NON-ENERGY BENEFITS IN OTHER JURISDICTIONS

Celia Johnson June 15, 2015 TRC Subcommittee Meeting

Issue

 Should NEBS be included in the Illinois TRC calculation? If so, how should they be quantified?

NRDC Proposal

- 1. 15% Default Non-Low Income Benefits Adder
- 2. 30% Default Low Income Benefits Adder
- 3. 50% Whole House Retrofit Program Benefits Adder
- 4. Other program specific adders can be developed to replace default values
- 5. Begin conducting some IL NEBs studies
 - Could be added to existing evaluations at modest cost.

Research Questions

- Which jurisdictions include NEBs in the TRC calculation?
- How are NEBs quantified, and what is the magnitude?
- What adder(s) are currently used in Illinois?

Research Findings

- NEBs are not widely incorporated in calculating energy efficiency program cost-effectiveness. However, the trend appears to be a slow but steady movement toward broader incorporation of NEBs.
- NEB adders in jurisdictions that utilize them range from 10-25%, with 10% or 15% being the most commonly used adder.
- Two states use a NEBs adder above 15%. Colorado uses 25% for low-income (with 10% as a general adder); Vermont uses 30% for low-income (with 15% as a general adder)

Current Practice - Illinois

- Ameren IL: 7.5% gas; 10% electric
- ComEd: No NEBs adder; CO2 costs at \$0.0139/kWh (C/E Report, EPY5)
- DCEO: 10% (DCEO reports TRC results with and without NEBs, assuming a 10% adder, not distinguishing between gas/electric NEBs); see additional detail in Table 1
- Nicor Gas: 7.5% gas
- Peoples Gas North Shore Gas: 7.5% gas

Other methods:

- Include NEBs benefits in the IL-TRM (water savings for the following measures: clothes washer, showerhead, aerator, thermostatic restrictor valve; dishwasher; ozone laundry, and HE pre-rinse spray valve).
- Include carbon in TRC analysis.

NEBs Adders in Other Jurisdictions

- British Columbia: 15%
- Colorado: 10%; 25% low-income
- **lowa:** 7.5% gas; 10% electric
- MidAmerican Energy: 7.5% gas; 10% electric
- New Hampshire: 15%
- Oregon: 10%; carbon at \$15/ton
- Vermont: 15%; additional 15% for low-income (totaling 30%)
- Washington: 10%

Examples of Other Approaches*

- California: NEBs are included in a special low-income C/E test. Participant-perspective NEBs include: water and sewer savings; fewer shutoffs; fewer calls to the utility; fewer reconnects; property value benefits; fewer fires; reduced moving costs; fewer illnesses and lost days from work or school; net benefits for comfort and noise; and net benefits for additional hardship.
- **Massachusetts:** NEBs are incorporated at the measure level. In 2011 a study was prepared for the Massachusetts PAs assessing and monetizing the NEBs applicable to the residential and low-income programs in the state. The results of this study have been incorporated into the Massachusetts TRM.
- Northwest Regional Technical Forum (RTF): 10% adder (EE premium), as required by statute.
- Pacificorp (CA, OR, WA, ID, UT, WY): Environmental adder of 10% for low-income C/E, if the regulators allow.

*See Table 2 for additional examples.

Next Steps

SAG questions:

- 1. What studies support the NEBs values that NRDC recommends?
- 2. How should NEBs be calculated, at the measure, program, or portfolio level?
- 3. Can NEBs be negative? If so, how to deal with this?
- 4. Is there a difference including NEBs on electric vs. gas portfolios?
- 5. Should IL have a "blended" adder?
- 6. Should carbon and environmental benefits (SOx, NOx, microparticles) be calculated separately?
- 7. Find out how IPA will treat NEBs in upcoming procurement.

Discussion points:

- NRDC Proposal do SAG participants agree or disagree with values?
- Narrow the issues; discuss consensus resolution