# Committee on Energy Resources and the Environment

## Revisiting Paradigms for Decision-Making About Customer Side Resources

NARUC Summer Policy Summit

# Revisiting Paradigms for Decision Making about Customer-Side Resources

**Tanuj Deora**

**NARUC Summer Policy Summit**

July 22, 2019

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# Criteria we Design for:

- Safety,
  Reliability,
  Affordability

- Economic Development,
  Social Equity,
  Environmental Protection

# Criteria we Design for:

- Safety,
  Reliability,
  Affordability

- Economic Development,
  Social Equity,
  Environmental Protection

# Assumptions we Design by:

- Economies of scale
  of central station power

- Load is inflexible,
  generation must be flexible

- Design for cost, not value

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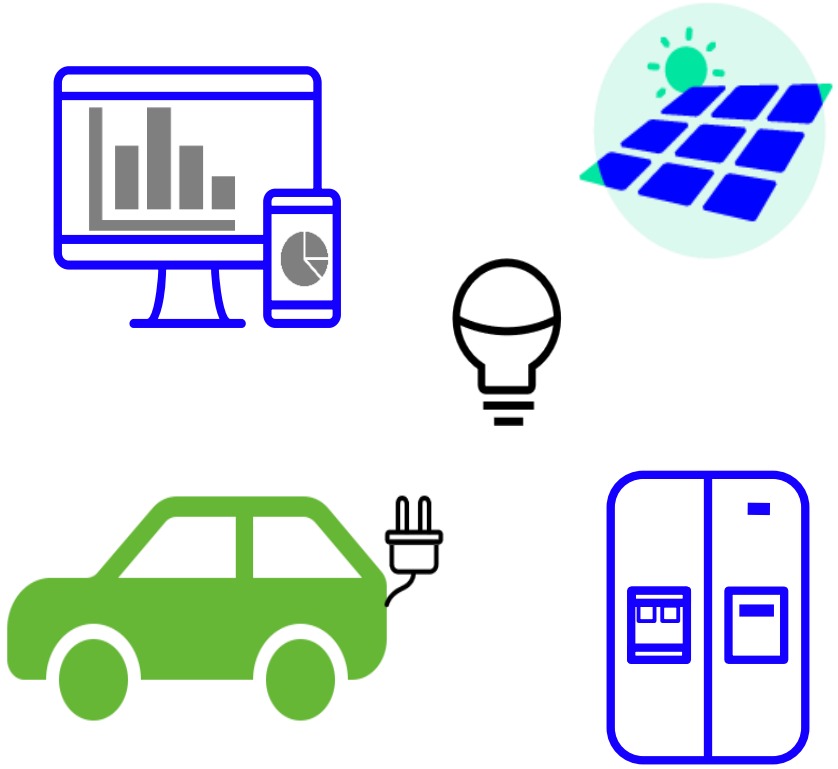
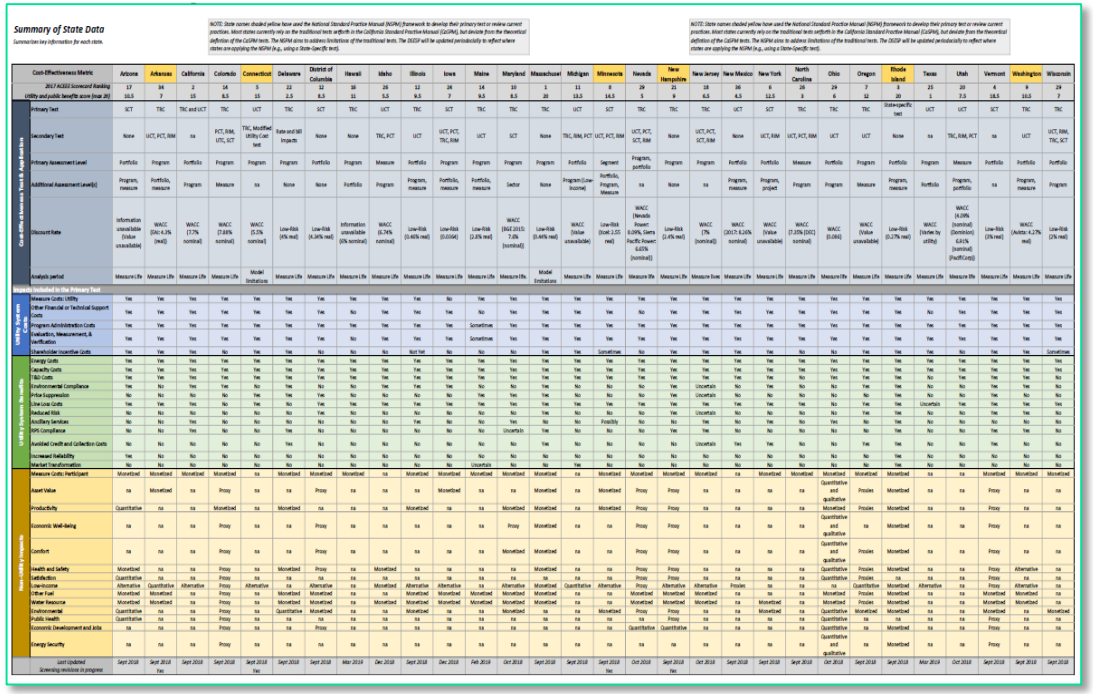
# We know things are different now…
# **…have we updated our approaches to planning the grid?**



- Understanding Measures vs. Channels
- Evaluation Methods & Metrics
- Market Potential, DRPs & IRPs
- Incentives for Utility Performance

# Some indications our approach to DSM needs improvement

(Scope, methodologies, assumptions, sensitivity analyses, cost caps, discount



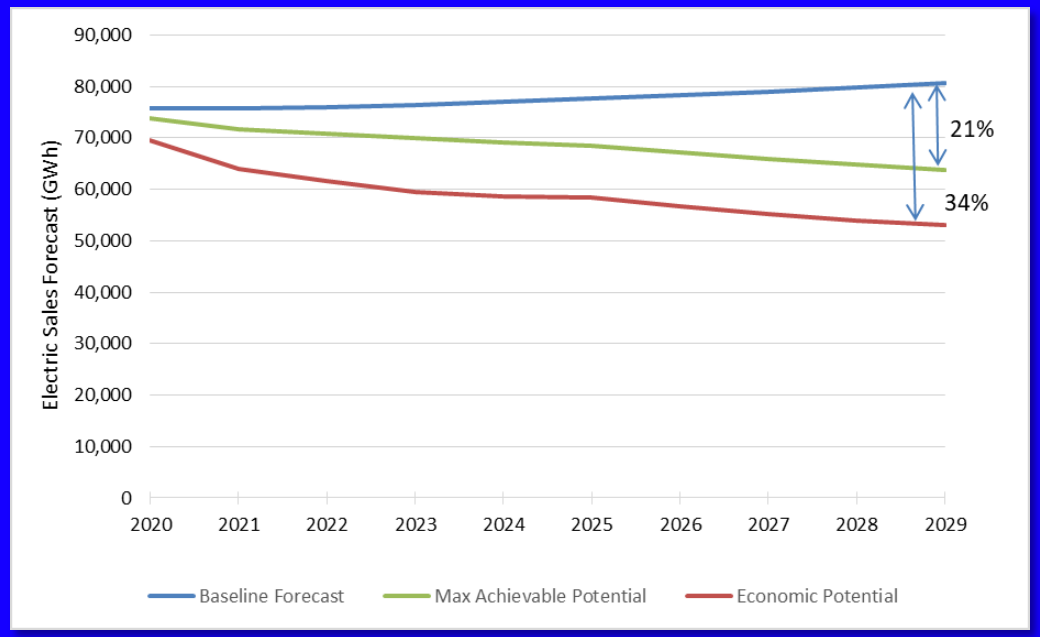

Source: 2018 Database of State Efficiency Screening Practices, NESP
https://nationalefficiencyscreening.org/state-database-dsesp/

*Table 5-2 Maximum Achievable Take Rate Lift*

| Factors Considered | Take Rate "Lift |
|---|---|
| Lift from Fastest Payback (0 or 1-year) vs. 3-year | 10% |
| Lift from Best Delivery Mechanism vs Avg. | 22% |
| Lift from Best Features vs Avg. | 1% |
| Lift from Best Customer Financial Situation vs Avg. | 14% |
| Lift from Most Informed vs Avg. | 11% |
| Maximum Lift with All Factors Stacked | 57% |

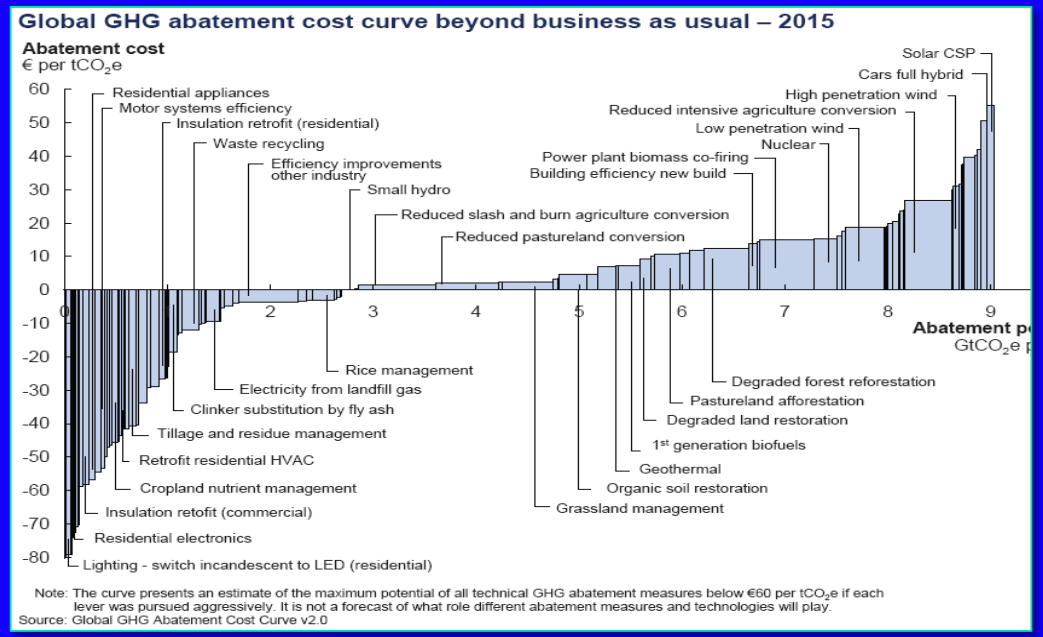
Source: Ameren Illinois Market Potential Study , AEG, 2016

# But most profound is that our analyses and programs are not fulfilling the full potential of DSM at the pace we require




Source: 2019 NJ Market Potential Study, Optimal

VS.




Source: 2009 US Carbon Abatement Cost Curve, McKinsey

**Challenge:**

Current approaches to customer-sited resource evaluation ***grossly undervalue*** and ***systematically under-deploy*** behind-the-meter assets, resulting in a **less resilient, dirtier,** and **more expensive** energy system.

# Solutions:

- Pressure test methodologies, assumptions, and outcomes on market potential studies
- Demand innovative deployment of technologies to increase technical, economic, and achievable potentials
- Search for technology and program synergies between efficiency, demand response, and other DER for both energy savings and demand flexibility
- Let go of prescriptive, cost-based oversight; focus on the outcomes we actually care about

# Solutions:

- **Pressure test methodologies, assumptions, and outcomes on market potential studies**
- Demand innovative deployment of technologies to increase technical, economic, and achievable potentials
- Search for technology and program synergies between efficiency, demand response, and other DER for both energy savings and demand flexibility
- Let go of prescriptive, cost-based oversight and focus on the outcomes you actually care about

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# Appendix Slides

Introducing Uplight

# We Are Unifying the Customer Energy Experience.

The industry's leading Customer Engagement, Demand-Side Management, Personalization and Marketplace solutions—Residential and Commercial—have come together to deliver customer-centric innovation at scale.

TENDRIL ENERGYSAVVY SIMPLE energy FIRSTFUEL eeme

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## Behavioral Energy Efficiency

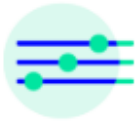
Motivate customers to take meaningful actions and achieve 30% greater energy savings with a suite of products built with best-in-class energy analytics, personalization and proven behavioral science—including HERs, Customer Portals, High Usage Alerts, and more.

## Demand Management

Enroll more customers, at a faster rate, with the highest per-household results, with the most cost-effective and encompassing demand response software solution on the market—including Orchestrated Energy, Marketplace, Analytics and Program Management tools covering multiple device classes.

## Digital Customer Engagement

Fully leverage every touchpoint and seamlessly engage residential and business customers in the personalized way they now expect, consistently across every channel and program, with the most comprehensive and unified digital customer engagement suite on the market.



## CX Personalization and Next Best Action

Leverage sophisticated energy analytics to harness customer data and transform all relevant customer interactions into powerful, real-time next best action recommendations that are consistent across every program and channel.

## Rates Adoption and Experience

Transform your rate transition efforts through proven and personalized education, targeted marketing and recommendations, and grid-optimized enrollment—all designed to make you a truly trusted energy advisor.

## Utility Marketplace

Rely on the industry's most trusted and adopted utility Marketplace to put your utility at the center of all customer energy product decisions with a turnkey solution that drives customer satisfaction and a deeper customer relationship.

## Renewables Adoption and Experience

Grow your renewables program awareness and adoption rates through educational content and personalized, targeted messaging.

## Energy Experience Platform

Move beyond siloed programs and departments and open the door to a unified customer energy action system that leverages every customer interaction across all channels, programs, and solutions.

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# Committee on Energy Resources and the Environment

## Revisiting Paradigms for Decision-Making About Customer Side Resources

NARUC Summer Policy Summit

# The Rhode Island Benefit Cost Framework

## Overview of the Purpose, Structure, and Use of Rhode Island's Comprehensive Benefit Cost Framework

**July 22, 2019**

# Purpose

- **Explain the Commission's purpose for adopting the Rhode Island Benefit Cost Framework.**
- **Explain the Commission's expectations for the use of the Framework.**
- **Discuss challenges and lessons learned.**

# Investigation into the Changing Electric Distribution System

## Scope

**Determine what to value when setting rates**

**Increase consistency in regulation and valuation across programs**

## Report

Goals for the future electric system

**Benefit Cost Framework**

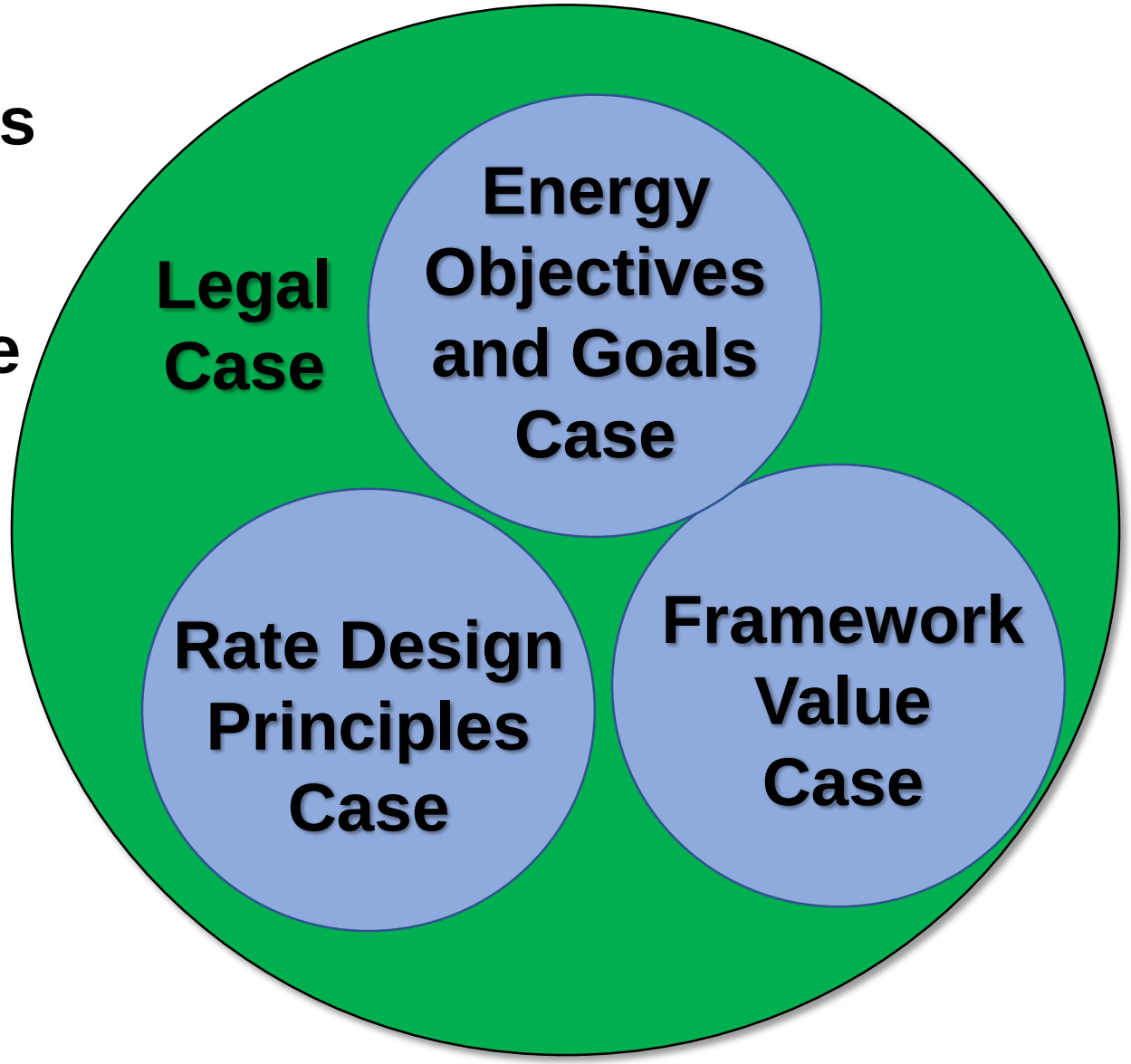
Rate Design

Next Steps

- **Framework**
- **Use for programs and projects**
- **Use for rates**
- **Use for optimization**
- **Next steps**

# Making a Case to the Commission

- **Legal case must have a business case.**
- **The *Framework* standardizes the value case within the business case.**
- **Start with Framework values to create evidence.**



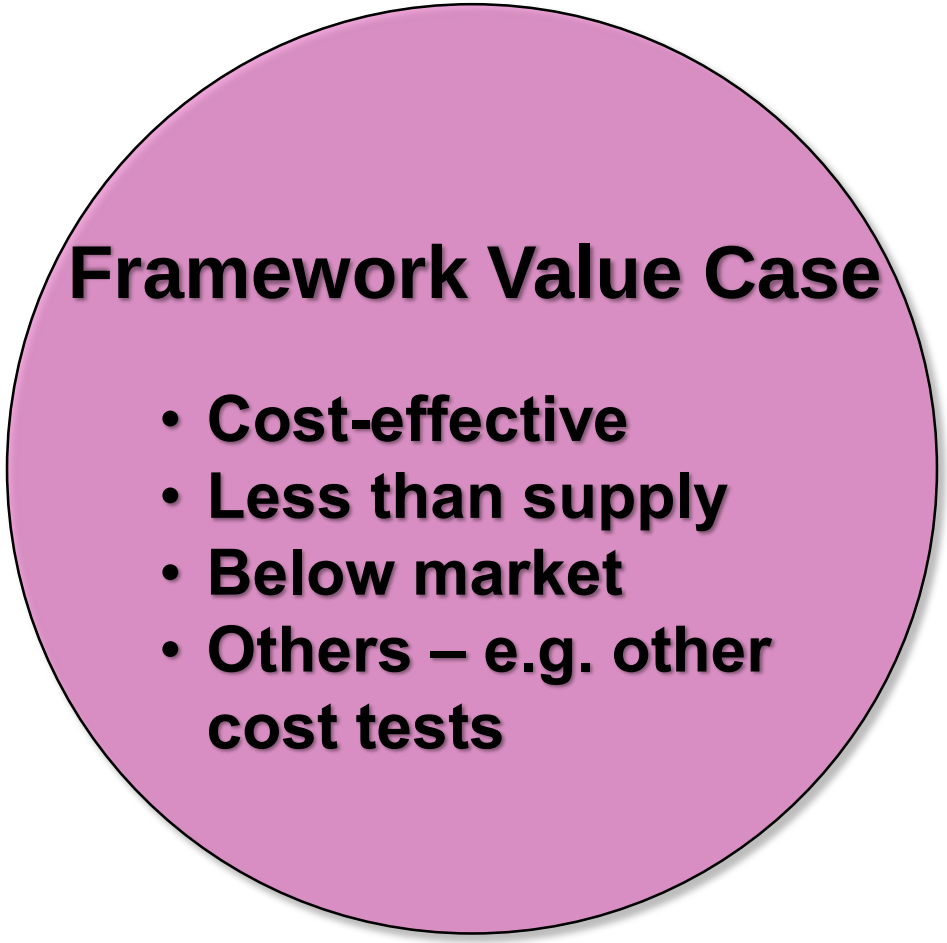
# RI Benefit Cost Framework

| Mixed Cost-Benefit, Cost, or Benefit Category | System Attribute Benefit/Cost Driver | Candidate Methodologies | Potential Visibility Requirements |
|---|---|---|---|
| The set of costs and benefits that should be evaluated by the PUC when reviewing rates, programs, and investment | For each category, the set of factors that, when changed, will increase or decrease the benefits or costs in that category | Options for ways to quantify or qualify the value of benefits and costs | Requirements of different valuation methods |

# Value Case and Cost Effectiveness

**The Framework should be used to create alternative value cases as well.**

**Example: Comparing the cost of energy efficiency vs. cost of energy supply.**



# Example of Using the Framework

# Rhode Island Renewable Energy Long Term Contract RFP
# Docket 4600 Benefit-Cost Framework - Applicable Category Summary

**Power System Level** (Cost/Benefit Categories)

| | | | (NPV in 2018$) | Description of quantitative values or reason for exclusion: |
|---|---|---|---|---|
| (1) | Energy Supply & Transmission Operating Value of Energy Provided or Saved (Time- & Location- | Applicable/Quantifiable | $933,754,251 | Market value of Energy from Project + Increase in Project PPA market value from year with extreme Winter prices ocurring once in 15 years |
| (2) | Renewable Energy Credit Cost/Value | Applicable/Quantifiable | $430,227,231 | Market value of Project RECs retired (used) for RES or sold |
| (3) | Retail Supplier Risk Premium | Not Applicable (N/A) | $0 | PPA is a long term contract for wholesale power supply at a fixed price. |
| (4) | Forward Commitment: Capacity Value | Applicable/Not Quantifiable | - | Beyond the capabilities of the modeling system to quantify accurately. Neutral impact. |
| (5) | Forward Commitment: Avoided Ancillary Services Value | Applicable/Not Quantifiable | - | Beyond the capabilities of the modeling system to quantify accurately. Negative impact, insignificant. |
| (6) | Utility / Third Party Developer Renewable Energy, Efficiency, or DER costs | Applicable/Quantifiable | ($1,333,945,342) | PPA cost of energy and RECs. |
| (7) | Electric Transmission Capacity Costs / Value | Applicable/Quantifiable | $0 | The Proposal contains a fixed PPA price for energy and REC, with all interconnection and transmission upgrades included in PPA price. The project is commitment to interconnect to the ISO-NE "PTF" at the Capacity Capability Interconnection Standard, as defined by ISO-NE. |
| (8) | Electric transmission infrastructure costs for Site Specific Resources | Applicable/Quantifiable | $0 | The Proposal contains a fixed PPA price for energy and REC, with all interconnection and transmission upgrades included in PPA price. The project is required to interconnect to the ISO-NE "PTF" at the Capacity Capability Interconnection Standard, as defined by ISO-NE. |
| (9) | Net risk benefits to utility system operations (generation, transmission, distribution) | N/A | $0 | Generation supply will be interconnected at the ISO-NE "PTF". This resource is not a DER. |
| (10) | Option value of individual resources | Applicable/Quantifiable | $215,455,678 | RI Energy Market Price Change Impact + RI REC Market Price Change Impact + Benefit to Rhode Island Gas Customers due to Gas Use Reduction (Benefits) |
| | Option value of individual resources | Applicable/Quantifiable | ($113,251,584) | RI Energy Market Price Change Impact + RI REC Market Price Change Impact (Revenue Reduction for existing Long Term Contracts) |
| | Option value of individual resources | Applicable/Quantifiable | $3,023,398,021 | Other NE States Energy Market Price Change Impact + Other NE States REC Market Price Change Impact + Benefit to Other NE States Gas Customers due to Gas Use Reduction (Benefits) |
| | Option value of individual resources | Applicable/Quantifiable | ($564,879,589) | Other NE States Energy Market Price Change Impact + Other NE States REC Market Price Change Impact (Revenue Reduction for existing Long Term Contracts) |
| (11) | Investment under Uncertainty: Real Options Cost / Value | Applicable/Quantifiable | Included in categories (1,2,6,10) | Project was selected based on a competitive process of multiple proposals. Evaluation and benefit cost analysis was compared to a basecase that provided a "but for" or "counterfactual" projection of the costs of electric energy, RECs, and carbon emissions associated with Rhode Island electricity consumption under a future in which no proposals are selected. |
| (12) | Energy Demand Reduction Induced Price Effect | N/A | $0 | Generation supply is not an Energy DRIPE, but the proposal's indirect benefit impact on market LMP price change and REC price change is listed above. |
| (13) | Greenhouse gas compliance costs (Embedded Cost) | Applicable/Quantifiable | Included in category (1) | Greenhouse gas compliance costs (RGGI) is embedded as a fuel related cost in the model analysis to determine the quantitative market impacts listed above. |
| (14) | Criteria air pollutant and other environmental compliance costs | Applicable/Not quantifiable | - | Not significant value to quantify or differentiate between projects |
| (15) | Innovation and Learning by Doing | Applicable/Not quantifiable | - | The benefits of innovation in the OSW industry and by the developer have been captured in the bid pricing of the contract, including, but not limited to any potential federal tax credits, economies of scale, and first mover advantage. Postive impact, significant. |
| (16) | Distribution capacity costs | N/A | $0 | Generation supply will be interconnected at the ISO-NE "PTF". Distribution level category is not applicable to this project. |
| (17) | Distribution delivery costs | N/A | $0 | Generation supply will be interconnected at the ISO-NE "PTF". Distribution level category is not applicable to this project. |
| (18) | Distribution system safety loss/gain | N/A | $0 | Generation supply will be interconnected at the ISO-NE "PTF". Distribution level category is not applicable to this project. |
| (19) | Distribution system performance | N/A | $0 | Generation supply will be interconnected at the ISO-NE "PTF". Distribution level category is not applicable to this project. |
| (20) | Utility low income | N/A | $0 | Generation supply will be interconnected at the ISO-NE "PTF". Distribution level category is not applicable to this project. |
| (21) | Distribution system and customer reliability / resilience impacts | N/A | $0 | Generation supply will be interconnected at the ISO-NE "PTF". Distribution level category is not applicable to this project. |
| (22) | Distribution system safety loss/gain | N/A | $0 | Generation supply will be interconnected at the ISO-NE "PTF". Distribution level category is not applicable to this project. |

**Customer Level** (Cost/Benefit Categories)

| | | | | |
|---|---|---|---|---|
| (23) | Program participant / prosumer benefits / costs | N/A | $0 | Proposed rate recovery through distribution rates applicable to all distribution customers. |
| (24) | Participant non-energy costs/benefits: Oil, Gas, Water, Waste Water | N/A | $0 | Proposed rate recovery through distribution rates applicable to all distribution customers. |
| (25) | Low-Income Participant Benefits | N/A | $0 | Proposed rate recovery through distribution rates applicable to all distribution customers. |
| (26) | Consumer Empowerment & Choice | N/A | $0 | Proposed rate recovery through distribution rates applicable to all distribution customers. |
| (27) | Non-participant (equity) rate and bill impacts | N/A | $0 | Proposed rate recovery through distribution rates applicable to all distribution customers. |

**Societal Level** (Cost/Benefit Categories)

| | | | | |
|---|---|---|---|---|
| (28) | Greenhouse gas externality costs | Applicable/Quantifiable | $533,172,942 | Impact of Reduction in GHG Emissions |
| (29) | Criteria air pollutant and other environmental externality costs | Applicable/Quantifiable | $10,761,161 | Impact of Reduction in NOx Emissions |
| (30) | Conservation and community benefits | Applicable/Not quantifiable | - | The project must obtain all required federal, state and local permits. This categeory calls for consideration of land use impacts, including loss of carbon sink, habitat, historical value, and sense of place, as well as the equity in distribution of harful or nuisance infrastructure. DWW explained how it intends to minimize land use impacts, including through the federal, state and local permitting process, in Section 6 of its bid related to siting and zoning, and Section 7 of its bid related to environmental assessments and permitting. Any associated costs not mitigated through applicable permitting processes are not quantifiable at this time. Negative impact, unknown magnitude. |
| (31) | Non-energy costs/benefits: Economic Development | Applicable/Quantifiable | $405,125,090 | Economic Benefit to Rhode Island |
| (32) | Innovation and knowledge spillover | Applicable/Not quantifiable | - | Rhode Island's leadership and contribution to emerging off-shore wind industry brings opportunities to drive down costs, attract future development, increase diversity of clean energy supply, and encourage a clean energy economy bringing investment and jobs to the region. Additional value brought by DWW's experience developing off-shore wind in the US and opportunity to take advantage of expiring federal tax incentives, economies of scale, and first mover advantage. Positive impact, large. |
| (33) | Societal Low-Income Impacts | N/A | $0 | Proposed rate recovery through distribution rates applicable to all distribution customers. |
| (34) | Public Health | Applicable/Not quantifiable | Included in category (28) and (29) | Navigant Report (Schedule NG-6), "Pollutants emitted by the electric power sector cause damage to human health, including increased morbidity and mortality. Over the course of its operating life, the Revolution Wind Rhode Island project will displace thermal generation which will result in reduced emissions of harmful pollutants, which can be translated to societal benefits". The societal benefits for GHG and NOx emissions reduction are listed above in (28) and (29). Positive impact, significant. |
| (35) | National Security and US international influence | Applicable/Not quantifiable | Included in category (1) and (28) | The project will contribute to reducing oil consumption, attributed to winter fuel switching, by approximately 270,000 Bbls. The economic and environmental impacts have been captured in the market value and GHG emission reduction listed in (1) and (28). Positive impact, small. |

| | |
|---|---|
| **Total Net Benefits:** | **$3,539,817,859** |

# Example

**Power System Level** (Cost/Benefit Categories)

| | | | (NPV in 2018$) |
|---|---|---|---|
| (1) | Energy Supply & Transmission Operating Value of Energy Provided or Saved (Time- & Location- | Applicable/Quantifiable | $933,754,251 |

Description of quantitative values or reason for exclusion:

| |
|---|
| Market value of Energy from Project + Increase in Project PPA market value from year with extreme Winter prices ocurring once in 15 years |

# Example

| | | |
|---|---|---|
| (4) Forward Commitment: Capacity Value | Applicable/Not Quantifiable | - |

Beyond the capabilities of the modeling system to quantify accurately. Neutral impact.

# Example

| | | |
|---|---|---|
| (32) Innovation and knowledge spillover | Applicable/Not quantifiable | - |

Rhode Island's leadership and contribution to emerging off-shore wind industry brings opportunities to drive down costs, attract future development, increase diversity of clean energy supply, and encourage a clean energy economy bringing investment and jobs to the region. Additional value brought by DWW's experience developing off-shore wind in the US and opportunity to take advantage of expiring federal tax incentives, economies of scale, and first mover advantage. Positive impact, large.

# Taking Stock

- **Framework is intended to offer clarity and a roadmap to proponents.**
- **Parties are struggling at various levels to execute the Framework.**

# Committee on Energy Resources and the Environment

## Revisiting Paradigms for Decision-Making About Customer Side Resources

NARUC Summer Policy Summit

# National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources

(NSPM for DERs)

Julie Michals - E4TheFuture

NARUC Summer Policy Summit - ERE Committee

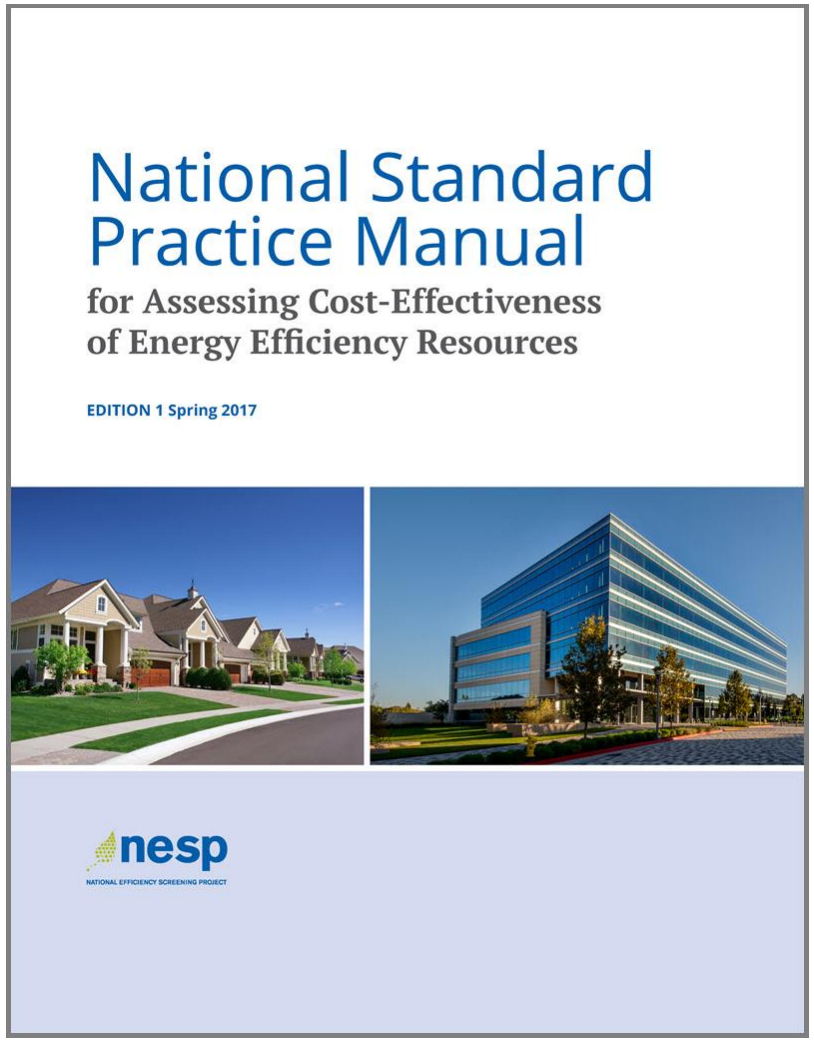
*Revisiting Paradigms for Decision-Making About Customer Side Resources*

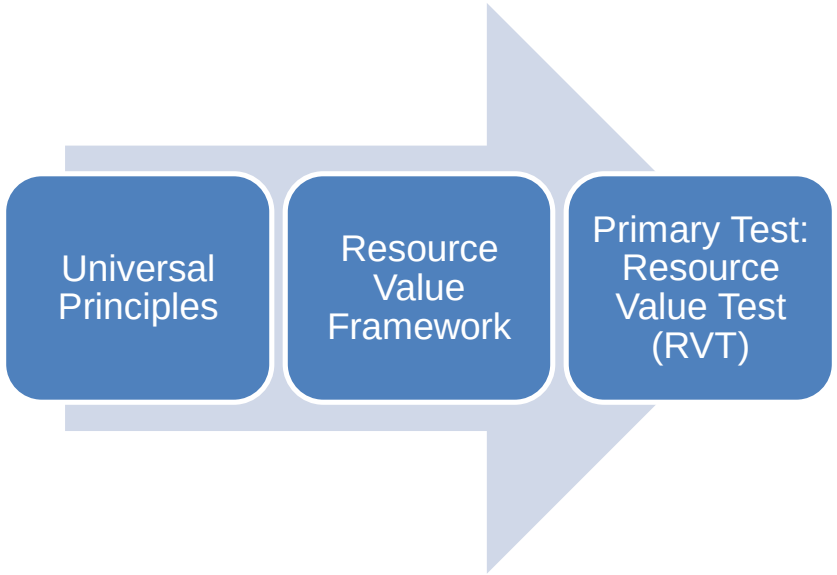
July 22, 2019

# Overview

1. Background – NSPM for EE
2. NSPM for DERs (coming in 2020)

# Background:  NSPM for EE (May 2017)

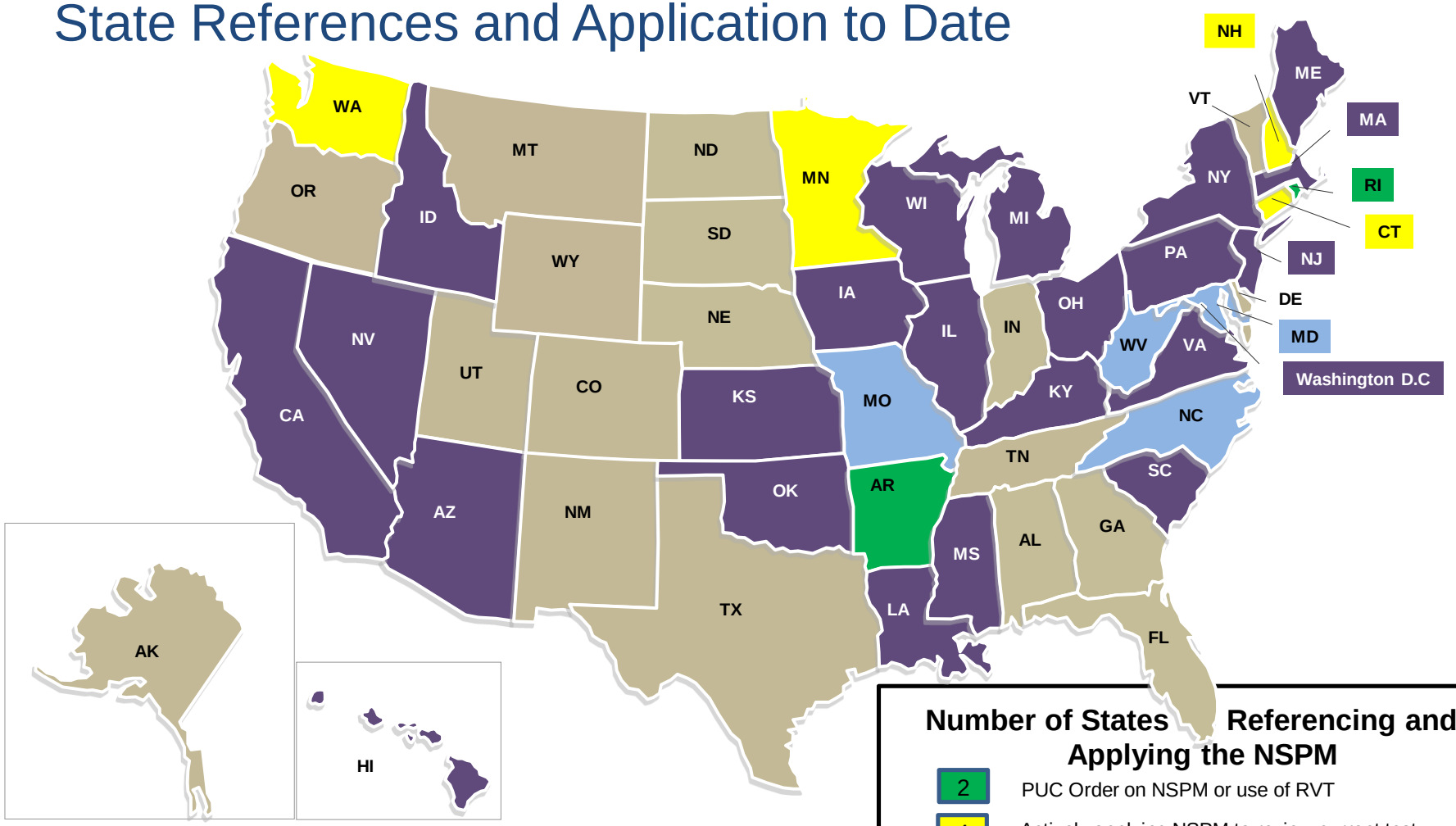



- Align with applicable state policies
- Treat costs & benefits symmetrically
- Account for relevant impacts (even if hard to quantify)
- A state's test may align with a traditional test…. or not

# NSPM for Energy Efficiency

## State References and Application to Date




**Number of States Referencing and Applying the NSPM**

| | |
|---|---|
| 2 | PUC Order on NSPM or use of RVT |
| 4 | Actively applying NSPM to review current test |
| 4 | In process of learning about the NSPM |
| 30+ | References have been made in PUC or legislative proceedings |

*Numbers next to state abbreviations in map indicate number of NSPM references in state formal proceedings

# Why an NSPM for DERs?

- Growing interest in range of DERs as grid resources and for distribution planning → regulators need further guidance to support BCA considerations and common framework for DER analyses
- States currently are using different techniques, methodologies, and assumptions for DER BCA, leading to inconsistency even within states
- NSPM for DERs - will generally apply principles from the NSPM for EE guidance to DERs to support consistent and economically sound BCA policies and practices

# Key Audiences and Applications

The NSPM for DERs purpose is to:

- Serve as a universal benefit-cost analysis (BCA) guidebook providing a common framework to support regulators, SEOs, utilities, and other stakeholders as DER investments expand and evolve.
- Help jurisdictions better understand range of potential DER benefit-cost impacts and associated key challenges – whether single or multiple-DER assessment, or non-wires.
- Provide forward looking guidance that addresses current considerations and practices but also valuation issues relevant to integrated, fuel-neutral DER investments.
- Inform state prioritization of DER investments that help to optimize building energy savings and energy use to support efficient and flexible building loads, including evolving EE as building technologies (e.g., advanced controls, sensors and data analytics)
- Help states address issues and investment decisions around electricity system reliability, energy affordability, and grid modernization.

# NSPM for DERs
## Answering Key Questions

1. Why a common framework for assessing the value of DERs?
2. How should the Utility Cost test or Societal Cost test be used in assessing DERs? What costs and benefits should be accounted for?
3. Should a different, state-specific test be used in assessing different types of DERs? If so, how should that test be designed?
4. Should multiple tests be used to assess DERs? If so, how? Or should the same tests be used for all DERs? If not, why not?
5. How should DER analyses account for revenue-shifting, cost-shifting, rate increases, or rate decreases?
6. How should third party capital be assessed in valuing DERs (in particular for non-utility system impacts)?

# NSPM for DERs - Advisory Committee

| Name | Affiliation | Name | Affiliation |
|---|---|---|---|
| Adam Cooper * | Edison Foundation | Kara Saul Rinaldi | Building Performance Assoc |
| Allison Clements * | Energy Foundation | Kelly Speakes Bachman * | Energy Storage Association |
| Andy Satchwell * | Lawrence Berkeley Lab | Marty Kushler | ACEEE |
| Ben King | US Dept of Energy | Mohit Chhabra | NRDC |
| Chris Porter | National Grid | Nadav Enbar * | EPRI |
| Cyrus Bhedwar | Southeast Energy Efficiency Alliance | Nate Kinsey | CA Efficiency+Demand Council |
| Dan Cross-Call * | Rocky Mountain Institute | Natalie Frick | Lawrence Berkeley Lab |
| Dan Delurey * | Wedgemere Group | Nick Dreher | Midwest Energy Efficiency Alliance |
| Dan Violette | Lumina | Paula Carmody * | Maryland Office of People's Counsel |
| Dave Seamonds * | MJ Bradley | Phil Jones * | Alliance for Transp Electrification |
| Danielle Byrnett | NARUC | Ric O'Connell/Taylor McNair * | Grid Lab |
| Deborah Reynolds | WA Utilities and Transport Commission | Rick Gilliam * | Vote Solar |
| Don Gilligan | Nat'l Assoc. of Energy Service Companies | Rodney Sobin | NASEO |
| Don Kreis * | NH Consumer Advocate | Robert Kasman/Ryan Chan * | PG&E |
| Elizabeth Titus | Northeast Energy Efficiency Partnerships | Ryan Katofsky * | Advanced Energy Economy |
| Gregory Ehrendreich | Midwest Energy Efficiency Alliance | Sami Khawaja | Cadmus |
| Howard Geller | Southwest Energy Efficiency Project | Scott Dimetrosky | Apex Analytics |
| Jack Laverty | Columbia Gas of Ohio | Sierra Martinez | Energy Foundation |
| Janet Gail Besser * | Smart Electric Power Alliance | Susan Stratton | Northwest Energy Efficiency Alliance |
| Jennifer Morris * | Illinois Commerce Commission | Todd Bianco | RI Public Utilities Commission |
| Joe Cullen | Building Performance Assoc | Tom Eckman | Consultant |
| Johanna Zetterberg | US Dept of Energy | Tom Stanton | Nat'l Regulatory Research Institute |
| John Agan | US Dept of Energy | Wally Nixon * | Arkansas |
| John Shenot | Regulatory Assistance Project | | |
| ** joined Advisory Committee for NSPM for DERs project* | | | |

# NSPM for DERs Project Team

Project Coordinator:  Julie Michals – Director of Valuation, E4TheFuture

Project Consultants/Authors:

| Name | Affiliation |
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| Chris Neme | Energy Futures Group |
| Karl Rabago | Pace Energy Center |
| Steve Fine | ICF Consulting |
| Steve Schiller | Schiller Consulting |
| Tim Woolf | Synapse Energy Economics |

# Three Tiers of DER Analyses

1. Single-DER analysis; where one type of DER is assessed relative to a fixed (i.e., static) set of alternative resources.

2. Multiple-DER analysis; where multiple DERs are assessed and optimized relative to a fixed set of alternative resources.

3. Integrated-DER analysis; where all electric resources, both distributed and utility-scale, are optimized.

*NSPM for DERs will focus on #1-2*

# NSPM for DERs Table of Contents

1. Executive Summary
2. Introduction
3. Common Framework for Benefit-Cost Analysis of DERs
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5. Demand Response Resources
6. Distributed Generation Resources
7. Distributed Storage Resources
8. Electrification
9. Non-Wires Solutions
10. Analysis of Multiple DERs
11. Integrated DER Planning
12. Tools and Techniques for DER BCAs

# Project will Build on Past & Ongoing Projects

State BCA DER efforts (NY, CA, MN, etc.)

A Framework for Integrated Analysis of Distributed Energy Resources: Guide for States, LBNL+DOE 2018

- A framework for states to plan for and assess DER utility and non-utility impacts at the individual, multiple, and integrated levels.

NARUC-NASEO Task Force Comprehensive Electricity Planning 2019

- A task force on comprehensive electricity planning (CEP) to align distribution system and resource planning processes

NASEO-NARUC Grid-interactive Efficient Buildings Working Group 2018-19

- Grid-interactive Efficient Buildings (GEB) addresses role of GEB in grid-mod efforts

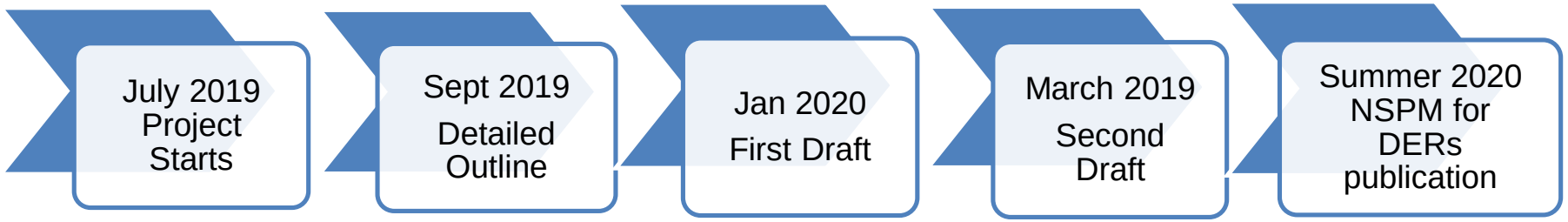
Integrated Distribution Grid: Decision Guide, vol iii (DSPx), US DOE 2017

- A review of what is necessary to develop a grid with integrated DERs and five common BCA test overviews

EPRI, 2014 + other Integrated Grid Projects

- A framework for DER-grid integration planning, including a BCA methodology which considers Distribution System, Bulk System, Customer, and Societal Impacts.

# Project Schedule



# NSPM Resources

**NSPM for EE:** https://nationalefficiencyscreening.org/the-national-standard-practice-manual-for-energy-efficiency/

**NSPM Case Studies**: https://nationalefficiencyscreening.org/resources/case-studies/

**NSPM and BCA Modeling:**
https://nationalefficiencyscreening.org/resources/nspm-and-models/

**Database of State Efficiency Screening Practices (DSESP):**
https://nationalefficiencyscreening.org/state-database-dsesp/

**NSPM for DERs (Overview):**
https://nationalefficiencyscreening.org/the-national-standard-practice-manual-for-ders/

www.nationalefficiencyscreening.org

# Thank you

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# Committee on Energy Resources and the Environment

## Revisiting Paradigms for Decision-Making About Customer Side Resources

NARUC Summer Policy Summit


# WA IOU Resource Value Framework

Deborah Reynolds, Assistant Director

Conservation and Energy Planning

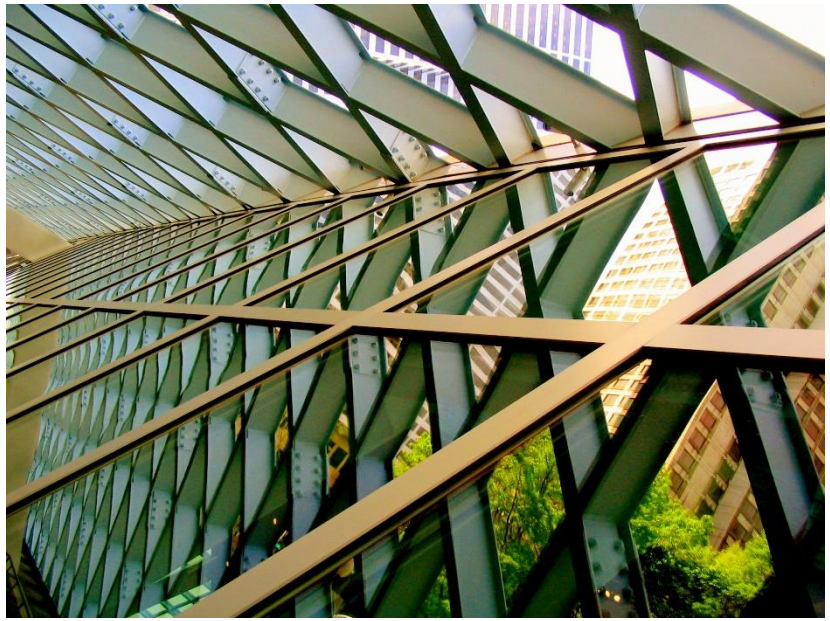
# Role of a state regulator – WA UTC

**Pursue all cost-effective conservation**

- Target setting
  - IRP process
- Prudency review
  - Ongoing process

# Why use the Resource Value Framework?

- TRC provides a false impression of standardization across jurisdictions
- *National Standard Practice Manual* by National Efficiency Screening Project, May 2017
- Regulatory perspective
- Symmetry
- Transparency



# RVF Steps

1. Identify and articulate the jurisdiction's applicable policy goals.
2. Include all utility system costs and benefits.
3. Decide which additional non-utility system costs and benefits to include in the test, based on applicable policy goals.
4. Ensure the test is symmetrical in considering both costs and benefits.
5. Ensure the analysis is forward-looking, incremental, and long-term.
6. Develop methodologies and inputs to account for all impacts, including hard-to-quantify impacts.
7. Ensure transparency in presenting the analysis and the results.

# What to include in a WA IOU RVT?

**Cost and Benefit Inputs**

- All utility system impacts
- Other impacts based on applicable policy goals

**UTC Policy Goals**

- Public service laws
  - Safe and reliable
  - Lowest reasonable cost
  - Public interest objective
- Energy Independence Act
  - Economic benefits
  - Protect clean air and water
  - Energy independence
  - Stabilize electricity prices
  - High-quality jobs

| Public Service Laws and Policies: | Subject | Principles | | | | | Policy Goals Reflected in Laws, Regulations, Orders, etc. | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **Efficiency as a Resource** | **Hard-to-Quantify Impacts** | **Symmetry** | **Forward-looking Analysis** | **Transparency** | Lowest-Reasonable-Cost | Industry Neutrality | Manage Risk | Maintain Reliability | Environmental: Energy and Non-energy Impacts from Emissions, Water, | Economic Development | Provide Safe Service | Public Health | Used & Useful | special consideration for low-income customers | special consideration for senior citizens | reduction of coal-fired electricity | Equity | Resource diversity | Consistent with the Council method |
| PURPA | Consider all costs and benefits, including environmental effects | X | X | X | X | X | X | | X | X | X | | X | | | | | | | X | |
| RCW 19.280.010 | Integrated Resource Planning statute requires utilities to consider public policies regarding resource preference adopted by Washington state or the federal government | X | X | X | X | X | X | | X | X | X | | | | | | | | | X | |
| RCW 19.280.010 | Utilities must consider the cost of risks associated with environmental effects including emissions of carbon dioxide, among other things | X | X | X | X | X | X | | X | X | X | | | | | | | | | X | |
| RCW 19.285 | Energy Efficiency Resource Standard | X | X | X | X | X | X | | X | | X | | | | | | | | | X | X |
| RCW 19.285 | Renewable Portfolio Standard | | X | | X | X | | | X | X | X | X | | | | | | | | X | |

# Statewide IOU Advisory Group (SWAG)

- Began RVF with SWAG in June 2018
- Progress through Step 4
- Staff plans to present a proposal detailing costs and benefits to include in the test, based on applicable policy goals discussed with stakeholders
- Possible outcomes - rulemaking, policy statement, or adoption through biennial plan order

# Back to Step 1?

## *Washington Clean Energy Transformation Act, SB 5116, may change applicable policy goals*

- Sec 4(8) "…. equitable distribution of energy and nonenergy benefits and reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits and reduction of costs and risks; and energy security and resiliency."
- SB 5116 and HB 1257 incorporate social cost of carbon into cost-effectiveness for electric and gas
- Sec 24 Incorporate cumulative impact analysis developed by Department of Health

# Thank You

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