MERP Assessment Breakdown

Howden Hall - Projects Recommended by the Bristol Energy Committee * Note: projects with figures in blue are questioned by the committee but could be considered.

Energy Conservation Measures (section 1.3)

- \$5,200 Weatherization Projects: includes roof/attic, windows, door and general air sealing
 \$5,200 Total Energy Conservation Measures
 - Included in this section was a high-efficiency propane fired boiler at a cost of \$12,500. This measure was separated from the others since it is an energy conservation and fuel switching measure. This measure is not cost effective from a financial perspective only at the present time. It is marginally cost effective when accounting for the additional benefits of reduced cost volatility and reduced environmental impact when the existing boiler requires replacement.

Renewable and Resilient Energy Measures (section 1.4)

\$6,675 Battery Electric Storage

- This is included for info purposes only. We need to consider if worth the investment
- \$2,625 Solar PV
- \$17,050 Air-to-air Heat Pumps
 - A heat pump system is not cost-effective from a financial payback alone. Accounting for the additional benefits of reduced energy cost volatility, positive impact on the local economy, reduced environmental impact and cooling capability may make this a worthwhile investment. An air-to-water heat pump system is more easily integrated with the existing hot water heating system.

Upgraded Electrical Service (section 3.3)

??? The existing electrical service does not appear to have the capacity to support the addition of electric vehicle chargers and electric heat pumps and would need to be upgraded from 200 to 300A (detailed later in report). A licensed electrical engineer should be consulted to verify if any modifications are required.

Sub-total \$24,875 Items in black \$6,675 Items in blue

Total \$31,550

Note: The cost of items identified with ??? will need to be evaluated and estimated by contractors for inclusion in total.

Note: with the MERP program there is no cost to the town - no match.