
WEATHERIZATION INDUSTRIES SAVE ENERGY

565 21ST ST SE SALEM, OREGON 97301 • (503) 569-1381 • WEATHERIZATIONALLIES@GMAIL.COM

COMMENTS ON ACHIEVABLE SAVINGS: A RETROSPECTIVE LOOK AT THE NORTHWEST POWER AND CONSERVATION COUNCIL'S CONSERVATION PLANNING ASSUMPTIONS

Weatherization Industries Save Energy (WISE) is an Oregon trade association of residential weatherization and HVAC contractors, manufacturers, and distributors. It is dedicated to promoting energy conservation through the services of its members, keeping conservation measures affordable, and providing policy-makers with the experience-based knowledge of business owners.

WISE is pleased to see that the Council is examining its methodology and assumptions and welcomes the opportunity to provide comment. Due to the specialized knowledge and experience of WISE's members, such comments will be limited to the retrofit portion of the residential sector. WISE advocates that the Council has underestimated the potentially achievable savings from residential retrofit opportunities.

The notion that residential retrofit savings will sharply decline after 2015 appears overly conservative at best. The Council's statement that "by 2015 all of the lower cost (<\$50/MWH) non-lost opportunity resources have been acquired"¹ seems to contradict the main thrust of the rest of the issue paper. Elsewhere in the paper the Council clearly shows that advances in technology provide for cost effective savings as fast they can be put into place. It would therefore seem more reasonable to assume that technology will continue to develop than to assume that it will falter its progress². Additionally the Council does not appear to have factored in the need for previous weatherization work to be redone or improved. Currently, many weatherization firms are retrofitting homes that were weatherized in the 1980's and early 1990's.³

The main supporting argument for this claim appears to be that it is "clear that the pace of residential weatherization has slowed considerably since the early 1980's."⁴ It may be clear that the savings reported to the Council have decreased, but that does not mean that there are fewer saving available. Years of ramping up and slowing down have frustrated many in the weatherization industry and led them to not participate in utility programs. The constant change of programs has also confused many homeowners. The end result is that fewer contractors are pushing full weatherization packages and participation in utility programs, and fewer homeowners are looking to utilities for information and assistance. Indeed, new potential savings as a result of advances in technology (such as duct and air sealing or better windows

¹ Council Document 2007-7 p5

² Window technology seems to be a perfect example. In 1983 a U-.87 window was considered to be energy efficient. BPA's current standard is a U-.30. By 2015, current products will certainly be obsolete and, in some cases, ready for replacement.

³ For example, it is very common to overblow an R-19 batt ceiling (with an effective R-Value closer to 10) to R-38.

⁴ Council Document 2007-7 p10

and insulation) have likely more than offset the savings acquired in the past; the same will most likely continue into the future.

Neither the opportunity nor the interest for savings have waned, just excitement about utility programs. It would seem then that the question for the Council, the RTF, and BPA must become how to capitalize on the opportunities and interest that exist in the northwest. Although this topic seems peripheral to the scope of these comments, the methodology of determining cost-effectiveness, which is integral to program design, is clearly germane.

The Northwest Power Act charges BPA with acquiring cost-effective savings. It also dictates that calculations of cost-effectiveness take into account the system benefit of any given measure. BPA and the RTF have developed a methodology around this that includes any cost to the end user as part of the cost of a measure. This seems perfectly justified when a measure is required, such as is the case with a building code. It is right that before mandating a measure, there should be a high standard to determine cost-effectiveness. However, this methodology gives more weight to cost than to effect by adding cost to the end consumer without balancing it with unquantifiable benefits to the end consumer. This disqualifies measures that would otherwise qualify.

A methodology that would lead to a more effective program would take into account that, for voluntary measures, end users can make their own cost-effectiveness calculations. If an end-user is not required to do a measure (such as in the case of most retrofit measures) the BPA should determine cost-effectiveness *for BPA* and leave it to the end user to determine cost-effectiveness for themselves.⁵

Another quick note on retrofit measure cost calculations is that it is far more common for a project to be expensed than financed. This should further affect the cost-effective calculations.

If the retrofit portion of residential sector provides steady savings of 120 aMW per year, WISE contends that this will, depending on BPA's decisions, either remain steady or possibly increase far into the future. WISE further contends that the decisions made by BPA regarding its residential conservation programs will determine how much is saved, but that the total potential savings will be closer to 2400 aMW than the 1600 aMW predicted in Council Document 2007-7.

In sum, while the argument that non-lost opportunity conservation will continue at an upper limit of 120 aMW per year, that there are 1,500-1,600 aMW of potential, that 85% of that potential is achievable, and that therefore by 2015 the bulk of savings should be realized is deductively sound, it is inductively absurd. The weakest premise of the argument appears to be that there are only 1,500-1,600 aMW of potential. It is at that point that WISE would recommend that the Council focus its reconsideration of residential retrofit conservation possibilities.

For more information contact Jeremy Anderson at (503) 569-1381.

⁵ This means that for any measure, BPA would pay a flat \$ per annual kWh regardless of societal c/e and leave it to the end user to determine if the difference between the total measure cost and BPA's contribution is too expensive for the benefit.