RMI

ELECTRICITY AFFORDABILITY TOOLKIT

Capex-Opex Equalization

COST CONTROL

AT A GLANCE

TARGET COST DRIVERS

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

- **Extreme weather/wildfires**
- **Load growth**
- **Misaligned utility incentives**

IMPACT TIME HORIZON *Page 2*

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

Capex-opex equalization refers to a set of strategies that aim to balance the financial incentives between capital expenditures (capex) and operating expenditures (opex).

Since utilities traditionally earn a return on capex but not opex, they typically favor capex solutions, like constructing new power generation, even when opex solutions may cost less or provide more benefits to customers and the grid (e.g., grid-enhancing technologies, non-wires alternatives, energy efficiency, or demand flexibility).

There is a range of equalization strategies that aim to correct this imbalance; on the narrow end of the spectrum, they can allow utilities to treat certain opex categories like capex with an allowed return, and on the broad end of the spectrum, they remove the distinction between capex and opex completely.

The ideal end result is to neutralize the utility preferences for capex solutions where more cost-effective opex solutions exist.

REAL-WORLD EXAMPLES

In addition to the states listed below, many other states currently have explicit capex-opex equalization mechanisms in place.

California incorporates capex-opex equalization through rules and mechanisms approved by its utility commission and authorized via laws like Assembly Bill 32 (the Global Warming Solutions Act) and Senate Bill 350 (The Clean Energy and Pollution Reduction Act) that broadly support these types of utility innovation strategies. Utilities are allowed to capitalize certain operational costs, such as those that enable distributed energy generation or grid modernization.

Massachusetts established the Green Communities Act, which mandates strong energy efficiency targets and allows utilities to amortize and earn a rate of return on energy efficiency expenditures.

Minnesota has implemented capex-opex equalization through programs that allow cost recovery for certain investments related to distributed generation. Broad authority is available via a number of statutes related to energy efficiency and cost recovery.

New York enabled capex-opex equalization through the state's Reforming the Energy Vision (REV) framework, which came about via a regulatory proceeding aimed at realigning utility incentives. The framework allows utilities to amortize and earn a return on specific types of operating expenses, such as energy efficiency and demand-side management programs.

Oregon has approved non-wires alternatives programs in which utilities can recover costs associated with investments in demand-side and distributed energy solutions, and regulators have approved financing mechanisms in select dockets that place these expenses on more equal footing with capital expenses. No single statute explicitly encourages equalization mechanisms, broad authority is available via laws like House Bill 2021, which mandates decarbonization and encourages non-wires alternatives.

IMPACT TIME HORIZON

Medium-term (2–5 years)

Capex-opex equalization mechanisms are not expected to deliver results immediately but rather require regulatory reform or rule changes and often take time to integrate into utility planning and operations. This policy can be expected to show real impacts within a 2–5-year window after implementation starts.

POTENTIAL COST SAVINGS

Medium

Consolidated Edison's Brooklyn-Queens Demand Management program, approved in 2014 by the state's commission, demonstrated how incentives can enable utilities to use demand management, efficiency, and distributed generation in place of $1.2 billion of traditional grid upgrades to meet increasing peak demand. With only $75 million in spending, Consolidated Edison achieved most of the targeted peak reduction and deferred major infrastructure investments. Overall, cost savings will depend on the specific equalization mechanisms in place and the way they are designed.

LEGISLATIVE DESIGN AND IMPLEMENTATION CONSIDERATIONS

Legislation for capex-opex equalization can do the following. Approaches may differ state by state:

Equalization methods

Authorize or encourage the regulator to explore or implement one or more methods for placing capex and opex on equal footing. Methods can be narrow or broad in scope and tailored to the utility's context and policy goals. Methods could include, for example:

- **Opex capitalization** allows utilities to earn a rate of return on specific types of operating expenses, most commonly energy efficiency or demand-side management programs.
- **Efficiency carryover mechanisms** enable utilities to retain cost savings from reduced expenditures during any year of a multi-year rate plan, incentivizing them to undertake opex solutions by providing future revenue opportunities.
- **Performance incentive mechanisms** (PIMs) are tools that offer utilities financial incentives relative to specific outcomes. They generally include a performance metric tied to the outcome and one or more targets or benchmarks that trigger rewards if met or penalties if unmet. For example, a PIM to increase utilization of distributed energy resources can be considered a form of capex-opex equalization.
- **Shared savings mechanisms** (SSMs) are a form of PIM designed to align utility behavior with policy objectives by offering a proportion of savings or net benefits created by certain utility actions to the utility as earnings. SSMs have been applied across a range of utility investments, including demand response, non-wires alternatives, and energy efficiency programs.
- **Modified clawback mechanisms** are a type of PIM that adjust or reclaim utility earnings when actual outcomes differ significantly from projections used to justify an investment. These mechanisms are designed to protect customers from overpayment and maintain utility accountability.
- **Totex ratemaking** merges capex and opex into a single "total expenditures" pool and applies a consistent capitalization rate so utilities earn on both capex and opex equally.

The table below provides examples of how authority and responsibility for capex-opex equalization may be distributed across key entities.

VENUE	POTENTIAL ROLES
Legislature	• Establish policy framework • Define eligible opex categories • Establish or clarify regulatory authority • Require reporting and transparency
Regulator	• Implement equalization methods • Align implementation with other regulatory programs and dockets • Oversee utility compliance • Publish policy outcomes and results
Administration	• Drive cross-agency coordination • Recommend or provide strategic direction
RTO/ISO	• Integrate policy effects into regional planning or assumptions

LEGISLATIVE DESIGN AND IMPLEMENTATION CONSIDERATIONS (CONTINUED)

Establishment of related policies

Implement capex-opex equalization alongside policies that create a cost-efficiency incentive. Capex-opex equalization is most effective when part of a broader policy framework that aligns utility incentives with cost-efficiency. While capex-opex equalization strategies can place opex solutions on an equal footing with capex solutions, on their own, they do not incentivize cost-efficiency. It is therefore important to implement capex-opex equalization alongside mechanisms that create an incentive for cost-efficiency.[1]

Coordination with other programs

Encouraging alignment between equalization mechanisms and broader goals, such as clean electricity standards or building energy efficiency initiatives, creates a more coherent and effective policy approach.

Eligible costs

Empower the commission to define the categories of opex that can be treated like capital, such as demand-response programs, energy efficiency investments, a distributed energy resource management system, grid-enhancing technologies, non-wires alternatives, or battery storage deployment. Rather than selecting specific technologies, legislation may allow for flexibility in program design and instead set criteria for eligible operating costs based on, for example, customer benefits.

Regulatory enforcement

Granting regulators explicit authority to oversee implementation and assess performance outcomes enables accountability and ensures utilities adhere to the requirements established.

Reporting and transparency

Requiring utilities to submit filings that, for example, track outcomes and describe how equalized costs are calculated and allocated to customers increases transparency and oversight of program impacts.

[1]As an illustrative example: a utility can earn 7% on either an opex solution or a capex solution, and the opex solution is $10 (yielding $0.70 in earnings) while the capex solution is $100 (yielding $7). Even though both offer the same rate of return, the utility would still prefer the capital solution. To actually drive reduced spending, additional incentives are needed to make the opex option attractive.

FURTHER READING

- "A Strategic Framework for Utility Cost Control," RMI, 2025
- "Making the Clean Energy Transition Affordable: How Totex Ratemaking Could Address Utility Capex Bias in the United States," RMI, 2022
- "Improving the PBR Framework in Hawaii: Addressing the Risk of "Capex Bias"," Brattle Group, 2019