

# **National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources (NSPM for DERs)**

## **OVERVIEW**

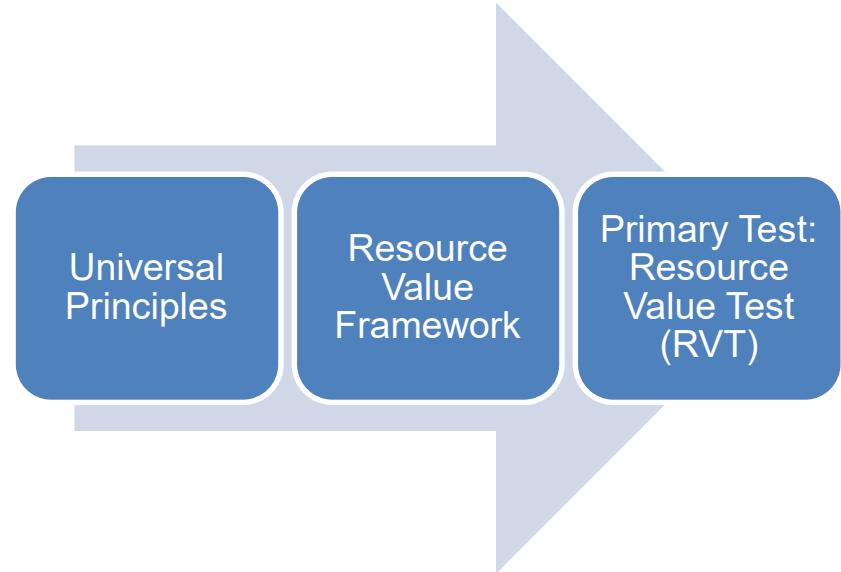
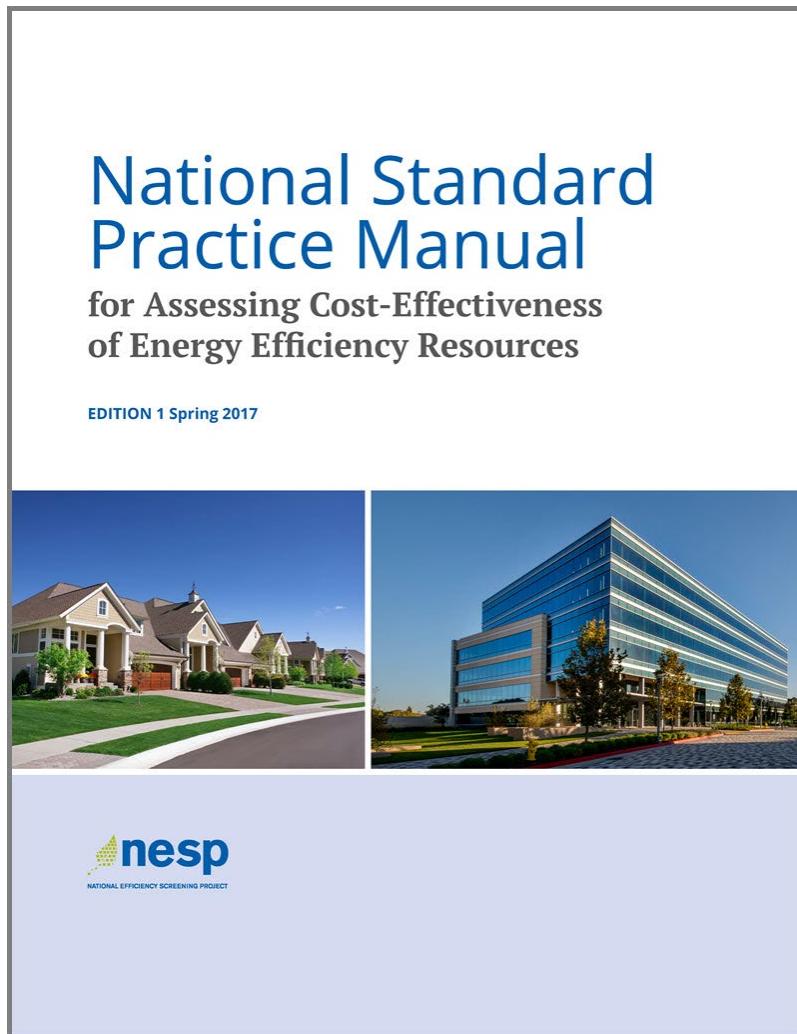
October 2019

The National Efficiency Screening Project

# Overview

1. Background – NSPM for EE
2. Why an NSPM for DERs?
3. Who's Involved?
4. Scope of Guidance
5. Project Schedule

# Background: NSPM for EE (May 2017)



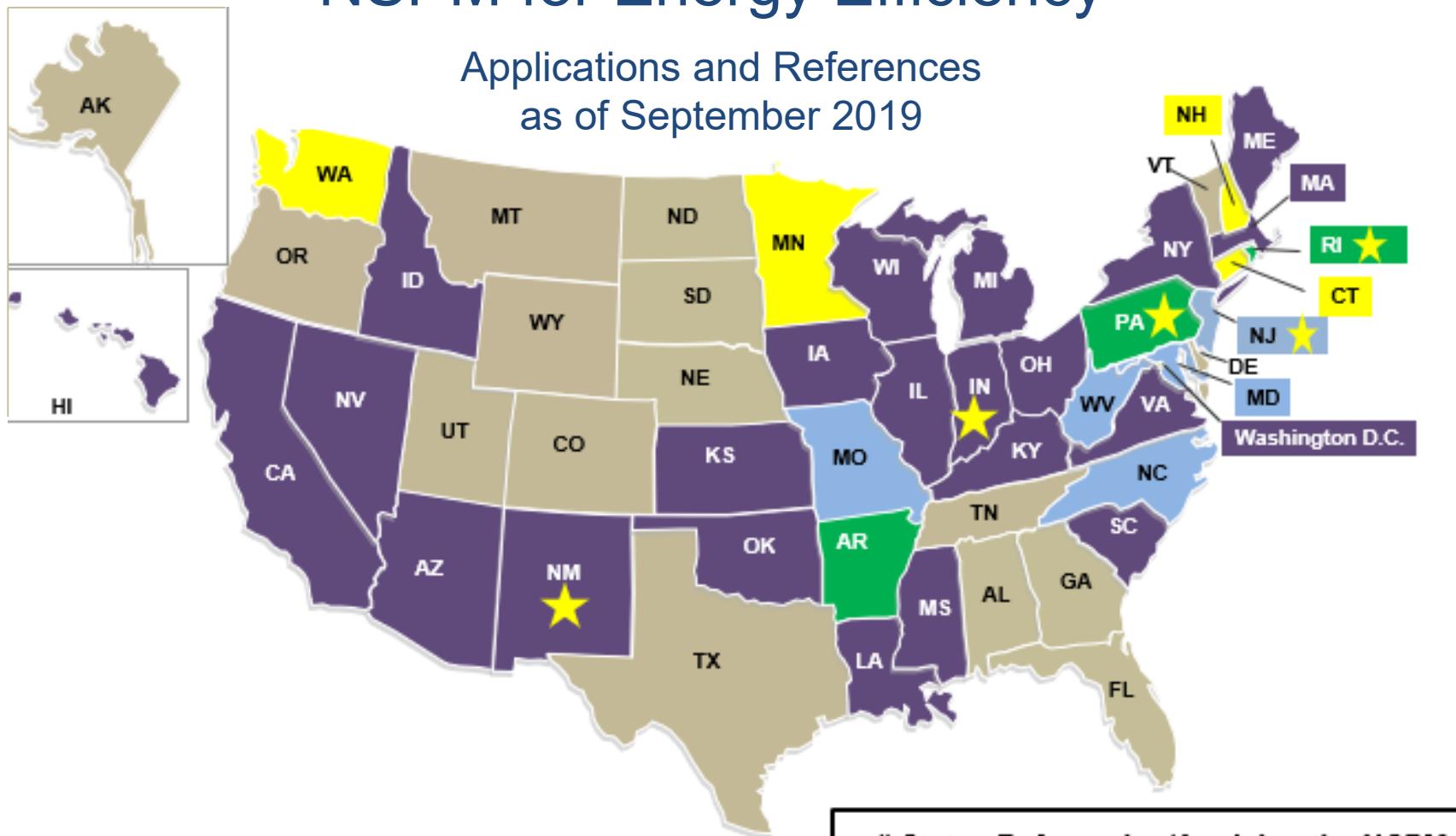
- Align with applicable state policies
- Treat costs & benefits symmetrically
- Account for relevant impacts (even if hard to quantify)
- A state's test may align with a traditional test.... or not

# NSPM Principles

1. Recognize that energy efficiency is a resource.
2. Account for applicable policy goals.
3. Account for all relevant costs & benefits (based on applicable policies), even if hard to quantify impacts.
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.

# NSPM for Energy Efficiency

Applications and References  
as of September 2019



## # States Referencing/Applying the NSPM

3	PUC Order (final/tentative) on use of NSPM/RVT
4	Actively applying NSPM to review current test
5	In process of learning about the NSPM
22	References made in PUC/legislative proceedings
<b>★</b>	New state status since last quarter's newsletter

## 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 practice

# 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 Sabin	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 in 2019. Other Committee members guided the NSPM for EE in 2017-2018

# NSPM for DERs Project Team

Project Coordinator: Julie Michals - E4TheFuture

Project Consultants/Authors:

Name	Affiliation
Brenda Chew	Smart Electric Power Alliance
Chris Neme	Energy Futures Group
Karl Rabago	Pace Energy Center
Steve Fine	ICF Consulting
Steve Schiller	Schiller Consulting
Tim Woolf	Synapse Energy Economics

# The Goal of the 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)?

## 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 (Preview)

1. Executive Summary
2. Introduction
3. Common Framework for Benefit-Cost Analysis of DERs
4. Energy Efficiency Resources
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 to align distribution system and resource planning processes.

NASEO-NARUC Grid-Interactive Efficiency Buildings (GEBs) 2018

- Role of Grid-interactive Efficient Buildings in grid-mod efforts

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

- 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



# For More Info...

**Stay informed with the *NSPM Quarterly Newsletter*:**

<https://nationalefficiencyscreening.org/national-standard-practice-manual/news/>

**To download the NSPM for EE and find supporting Resources visit: <http://www.nationalefficiencyscreening.org/>**

**Questions? Email [NSPM@nationalefficiencyscreening.org](mailto:NSPM@nationalefficiencyscreening.org)**