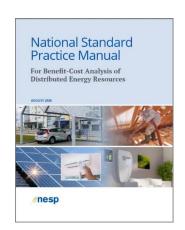
New Publication: National Guidance on Benefit-Cost Analysis of Distributed Energy Resources

FRAMINGHAM (August 19, 2020)—The comprehensive *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources* (NSPM for DERs) is now available to help guide benefit-cost analyses (BCAs) of distributed energy resources. The manual serves as an objective, technology-neutral and economically sound guidance document for regulators, utilities, consumer advocates, DER proponents, state energy offices, and other stakeholders interested in comprehensively assessing the impacts of DER investments.



BCAs involve a systematic approach to assess the cost-effectiveness of investments by consistently comparing the benefits and costs of

DER types with each other and with alternative energy resources. The new NSPM includes information on BCAs of single and multiple DER types, and provides use-case examples for different combinations and DER applications.

DERs represent a critical component of electricity grid evolution as jurisdictions transition from a traditional, centralized power grid to a more distributed one that supports flexibility with two-

way energy flows to manage electricity demand and increased adoption of large scale, intermittent renewable energy. DERs can enable third parties to introduce and sell new products and services, allowing customers to optimize their end-uses and consumption patterns to lower their bills and utility costs.

DER types covered in the NSPM are: energy efficiency; demand response; distributed generation; distributed storage; electric vehicles; and increased electrification of buildings including heating and cooling systems. "The National Standard Practice Manual provides neutral and objective guidance that incorporates lessons learned across the country during the past two decades. It responds to current needs and addresses relevant policies and goals of each jurisdiction undertaking investments in distributed energy resources."

--Steve Cowell, president, E4TheFuture

The manual is built around a BCA framework, and comprises five major parts:

- Part I the NSPM Benefit-Cost Analysis Framework, fundamental principles and guidance on development of cost-effectiveness tests.
- Part II full range of potentially relevant DER benefits and costs (i.e., impacts); cross-cutting considerations on how to account for certain impacts.
- **Part III** guidance on single-DER analysis for different DER technology types; key factors affecting BCAs for each type and BCA challenges.
- Part IV guidance on 3 main ways multiple-DER analysis is conducted: at customer site level; for a geographic region; and for entire utility service territory. Also addresses dynamic system planning practices.
- Appendices provide further detail on some topics that warrant additional explanation.

The NSPM for DERs incorporates and expands upon the guidance from the 2017 NSPM for Assessing Cost-Effectiveness of Energy Efficiency Resources (NSPM for EE), which in turn built upon useful concepts from the 2001 California Standard Practice Manual.

What industry experts are saying about the NSPM for DERs...

"As utilities move toward taking advantage of a wide variety of DERs, we need a tool like the NSPM to help utilities implement cost-effective programs that consider all the relevant costs and benefits, and to help regulators review these new programs. The jurisdictional approach to cost-effectiveness in the Manual significantly improves certainty around program implementation for utilities, regulators, and stakeholders." — Deborah Reynolds, Washington Utilities and Transportation Commission

"This is a very good, useful, and important document. It will be valuable for guiding the deployment of DERs to enhance the operational, economic, resiliency, and environmental performance of our electricity system." – Rodney Sobin, National Association of State Energy Officials

"The NSPM for DERs is easy to use and navigate. Many of our colleagues would be able to lead a process to create a Jurisdiction Specific Test with this document." – Todd Bianco, Rhode Island Public Utilities Commission

"I expect the NSPM for DERs to quickly become the pre-eminent resource for states on costeffectiveness analysis for all types of DERs, and to remain the prevailing guidance for many years (perhaps with periodic updates). The manual can help lead to more consistent valuation methods across DER types, and across states, with greater consideration of the full suite of values that DERs can provide." – John Shenot, Regulatory Assistance Project

"The NSPM for DERs is a useful guide for regulators charged with evaluating the benefits and costs of utility proposals for expenditures related to DERs and other types of investments. Its "jurisdiction specific" test outlines an approach to assessing system, customer, and societal benefits consistent with the public policy priorities in a given state. This tool will help progress towards a clean and modern electricity system."— Janet Gail Besser, Smart Energy Power Alliance

Why the NSPM for DERs?

Electricity and gas industries as well as public agencies increasingly plan for and invest in DERs—whether in the form of programs, procurement, or pricing mechanisms. This is driven largely by changing economics, customer preferences and demand—along with policy goals and objectives (e.g., reducing costs, deferring capacity, providing demand flexibility, increasing reliability, reducing energy burdens for low- to moderate-income customers, managing grid power quality, lowering carbon emissions, and/or supporting economic development).

By applying a comprehensive and consistent BCA framework to analyze DER investments, jurisdictions can implement optimal levels of DERs and avoid decisions that can lead to unintended customer costs.

Background

The NSPM for DERs is important for the full range of public agencies, authorities and decision makers to manage decisions relevant to investment of public resources in DERs. The principles and concepts presented in the manual are relevant to all types of electric and gas utilities, including investor-owned and publicly owned utilities (e.g., municipal or cooperative

utilities). The manual is relevant to all types of utilities, including those that are vertically integrated, transmission and distribution or distribution-only utilities; or those serving as a distribution platform for host customers to access energy services and DERs from third parties.

The NSPM is a product of the National Energy Screening Project (NESP). The NESP represents a multi-year effort guided by an advisory group represented by a range of experts with varying perspectives involved in BCA of DERs; it is coordinated by the nonprofit E4TheFuture.

Authorship and Advisory Group

The NSPM for DERs was authored by Synapse Energy Economics (project lead), Energy Futures Group, ICF, Pace Energy and Climate Center, Smart Energy Power Alliance, and Schiller Consulting. Content was guided by an <u>Advisory Group</u> represented by a broad group of industry stakeholders and experts. NESP recognizes the authors and Advisory Group for developing and informing this important and timely guidance document. See https://nationalenergyscreeningproject.org/ to download the NSPM and other supporting materials.

About the National Energy Screening Project

The NESP joins organizations and individuals who seek to improve how utility customer-funded electricity and natural gas DERs are screened for cost-effectiveness. NESP is a stakeholder organization open to all interested parties willing to work collaboratively toward better cost-effectiveness testing, which will help enable decision-makers to determine which DERs are in the public interest and what level of investment in these resources is appropriate based on jurisdiction goals and objectives.

About E4TheFuture

E4TheFuture is a nonprofit organization that collaborates with stakeholders to provide expert policy solutions, education, and advocacy to advance clean energy and energy efficiency solutions at federal, state and local levels.

