

Developing Requirements for Utility Distribution Plans: *Example State Practices*

Lisa Schwartz

Lawrence Berkeley National Laboratory

**National Association of Regulatory Utility Commissioners
Peer-Sharing Series on Integrated Distribution System Planning**

June 12, 2023

Disclaimer

This document was prepared as an account of work sponsored by the United States Government. While this document is believed to contain correct information, neither the United States Government nor any agency thereof, nor The Regents of the University of California, nor any of their employees, makes any warranty, express or implied, or assumes any legal responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by its trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or The Regents of the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof, or The Regents of the University of California.

Ernest Orlando Lawrence Berkeley National Laboratory is an equal opportunity employer.

Copyright Notice

This manuscript has been authored by an author at Lawrence Berkeley National Laboratory under Contract No. DE-AC02-05CH11231 with the U.S. Department of Energy. The U.S. Government retains, and the publisher, by accepting the article for publication, acknowledges, that the U.S. Government retains a non-exclusive, paid-up, irrevocable, worldwide license to publish or reproduce the published form of this manuscript, or allow others to do so, for U.S. Government purposes.

Example State Practices (1)

- ▶ Establish distribution system planning (DSP) goals, objectives, and priorities with stakeholder engagement
 - [Maine](#) – “...the commission shall ... identify the priorities to be addressed in a filing by a covered utility regarding a grid plan that will assist in the cost-effective transition to a clean, affordable and reliable electric grid. The commission shall hold technical conferences or stakeholder workshops before the filing to identify priorities, assumptions, goals, methods and tools that will assist the covered utility in developing a grid plan.”
 - See Berkeley Lab presentation on goals and objectives in other states [here](#)
- ▶ Build on work by other states, tailored to your state’s interests
 - Forthcoming catalog of state DSP requirements (slide 6)
- ▶ Host presentations to increase stakeholders’ understanding
 - [Colorado](#), [Illinois](#), [Maine](#), [Massachusetts](#), [Michigan](#), [New Mexico](#), [Oregon](#)
- ▶ Require utilities to engage stakeholders and communities in the planning process
 - Joint Utilities of NY [stakeholder plan and timeline](#)
 - Oregon’s community engagement plans – see chapter 3 in [Portland General Electric](#) (PGE) plan
- ▶ Ask utilities to respond to a questionnaire to gather baseline information on their distribution system and planning practices — and ask for stakeholder comments
 - Minnesota [utilities](#); Oregon [utilities](#) and [third-party energy efficiency administrator and stakeholders](#); New Jersey (questionnaire for utilities forthcoming)



Example State Practices (2)

- ▶ Determine whether any current filings can be integrated/consolidated in DSP filings
 - Oregon PUC suspended smart grid filings (e.g., [order](#) on PGE's DSP part two)
 - Minnesota PUC integrated [grid modernization plans](#) and [transportation electrification plans](#) into DSP
- ▶ Prepare a white paper to lay out PUC staff's vision for DSP processes and provide guidance for utility filings
 - [Minnesota](#) – Defined grid modernization for Minnesota, proposed a phased approach, and identified principles to guide it
 - [New York](#) – Proposed changes in filing requirements for effective interaction with the PSC's Coordinated Grid Planning proceeding to achieve the state's climate goals
 - [Oregon](#) – Outlined rationale and key drivers for opening a DSP investigation, desired outcomes and future planning process, near-term scope and schedule for investigation, and planning considerations



Photo courtesy of Sunrun

Example State Practices (3)

- ▶ Host work groups to help develop and refine requirements — and address emerging planning issues
 - [Hawaii](#) – Stakeholder council, technical advisory panel, and working groups
 - [Maine](#) – Working groups on forecasting, solutions evaluation criteria, and data availability/collection
 - New Jersey – Facilitated working groups with electric distribution companies and stakeholders will make recommendations for integrated distributed energy resources (DER) planning — forthcoming
 - [Oregon](#) – DSP Work Group serves as a forum to identify, articulate, discuss and, when possible, resolve technical and other questions that arise. The primary objective is finding solutions to barriers that would otherwise inhibit completion of the utilities' plans.

- ▶ Consider pilots for new processes and technologies
 - Non-wires alternatives ([Oregon](#))
 - Resilience — Resilient Minneapolis project ([Minnesota](#))
 - Hosting capacity analysis — start with solar PV, expand to other DERs, and add use cases*
 - Time-based rates — for general service rates and managed electric vehicle charging (e.g., Oregon, Minnesota, [Hawaii](#), [New York](#))

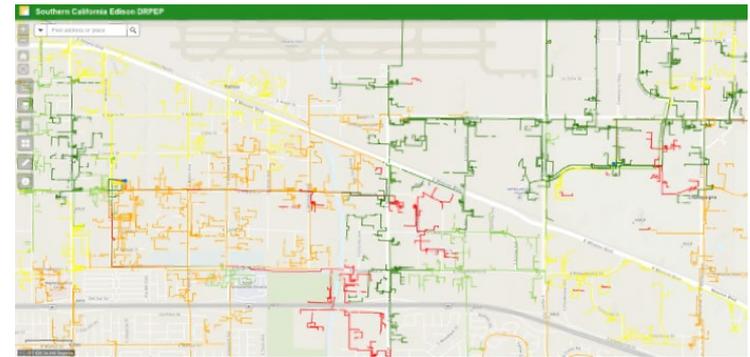


Figure source: Southern California Edison

*See Minnesota PUC orders in Docket Nos. 15-962, 18-684, 19-666, and 21-694

Catalog of State Distribution System Planning Requirements



- ▶ *Available soon* – Detailed table summarizing DSP requirements by topic and state
- ▶ *Later this year* — Report updating our [2017](#) and [2018](#) publications on state engagement in DSP and our [presentations](#) on regulatory approaches
 - Materials will be posted on BerkeleyLab’s IDSP [website](#)
- ▶ **General information and procedural requirements**
 - Planning goals and objectives, type of plan (grid modernization plan, distribution system plan, integrated grid plan, DER plan, T&D improvement plan), filing frequency, planning horizon, term of action plan, stakeholder engagement and equity, type of commission action on filed utility plans
 - Links to legislation and regulations, commission proceedings and orders, and utility plans
- ▶ **Substantive requirements**
 - Baseline information required on current distribution system
 - Load and DER forecasting
 - Reliability and resilience analysis and metrics
 - Grid needs assessment and solution identification, including non-wires alternatives
 - Hosting capacity analysis
 - Grid modernization strategy and roadmap
 - Coordination with other types of planning

Contact



Lisa Schwartz
lcschwartz@lbl.gov
(510)926-1091

Electricity Markets and Policy Department
Berkeley Lab

<https://emp.lbl.gov/>

Click [here](#) to stay up to date on our publications and webinars and follow us [@BerkeleyLabEMP](#)