ELECTRICITY AFFORDABILITY TOOLKIT

Improved Planning Processes

COST CONTROL

AT A GLANCE

TARGET COST DRIVERS

The policy can help to ease customer cost pressures created by these drivers

- **Aging grid infrastructure**
- **Load growth**
- **Misaligned utility incentives**

IMPACT TIME HORIZON

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How long it typically takes before changes materialize in utility behavior or customer bills

Medium-term (2–5 years)

POTENTIAL COST SAVINGS

Page 2

The level of cost savings that can reasonably be expected to result from this policy

Medium

CONTEXT AND BACKGROUND

For vertically integrated utilities, adopting high-quality, integrated planning processes that span generation planning, distribution system planning, and transmission planning will help ensure that cost-effective and customer-centric resources are considered when utilities plan for future investments.

Even for "wires-only" utilities, updating and coordinating distribution and transmission planning processes, especially to integrate distributed energy resources (DERs), can drive down costs and improve system reliability. Traditional planning often silos different planning processes and favors utility-owned, capital-intensive infrastructure while overlooking lower-cost alternatives like DERs.

Modern planning requires utilities to evaluate a broader set of solutions, including demand-side solutions like virtual power plants (VPPs) and demand-side management programs, advanced transmission technologies (ATTs) like grid-enhancing technologies (GETs) and advanced conductors, community solar, and utility-scale electricity generation.

State legislatures and public utilities commissions (PUCs) can enable least-cost, least-risk planning outcomes by modernizing requirements for integrated resource plans (IRPs), distribution system plans (DSPs), and transmission planning practices – in addition to engaging in formal proceedings and providing critical input via other channels. Improvements to planning include:

- Defining requirements for transmission and distribution plans in addition to resource planning,

including establishing methods for coordinating across planning processes;
- Ensuring plans evaluate emerging and non-traditional resources as options for providing critical grid services in resource planning;
- Identifying key policy objectives for resource planning, such as reducing long-term transition risks; and
- Increasing the transparency of planning with clearly defined opportunities for stakeholder engagement.

These improvements reduce system costs, avoid unnecessary infrastructure, and accelerate the transition to a more affordable and resilient grid.

REAL-WORLD EXAMPLES

In 2023, the **Michigan** legislature passed a comprehensive bill updating utility regulation that includes detailed updates to resource planning requirements. Among other things, the bill enables stakeholders to define key assumptions in planning and ensure the utility evaluates plans in alignment with state priorities. Additionally, statute requires the commission to review planning regulation and revise the rules every 5 years.

In 2022, the **Minnesota** PUC via order Docket No. E002/M-21-694 updated their integrated distribution planning requirements, established in 2018, to include transmission planning. Minnesota state statute directs utilities to periodically file resource plans with the commission and empowers the commission to approve, reject, or modify those plans.

IMPACT TIME HORIZON

Medium-term (2–5 years)

Planning reforms typically take effect over one or more planning cycles, with impacts realized as new investments are approved and implemented.

POTENTIAL COST SAVINGS

Medium

While cost savings will vary based on policy design and implementation, improved planning processes can reduce system costs and customer bills by avoiding overbuilt infrastructure and selecting lower-cost energy or demand-side solutions.

FURTHER READING

- "Integrated Distribution System Planning", Berkeley Lab
- "50 Ways to Improve Planning for Electricity Resources of the Future," Berkeley Lab, 2024
- "Reimagining Resource Planning," RMI, 2023