

## **Recommendation for new Low income energy efficiency program for next year**

A low income weatherization rebate program should be included in the FY 2016 energy efficiency budget. The rebate program would be implemented in conjunction with the Neighborhood Housing Repair program to obtain efficiencies of scope. Eligibility for the program would be determined by the agency performing the home repairs and would be based on 50% area family median income ("AFMI") or lower. AFMI is a HUD income eligibility criteria for programs funded with HUD monies that is relied upon for the home repair program. Rebates would be set to recover the contractor costs in performing the weatherization services and the rebates would be paid to the weatherization contractors; however, the contractor costs would be standardized consistent with the contractor pricing for plumbing repairs performed as part of the home repair program that is reimbursed by the water department. Contractors certified by AE to perform weatherization services for the home performance with Energy Star EE programs would be eligible to participate in this rebate program. Energy and demand savings would be calculated on the whole job especially including the home repairs which make the home "weather tight" as a prerequisite for implementation of AE's traditional low income weatherization programs, thereby acknowledging the energy and demand savings realized from the home repairs funded with public monies.

**Pros:** By incorporating the weatherization funded by AE into the repair job being done by the repair coalition, savings will result from increased contractor efficiencies. Additionally, this

incorporation would allow the weatherization services to be performed under the same city permits, either as part of the original permit or through an amendment that is less costly and time consuming. More importantly, customer contacts will be minimized allowing the customer a more seamless service. Using a rebate system will avoid the necessity of AE hiring contractors for this low income weatherization program. AE will be able to rely upon contractors that are already certified by AE for the non-low income weatherization energy efficiency programs, thereby reducing administrative costs.

**Cons:** Implementation risks consistent with new programs may occur. From a customer perspective, there may be less accountability for job performance. AE has not captured energy and demand savings from the whole house repair. AE uses “deemed” savings for each of its weatherization components. Deriving the energy and demand savings from the complete home repair will pose a challenge. It is likely initial start-up costs will be incurred to address this issue.

**Recommended Budget:** AE EE budget for this program should be based on the number of houses budgeted for home repair through Neighborhood Housing times \$6000. This is a conservative number which in all likelihood will result in a surplus at the end of the budgeting cycle. The \$6000 number is based on weatherization including HVAC and refrigerator replacement. The appliance replacement will not be done for every house repaired under Neighborhood Housing. The surplus remaining in this program should be carried over to the next fiscal year’s energy efficiency budget.

## FAQs

Q: Why tie AE low income weatherization rebate program with the Neighborhood Housing repair program?

A: The housing repair program administered by Neighborhood Housing and implemented through the Home Repair Coalition has a proven track record in bring the houses they repair up to AE weatherization standards. AE will refuse to weatherize houses that are to “leaky”. AE does do minor repairs for health and safety reasons but a cap is set on that expenditure that AE will not exceed except for exigent circumstances occurring during AE’s performance of the weatherization services. Having AE provide weatherization’s services through a rebate program reduces administrative and contractor costs.

Q: A review of AE low income weatherization program costs reveal many residences being weatherized at a cost greater than \$6000. Why should we be confident that a \$6000 per house budget is a conservative number for funding this program?

A: A home repaired through Neighborhood Housing covers repairs that AE oft times will make for health and safety. The \$6000 reflects AE’s costs to provide weatherization services, HVAC and refrigerator replacement but generally doesn’t include the additional costs incurred for health and safety. These costs are already covered.

Q: Low income weatherization programs rely upon “deemed” savings from the weatherization measures provided by AE. Why should we include the EE savings from the weatherization measures provided by the repair coalition?

A: By merging the AE weatherization program into the home repair jobs through rebates, we have “leveraged” AE investment into broader EE savings potential. The home repairs traditionally performed by the Home Repair Coalition include replacing windows and doors with energy efficient ones. The coalition repairs roof and wall leaks that increase the energy efficiency of the home. These energy savings should be captured. Just as AE captures all the savings from a non-low income weatherization of a house while investing less than half of that cost through rebates, AE should capture all the EE savings resulting from the complete weatherization project that it has paid for in part through rebates.

Q: How are we going to calculate the EE savings resulting from the work performed by the Home Repair Coalition since there are no “deemed” savings?

A: First, there may be some deemed savings that we might find through research. Second, at the very least, we can compare the before installation with the after installation consumption. Tracking this raw consumption data would be a first step. The second step would be to make additional adjustments like normalization for weather that utilities, including AE, routinely make. Additional adjustments may rely upon an actuarial study to establish “tempering” factors utilized in actuarial sciences to account for behavioral changes.<sup>1</sup>

Q: Why not turn all low income weatherization programs into rebate programs?

A: Rebates rely upon a standardization of construction costs. Joining AE weatherization contract jobs with the repair jobs performed through Neighborhood Housing ensures the costs incurred for the AE weatherization services are standardized. For traditional low income weatherization jobs, additional costs can occur for safety and health reasons that would be difficult, at best, to standardize these costs.

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<sup>1</sup> An example of this type of adjustment is auto insurance where actuaries adjust the losses with a tempering factor to account for driver behavior in response to law changes such as an increase in the speed limit.