

Non-Energy Impacts Approaches: The American Way(s)

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6 March 2018

Northeast Energy Efficiency Partnerships



"Assisting the Northeast & Mid-Atlantic Region in Reducing Total Carbon Emissions 80% by 2050"

Mission

Accelerate energy efficiency as an essential part of demand-side solutions that enable a sustainable regional energy system

Vision

That the region embraces next generation energy efficiency as a core strategy to meet energy needs in a carbon-constrained world



Overcome barriers and transform markets through *Collaboration*, *Education*, and *Enterprise*



More information at: www.neep.org

U.S. Approach to the Various Non-Energy Impacts (NEIs)



Utility NEI categories:

- Peak load reductions
- Transmission and distribution savings
- Reduced payments arrearages
- Reduced carrying costs,
- Lower debt written off/ lower collection costs
- Fewer customer calls

Participant NEI categories:

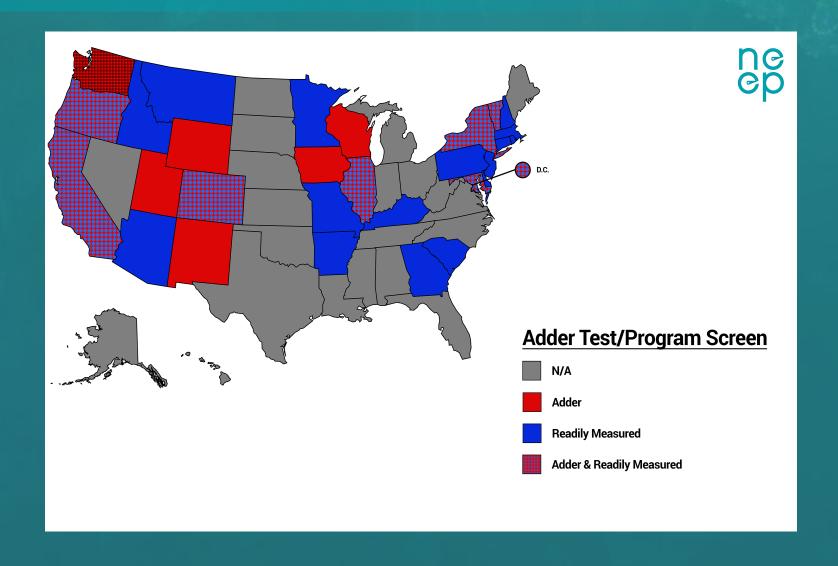
- Operations and Maintenance (O&M) cost savings
- Participant heath impacts
- Comfort
- Employee productivity
- Property values
- Benefits to low-income customers

Societal NEI categories:

- Public health and welfare effects
- Air quality impacts
- Water quantity and quality impacts
- Coal ash ponds and coal combustion residuals
- Economic development and employment effects
- Employment impacts
- Economic development constraints
- Other economic considerations
 - Societal risk and energy security
 - Benefits unique to low-income energy efficiency programs

Inconsistent Approaches to Include NEIs in Cost-Effectiveness Testing





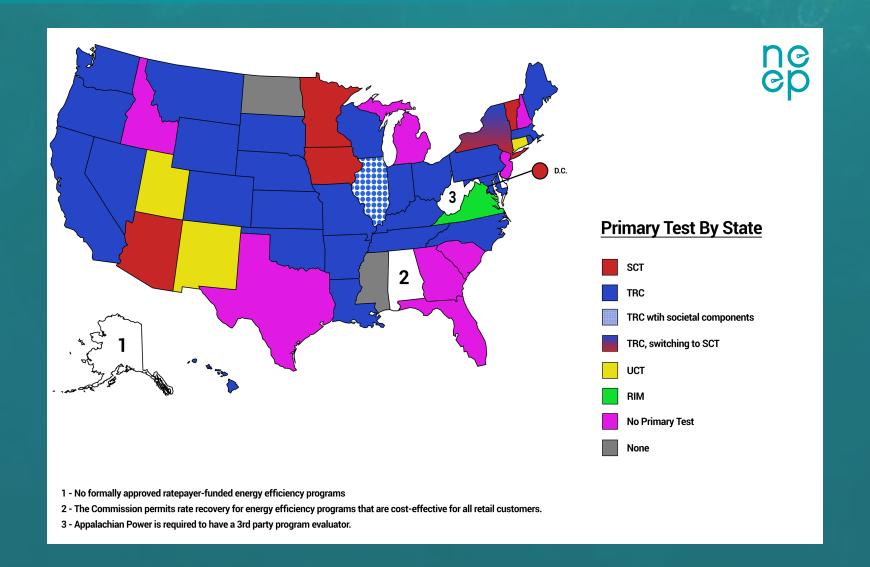
Policymakers' Concern: Are NEIs Credible?



- Credibility and convenience influence states' decisions about what to include in NEIs, particularly for states with monetized NEIs.
- 5 of 50 states are explicit that NEIs must be "easily measured."
 - One requires NEIs be "reliable with real economic value."
 - Water savings versus comfort
- States borrow values from others and may apply discounts to make the values more conservative
 - NEIs easily become undervalued

Too Much Variation in Cost-Effectiveness Testing





Policymakers and Utilities Need a New Approach



- Traditional tests (UCT, TRC, SCT) do not meet states' needs
 - No foundational principles
 - Do not consider policy goals
 - Lack of clarity on their construct, states modify tests in attempt to meet needs, particularly if they are locked into a specific one
- Lack of transparency on how tests are developed and why – Undermines credibility
- Lack of symmetry in the inclusion of costs without benefits- Biases cost-effectiveness

National Standard Practice Manual Provides a New Approach: Resource Value Test



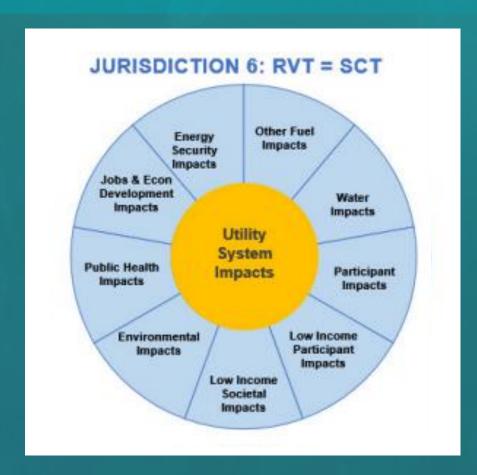
The NSPM Purpose:

- 1. Define policy-neutral principles for costeffectiveness tests
- 2. Provides a framework to develop a primary test
- 3. Insight on key inputs based on state goals



NSPM Relationship to Traditional Tests





Core Principles

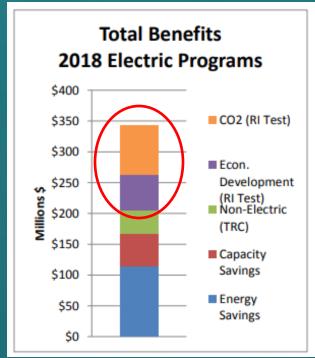
- Efficiency as a Resource
- Energy Policy Goals
- Hard-to-Quantify Impacts
- Symmetry
- Forward looking
- Transparency

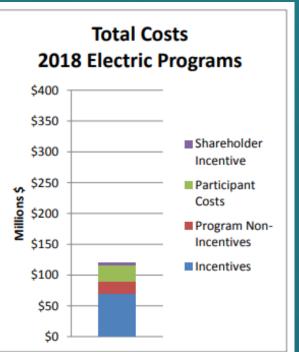
Rhode Island Goes First in Developing its Own Test



From the TRC to the RI Test

- RI Test includes greenhouse gas (GHG) reduction and economic development
- B/C ratio went from 1.7 to 2.8





Thank you!



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The NEEP report is available at:

The National Standard Practice Manual is Available at: https://nationalefficiencyscreening.org/wp-content/uploads/2017/05/NSPM_May-2017_final.pdf