this work would be billed to Health & Safety or General Heat Loss.
- The Cumulative SIR for the energy efficiency work (including the 0.5 measures) to be completed on the home is 1.3 and is eligible for implementation.
- The costs associated with completing the work above the orange dotted line would be billed to Energy Efficiency using either DOE or LIHEAP funds.
- The costs associated with completing the work between the orange dotted line and the blue line would be billed to Energy Efficiency using LIHEAP funds.

Following the completion of the work and the receipt of a satisfactory Quality Control Inspection (Form Wx1), the project BCJO can be submitted for reimbursement.

Sub-grantees with questions regarding this guidance can contact the NDEE Grants Section Supervisor Katie Svoboda at 402-471-3347 or [katie.svoboda@nebraska.gov](mailto:katie.svoboda@nebraska.gov).