BUILDING PERFORMANCE ASSOCIATION

NEW PERSPECTIVES ON COST TEST REFORMS

PENNSYLVANIA AND NEW JERSEY HIGHLIGHTS AND UPDATES
INTRO TO THE NATIONAL STANDARD PRACTICE MANUAL FOR BENEFIT-COST ANALYSIS OF DISTRIBUTED ENERGY RESOURCES (NSPM FOR DERS)

Ben Adams, Vice President, Strategic Development, MaGrann Associates
J. Joseph Cullen, Director of Policy and State Outreach, Building Performance Association
Kara Saul Rinaldi, V-P of Government Affairs, Policy and Programs, Building Performance Association
Tim Woolf, Senior Vice President, Synapse Consulting

EEA
ENERGY EFFICIENCY ALLIANCE
PENNSYLVANIA NEW JERSEY

BUILDING PERFORMANCE ASSOCIATION

Presentation Overview – Cost Test Reform Perspectives

- Background on the May 2017 **National Standard Practice Manual** (NSPM), Resources available from the National Energy Screening Project, BPA Outreach on the NSPM & Case Studies on NSPM reforms (5 - 10 minutes)
- Background on **Pennsylvania** activities related to the NSPM (10 minutes)
- Background on **New Jersey** activities related to the NSPM (10 minutes)
- Introduction to the August 2020 **National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources** (NSPM for DERs) (20 – 25 minutes)
- Questions and Answers (5 – 15 minutes)

The Building Performance Association - April 2019

- Merger of Efficiency First, Home Performance Coalition and the Home Energy Magazine
- 501 (C)(6) – Trade Organization
- More than 9,750 members in all 50 states (900+ in PA and NJ)
- Building Performance Journal & Digital Community at:
  https://www.buildingperformancecommunity.org/
- Policy and advocacy at the state and federal level

How BPA Works in States

- Partnerships with Regional Energy Efficiency Organizations, NASEO, ACEEE, NARUC E4TheFuture & other non-profit organizations
- **BPA works closely with KEEA/EEA** – Recent examples include:
  - Filings with PA PUC against the Industrial Energy Consumers Petition (April – June 2020)
  - Letters and comments on PA RGGI legislation and regulations (September 2020)
  - Joint BPA-KEEA Candidate Forum (October 2020)
  - Comment process on NJ Master Plan, Straw Proposals & related documents (2020)
- Contractors and small businesses are BPA's secret weapon in education and advocacy

BPA Policy Response Example: Defending EE Budgets

We're thrilled to be able to report that the petition you signed against the attempts to shut down funding for energy efficiency programs in Pennsylvania **was a success!**

The petition, filed on June 18, 2020, helped strengthen legal arguments and comments filed with partner organizations earlier in May 2020.

On October 29, 2020, the Pennsylvania Public Utilities Commission (PA PUC) issued an Order last week that responded to your petition and denied the Industrial Energy Consumers' request to shut down energy efficiency programs!

We thank you for your support for energy efficiency in Pennsylvania and for signing the petition. The PA PUC agreed with you, and your voices were heard!

BPA State Policy Basics

- Advocacy for members, contractors, state chapters, and industry allies
- Informed by Members, BPA Board & Policy Committee
- We rely heavily on member input
- BPA 14 Policy Principles: https://www.building-performance.org/policy

Recognition of the building performance workforce as a distinct and critical industry

Increased workforce development training and education for home performance contractors and businesses

Increased collaboration between the weatherization and home performance industries

Robust federal and state funding for building performance and weatherization

Economic development programs such as rebates and tax incentives, to increase market penetration of energy efficiency upgrades

Well-designed customer and contractor financing options

Modernized and reformed cost-effectiveness screening practices

The advancement of healthy homes, including policies that help remove barriers to home energy upgrades

Coordinating electrification initiatives with building science-based energy efficiency and weatherization

Expansion and use of smart home technologies

Consistent, secure and reliable access to quality data to improve the quantification of energy savings and non-energy benefits

Standardized data transfer and reporting to scale up energy efficiency upgrades

Policies and research that demonstrate the broader benefits of residential energy efficiency and weatherization in resiliency, healthy outcomes and climate change

Engagement of state and government agencies to advance the economic development potential of the energy efficiency industry.

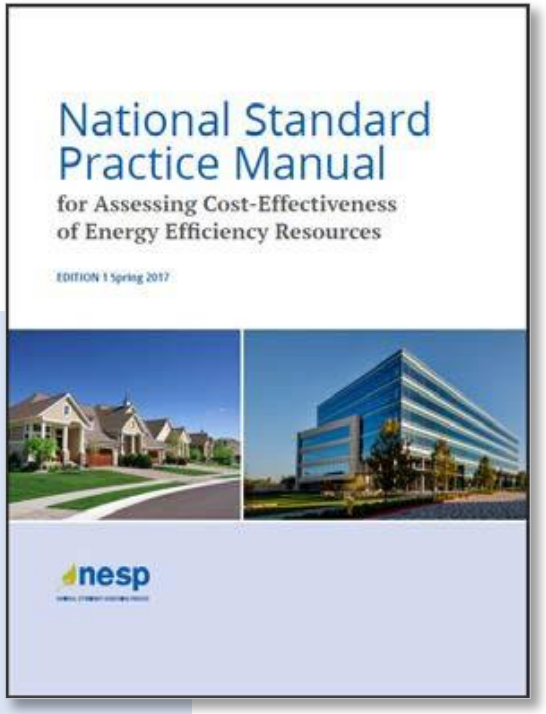
COST EFFECTIVENESS TESTING WHAT'S AT STAKE?

Consortium for Energy Efficiency Annual Industry Report

2018 State of the Efficiency Program Industry

U.S. Gas and Electric DSM: [both energy efficiency (EE) and demand response (DR) funding] – In 2018, U.S. DSM **expenditures totaled $8.2 billion** from all sources, a 15% increase over a five-year period.

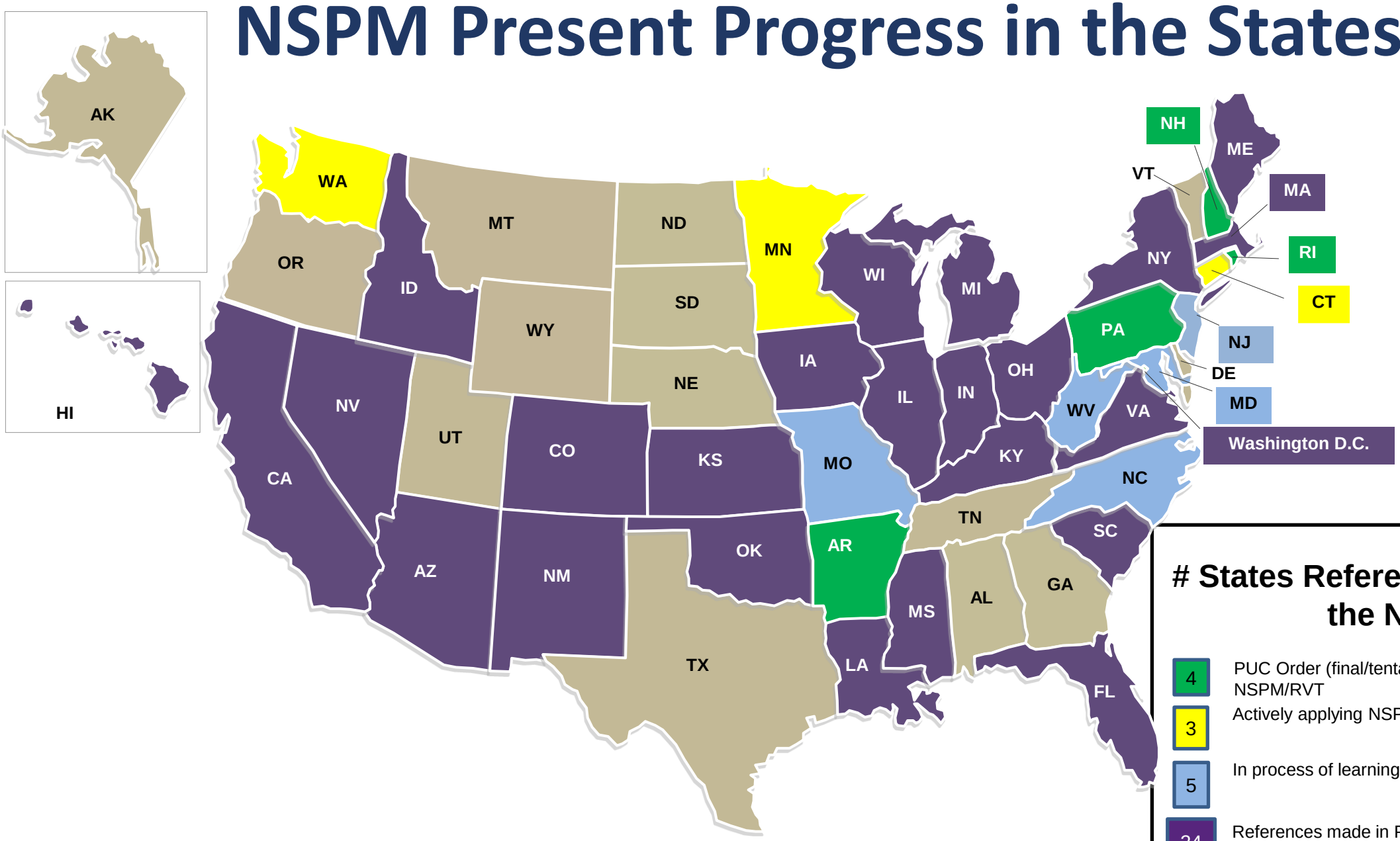
NSPM Principles – August 2020



1. Recognize that energy efficiency is a resource.
2. Account for applicable state or local policy goals.
3. Account for all relevant costs & benefits (based on applicable policies), even if impacts are hard to quantify.
4. Ensure symmetry across all relevant costs and benefits.
5. Conduct a forward-looking, long-term analysis that captures incremental impacts of energy efficiency.
6. Ensure transparency in presenting the analysis and the results.

http://www.nationalenergyscreeningproject.org/

NSPM Present Progress in the States – 2020



CASE STUDIES NH, RI, ARK, MINN EXAMPLES OF HOW THE NSPM HAS BEEN APPLIED TO COST-EFFECTIVENESS TESTING

http://www.nationalenergyscreeningproject.org/

New Hampshire

NSPM Case Study authored by NESP (January 2019: NSPM for EE)
NH PUC Order 26,322 (December 31, 2019)
Synapse Report for the NH EM&V Working Group (October, 2019)

Arkansas

NSPM Case Study authored by NESP (May 2019: NSPM for EE)
PWC Case Study Report to Arkansas PSC, Appendix A, and Appendix B
Presentation
Arkansas PSC decision on adopting PWC recommendations (May, 2019)

Minnesota

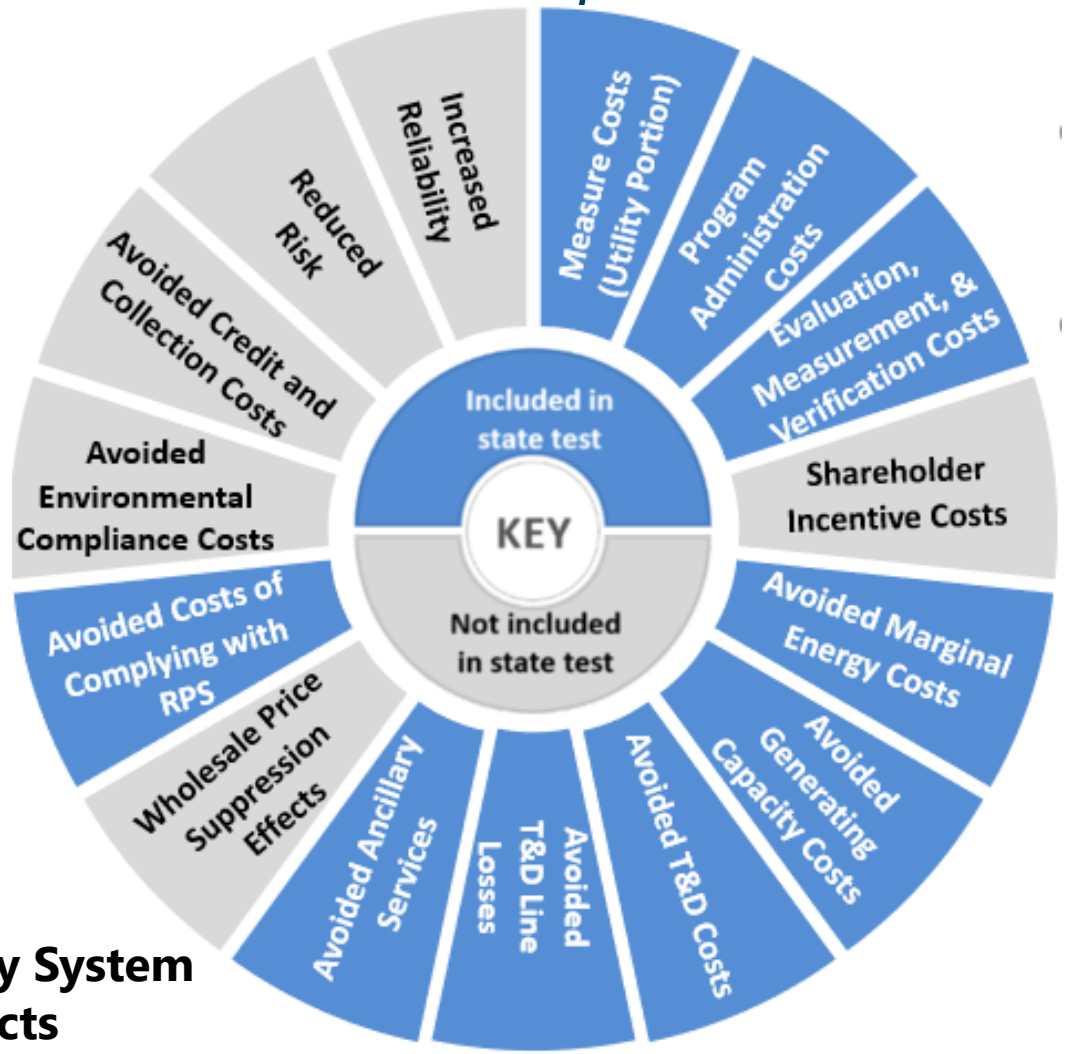
NSPM Case Study authored by NESP (December 2018: NSPM for EE)
Synapse Report to MN Dept. of Commerce (September, 2018)
Presentation

Rhode Island

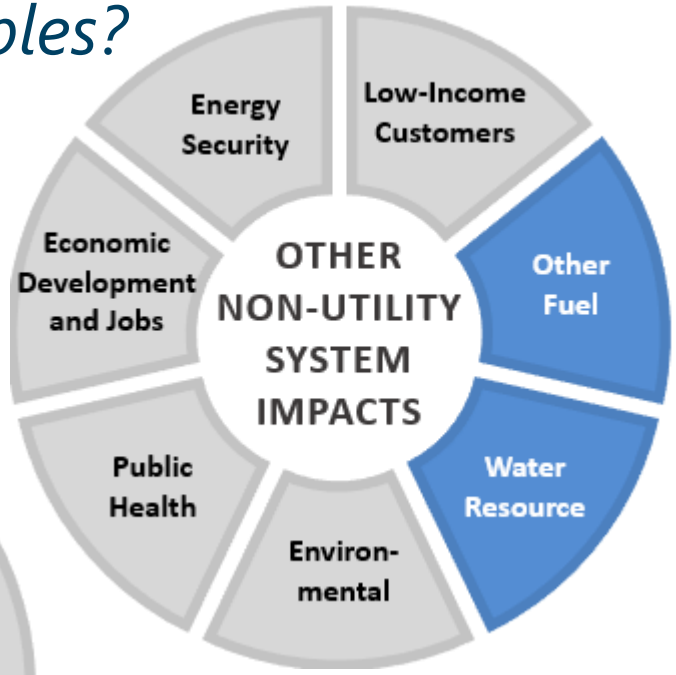
NSPM Case Study authored by NESP (December 2018: NSPM for EE)
2020 Rhode Island Test (October, 2019)
Synapse Report on Methodologies for Developing Inputs for DERs (October, 2018)

DATABASE OF SCREENING PRACTICES (DSP) IN THE U.S.
EXAMPLE: EE COST-EFFECTIVENESS TESTING IN PA

Does practice in PA align with NSPM principles?



Utility System Impacts



http://www.nationalenergyscreeningproject.org/

National Standard Practice Manual for Energy Efficiency Cost-Effectiveness

Joseph Cullen, Home Performance Coalition
Director of Policy and State Outreach

NASEO-MACRUC Joint Session

Hotel Hershey - Hershey, Pennsylvania

June 26, 2017

National Standard Practice Manual for Energy Efficiency Cost-Effectiveness (Edition 1.0)

Presentation to Pennsylvania PUC

Chris Neme, Energy Futures Group

October 28, 2019

Follow up NESP Briefing after the release of the PA PUC
2021 ***TRC Test Tentative Order*** on September 19, 2020

DECEMBER 19, 2020 PA PUC
FINAL ORDER ON TOTAL RESOURCE COST TEST

PA Total Resource Cost Test Explained

Act 129 defines a TRC test as "a standard test that is met if, over the effective life of each plan not to exceed 15 years, the net present value (NPV) of the avoided monetary cost of supplying electricity is greater than the NPV of the monetary cost of energy efficiency conservation measures." 66 Pa. C.S. § 2806.1(m). Thus, the TRC test is a critical measuring tool in determining the cost-effectiveness of an EDC's EE&C plan. Historically, the TRC test has been a regulatory test. *It is not a static, one-size-fits-all tool.*

DECEMBER 19, 2020 PA PUC
FINAL ORDER ON TOTAL RESOURCE COST TEST

Final Order – NSPM Reference (General Literature Review) and Opening for Modifications?

As discussed in prior TRC Test Orders, the California Manual was the starting point for the Pennsylvania TRC Test but does not address all issues specific to Pennsylvania. For this reason, the Commission will continue to explore how best to structure and apply the TRC Test for Pennsylvania. **In preparation of this Final Order, the Commission and the Phase III SWE reviewed new industry literature on benefit cost analysis, such as the National Standard Practice Manual, to refine the TRC Test to meet Pennsylvania policy objectives.** The 2021 TRC Test adopted herein is intended to be applicable throughout the course of Phase IV, if implemented, potentially concluding May 31, 2026. **However, many issues involved in EE&C plans, program implementation, and operation of the TRC Test are ongoing in nature, and future updates may be proposed by stakeholders or the Commission as needed.**

DECEMBER 19, 2020 PA PUC
FINAL ORDER ON TOTAL RESOURCE COST TEST

Final Order – NSPM Reference (Detailed Review)
PA PUC – "Applicability of NSPM to the Act 129 TRC Test"

Following the release of the NSPM in 2017, ***the Commission tasked the Phase III SWE with a detailed review of the NSPM and an inventory of how the 2016 TRC Test Order compared with the principles outlined in the NSPM***. Many of the issues identified by the Phase III SWE as part of the NSPM review were instrumental in guiding our proposals in the 2021 TRC Test Tentative Order. The 2017 NSPM review did not include a comprehensive review of Commonwealth policies, laws, and regulations. We reject the suggestion to "pause" the 2021 TRC Test Order for an additional NSPM review. ***We do, however, agree that such a review could be considered an initial step in the preparation of future Act 129 TRC Test Orders.***

FEBRUARY 19, 2020 BPA RIGHT TO KNOW REQUEST ON NSPM MEMO PA PUC RESPONSE – FEBRUARY 27, 2020

Your request is denied.

The Commission searched its records and found one document responsive to your request. The SWE prepared a memorandum (Memo) reviewing the National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources and which included a review of other industry literature covering cost-effectiveness.

Section 67.708(b)(10) of the RTKL exempts from disclosure all agency records that reflect pre-decisional deliberations of an agency, including any research, memos, or other documents used in the pre-decisional deliberations. The Memo was created and used as part of pre-decisional deliberations by the Commission and therefore is exempt from disclosure under Section 67.708(b)(10).

This response constitutes the final response of the Commission to your RTKL Request.

Reference to General Literature Review or the Detailed Review (or Both)?

DECEMBER 19, 2020 PA PUC
FINAL ORDER ON TOTAL RESOURCE COST TEST

Addition of Health and Economic Development Benefits to TRC Test

"The Commission recognizes the concerns of parties who highlight the exclusion of **potential health and safety and economic development benefits** of EE&C plans in the TRC Test. In reviewing information provided in comments and our own research, the most common approach other jurisdictions use to monetize these benefits is through 'adders' that increase TRC benefits by some amount. We are not persuaded to allow inclusion of adders in the TRC benefits.."

DECEMBER 19, 2020 PA PUC
FINAL ORDER ON TOTAL RESOURCE COST TEST

Creation of an Energy Efficiency Technical Advisory Committee

In reply comments, BPA notes that the DR market is expected to grow in upcoming years and suggests that the Commission establish an energy efficiency technical advisory committee to develop positions and recommendations on technical issues related to EE and DR.

Resolution – At this point in time, the Commission does not see the need to create an additional advisory committee on EE and DR as part of TRC Test consideration. *Concerns related to an EE technical advisory committee should be raised in the context of Docket No. M-2019-3006867.*

GLASS 1/2 FULL SUMMARY – FINAL PA PUC ORDER ON TRC TEST

- **NSPM for energy efficiency – is on the PA PUC's radar screen**: *"we do, however, agree that [an NSPM] review could be considered an initial step in the preparation of future act 129 TRC test orders."*
- **TRC is not static** - *"operation of the TRC test are ongoing in nature, and future updates may be proposed by stakeholders or the commission as needed."*
- **Potential for TRC Test for modifications** pre-2026 cycle
- Most likely route for immediate reforms is through the PA PUC docket – e.g. "*Concerns related to an EE technical advisory committee should be raised in the context of docket no. M-2019-3006867."*

NOTE ON NEW YORK TECHNICAL RESOURCE MANUAL REFORMS

NY TRM
Technology & Innovation

September 29, 2020

New York State Technical Resource Manual Management Committee

Co Chairs: Amy Dickerson & Courtney Golino

POTENTIAL NEW ISSUES ARISING ON PA DERS

UTILITY DIVE

Pennsylvania to be a testing ground for how utilities manage distributed energy

AUTHOR, Matthew Bandyk - **October 14, 2020**

- The growing tension over how much control regulated utilities should have over distributed energy will be put to the test in a planned pilot project in PPL Corp.'s Pennsylvania service territory. The pilot would examine the value of the ability for utilities to "actively manage" customer-sited resources like rooftop solar and battery storage.
- PPL reached a settlement over the project with opposing groups including the Natural Resources Defense Council (NRDC), who, along with third party distributed energy resource (DER) provider Sunrun, had blasted PPL's initial 2019 proposal as potentially harmful to the growth of distributed energy. The groups submitted the new settlement to the Pennsylvania Public Utility Commission (PUC) on Oct. 5.

https://www.utilitydive.com/news/pennsylvania-ppl-testing-ground-for-how-utilities-manage-distributed-energy/586968/

New Perspectives on Cost Test Reforms:
Latest Developments in New Jersey

Energy Efficiency Evolving Conference

Kara Saul Rinaldi
Vice President of Government Affairs, Policy, and Programs
Building Performance Association

November 20, 2020

KARA SAUL-RINALDI

Vice President of Government Affairs, Policy, and Programs
Building Performance Association

Kara is the President and CEO of the AnnDyl Policy Group and through it serves as the Vice President of Government Affairs, Policy, and Programs for the Building Performance Association. With over twenty years of experience in advocacy strategy development, lobbying and media relations, Kara is a leading energy and climate policy expert. She has directed national policy, communications, and grassroots campaigns spearheading education efforts with the Administration and Congress on tax, appropriations, and authorization issues for national and international corporations as well as NGOs. Kara has testified before Congress and authored numerous papers on energy efficiency, climate change, and smart technology. Prior to starting her firm, Kara worked on climate and energy policy at Environmental Resources Management, Owens Corning, the Alliance to Save Energy, and World Wildlife Fund. She also worked in the offices of Rep. Lynn C. Woolsey (D-Calif.) and Sen. Barbara Boxer (D-Calif.).

Kara holds a master's degree from the London School of Economics and a bachelor's degree from the University of California, San Diego. She is fluent in English and French.

Policy Background: NJ's Next Generation of EE Programs

- **Clean Energy Act of 2018** (P.L. 2018, c. 17)
    1. Established ambitious energy reduction targets:
        - 2% annual savings for electric utilities; 0.75% annual savings for natural gas
    2. Includes specific requirements for benefit-cost analyses (BCAs):
        - "The energy efficiency programs and peak demand reduction programs **shall have a benefit-to-cost ratio greater than or equal to 1.0 at the portfolio level, considering both economic and environmental factors** […] The methodology, assumptions, and data used to perform the benefit-to-cost analysis shall be **based upon publicly available sources and shall be subject to stakeholder review and comment.**"
- **NJ 2019 Energy Master Plan** (released January 2020) identifies EE as one of 7 key strategies for meeting the state's goal of 100% clean energy by 2050.

NJBPU Stakeholder Process & Cost Test Reform

- **In 2019, NJBPU initiated a stakeholder process** to determine the framework for the "EE transition" and look at cost test reform *(BPU DOCKET NOS. QO19010040 & QO20060389).*
  - **December 2019 –** EM&V Stakeholder Meeting **(NSPM presentation)**
  - **January/February 2020 –** Staff solicited written comments on EM&V
  - **March/April –** EE Transition Straw Proposal **(Staff recommends RVT)**
  - **June 10 –** Board approved EE Transition Framework
    - Decision to delay development of RVT, use a modified TRC as interim NJCT
  - **July – New Jersey Cost Test (NJCT) Straw Proposal**
  - **August 24 –** Board approved **Interim NJCT** for the first 3-year program cycle

Interim NJ Cost Test

- **BPA applauds NJBPU –** a victory for cost test reform using NSPM principles.
- "The NJCT has been designed to include **all costs and benefits relevant** to a proposed portfolio of EE programs that are reasonably quantifiable and that **align with the policies articulated in the CEA, as well as additional public interest goals of the BPU and the State of New Jersey**."
- NJCT accounts for several **non-energy benefits**:
  - Avoided emissions impacts (Social Cost of Carbon using 3% discount rate)
  - Low-income benefits including health & safety (10% adder)
  - Hard to quantify non-energy benefits, including public health, water and sewer benefits, economic development (5% adder)

Next Steps

- **"Didn't have time to do full NSPM"** but will be doing more review in coming years:
  - Board Order: "The NSPM approach should be evaluated for use in New Jersey through the work of the EM&V WG."
- **Key EE elements missing**
  - **5% adder for NEBs is on the lower end:** total utility non-energy indirect benefits have been estimated between 7.4% and 49.5% (ACEEE report).
  - **Identify specific values for quantifiable NEBs:** certain values and methods may be transferable from other jurisdictions (LBNL report).
- **Integration of other DERs** (e.g. rooftop solar, distributed storage, EVs, and building electrification) and multi-DER analysis using guidance from NSPM for DERs.

Future Work to Ensure NJ has a More Balanced Test

- **EM&V Working Group -** Not assigned yet (updates from NJBPU staff expected in December).
  - The EM&V WG will be comprised of utility-based and state program evaluators, the Statewide Evaluation Manager, Staff, Rate Counsel, and other stakeholder representatives.
  - This initial NJCT will evolve over time through the efforts of the EM&V WG and may include additional or different impacts as they are studied further and evaluated for use in NJ.
- **NJBPU directions:** "The EM&V WG will review the overall NJCT framework on an ongoing basis and consider modifications in collaboration with Staff. In addition, the Board has tasked the EM&V WG with developing a process […] through which the methodologies for developing the value of relevant costs and benefits are appropriately updated and memorialized ahead of each program cycle and/or as needed."
- **First 3-year cycle:** Programs start on July 1, 2021 and run through the end of program year 3 on June 30, 2024.

BUILDING PERFORMANCE ASSOCIATION

Thank you!

J. Joseph Cullen
Director of Policy and State Outreach
Building Performance Association
301.346.2321
jcullen@building-performance.org

Kara Saul-Rinaldi
Vice President of Government Affairs, Policies, and Programs
Building Performance Association
202.276.1773
kara.saul-rinaldi@building-performance.org