RMI

ELECTRICITY AFFORDABILITY TOOLKIT

Cost-Effective Wildfire Management

COST CONTROL | COST DISTRIBUTION

AT A GLANCE

TARGET COST DRIVERS

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

- **Extreme weather/wildfires**

IMPACT TIME HORIZON

Page 2

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

Variable

POTENTIAL COST SAVINGS

Page 4

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

Variable

CONTEXT AND BACKGROUND

Cost-effective wildfire management includes a variety of strategic approaches to electricity system operations, technologies, and planning that reduce the risk and impact of wildfires on the system while aiming to preserve electricity affordability.

As more intense wildfires occur in places like the Western United States, costs to the electricity system are increasing substantially. These costs come from a number of interconnected factors: the increased need to mitigate wildfire risk (e.g., by undergrounding power lines), wildfire lawsuit claims when infrastructure causes costly fires, high premiums for utility liability insurance, increased capital spending to repair equipment that fails during fires, and utility credit rating downgrades associated with elevated risk.

In California, for example, 16 percent of the total cost to customers in the state's three largest investor-owned utilities now comes from wildfire-related costs.

In some states, the legal and financial landscape compounds the challenges associated with wildfire risk. Under California's doctrine of inverse condemnation, utilities can be held liable for wildfire damages caused by their equipment even without negligence and regardless of other contributing factors.

This liability framework, combined with the growing risk of intense fires, leads to steep and unpredictable costs for utilities and their customers. To mitigate the costs utilities may face, some states have adopted liability caps, which limit how much they must pay and shift a portion of the risk to property owners or the state.

Utilities may manage wildfire risk independently, but establishing regulatory processes helps ensure that utilities are in fact managing risk and doing so in a way that is transparent and cost-effective. Legislation can establish these processes and support strategies to identify and assess wildfire risks, mitigate risks, and ensure risks are distributed fairly among taxpayers, ratepayers, shareholders, and individual homeowners.

For example, legislation can authorize the creation and terms of use of wildfire self-insurance funds, which are essential to keeping utilities out of bankruptcy when a particularly bad fire comes around and serve as a key mechanism of affordability. Integrated resource plans (IRPs), distribution system plans (DSPs), and risk-specific plans like wildfire mitigation plans provide direct opportunities for risk management.[1] Dockets and rate cases may address elements of wildfire risk but tend to be less well-suited for comprehensive risk management. Legislation can require addressing wildfire risks through established planning processes or other venues.

[1] Oregon's Distribution System Plan serves as an illustrative example.

REAL-WORLD EXAMPLES

Utilities in at least 19 states have wildfire mitigation plans, and at least 12 states have state-level requirements, often legislated, that directly address wildfire-related planning, mitigation, or cost distribution within the electricity sector.

California requires utilities to file annual wildfire mitigation plans. Oversight and enforcement are shared, with the Office of Energy Infrastructure and Safety (an independent agency) reviewing and approving plans, the utility commission enforcing compliance and determining cost recovery, and CalFire providing technical input. Liability follows inverse condemnation, but utilities may access a wildfire liability fund to cover the cost of wildfire-related damages if the commission finds they acted reasonably and complied with safety requirements. Both utility customers and shareholders contribute to the wildfire fund with fixed annual shareholder charges and capped ratepayer surcharges. California's wildfire management requirements for utilities result from a number of statutes, including Senate Bill 901 and the 2019 Wildfire Legislation — Assembly Bill 1054 and Assembly Bill 111.

Utah requires wildfire mitigation plans from utilities, and utilities are shielded from claims if they follow an approved plan. Plans do not include ratepayer protections like cost-effectiveness or affordability tests. The commission reviews utility plans but has limited enforcement mechanisms. Customer bill surcharges (capped to protect ratepayers) support a fund that pays for wildfire-related damages, which are capped at $450,000 per person unless there is a case of wrongful death. Utah established these requirements for utilities through 2024's Senate Bill 224.

IMPACT TIME HORIZON

Variable

This section assesses the timelines over which policy may impact utility investments and processes, rather than the timeline over which wildfire impacts themselves may change.

- **Planning: short.** Planning efforts can have an immediate impact on actions, but the full benefits depend on how quickly plans are implemented.
- **Mitigation: medium.** Actions like vegetation management may occur in the short term, but large infrastructure upgrades like undergrounding typically take at least 3–5 years.
- **Cost Distribution: variable.** Cost recovery for wildfire-related expenses can begin immediately if they are included in a cost tracker, but utilities often recover costs from larger capital investments over much longer time horizons through the rate base. The structural impacts of cost distribution, such as how financial stability affects a utility's ability and willingness to invest, may also emerge over a longer time horizon. The duration of litigation can introduce another source of variability to cost distribution.

LEGISLATIVE DESIGN AND IMPLEMENTATION CONSIDERATIONS

Legislative approaches to cost-effective wildfire management will differ state-to-state but can consider the following actions and parameters:

Policy structure

Designing policy to address a combination of the processes relevant for wildfire risk management ensures comprehensiveness. Comprehensive policy addresses at least these three components: risk identification and assessment (i.e., planning), risk mitigation (i.e., action), and the distribution of costs related to mitigation, damages, or liability.

Affordability requirements

Ensuring ratepayer protections are baked into bill surcharges or other payment mechanisms — e.g., by requiring transparency and independent review of utility expenditures, setting spending guardrails, or providing targeted rate assistance for low-income communities — helps protect households from disproportionate financial burdens and builds public trust.

Source of funding

Establish to what extent funding comes from shareholders, ratepayers, taxpayers, or others with an eye toward fair cost distribution.

Regulatory enforcement

Direct utilities to conduct proactive wildfire planning integrated with other planning efforts (e.g., DSPs or IRPs), and require utilities to follow approved mitigation measures, report on implementation progress, and justify costs. Provide state agencies the authority to audit, revise, or reject wildfire plans and impose penalties for non-compliance. Consider mandating that utilities revise plans if they exceed authorized budgets or fall short of established requirements.

Liability framework

Clarify under what conditions utilities are shielded from or subject to legal liability for fire-related damages to balance utility protection with public accountability.

The table below provides examples of how authority and responsibility for cost-effective wildfire management may be distributed across key entities.

VENUE	POTENTIAL ROLES
Legislature	• Specify the policy structure • Determine the source of funding • Clarify regulatory authority • Set up a liability framework
Regulator	• Implement specific affordability requirements • Undertake enforcement • Conduct reporting and provide transparency • Design and review mitigation strategies
Administration	• Propose budget support • Establish related or complementary policies
RTO/ISO	• Integrate wildfire risk data into transmission planning and operations

Reporting and transparency

Require utilities to make plans public and submit regular public reports on mitigation goals, expenditures, and outcomes to ensure oversight and transparency.

CASE STUDY: WASHINGTON

OVERVIEW

Washington's House Bill (HB) 1539 established a Wildfire Mitigation and Resiliency Standards Work Group tasked with developing recommendations for utility wildfire mitigation planning and implementation.

The bill itself does not mandate specific actions by utilities but provides a foundation for coordinated statewide policy to address wildfire risk in a cost-effective way. As of this year, the Work Group is actively meeting and must submit recommendations to the legislature and key agencies within a set timeline.

THE DETAILS

Policy structure
HB 1539 addresses wildfire planning, mitigation, and cost allocation by creating a structure for strong coordination between parties, including utilities, fire authorities, local governments, insurers, and others.

Source of funding
The legislation does not establish a funding mechanism but directs the Work Group to evaluate cost-effectiveness and fair cost allocation among utilities, ratepayers, and others.

Regulatory enforcement
The bill positions the Work Group to recommend future regulation.

Reporting and transparency
The Work Group must hold public meetings, solicit stakeholder input, and submit a final public report with policy recommendations to the legislature and governor.

Timeline
The bill includes a near-term deadline for the Work Group to deliver recommendations, but it does not establish a permanent planning framework or mandate any resulting legislative or regulatory action.

KEY TAKEAWAYS

HB 1539 does not impose binding requirements on utilities but instead establishes structure and process for developing comprehensive recommendations that inform future regulatory and legislative work to address wildfire risks.

POTENTIAL COST SAVINGS

Variable

The effects of mitigation techniques on wildfire damages and liabilities vary, and accurately estimating avoided losses is inherently difficult. Cost impacts for low-income households depend on affordability protections and cost distribution approaches if applicable.

FURTHER READING

- "Reimagining Utility Climate Risk Planning," RMI, 2024
- "Climate change and utility wildfire risk: A proposal for a federal backstop," The Hamilton Project, 2024
- "Dynamic Grid Management Technologies Reduce Wildfire Adaptation Costs in the Electric Power Sector," University of California Berkeley Energy Institute at Haas, 2025
- "Current Practices in Distribution Utility Resilience Planning for Wildfires," National Renewable Energy Laboratory, 2024
- "Clean Energy Isn't Driving Power Price Spikes," Energy Innovation, 2024