DE 17-136

Statewide 2018-20 Energy Efficiency Plan
Benefit-Cost Work Group

Adopting a Separate Low Income Adder in New Hampshire

Presentation by NH Legal Assistance
on Behalf of The Way Home
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I. Introduction

The Benefit-Cost Work Group has been asked to consider a number of issues relating to non-energy impacts (NEIs) and adders. One question, and the subject of this presentation by NHLA, is whether it is appropriate for New Hampshire to adopt a separate low income adder and, if so, when, for how long, and in what percentage amount. NHLA suggests, on behalf of The Way Home, that it is appropriate for New Hampshire to adopt a separate low income adder.

II. Adders, Including a Separate Low Income Adder, Are Necessary and Appropriate in the Absence of Specific Monetized Non-Energy Impacts.

The use of adders, or combined approaches, in which adders and monetized Non-Energy Impacts (NEIs) are included, have enabled states to be more comprehensive in terms of cost-effectiveness analysis. Non-Energy Impacts Approaches and Values: An Examination of the Northeast, Mid-Atlantic, and Beyond, Northeast Energy Efficiency Partnerships, Inc., 2017 (hereinafter, "NEEP Report"), p. 1. The NEEP Report notes at page 9, that even with various methods applied to NEIs, some attributes may be difficult and costly to monetize. In addition, accuracy of the many NEI estimates may be questionable, controversial, and difficult to use effectively in modeling. The Report further notes that it may also be difficult to attribute specific NEIs to specific measures. NEEP Report, p. 9.

Adders are an alternative to monetized NEIs. Adders also have advantages beyond lower cost. They can acknowledge the existence of impacts that we know are not zero in value. NEEP Report, p. 9.

More than 20 states and Washington, DC account for NEIs in some way in their cost-effectiveness tests. Testimony of Michael R. Goldman, Sept. 1, 2017, DE 17-136 (hereinafter "Goldman"), p. 3. Regulatory bodies have approved measured NEI values or adders, or both. Goldman, p. 3. Some jurisdictions also apply an additional percentage for certain programs, such as low income programs, which are known to have more significant non-energy benefits. Goldman, pp. 3,4.

When adders are used they are most often used as proxies for low income NEIs and as proxies for emissions reductions. NEEP Report, p. 40. Adders allow jurisdictions to account for the value of NEIs, given limited resources for evaluations to precisely measure NEIs. Goldman, p.4.

The use of adders can also be appropriate when a state is seeking to implement specific public policies. One such public policy, for example, is to promote the delivery of energy efficiency services to low income households. Testimony of Roger D. Colton, November 1, 2017, DE 17-136 (hereinafter "Colton"), p. 25.

General adders can be applied to all NEIs, although if there are particular impacts of higher importance, such as low income or environmental, an adder for that particular impact can be developed on top of a general adder. NEEP Report, p. 41.

III. Low Income Programs Generally Have Higher NEI Values Than Non Low Income Programs.

A. General, or Portfolio-Wide NEIs and Adders Do Not Capture All Low Income Specific NEI Values and Benefits.

Low income programs are known to have more significant non-energy benefits than non-low income programs. Goldman, pp. 3,4. The value of low income participant perspective NEIs can be expected to exceed the value of non-low income participant perspective NEIs on a percentage of energy savings basis. Colton, pp. 25, 35 (l. 23), and p. 36 (ll. 1, 2). All four states studied in Colton Appendix B (CO, MA, MD, CT) support this conclusion. Colton, p. 27.

Mr. Goldman notes in his testimony that neighboring states' low income residential programs have NEIs ranging from nearly 68% to 177% of total resource benefits. Goldman, p. 10.

In the New England states of MA, CT, RI, and VT, low income NEIs substantially exceed non-low income NEIs on a percentage basis. Colton, p. 29. Mr. Colton points to Table 1, p. 8 of 11 of Mr. Goldman's testimony in this regard. Mr. Colton notes that with the exception of Vermont, which uses a smaller adder, the low income NEIs exceed the non-low income NEIs by a factor of 200% to 700%. Colton, p. 29.

B. General, or Portfolio-Wide NEIs and Adders May Understate Some Low Income NEI Values and Benefits.

Mr. Colton points out in his testimony at pages 30-34, and in his Appendix B, that some NEI studies have under-estimated certain NEI values, particularly as they relate to low income households. Colton, pp. 29, 30. Indeed, Mr. Colton notes that the MA study which evaluated Health and Safety NEIs acknowledges that the report under-estimates certain values. Colton, pp. 29, 30, and Appendix B, pp. 1-4, Bates pp. 78-82 (CO; MA).

Accordingly, some jurisdictions provide an additional percentage or adder for low income programs over and above a general adder. For example, as pointed out by Mr. Goldman, Vermont uses a 15% adder to account for the hard to quantify benefits that factor into participant decision-making, and an additional 15% low income NEI adder, which the Public Service Board determined was a conservative estimate of the unique benefits of low income programs. Goldman, p. 9.

IV. Other States Have Adopted Low Income Adders or Multipliers.

Adders allow jurisdictions to account for the value of NEIs, given limited resources for evaluations to precisely measure NEIs. Goldman, p. 4. Mr. Goldman notes that, in several states, low income NEI adders have been approved as temporary, conservative proxies, to be updated with measured NEI values from subsequent evaluations or evaluations in other states. Goldman, p. 4.

For example, in 2008 the Colorado PUC adopted a 20% NEI adder for low income programs and directed an update of the quantification of low income NEIs (Decision No. C-08-0560, 5/23/08). In 2011, the Colorado PUC approved a proposal to increase the low income NEI adder to 25% based on the results of a study done pursuant to the 2008 Order (Decision No. C-11-0442, 3/30/11). Goldman, p. 4.

Mr. Goldman notes that the Vermont Public Service Board determined in 2012 that it was appropriate to adopt a 15% NEI adder, subject to continued monitoring and potential revision in future proceedings (VT PSB Order, 2/7/12). Goldman, p. 4. See also Table 1 on page 8 of Mr. Goldman's testimony in which he notes that Vermont's participant NEIs are applied as a 15% adder to total energy benefits, with an additional 15% adder for low income programs. Goldman, p. 8. See also, Goldman, p. 9 regarding the Vermont 15% low income adder. In this regard, the NEEP Report notes that the Vermont Board acknowledged that the adders are an approximate, conservative estimate of the value of low income benefits, but that such a value is better than assuming zero, which is clearly not correct (VT PSB Order, 2012, p. 30). NEEP Report, p. 39.

Several Tables in the 2017 NEEP Report show states that have adopted low income adders or multipliers. For example, Table 10, which begins on page 18, shows that, in applying the TRC Test to low income DSM programs in 2012, the benefits included in the calculation were increased by 20% to reflect the higher level of non-energy benefits that are likely to accrue from DSM services to low income customers. Thus, Colorado's low income NEI adder was raised form 20% to 25%. NEEP Report, p. 18.

Table 10 indicates on page 19 that New Mexico adopted a 15% adder, and that low income weatherization includes a multiplier of 1.25 for benefits. The Table further indicates that lifetime energy savings from programs targeted exclusively to low income customers are valued at 1.25 times the actual KWh savings. NEEP Report, p. 19.

Table 10 shows that Utah authorized an environmental adder of 10% of benefits for low income cost-effectiveness if allowed by regulators. NEEP Report, p. 19.

Table 10 shows the 15% general adder as well as the additional 15% low income adder for the non-energy benefits of Vermont's low income programs. NEEP Report, p. 19.

Table 10 shows that for Puget Sound Energy, in the state of Washington, a 10% adder was adopted. The Table also indicates that non-quantifiable NEBs may include low income health and safety and low income energy efficiency. NEEP Report, pp. 19, 20.

Table 11 of the NEEP Report (pages 21-24) also shows that in addition to the states noted above in Table 10, Wyoming authorizes an environmental adder of 10% of benefits for low income cost-effectiveness if approved by regulators. NEEP Report, p. 24.

Finally, Table 24 of the NEEP Report (page 56), entitled Summary of NEI Values by Customer Sector – Vermont, indicates that the percent adder for the Low Income Sector would be 32% in Vermont, or more than twice as high as the Vermont Residential Sector adder of 15%. NEEP Report, p. 56.

In this regard, see the testimony of Roger D. Colton, in which he concludes that monetized participant perspective non-energy impacts arising from energy efficiency investments will be greater for low income than for non-low income households. Colton, pp. 35, 36. Mr. Colton also concludes that to the extent that the non-energy impacts are accounted for through use of an NEI adder, a separate and larger NEI adder is appropriate for low income customers. Colton, p. 36.

V. Separate Low Income Adders Can Reflect Specific State Public Policy Considerations.

Mr. Colton points out in his testimony that the use of a separate low income adder would allow the Commission to incorporate New Hampshire public policy favoring the delivery of energy efficiency to low income households into the NEI determination. See RSA 374-F:3, VI and F:3, X. Colton, p. 35. Mr. Colton notes that the public policy favoring low income energy efficiency is predicated on (1) promoting an equitable distribution of efficiency investments, (2) the improved affordability resulting from low income efficiency investments, and (3) the increased efficiency of low income bill affordability programs provided through usage reduction rather than through the need for repetitive fuel assistance or rate discounts. Colton, p. 25. See also pp. 12-14 of Mr. Colton's testimony for a more detailed discussion of public policy related to the equitable distribution of energy efficiency investments.

The presence of these public policies allows the Commission to weigh the benefits of quantifying NEIs against the possible imprecision of establishing an NEI value differently for low income and for non-low income customers. Colton, p. 35. The NEEP Report also notes in its Summary of Findings and Conclusions, starting on page 40, that looking ahead and taking key policy goals into account would help guide New Hampshire in the development of unbiased, comprehensive, forward-looking energy efficiency cost-effectiveness assessment. NEEP Report, p. 44.

VI. Conclusion.

The Way Home views this presentation on low income adders as the beginning of a discussion of this issue. The Way Home looks forward to participating in further discussions with the Benefit-Cost Working Group and the Commission on this subject.

Respectfully submitted,
By New Hampshire Legal Assistance
on behalf of The Way Home

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