How Other States Are Evaluating Transportation Electrification Proposals

Oregon Public Utility Commission Public Workshop
Docket No. UM 2165: Transportation Electrification Investment Framework

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Proceedings Where Evaluation Questions Arise

- Utility investment in EV charging equipment
- Grid investments to accommodate incremental load from EVs
- Rate cases/rate design – e.g., EV charging tariff
- Performance-based regulation (PBR) investigation
Common Evaluation Approaches

• Benefit-Cost Analysis (BCA)
  • For programs or specific proposed electrification investments
  • Key Challenge: designing the cost test

• Performance vs. Target
  • For compliance with statute/regulation/order or for PBR
  • Key Challenge: for PBR, designing metrics & targets

• Least Cost/Best Fit
  • For planning investments to ensure reliability at least cost
  • Key Challenge: treating all resources equally

• Prudence
# Examples

<table>
<thead>
<tr>
<th>State</th>
<th>Method</th>
<th>Test/Standard</th>
<th>Consistent with Other DERs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>BCA</td>
<td>JST in development</td>
<td>No?</td>
</tr>
<tr>
<td>MN</td>
<td>BCA</td>
<td>SCT, UCT, RIM (no primary test)</td>
<td>Mostly</td>
</tr>
<tr>
<td>NY</td>
<td>BCA</td>
<td>SCT (primary)</td>
<td>Yes</td>
</tr>
<tr>
<td>RI</td>
<td>BCA</td>
<td>JST (primary)</td>
<td>Yes</td>
</tr>
<tr>
<td>WA</td>
<td>BCA</td>
<td>SCT (primary)</td>
<td>No</td>
</tr>
<tr>
<td>CA</td>
<td>Performance vs Target</td>
<td>Minimize costs and maximize benefits</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>Performance vs Target</td>
<td>Rate Impact &lt;0.5%</td>
<td>No</td>
</tr>
<tr>
<td>VA</td>
<td>Prudence</td>
<td>Public Interest</td>
<td>No</td>
</tr>
</tbody>
</table>
External BCA Analyses by MJB&A, E3, and ICF

- Impacts of achieving a statewide target or assumed level of EV deployment
- Cost tests used:
  - PCT – net benefits to EV owners
  - SCT – net benefits to society
  - RIM – impact on electric utility rates
About RAP

The Regulatory Assistance Project (RAP)® is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org
Extra Slides if Useful for Q&A
## Traditional BCA Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Perspective</th>
<th>Key Question Answered</th>
<th>Impacts Accounted For</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Cost Test (UCT)</td>
<td>The utility system</td>
<td>Will utility system costs be reduced?</td>
<td>Includes the benefits and costs experienced by the utility system</td>
</tr>
<tr>
<td>Total Resource Cost (TRC)</td>
<td>The utility system plus participating customers</td>
<td>Will utility system costs plus program participants’ costs be reduced?</td>
<td>Includes the benefits and costs experienced by the utility system, plus benefits and costs to program participants</td>
</tr>
<tr>
<td>Societal Cost Test (SCT)</td>
<td>Society as a whole</td>
<td>Will total costs to society be reduced?</td>
<td>Includes the benefits and costs experienced by society as a whole</td>
</tr>
<tr>
<td>Participant Cost Test (PCT)</td>
<td>Customers who participate in a program</td>
<td>Will program participants’ costs be reduced?</td>
<td>Includes the benefits and costs experienced by the customers who participate in the program</td>
</tr>
<tr>
<td>Rate Impact Measure (RIM)</td>
<td>Impacts on rates paid by customers</td>
<td>Will utility rates be reduced?</td>
<td>Includes the benefits and costs that will affect utility rates, including utility system benefits and costs plus lost revenues</td>
</tr>
</tbody>
</table>

Primary Test for EE Evaluation

Database of State Efficiency Screening Practices (DSESP)
In States that use TRC, does test include “other fuel impacts”? 

Database of State Efficiency Screening Practices (DSESP)