Opinion Dynamics

IL-SAG POLICY MANUAL SUBCOMMITTEE POLICY PROPOSAL

Electrification Savings in Cost-Effectiveness Analyses

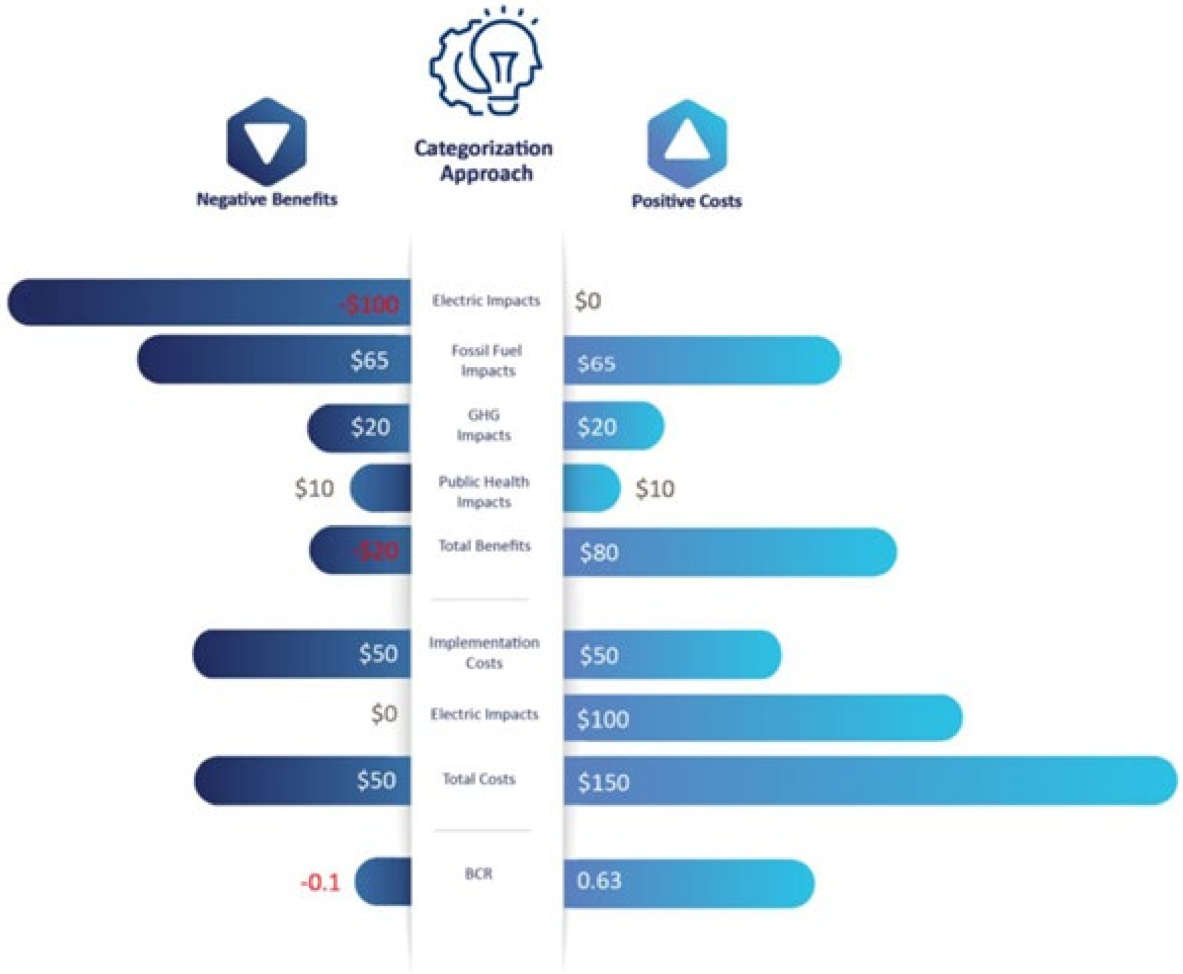
October 19, 2022

Background

- Passing of CEJA authorized electric utilities to pursue electrification.
- Electrification measures will produce simultaneous changes in the consumption of multiple fuels – decreased fossil fuel consumption and increased electricity consumption.
- Introduces a *relatively* new paradigm regarding the definition and monetization of costs and benefits in CE analysis.
  - Increased electricity consumption could be thought of as “negative savings”.
  - Negative savings have been encountered in traditional EE programs (e.g., heating penalties).
  - Under existing frameworks, we have taken a “net benefits” approach to these negative savings – i.e., left them on the benefits side of the BC equation as negative benefits.
  - Magnitude of negative savings from electrification warrants re-visiting this approach and considering whether they should be treated as costs rather than negative benefits.

Summary of Issue

- Fictional electrification scenario:
  - Implementation cost: $50
  - Avoided energy costs: -$100
  - Avoided fossil fuel costs: $65
  - Societal NEIs: $30
- Decision to categorize increased consumption as negative savings vs. costs has considerable impact on BCR.
  - BCR of 0.63 vs. -0.1.
- Note that net benefits do not change; just the BCR.



Opinion Dynamics Proposal

- We do not have a specific position on this issue.
- However, we believe explicit guidance should be included in the Policy Manual as to whether these impacts should be treated as negative benefits or positive costs to ensure program administrators, implementers, and evaluators conduct cost-effectiveness analyses in a consistent manner.
- We present two suggested Policy Manual edits on the following slides for group consideration.
- Either way, we recommend effectiveness of this policy as early as possible to avoid confusion.

Positive Costs Example

- New section added to Policy Manual Section 8

8.6 Electrification

The following definitions should be adhered to for purposes of classifying effects associated with electrification measures when performing the TRC Test analysis:

i. **Decreased Fossil Fuel Consumption:** Any avoided costs related to fossil fuel consumption avoided through electrification measures should be treated as benefits in the TRC analysis.

ii. **Increased Electric Energy Consumption and Electric Demand:** Any avoided costs related to increased electric energy consumption and electric demand associated with electrification measures should be treated as costs in the TRC analysis.

- Note that this approach will be expected to produce positive BCRs at the measure level

Negative Benefits Example

- New section added to Policy Manual Section 8

8.6 Electrification

The following definitions should be adhered to for purposes of classifying effects associated with electrification measures when performing the TRC Test analysis:

i. **Decreased Fossil Fuel Consumption:** Any avoided costs related to fossil fuel consumption avoided through electrification measures should be treated as benefits in the TRC analysis.

ii. **Increased Electric Energy Consumption and Electric Demand:** Any avoided costs related to increased electric energy consumption and electric demand associated with electrification measures should be treated as negative benefits in the TRC analysis.

- Note that this approach will be expected to, at times, produce negative BCRs at the measure level

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Reference: Past Precedent – O&M/DRC

- Previously we encountered a similar issue with the treatment of Operations and Maintenance (O&M) and/or Deferred Baseline Replacement Cost Changes
- Policy Manual 1.0 was somewhat unclear on how to treat these cost changes, and the plainest interpretation resulted in negative TRCs for some measures
- The Policy Manual 2.0 process clarified that any avoided costs related to deferred baseline replacement costs are treated as benefits, and any incremental costs are treated as costs, which leads to positive TRCs in all cases