

MEMORANDUM



Date: **September 2026**

To: **Fire Innovations for Regulatory Excellence (FIRE) Group**

From: **Devyn Powell and Jason Eisdorfer, Pacific Northwest National Laboratory**

Subject: **Emerging Use of Securitization for Recovery of Utility Wildfire Costs: Trends and Key Considerations**

Wildfire has become a significant and growing driver of increasing electric utility costs, placing mounting pressure on ratepayer affordability across the western United States and, increasingly, nationwide. As the costs of both wildfire mitigation and wildfire liability have grown, utilities and their regulators have turned to alternative financing and cost-recovery mechanisms to manage the ratepayer impact of these extraordinary expenses. Securitization, a financing tool that allows investor-owned utilities to issue ratepayer-backed recovery bonds to recover certain costs at lower interest rates than traditional rate recovery, has emerged as an increasingly common approach.

This memo reviews trends in deployment of securitization for wildfire costs, making a distinction between categories of wildfire costs, including post-event recovery expenses, proactive wildfire mitigation investments, and third-party liability costs that may arise if a utility's equipment is found responsible for starting a fire. It summarizes how securitization uses have evolved over time from its initial purpose of allowing utilities to recover some investments in stranded assets. It also reviews key trends and notable case studies, referring to developments in state legislation, regulatory decisions, and utility actions. The memo then summarizes key considerations, risks, and tradeoffs the approach presents for ratepayers, utilities, and regulators, and how these considerations vary depending on the type of wildfire costs for which securitization is deployed. Specific case studies from California, Colorado, and Oregon illustrate different applications of utility securitization for wildfire mitigation and liability costs.

The principal findings of this memo are:

1. Securitization has seen more frequent use as a tool to allow investor-owned utilities to recover increasingly significant wildfire-related costs, often at a lower cost to ratepayers than traditional rate recovery. As of 2026, 34 states authorize investor-owned utilities to securitize certain costs. Since 2018, the majority of enabling legislation has authorized securitization for wildfire or other disaster-related expenses, marking a growing trend.
2. Securitization is an established and useful tool to manage spikes in utility expenses at lower cost to ratepayers, but realizing ratepayer benefits requires effective regulatory safeguards. Because recovery bonds typically carry lower interest rates than a utility's authorized rate of return, securitization can save ratepayers money. However, financing

orders are irrevocable and shift the full obligation for bond repayment from utility shareholders onto present and future ratepayers. This is why regulatory review, clear statutory standards, and consumer advocate participation are essential to ensure that the approach delivers ratepayer benefits. These safeguards are included in legislative and regulatory requirements established in several states. More widespread development of best practices for affordability protections in the context of securitization will be important as use of the approach continues to increase nationwide.

3. Securitization has historically been used for recovering discrete, already-incurred costs, including stranded investments and recovery costs from a specific natural disaster. More recently, however, the approach has been adopted for new categories of costs in response to increasing wildfire financial risk. Three categories of wildfire costs that have been authorized for securitization in various states include post-event recovery costs, proactive mitigation investments, and third-party liability costs. The latter two categories are novel uses and invite key questions and tradeoffs.
 - a. Post-event recovery costs are bounded by time and have already been incurred. Proactive wildfire mitigation costs, however, differ: these costs are forward-looking and preventative, and involve investments in infrastructure and programs that may operate for decades after bonds are issued. This may raise financial risks and tradeoffs for utilities, which may indirectly impact ratepayer costs.
 - b. Securitization of alternative insurance funds for third-party liability from wildfire damages, a novel authorization for recovery bonds so far allowed only in Oregon, represents an even more open-ended and forward-looking category of costs. Precedent for these uses, and best practices to maximize their benefits, is limited.

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1.0 Introduction

Wildfire has emerged as a major year-round risk to electric utilities and the communities they serve across the western United States and, increasingly, nationwide. As wildfire has increased in prevalence, frequency, and destructiveness, wildfire mitigation investments have become a significant utility cost, exacerbating the growing challenge of electricity affordability. Customer bills in many states have risen faster than inflation, and millions of Americans report difficulty paying them every month.¹ Research has suggested that wildfire costs, both for mitigation and liability expenses, are now a meaningful driver of bill increases for many utility customers, especially in the West.² These include both the direct costs of restoring or hardening utility assets as well as third-party liability costs from damage associated with utility-caused wildfires.

In California, for example, direct wildfire spending accounted for an average of about 10% of an average investor-owned utility (IOU) customer's monthly bill, or about \$18 per month.³ While wildfire costs have been markedly higher in California than in other states thanks to California's history of costly, destructive fires, wildfire spending has quickly become the fastest-growing expenditure category for several utilities in other states across the West.⁴ Meanwhile, third-party liability damages for wildfires ignited by utility equipment have cost billions of dollars in some cases, and heightened liability risk has led to credit rating downgrades and driven up insurance costs for many utilities.⁵

Several states have adopted legislative or regulatory requirements intended to reduce ratepayer burdens as these wildfire-driven costs have ballooned. As a result of these cost pressures, utilities have begun to pursue alternative financing and cost recovery mechanisms for some wildfire expenses, with securitization being one such approach.

¹ Devyn W. Powell and Erik Anderson, *Storing Affordability: Battery Storage as an Asset to Reduce Data Center Cost Shifts* (Pacific Northwest National Laboratory, 2026), <https://doi.org/https://doi.org/10.2172/3400052>; Thomas S. Benson et al., "Regulatory Approaches for Aligning AI Data Center Growth With Residential Energy Affordability," *Pacific Northwest National Laboratory* Forthcoming (2026); Ryan Wiser et al., "Factors Influencing Recent Trends in Retail Electricity Prices in the United States," *The Electricity Journal* 38, no. 4 (2025): 107516, <https://doi.org/10.1016/j.tej.2025.107516>.

² Wiser et al., "Factors Influencing Recent Trends in Retail Electricity Prices in the United States"; Jess B. Kincaid et al., *The Burn Rate: How Wildfire Impacts Energy Affordability*, PNNL-SA-223453 (Pacific Northwest National Laboratory, 2026), https://www.pnnl.gov/sites/default/files/media/file/PNNL_Burn_Rate_Wildfire_and_Energy_Affordability_June2026.pdf.

³ Jay Barlow et al., *Wildfire Risk: Review of Utility Industry Trends*, PNNL-SA-211619 (Pacific Northwest National Laboratory, 2025), https://www.pnnl.gov/sites/default/files/media/file/Wildfire%20Risk%20Review%20of%20Utility%20Industry%20Trends_PNNL_July%202025.pdf.

⁴ Kincaid et al., *The Burn Rate: How Wildfire Impacts Energy Affordability*; PNNL, *Cost Recovery Mechanisms for Utility Wildfire Mitigation*, PNNL-38980 (Pacific Northwest National Laboratory, 2026), https://www.pnnl.gov/sites/default/files/media/file/Final_Cost%20Recovery%20Memo_February%202026.pdf.

⁵ Barlow et al., *Wildfire Risk: Review of Utility Industry Trends*; Kincaid et al., *The Burn Rate: How Wildfire Impacts Energy Affordability*; Carolyn Kousky et al., *Wildfire Costs in California: The Role of Electric Utilities* (The Wharton School of the University of Pennsylvania, 2018), <https://impact.wharton.upenn.edu/wp-content/uploads/2023/07/Wildfire-Cost-in-CA-Role-of-Utilities-1.pdf>.

Securitization is a financing tool that allows investor-owned utilities to issue special ratepayer-backed bonds, often referred to as “recovery bonds,” to recover certain wildfire-related costs.⁶ These bonds generally have lower interest rates than a utility’s return on equity, meaning that securitized expenses can in many cases lead to lower costs for ratepayers compared to cost recovery via standard rate recovery.⁷

Securitization has been used by utilities for decades as a mechanism to recover certain types of extraordinary costs. Historically, the tool has most commonly been used to recover costs from generation assets that had become stranded as a result of utility restructuring, market factors, or policy changes.⁸ For example, utilities in several states have issued bonds to securitize the costs associated with early retirement of coal plants that were deemed uneconomic to operate for the remainder of their expected lifetimes.⁹ More recently, securitization has emerged as a tool to recover extraordinary costs associated with recovery and rebuilding after a storm or other disaster, such as a hurricane or a major wildfire.¹⁰ Fifteen states have passed legislation allowing utilities to securitize disaster-related costs, and five of these states explicitly mention wildfire as an eligible cost driver in their enabling statutes. In 2019, California became the first state to enable utilities to issue recovery bonds for proactive investments in wildfire mitigation expenses, while Oregon established a new precedent in 2026 with the passage of legislation allowing utilities to securitize contributions to liability self-insurance funds in response to wildfire-driven insurance challenges increasingly faced by utilities across the west.

This memo reviews emerging trends in use of securitization as a tool to mitigate ratepayer burdens for soaring wildfire costs, both direct and indirect. It provides an introduction to securitization, offering an overview of its basic mechanisms and how different states and utilities’ uses have evolved toward its present emphasis on wildfire and other disaster costs. States have permitted IOUs to issue recovery bonds for different categories of wildfire costs, including both post-event and proactive infrastructure investments as well as indirect liability costs, and it describes considerations and highlights case studies of these varied uses. Finally, it identifies high-level benefits, potential risks, and key process considerations for utility ratepayers, utility companies and their shareholders, and the public utility regulators responsible for vetting and approving securitization proposals. Since securitization remains a novel tool in the context of wildfire, particularly for forward-looking investments to reduce utility wildfire risk, best practices and precedents are limited. This memo is intended as a resource to stakeholders navigating this rapidly evolving landscape of wildfire-driven costs, risks, and emerging solutions.

⁶ Kevin Ryan, *The Rationale Behind U.S. Utility Securitization And Reasons For Recent Growth*, RatingsDirect (S&P Global, 2024), https://csgwest.org/wp-content/uploads/2024/08/RatingsDirect_CreditFAQTheRationaleBehindUSUtilitySecuritizationAndReasonsForRecentGrowth_57532202_Jun-05-2024.PDF.pdf; Joseph S. Fichera et al., “Ratepayer-Backed Bonds for Utility Financings,” *Nature Energy* 10, no. 4 (2025): 419–22, <https://doi.org/10.1038/s41560-025-01755-3>.

⁷ RMI, “Securitization,” RMI Electricity Affordability Toolkit, Rocky Mountain Institute, September 21, 2025, <https://affordability-toolkit.rmi.org/policies/securitization>.

⁸ Cindy Menhorn, *Securitization: A Valuable Tool for Cost Recovery Opportunities Outside a Normal Rate Case* (MCR Group, 2023), https://www.mcr-group.com/wp-content/uploads/2023/10/Securitization-White-Paper_v2.pdf.

⁹ Paul Bodnar et al., *How to Retire Early: Making Accelerated Coal Phaseout Feasible and Just* (Rocky Mountain Institute, 2020), https://rmi.org/wp-content/uploads/2021/03/rmi_how_to_retire_early.pdf.

¹⁰ Menhorn, *Securitization: A Valuable Tool for Cost Recovery Opportunities Outside a Normal Rate Case*.

2.0 Securitization Overview

Securitization is a mechanism for utilities to recover certain costs outside of the standard ratemaking process. It was established as a tool for managing cost recovery under unique or extreme conditions, with its initial uses by IOUs in the United States focused on recovery of stranded costs resulting from utility deregulation in the late 1990s and early 2000s. In recent years, it has been used to recover costs from destructive storms and other natural disasters, with an emerging focus among western states on costs specifically related to wildfire.¹¹

Securitization is a financing mechanism where utilities issue bonds to pay for certain eligible costs, such as the cost of retiring uneconomic power plants or repairing utility assets after disaster damage. In a typical securitization process, utilities file a financing order with their regulator, typically a state public utility commission. If the financing order is approved, the utility can then issue a bond for the full amount of the approved costs. These bonds are backed by guaranteed recovery from the utility's ratepayers and are usually issued at a much lower carrying cost than a regulated asset.

This section summarizes the current landscape of state legislation allowing utilities to securitize certain costs, offers a brief review of a typical securitization process, and describes how the increasing financial pressures of wildfires and other natural disasters have impacted utility cost recovery approaches and led to evolving applications of securitization, including current trends in usage for recovery of various types of wildfire costs.

2.1 Trends in state legislation enabling utility securitization

Public utilities, such as municipal utilities and public utility districts, are government entities and are thus generally permitted to issue tax-exempt municipal bonds to raise revenue for large expenses.¹² Electric cooperatives, a type of nonprofit utility collectively owned by its ratepayer-members, are also permitted by federal law to issue bonds to raise capital.¹³ However, investor-owned utilities, which are private companies, may only issue recovery bonds if permitted by dedicated state legislation.¹⁴ This legislation generally defines what types of costs are eligible for securitization, outlines process steps, and may establish other evaluation or reporting requirements. As of 2026, 34 states had passed laws allowing investor-owned utilities to securitize certain costs, as illustrated in Figure 1.

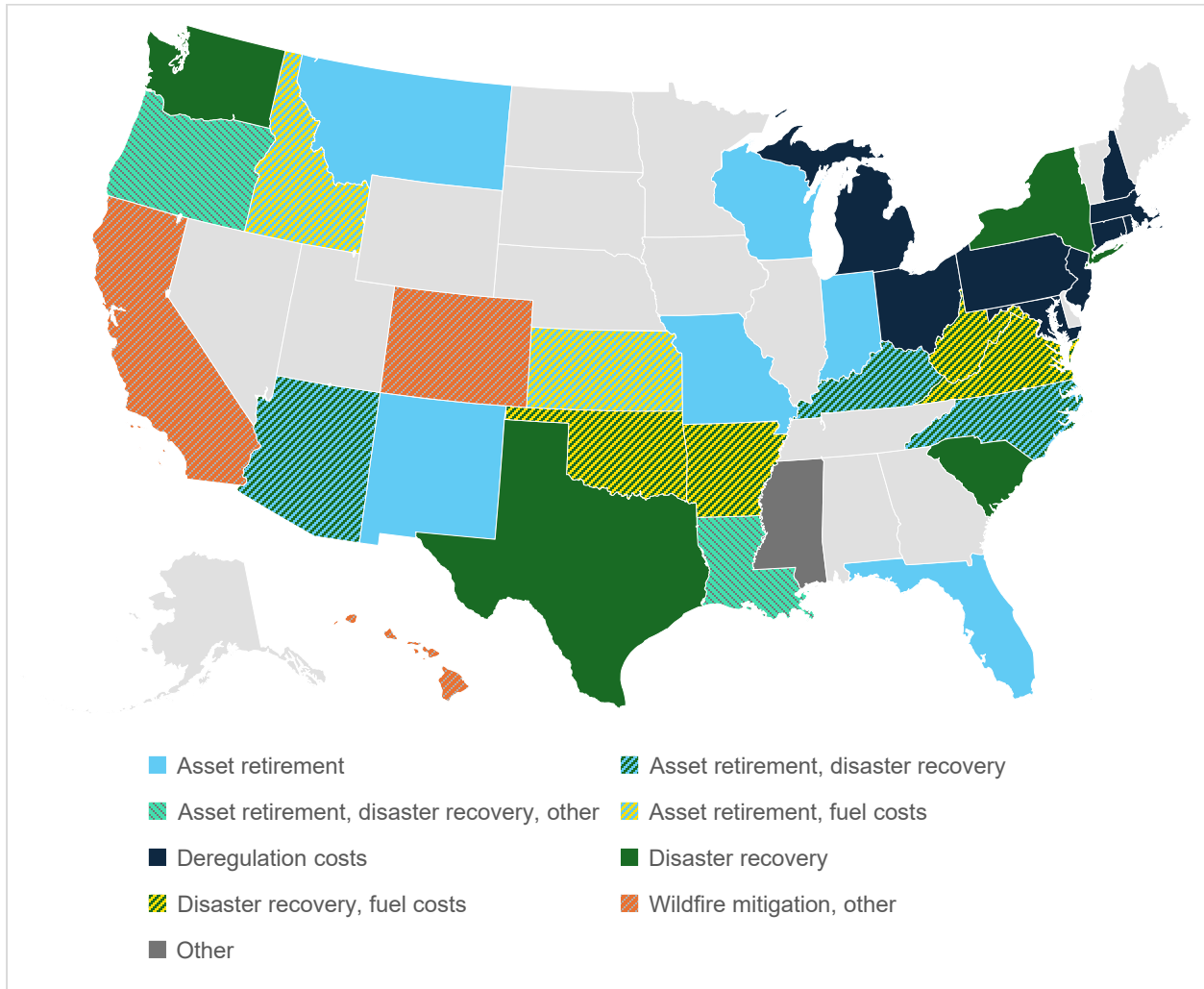
¹¹ Menhorn, *Securitization: A Valuable Tool for Cost Recovery Opportunities Outside a Normal Rate Case*.

¹² John Godfrey, "Municipal Bonds and Public Power," American Public Power Association, January 2026, <https://www.publicpower.org/policy/municipal-bonds-and-public-power>.

¹³ The Federal Power Act of 1920 prohibits public utilities regulated by state commissions from issuing "any security" unless a financing order is approved by their regulatory commission. The Act's definition of "public utility" does not generally apply to consumer-owned utilities. See Federal Power Act, 66th United States Congress Chapter 285 (1920), https://www.ferc.gov/sites/default/files/2021-04/federal_power_act.pdf.

¹⁴ RMI, "Securitization."

Figure 1: Types of Costs Eligible for Securitization by State



Costs defined as eligible for utility securitization in legislation vary widely. A review of state legislation enabling securitization identified six eligible cost categories: deregulation costs, asset retirement, disaster recovery, wildfire mitigation, fuel costs, and all other uses. These cost categories are summarized in Table 1 below.

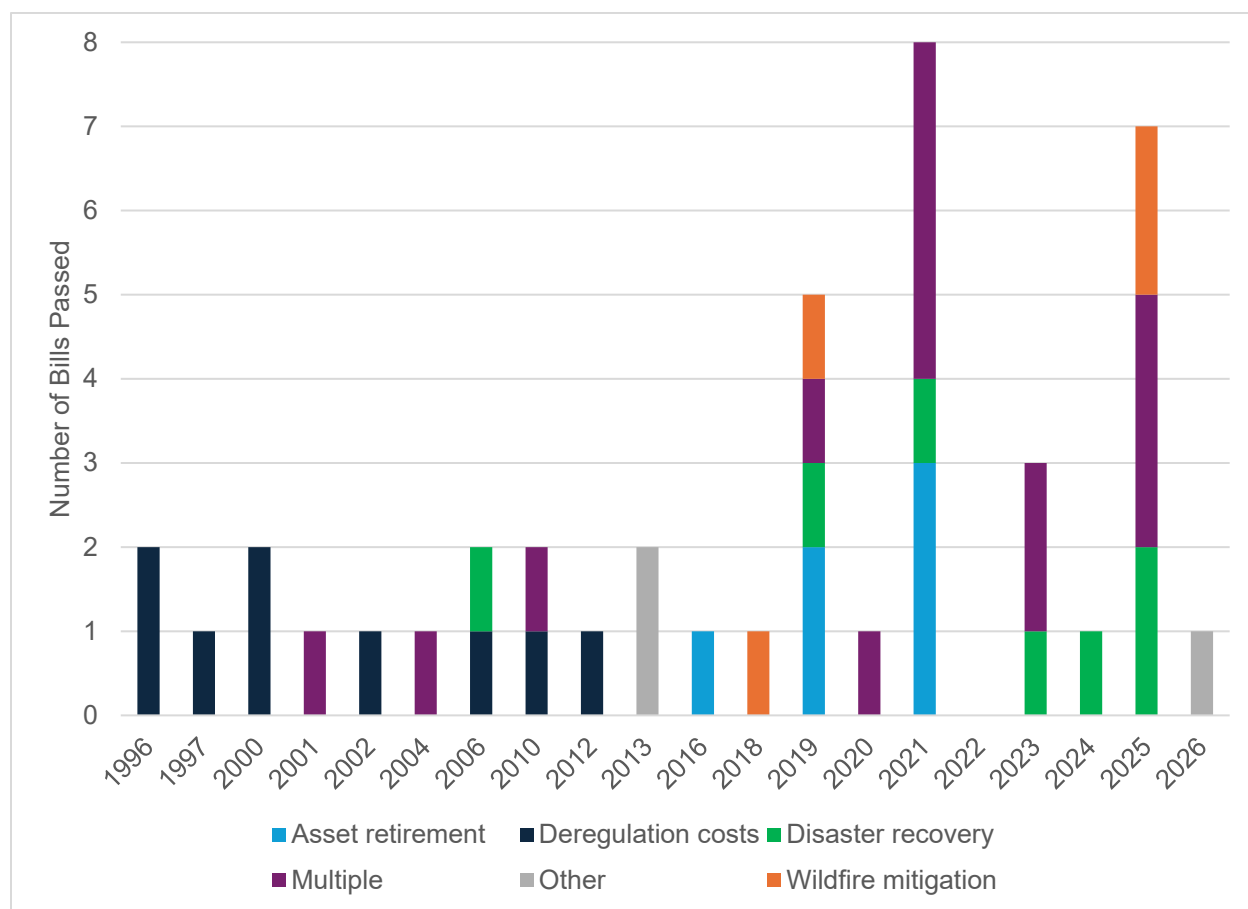
Table 1: Categories of Costs Eligible for Securitization

Category	Description	States Authorized
Deregulation costs	Deregulation costs, which made up the bulk of initial securitization authorizations, permitted utilities to issue financing orders to recover any stranded costs that resulted from the sale of generation assets required by deregulation.	Connecticut, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, Ohio, Pennsylvania, Rhode Island
Asset retirement	Cost recovery associated with early retirement of certain generating facilities. Some legislation clarifies the type of plant that may be eligible, generally coal or nuclear, while other authorizations are written more generally. Louisiana also permits securitization of costs associated with construction of a generation facility that was not completed.	Arizona, Colorado, Florida, Idaho, Indiana, Kansas, Kentucky, Louisiana, Missouri, Montana, New Mexico, North Carolina, Wisconsin
Disaster recovery	Costs associated with repairing damage to utility assets from extreme weather, natural disasters, or similar language. Some of this legislation stipulates that an event must have been declared a state or federal emergency for costs to be eligible for securitization. While the most prevalent type of natural disaster varies by region, it is implied that states that allow securitization of costs for any “natural disaster” would include damages from a wildfire even if wildfire is not explicitly named. In other cases, storm-related costs are narrowly defined and do not apply to wildfire or other extreme weather events. Texas and Oklahoma’s legislation further limit storm recovery bonds to costs associated with one specific catastrophic storm: 2021’s Winter Storm Uri.	Arizona, Arkansas, Colorado, Kentucky, Louisiana, New York, North Carolina, Oklahoma, Oregon, South Carolina, Texas, Virginia, Washington, West Virginia
Wildfire mitigation	Legislation that permits securitization of costs from proactive investments in grid hardening and other capital expenses for wildfire mitigation. Hawaii and California require initial mitigation expenses to be securitized. California’s example is discussed in more detail in Section 3.	California, Colorado, Hawaii
Fuel costs	Some states allow utilities to issue bonds to recover costs from extraordinary fuel costs. This may be defined as cost increases arising from a disaster or other supply shock.	Arkansas, Idaho, Kansas, Louisiana, Oklahoma, Virginia, West Virginia
Other	All other unique authorizations identified, including financing the construction of a specific type of generation asset (e.g. Mississippi), to offset costs associated with increased bill nonpayment during the COVID-19 pandemic (e.g. California), to capitalize a fund for eligible “green infrastructure” expenses (Hawaii), and to authorize utilities to fund self-insurance (Oregon). While Oregon’s self-insurance authorization was not explicitly cited as a wildfire cost, increasing difficulty securing insurance coverage for wildfire liability were cited by utilities and other stakeholders as a driver for the bill, which is discussed in more detail in Section 3.	Hawaii, Mississippi, Oregon

Deregulation costs were the most common initial use of utility securitization. In the late 1990s and early 2000s, several states required utilities to sell their generation assets to enable the creation of competitive energy markets, and some of these states authorized utilities to issue bonds as a way to recover stranded costs that resulted from the sale of these assets at what was in many cases a reduced value.¹⁵ A subsequent wave of legislation permitting utilities to issue bonds to recover costs of power plants forced to retire earlier than planned due to economic or policy drivers was cast in a similar mold, where bonds enabled utilities to recover expenses from investments in assets that had become stranded.¹⁶

California's passage of legislation in 2018 authorizing securitization for certain wildfire recovery costs marked a shift in focus. State passage of securitization legislation increased in 2019, and more states have adopted additional uses for the approach in the years since. Since 2018, the majority of state laws adopted to enable utilities to securitize certain costs have focused on wildfire or other disaster-related expenses. Trends in enabling legislation over time are illustrated in Figure 2.

Figure 2: Securitization Legislation by Year Enacted and Eligible Costs



¹⁵ Menhorn, *Securitization: A Valuable Tool for Cost Recovery Opportunities Outside a Normal Rate Case*; W. M. Warwick, *A Primer on Electric Utilities, Deregulation, and Restructuring of U.S. Electricity Markets* (Pacific Northwest National Laboratory, 2002), https://www.pnnl.gov/main/publications/external/technical_reports/pnnl-13906.pdf.

¹⁶ Bodnar et al., *How to Retire Early: Making Accelerated Coal Phaseout Feasible and Just*.

2.2 Typical securitization process

While securitization generally comes with lower financing costs compared to a regulated rate of return on rate-based assets, the process can be complex and involves specific transaction fees and carrying costs. The necessary steps to securitization, regardless of whether bonds are issued for wildfire or other cost categories, generally include:

1. State legislation authorizes the public utility commission to allow the utility to issue a bond for the express purpose of recovering certain costs and guaranteeing a stream of proceeds from utility customers, and may include standards concerning least cost options or net benefits to consumers;¹⁷
2. A utility applies for approval of a financing order from their regulator, usually a state public utility commission (PUC), in which they describe the costs proposed for securitization and also typically define why securitizing those costs is just and reasonable, depending on requirements described in that state's enabling legislation;¹⁸
3. The regulator opens a docket to review the financing order and determine whether securitization meets regulatory prudence standards and all requirements outlined in enabling legislation, which may include a demonstration of ratepayer savings via securitization as compared to other approaches. Like general rate case dockets, these proceedings are typically open to public comment, and consumer advocates and other parties may intervene;¹⁹
4. If securitization is determined to be prudent and a benefit to customers, the regulator then issues an irrevocable financing order, allowing the utility to issue a bond to generate proceeds in a lump sum that can be used by the utility to recover its eligible costs;²⁰
5. The utility issues bonds consistent with the financing order through a third party special-purpose entity (SPE) or special-purpose vehicle (SPV), a standalone entity that is legally separate from the utility. The SPV sells the securities to investors;²¹

¹⁷ Menhorn, *Securitization: A Valuable Tool for Cost Recovery Opportunities Outside a Normal Rate Case*; RMI, "Securitization."

¹⁸ Fichera et al., "Ratepayer-Backed Bonds for Utility Financings"; Menhorn, *Securitization: A Valuable Tool for Cost Recovery Opportunities Outside a Normal Rate Case*; RMI, "Securitization."

¹⁹ Kathryn Kline, *Mitigating Stranded Asset Risks to Utility Customers: An Exploration of Securitization and Retiring Coal Generation*, DOE-NARUC--0032095, 2570678 (National Association of Regulatory Utility Commissioners (NARUC), 2024), DOE-NARUC--0032095, 2570678, <https://doi.org/10.2172/2570678>; Travis Ritchie and Ethan Elkind, *Powering Down Prices* (The Center for Law, Energy and the Environment at UC Berkeley Law (CLEE), 2026), https://www.law.berkeley.edu/wp-content/uploads/2026/06/Powering-Down-Prices_CLEE-Report_June-2026.pdf.

²⁰ Fichera et al., "Ratepayer-Backed Bonds for Utility Financings"; Joseph S. Fichera, "Investor-Owned Utility Securitization Possibilities, Processes, Pitfalls," NASUCA Annual Meeting, National Association of State Utility Consumer Advocates (NASUCA), November 8, 2020, <https://nasuca.org/wp-content/uploads/2019/09/Securitization-NASUCA-Fichera-11-8-20.pdf>.

²¹ Menhorn, *Securitization: A Valuable Tool for Cost Recovery Opportunities Outside a Normal Rate Case*; RMI, "Securitization."

6. Customers are assessed a “non-bypassable” charge to service the bonds to the utility which passes the proceeds to the bond holders until the full amount of the bond is repaid with interest, regardless of the solvency of the utility;²²
7. The regulator conducts periodic “true-up” reviews on an annual or biannual basis, in which any needed increases or decreases are made to customers’ recovery bond charge to ensure that revenues collected continue to meet debt obligations. True-up adjustments to customer bill charges are not typically capped and may be adjusted as much as necessary to ensure bondholders are repaid.²³

Because of the legal separation between the utility and the SPV, and because the bonds are backed by guaranteed revenue from the utility customers, the risk for bond investors is low. The SPV is legally and financially separate from other utility business activities and is therefore also remote from a utility bankruptcy. This means that even utility insolvency would not affect bond investors’ right to the cash flow serviced by utility customers.²⁴ This arrangement supports stronger credit ratings for utilities, which can lead to lower financing costs, contributing to additional potential affordability benefits for utility ratepayers.²⁵

2.3 The impacts of wildfire and other natural disasters on utility cost recovery approaches

Utility rate regulation has managed costs arising from wildfires, storms, or other natural disasters the same way that it has managed other capital costs: via the annual revenue requirement established through a general rate case. However, the growing scale of wildfire risk has threatened to upend this balance, forcing some utilities and their regulators to explore new avenues to control ratepayer costs.

A utility’s annual revenue requirement generally includes prudently incurred distribution and transmission costs. This has typically included any investments intended to help infrastructure withstand the impacts of extreme weather or damages where needed. These infrastructure costs are added to a utility’s rate base and earn a rate of return for shareholders. Costs for operation and maintenance are also included in the annual revenue requirement, with recognition that these expenses vary by year: for example, if storm-related costs were higher than expected one year, they may be lower the next year. Utility shareholders absorbed some

²² Kline, *Mitigating Stranded Asset Risks to Utility Customers*; Ryan, *The Rationale Behind U.S. Utility Securitization And Reasons For Recent Growth*; Jeffrey F. Cassella et al., “Utility Cost Recovery through Securitization Is Credit Positive,” Moody’s Investors Service, July 18, 2018, <https://saberpartners.com/wp-content/uploads/2018/10/Moody%E2%80%99s-Securitization-Credit-Positive-2018.pdf>.

²³ Nick Puga et al., *Securitization and Its Potential Role in Financing V.C. Summer Nuclear Costs* (Bates White Economic Consulting, 2018), <https://ors.sc.gov/sites/scors/files/Documents/News%20Archive/BW%20Securitization%20Report.pdf>; Ryan, *The Rationale Behind U.S. Utility Securitization And Reasons For Recent Growth*; Kline, *Mitigating Stranded Asset Risks to Utility Customers*.

²⁴ Janet M. Tavakoli, “Special Purpose Entities: Guide to SPEs in Finance,” *Tavakoli Structured Finance LLC*, June 23, 2025, <https://www.tavakolistructuredfinance.com/special-purpose-entities/>.

²⁵ Cassella et al., “Utility Cost Recovery through Securitization Is Credit Positive”; Jasper Shi and Ravikanth Rai, *Line of Fire: How Wildfires Threaten Utility Credit* (Morningstar DBRS, 2025), <https://dbrs.morningstar.com/research/457577>; Elizabeth Pearce, “Wildfires and Bond Ratings: A New Financial Challenge for Utilities,” *Energy Central*, February 12, 2025, <https://energycentral.com/c/pip/wildfires-and-bond-ratings-new-financial-challenge-utilities>.

storm-related cost risk in exchange for the rate of return earned on their investments, and costs and earnings typically averaged out appropriately over time.²⁶

In the event of a storm that entailed system damages that exceeded the assumptions in the revenue requirement, utilities have leaned on a range of regulatory tools to remain whole. These include deferred accounting and trackers, means by which a utility can track extraordinary costs related to storm damage and then recover those costs on a dollar-for-dollar basis from customers in the future.²⁷ Capital expenditures for replacement infrastructure are generally still included in a utility's rate base and earn the authorized rate of return. However, increasingly destructive and costly natural disasters, combined with a parallel trend of cost increases for some utility infrastructure due to supply chain constraints, inflation, and other factors, have driven monthly bills upward for many ratepayers. The affordability pressures of rising wildfire costs have tested the balance of this system and have informed regulators' response to rate cases, with some commissions citing customer costs as a reason for rejecting proposed increases or approving lower increases than requested.²⁸ These cost pressures have motivated utility regulators, customer advocates, and other stakeholders to explore options for alternative cost recovery approaches to account for the increasing costs of wildfire and other disasters while managing the impact to ratepayers. The growing use of securitization for disaster-related costs is one result.

The first state to authorize utilities to securitize costs related to disaster damages was Louisiana, which passed the Louisiana Electric Utility Storm Recovery Securitization Act in 2006 in response to the catastrophic damages wrought by Hurricane Katrina in 2005. The bill outlines the case for securitization as potentially less expensive for ratepayers than standard rate recovery: it permits utilities "to use securitization financing for storm recovery costs, because this type of debt may lower the financing costs or mitigate the impact on rates in comparison with conventional utility financing methods or alternative methods of recovery, thereby benefitting rate payers."²⁹

It took twelve years for another state to allow utilities to securitize disaster costs when California passed Senate Bill (SB) 901 in 2018. SB 901 was adopted in response to the historically destructive 2017 wildfire season in the state, a grim record broken shortly thereafter by the 2018 wildfire season mere months after the passage of the bill.³⁰ It permits utilities to securitize "costs

²⁶ Ron Davis, *Calculating the Revenue Requirement* (National Association of Regulatory Utility Commissioners, 2009), <https://pubs.naruc.org/pub.cfm?id=5376DE70-2354-D714-51BA-736C233E4185>.

²⁷ Roy Ellis et al., "The After-Storm Storm: Utility Cost Recovery," *Renewable Energy World*, May 14, 2014, <https://www.renewableenergyworld.com/power-grid/outage-management/the-after-storm-storm-utility-cost-recovery/>; Deborah Reynolds, *Wildfire Workbook Chapter Five: Cost Recovery Mechanisms*, *Wildfire Workbook: Guidance for Utility Regulators* (National Association of Regulatory Utility Commissioners (NARUC), 2025), <https://www.naruc.org/core-sectors/critical-infrastructure-and-cybersecurity/wildfire-workbook/>.

²⁸ Disposition: Application for General Rate Revision Approved as Revised, UE 433 (Public Utility Commission of Oregon December 19, 2024), <https://apps.puc.state.or.us/orders/2024ords/24-447.pdf>; Barlow et al., *Wildfire Risk: Review of Utility Industry Trends*; Kincaid et al., *The Burn Rate: How Wildfire Impacts Energy Affordability*.

²⁹ Creates the Louisiana Electric Utility Storm Recovery Securitization Act, HB 887, Louisiana State Legislature 2006 Regular Session (2006), <https://legis.la.gov/legis/BillInfo.aspx?s=06RS&b=HB887&sbi=y>.

³⁰ IBHS, *IBHS Post-Event Investigation: California Wildfires of 2017 and 2018* (Insurance Institute for Business & Home Safety (IBHS), 2020), https://ibhs.org/wp-content/uploads/member_docs/camp-fire-

and expenses arising from a catastrophic wildfire” if those costs are found to be just and reasonable by the California PUC.³¹

Since 2018, thirteen more states have passed legislation enabling securitization and seen utilities issue bonds in response to various types of disasters, including wildfires, hurricanes, and winter storms. These laws have commonly been passed in response to specific disasters, including Winter Storm Uri in Texas and Oklahoma in 2021, Hawaii’s wildfires in 2023, and Hurricane Helene in North and South Carolina in 2024.³²

As the scale of natural disaster costs have contributed to broader electricity affordability challenges nationwide, trends in state legislation have indicated an emerging consensus about the value of securitization as a tool to allow utilities to recover prudent costs of natural disaster damages at lower costs to their customers than traditional rate recovery. Wildfire, meanwhile, has exerted additional pressures on ratepayer affordability and on the utility business model, since a unique characteristic of wildfire as compared to a hurricane or other storm is that it is possible for a utility’s equipment to cause one.³³ This liability risk is a key reason why research has indicated that wildfires have had a larger impact on customer bills and utility financial stability than hurricanes or other disasters.³⁴

report_ibhs-1.pdf; “2017 Fire Season Incident Archive,” CAL FIRE, 2017, <https://www.fire.ca.gov/incidents/2017>.

³¹ Wildfires, Senate Bill 901, California State Legislature 2017-2018 Regular Session (2018), <https://legiscan.com/CA/text/SB901/id/1820716>.

³² See Appendix for a table describing securitization legislation by state in more detail.

³³ Devyn Powell et al., *Considerations for a Pooled Insurance Backstop for Utility Wildfire Liability*, PNNL-SA-222020 (Pacific Northwest National Laboratory, 2026), https://www.pnnl.gov/sites/default/files/media/file/PNNL-SA-222020_Wildfire-Insurance-Backstop_ODOE.pdf.

³⁴ Wiser et al., “Factors Influencing Recent Trends in Retail Electricity Prices in the United States”; Barlow et al., *Wildfire Risk: Review of Utility Industry Trends*; Pearce, “Wildfires and Bond Ratings.”

3.0 Uses of Securitization for Wildfire Cost Recovery

Wildfire costs that can be securitized by utilities fall into three broad categories: post-fire rebuilding and recovery expenses, proactive wildfire mitigation investments, and liability expenses. As described earlier in this memo, there is precedent for utility use of securitization for post-disaster recovery costs for various extreme weather events, including but not limited to wildfire, dating back to the passage of Louisiana’s Electric Utility Storm Recovery Securitization Act in 2006. The costs of rebuilding from a historic disaster like Hurricane Helene, Winter Storm Uri, or the deadly Camp Fire in California, for example, are extraordinary in scale and reflect the impacts of a single, defined event. However, use of securitization to recover costs of proactive grid hardening investments intended to improve future resilience and reduce ignition risk is a unique response to wildfire that has not yet been applied to other disasters. For liability expenses, meanwhile, only one state—Oregon—has passed legislation to date approving the use of securitization to capitalize alternative insurance funds. The bill was passed largely as a response to the impacts of wildfire risk on the affordability and availability of commercial liability insurance.³⁵

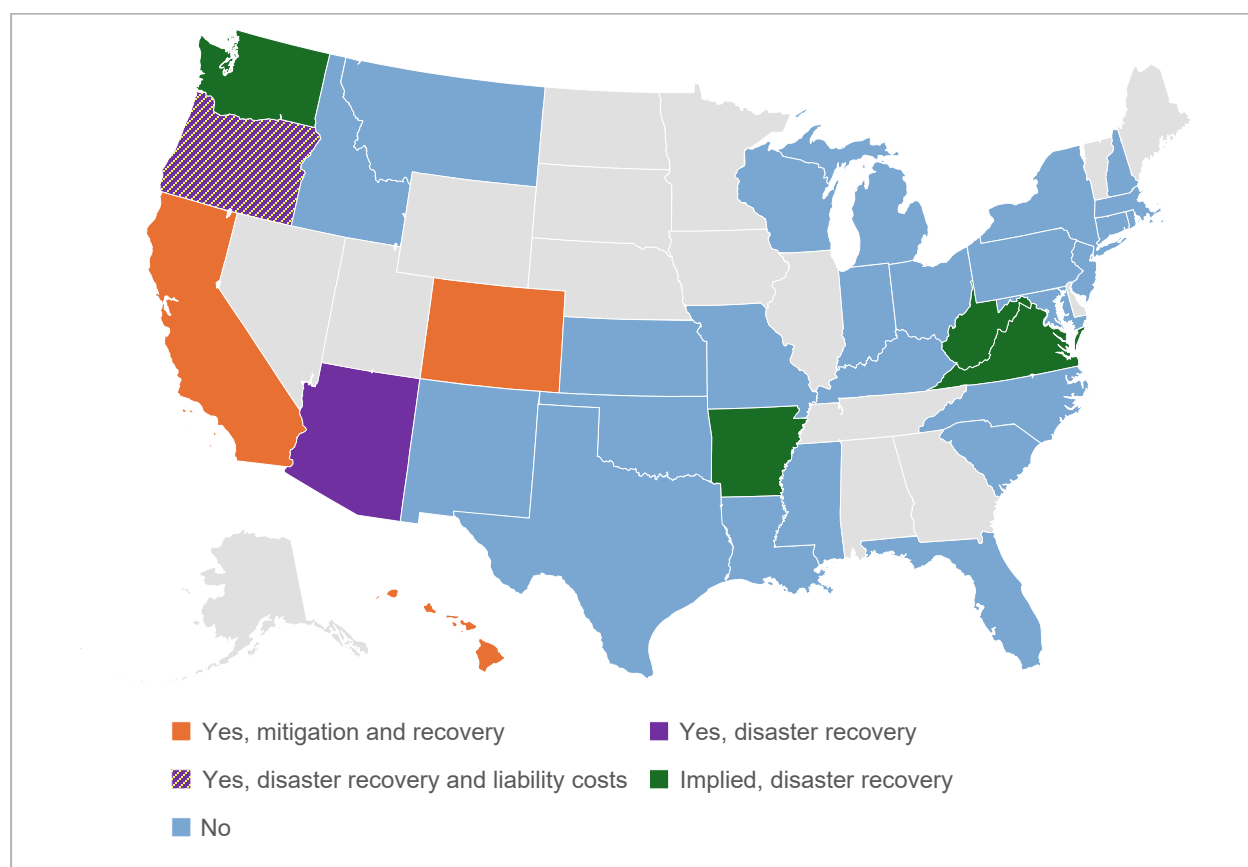
As illustrated in Figure 3, six states authorize utilities to securitize wildfire-related costs. These costs include post-event recovery costs, wildfire mitigation plan investments, or, in Oregon’s case, self-insurance to cover potential third-party liability costs. Three states—California, Hawaii, and Colorado—permit securitization to be used for wildfire mitigation as well as for recovery costs. Regardless of the specific costs defined, securitization legislation is typically structured so that utilities propose securitization and submit a financing order to their regulator. California and Hawaii are unique, however, in that they both require utilities to securitize an initial portion of wildfire mitigation costs described in wildfire mitigation plans (WMPs).³⁶ Both bills included these requirements in explicit efforts to reduce ratepayer impacts of increasing wildfire mitigation costs.³⁷

³⁵ Chloe Becker, *HB 4077: Using Securitization to Protect Energy Affordability* (Portland General Electric, 2026), <https://olis.oregonlegislature.gov/liz/2026R1/Downloads/PublicTestimonyDocument/234048>; “House Committee On Climate, Energy, and Environment: Meeting Details 02/10/2026 8:00 AM, HR 30, HB 4077,” Oregon State Legislature, February 10, 2026, <https://olis.oregonlegislature.gov/liz/2026R1/Committees/HCEE/2026-02-10-08-00/HB4077/PUB/Details>.

³⁶ Assembly Bill No. 1054: Public Utilities: Wildfires and Employee Protection, California Legislature 2019 (2019), https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=201920200AB1054&showamends=false; A Bill for an Act Relating to Energy, SB 897, Thirty-third Legislature, State of Hawaii 2025 (2025), <https://legiscan.com/HI/text/SB897/id/3222667>.

³⁷ Ritchie and Elkind, *Powering Down Prices*.

Figure 3: Eligibility of Wildfire Costs for Securitization by State



Accounting for wildfire costs *per se* in utility general rate case filings is a relatively new phenomenon, particularly outside of California. For one example, in PacifiCorp’s Oregon rate case filing in March 2013, the word “wildfire” did not appear once.³⁸ PacifiCorp’s next general rate case filing in February 2020, by contrast, included 200 mentions of the word, including a section of testimony entirely dedicated to describing the utility’s wildfire risk and mitigation efforts, and several proposed capital expenditures on its distribution and transmission systems specifically addressed wildfire mitigation.³⁹ The utility’s subsequent rate case filing, in February 2024, meanwhile, mentioned “wildfire” 669 times.⁴⁰

As the risks and costs of wildfire across the western United States grew in the decade preceding 2020, state regulatory approaches to managing that risk evolved in response. Securitization, which had precedent as a tool for recovering certain extraordinary costs, has

³⁸ RE: Advice No. 13-006 Docket UE 263 - PacifiCorp’s Request for General Rate Revision, UE 263 (Public Utility Commission of Oregon March 1, 2013), <https://apps.puc.state.or.us/edockets/docket.asp?DocketID=18212>.

³⁹ RE: Advice No. 20-001 Docket UE 374 – PacifiCorp’s Request for General Rate Revision, UE 374 (Public Utility Commission of Oregon February 14, 2020), <https://apps.puc.state.or.us/edockets/DocketNoLayout.asp?DocketID=22279>.

⁴⁰ Re: Advice No. 24-001/Docket UE 433—PacifiCorp’s Request for General Rate Revision, UE 433 (Public Utility Commission of Oregon February 14, 2024), <https://apps.puc.state.or.us/edockets/Docket.asp?DocketID=24006&Child=action&OrderBy=ActionDate&SortOrder=ASC>.

emerged as a wildfire risk mitigation tool and seen its overall usage increase. In the three years before 2021, utility-related securitization for all purposes raised a little over \$2 billion. In 2022 and 2023 alone, utility-related securitization for all purposes raised over \$20 billion, and wildfire-related costs, including both recovery from wildfire damages and wildfire mitigation expenses, accounted for 46% of those proceeds, according to analysis from Standard and Poor's.⁴¹ Furthermore, 33% of securitization proceeds in 2022-2023 were used for non-wildfire weather-related costs, such as a storm recovery, while just under 10% were used for stranded asset costs, indicating a pronounced shift in how utilities are using the approach.

This section summarizes the three main categories of wildfire costs that utilities in certain states are authorized to securitize—post-event recovery costs, proactive mitigation costs, and third-party liability costs. Case studies from California, Colorado, and Oregon are described to illustrate examples of how state legislators, regulators, and utilities have pursued securitization to address the rising financial impacts of wildfire across these different categories.

3.1 Uses of Securitization for Post-Event Wildfire Recovery Costs

Securitization has been used as a way to recover the costs of rebuilding infrastructure damaged after a catastrophic fire or other disaster at, usually, a lower cost to ratepayers. Disaster recovery costs have some similarities with securitization's initial uses for stranded investment recovery in that it represents recovery of significant, one-time costs already incurred.

As previously noted, securitization for disaster recovery costs was first permitted in Louisiana in response to the extensive damages to utility infrastructure caused by Hurricane Katrina in 2005. At least fifteen states permit utilities to securitize certain expenses resulting from a catastrophic event. Wildfire is usually, although not always, eligible for securitization of post-event costs in these states, whether it is named explicitly or implied as eligible by a broad statutory definition of "natural disaster" or similar language.⁴²

While use of securitization for mitigation and liability expenses is unique to wildfire, because of the risks that arise from the fact that wildfires are the only type of natural disaster that may be directly caused by utility infrastructure, securitization of post-event recovery costs is similar regardless of whether the event is a wildfire, hurricane, winter storm, or other catastrophic event. In these securitizations, utilities issue bonds equal to the cost of replacing assets damaged by a fire or other disaster. Securitization has been used for wildfire recovery and rebuilding by utilities in California, and has also been used for recovery from hurricanes and winter storms in other states.

Securitization of disaster recovery expenses has often been shown to result in lower costs to ratepayers than traditional cost recovery, and many state laws permitting utilities to securitize these costs require demonstration that the approach will lead to ratepayer savings. North Carolina's 2019 law, for example, requires utilities to demonstrate in their financing order applications that securitization will "provide quantifiable benefits to customers compared to the traditional method of recovery."⁴³ After the passage of the law, Duke Energy was approved to issue bonds for recovery costs from the historically destructive 2018-2019 hurricane season,

⁴¹ Ryan, *The Rationale Behind U.S. Utility Securitization And Reasons For Recent Growth*.

⁴² See Appendix for a table describing securitization legislation by state in more detail.

⁴³ Storm Securitization, Senate Bill 559, North 2019-2020 Session, G.S. § 62-172 (2019), https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_62/GS_62-172.pdf.

with ratepayer costs for those expenses estimated to be 35% lower than traditional cost recovery.⁴⁴

3.2 Uses of Securitization for Proactive Wildfire Mitigation Costs

Wildfire mitigation costs are distinct from post-event recovery costs in that mitigation costs are forward-looking, as opposed to expenses already incurred in response to a past event. Mitigation costs can include investments in long-term, systematic grid hardening solutions, infrastructure, and programs, such as undergrounding distribution lines, replacing wooden poles with fire-resistant materials, or enhancing vegetation management in high-risk transmission corridors, among other examples.⁴⁵ Such programs can be very large: in Colorado, Xcel Energy's 2025–2027 Wildfire Mitigation Plan proposed roughly \$1.6 billion in wildfire mitigation capital expenditures, an amount that could weigh heavily on ratepayers if recovered through conventional ratemaking, as discussed in more detail in the Colorado case study below.⁴⁶

While they may be extraordinary in scale, proactive investments are also by definition less clearly bounded than post-event recovery costs because they are not tied to a specific event but instead are intended to reduce future risk. This category represents a more novel and less precedented use of securitization, which has historically been used for retroactive recovery of clearly delimited one-time costs. Securitizing mitigation costs, by contrast, means that utilities are applying the funds from a bond issuance toward investments in ongoing programs or infrastructure that may be expected to remain in operation for decades into the future. This introduces new dynamics and potential financial risks for utilities: securitized costs, unlike traditionally-recovered investments in new capital projects, do not earn a rate of return, an issue of primary concern for utility investors and creditors but that may also contribute to increases in cost of capital, depending on investor and creditor reactions to a potential decrease in profits and weaker financial metrics.⁴⁷ Increases in a utility's cost of capital may in turn impact customer rates.⁴⁸ This and other considerations and tradeoffs for utilities weighing securitization of proactive wildfire mitigation investments are discussed in more detail in Section 4.2. It should also be noted that wildfire has blurred the line between recovery and mitigation costs in some cases, as described below in the California case study. For example, damaged assets are

⁴⁴ Storm Securitization; Chris Galford, "Storm Bonds to Save Duke Energy North Carolina Customers \$300M Repair Costs," *Daily Energy Insider*, December 7, 2021, <https://dailyenergyinsider.com/policy/32981-storm-bonds-to-save-duke-energy-north-carolina-customers-300m-repair-costs/>.

⁴⁵ André M. Coleman et al., *Current Best Practices on Wildfire Risk Reduction for Electric Transmission and Distribution Systems*, PNNL-38528 (Pacific Northwest National Laboratory, 2026), <https://www.pnnl.gov/publications/current-best-practices-wildfire-risk-reduction-electric-transmission-and-distribution>.

⁴⁶ "Colorado Public Utilities Commission Approves Unanimous Settlement Agreement for Xcel Energy's Wildfire Management Plan," Colorado Public Utilities Commission, June 6, 2025, <https://puc.colorado.gov/press-release/colorado-public-utilities-commission-approves-unanimous-settlement-agreement-for-xcel>; Decision No. C25-0556, Proceeding No. 24A-0296E (Colorado Public Utilities Commission June 5, 2025), ¶ 121, https://www.dora.state.co.us/pls/efi/EFI_Search_UI.Show_Decision?p_dec=32136&p_session_id=.

⁴⁷ Rebuttal Testimony and Attachments of Todd A. Wehner on Behalf of Public Service Company of Colorado, Proceeding No. 24A-0296E (Colorado Public Utilities Commission March 21, 2025), https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=24A-0296E.

⁴⁸ Kincaid et al., *The Burn Rate: How Wildfire Impacts Energy Affordability*, https://www.pnnl.gov/sites/default/files/media/file/PNNL_Burn_Rate_Wildfire_and_Energy_Affordability_June2026.pdf

commonly rebuilt to higher standards to enhance their resilience to future disasters and reduce the likelihood of future utility-caused fires.

Two case studies of securitization for wildfire costs, in California and Colorado, are described here to illustrate how the approach has been used in practice. Bonds issued in California by Pacific Gas & Electric and other IOUs in the state have addressed both recovery and mitigation costs, offering an illustration of two of the wildfire cost categories defined in this memo. Colorado, meanwhile, set a novel precedent for the state in 2025 by approving Xcel Energy's proposal to securitize proactive investments proposed in a wildfire mitigation plan.

3.2.1 Case study: Wildfire Hardening Recovery Bonds in California

California was the first state to permit utilities to securitize costs related to wildfire, and passed legislation permitting securitization to be used for both post-fire recovery and proactive wildfire mitigation expenses. The California legislature passed Assembly Bill (AB) 1054 in 2019, which enacted several sweeping changes related to utilities' wildfire costs. While the bill perhaps most notably established the California Wildfire Fund, it also permitted utilities to securitize some capital expenditures proposed in wildfire mitigation plans via "Wildfire Hardening Recovery Bonds."⁴⁹ This bill expanded securitization authority initially established by SB 901 in 2018, which permitted securitization to be used for the costs of recovering from catastrophic wildfire damages.⁵⁰ Utilities are permitted to issue these bonds for costs "related to a catastrophic wildfire" that are determined by the California PUC to be just and reasonable, in the public interest, and would reduce impact on rates as compared to recovering those same costs via traditional cost recovery.⁵¹

In addition to granting utilities authority to securitize eligible wildfire costs, AB 1054 also effectively requires securitization for some initial wildfire expenses. SB 901, in contrast, followed the more typical model of permitting utilities to apply for a financing order without imposing any requirements that they do so. Specifically, AB 1054 prohibits utilities from recovering the first aggregate \$5 billion of wildfire mitigation-related capital expenses described in their approved WMPs via the rate base. Instead, utilities can issue bonds to fund their share of that \$5 billion. This approach was adopted both to reduce ratepayer costs and to prohibit IOU shareholders from earning a rate of return on these expenses.⁵² As such, California IOUs have been both permitted and directed to securitize capital expenses related to wildfire risk mitigation.

⁴⁹ Assembly Bill No. 1054: Public Utilities: Wildfires and Employee Protection.

⁵⁰ Wildfires.

⁵¹ California Code, Public Utilities Code - PUC § 850.1, California Public Utilities Code § 850.1 (2019), <https://codes.findlaw.com/ca/public-utilities-code/puc-sect-850-1/>.

⁵² "California Assembly Bill 1054 (AB 1054), which was signed into law on July 12, 2019, includes a provision requiring each large electrical corporation to exclude its share of the first \$5 billion in wildfire risk mitigation capital expenditures from its equity rate base (prohibiting shareholders from earning common equity returns on those expenditures), and authorizes such electrical corporations the option to finance such expenditures and the related debt financing costs through a financing order." *Pacific Gas and Electric Company 2024 Wildfire Mitigation and Catastrophic Events Second Errata to Prepared Testimony*, nos. 24-11-009 (Pacific Gas and Electric Company, 2026), <https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2411009/8906/596902579.pdf>.

Under the allocation requirements outlined in AB 1054, PG&E, the state's largest utility, must contribute 64.2% of the initial \$5 billion, for a total of \$3.2 billion.⁵³ The utility has issued three of these recovery bonds to date, issued in 2021, 2022, and 2024.⁵⁴ Each approved financing order describes the total amount securitized and the utility's estimate of ratepayer savings from securitization, as calculated on a net present value basis for the total amount. The 2021 financing order approved issuance of \$1.2 billion in bonds, with an estimated total ratepayer savings of \$633 million; the 2022 order issued \$1.4 billion in bonds with estimated ratepayer savings of \$659 million; and the most recent 2024 order issued another \$1.4 billion with estimated ratepayer savings of \$465 million.⁵⁵ In all cases, the costs approved for securitization had already been approved as just and reasonable in general rate cases by the California PUC. All financing orders were filed after rate case approval in accordance with AB 1054's requirements to securitize initial wildfire mitigation costs.⁵⁶

These expenses have included both post-fire rebuilding and proactive grid hardening efforts. As noted above, the distinction between reactive and proactive wildfire expenses has been somewhat blurred in California. Bonds issued by Pacific Gas and Electric (PG&E), for example, have been used to rebuild infrastructure damaged in Butte County, California by the Camp Fire, which was caused by PG&E equipment and remains the deadliest wildfire in California history.⁵⁷ Rebuilding efforts funded by these bonds have included system hardening upgrades, including undergrounding distribution lines, that went beyond replacement of damaged infrastructure in order to reduce the risk of future utility-caused fires in the area.⁵⁸

In 2025, the PUC denied PG&E's fourth application for a wildfire-related financing order. The application sought to securitize more than \$2 billion in operation and maintenance expenses, mostly vegetation management costs, that PG&E had already fully collected from ratepayers through a prior rate case.⁵⁹ PG&E's proposal involved using the bond proceeds to fund a

⁵³ Kelly Martin Bosler, *Determination of Wildfire Allocation Metric* (California Public Utilities Commission, 2019), https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpucwebsite/content/news_room/newsupdates/2019/7-12-2019-determination-of-wildfire-allocation-metric.pdf.

⁵⁴ "Securitizations," PG&E Corporation, 2026, <https://investor.pgecorp.com/investors/Securitizations/default.aspx>.

⁵⁵ PGE Corp., "Securitizations."

⁵⁶ E.g. "PG&E issued three Wildfire Hardening Recovery Bonds in accordance with the provisions of AB 1054. PG&E applied these securitization funds against capital expenditures deemed reasonable in the 2020 GRC...." see *Pacific Gas and Electric Company 2024 Wildfire Mitigation and Catastrophic Events Second Errata to Prepared Testimony*, 3–19.

⁵⁷ Alejandra Reyes-Velarde, "California's Camp Fire Was the Costliest Global Disaster Last Year, Insurance Report Shows," Los Angeles Times, January 12, 2019, <https://www.latimes.com/local/lanow/la-me-ln-camp-fire-insured-losses-20190111-story.html>.

⁵⁸ *Pacific Gas and Electric Company 2024 Wildfire Mitigation and Catastrophic Events Second Errata to Prepared Testimony*.

⁵⁹ "PG&E seeks a Financing Order under Pub. Util. Code §§ 850 et seq. authorizing PG&E to securitize an amount, already collected, based on O&M expenses of up to \$2.356 billion and originally related to activities described in its Wildfire Mitigation Plans...PG&E's prior applications for Financing Orders address capital expenditures and catastrophic wildfire costs. PG&E has not previously sought Commission authorization to securitize O&M expenses previously collected from ratepayers." Decision 25-08-007: Decision Denying Request by Pacific Gas and Electric Company for Issuance of Recovery Bonds Pursuant to Assembly Bill 1054, Application 24-06-013 (California Public Utilities Commission August 14, 2025), 9–10, <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M576/K504/576504703.PDF>.

temporary 12-month “rate reduction credit” for residential customers to reflect the theoretical reduction in those costs if they were to be retroactively securitized. As described in PG&E’s financing order application, this would then be followed by nine years of surcharges that would have increased overall customer bills.⁶⁰ The Commission determined that the application failed California’s statutory standard that only costs that are just, reasonable, and demonstrably in the public interest should be recovered from ratepayers; AB 1054 further requires a utility to demonstrate both short-term and long-term economic benefits from securitization as opposed to other cost recovery mechanisms.⁶¹ Pointing to evidence from consumer advocates that the transaction could result in a negative net present value of \$142 million, the CPUC concluded that the plan would unfairly prioritize temporary rate relief at the expense of higher costs for future customers.⁶²

California and its electric utilities have been uniquely and disproportionately impacted by wildfire. As a result, the state has consistently been a first mover in adopting policies and regulations intended to manage wildfire-driven costs. California’s use of securitization for both reactive and proactive wildfire costs has demonstrated its potential value as an affordability tool, with total ratepayer savings across PG&E’s three Wildfire Hardening Recovery Bond issuances to date estimated to be greater than \$1.7 billion.⁶³ Its legislative requirements that utilities demonstrate ratepayer savings from securitization as a condition for approval offer a potential template to help ensure that the tool is deployed for customers’ benefit, and the California PUC’s denial of PG&E’s most recent financing order application illustrates how these guardrails can work in practice. Its innovative requirement that utilities use securitization for certain wildfire mitigation costs, meanwhile, has already been adapted by Hawaii in legislation adopted after utility-caused wildfires devastated Maui in 2023. As more Americans struggle with electricity affordability and wildfire costs continue to rise nationwide, California’s approach may offer models for other states.

3.2.2 Case study: Proactive Grid Hardening in Colorado

Colorado is the third state, alongside California and Hawaii, to have passed legislation permitting IOUs to securitize proactive grid hardening investments described in a WMP. In 2025, Colorado paved the way for the first use of securitization in the state for proactive utility wildfire mitigation expenses with the Colorado PUC’s approval of Xcel Energy’s 2025-2027 Wildfire Mitigation Plan. Unlike California, Colorado law does not currently require utilities to securitize specific costs, and the use of securitization in Xcel’s case was a voluntary proposal from the utility.⁶⁴ Xcel’s securitization proposal for the plan’s capital expenses reflected the concerns of consumer advocates and other intervenors about the potentially significant customer impacts if its unprecedented costs were instead recovered as part of the utility’s rate base.

⁶⁰ *Decision 25-08-007: Decision Denying Request by Pacific Gas and Electric Company for Issuance of Recovery Bonds Pursuant to Assembly Bill 1054*, 9–11, 23.

⁶¹ Assembly Bill No. 1054: Public Utilities: Wildfires and Employee Protection.

⁶² *Decision 25-08-007: Decision Denying Request by Pacific Gas and Electric Company for Issuance of Recovery Bonds Pursuant to Assembly Bill 1054*, 19, 23–24.

⁶³ PGE Corp., “Securitizations.”

⁶⁴ Colo. Public Util. Comm., “Colorado Public Utilities Commission Approves Unanimous Settlement Agreement for Xcel Energy’s Wildfire Management Plan”; *Decision No. C25-0556*.

Xcel's 2025 plan was the utility's second WMP in Colorado after its inaugural plan filing in 2020.⁶⁵ Colorado does not currently have any formal legislative or regulatory requirements for utilities to submit WMPs, but the Commission has reviewed and approved plans filed by Xcel at the utility's request.⁶⁶ The 2025-2027 plan was approved via a settlement agreed to by the Commission, Xcel, and all other parties who had intervened in the case, which included the Colorado Office of the Utility Consumer Advocate, city and county governments, and other organizations.⁶⁷ As part of the settlement, the Colorado PUC approved a framework under which the utility committed to pursue securitization of eligible retail capital costs associated with WMP investments. While the exact amount of this securitization will be determined when the utility files a financing order, the approved WMP included a total budget of approximately \$1.9 billion, \$1.6 billion of which is proposed new capital investments.⁶⁸

The 2025 WMP approval represented the first use of Colorado's legislative authority permitting electric utilities to securitize costs associated with wildfire mitigation. The state first passed legislation in 2019 permitting utilities to issue "Colorado Energy Impact Bonds" to securitize costs associated with the early retirement of certain generation facilities, following a precedent set by several other states.⁶⁹ Additional legislation passed in 2021 expanded allowable uses of securitization to include any "programs or projects" approved by the PUC to "mitigate the impacts of extreme weather, wildfires...or other hazards," and a 2025 update to that legislation more explicitly clarified that costs in a Commission-approved WMP are eligible.⁷⁰ In contrast to California and Hawaii, the two other states that allow utilities to issue bonds for wildfire mitigation expenses, Colorado law does not require utilities to securitize any costs; instead, the approach may be proposed by a utility and approved by the PUC.

Securitization was not part of Xcel's initial proposal when filing its WMP with the Commission. However, the utility agreed to securitization as part of the settlement agreement in response to intervenors' concerns about the plan's potential ratepayer impacts.⁷¹ Xcel's previous WMP, by contrast, had proposed just over \$500 million in capital expenses, less than a third of the costs

⁶⁵ "Xcel Energy - Wildfire Mitigation Program," Xcel Energy, 2026, https://www.xcelenergy.com/company/rates_and_regulations/filings/wildfire_mitigation_program.

⁶⁶ Barlow et al., *Wildfire Risk: Review of Utility Industry Trends*; "Wildfire Mitigation Plans," Colorado Public Utilities Commission, 2026, <https://puc.colorado.gov/puc-home/energy-and-water/wildfire-mitigation-plans>.

⁶⁷ Colo. Public Util. Comm., "Colorado Public Utilities Commission Approves Unanimous Settlement Agreement for Xcel Energy's Wildfire Management Plan"; Hearing Exhibit 137, Unanimous Comprehensive Settlement Agreement, Proceeding No. 24A-0296E (Colorado Public Utilities Commission April 18, 2025), https://www.dora.state.co.us/pls/efi/EFI.Show_Filing?p_fil=G_824069&p_session_id=.

⁶⁸ "the Company estimates the overall cost of its Updated WMP as set forth in the terms of the Settlement Agreement to be approximately \$1.9 billion of which more than \$1.6 Billion is new capital investment. This \$1.6 billion capital investment represents an enormous commitment of customer funds given the Company's current 2024 Colorado rate base of just over \$12 billion." *Decision No. C25-0556*, ¶ 118.

⁶⁹ Sunset Public Utilities Commission, SB19-236, Colorado General Assembly 2019 Regular Session (2019), <https://leg.colorado.gov/bills/sb19-236>.

⁷⁰ Increase Prescribed Burns, SB25-007, Colorado General Assembly 2025 Regular Session (2025), <https://leg.colorado.gov/bills/SB25-007>; Measures To Modernize The PUC, SB21-272, Colorado General Assembly 2021 Regular Session (2021), <https://leg.colorado.gov/bills/sb21-272>.

⁷¹ *Hearing Exhibit 137, Unanimous Comprehensive Settlement Agreement*, 21–23; Settlement Testimony and Attachment of Steven P. Berman on Behalf of Public Service Company of Colorado, Proceeding No. 24A-0296E (Colorado Public Utilities Commission April 28, 2025), 12, https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=24A-0296E.

in the 2025 plan.⁷² The expenses approved for securitization cover a wide range of equipment and program investments, including:

- Grid hardening investments intended to make Xcel's equipment more resilient and less likely to ignite a wildfire, including undergrounding distribution lines in high fire-risk areas and rebuilding critical transmission lines;
- Investments in improved situational awareness, including weather stations and cameras to monitor conditions and quickly detect fires;
- More frequent inspections of equipment and expanded vegetation management; and
- A rebate program to help fund battery energy storage systems (BESS) to protect customers who depend on electricity to power critical medical equipment during public safety power shutoffs (PSPS), where the utility proactively de-energizes part of the grid to reduce wildfire risk.⁷³

Not all of the plan's capital costs will be securitized. Specifically, the Colorado PUC's decision notes that securitizing transmission-related expenses could require additional review and approval from the Federal Energy Regulatory Commission (FERC), which could lead to process delays and uncertainty.⁷⁴

The settlement agreement includes an annual prudence review of actual WMP expenses, meaning that any costs proposed in an ultimate financing order will have been periodically reviewed and approved by the Colorado PUC before any recovery from ratepayers.⁷⁵ These costs will be tracked and deferred until the end of the plan period, at which point Xcel will file a financing order application.⁷⁶ Under the terms of the settlement agreement, the utility is expected to apply for this financing order in 2028, with bonds to be issued by 2029.⁷⁷ In the meantime, in order to mitigate some financial risk to the utility, some incremental costs (including depreciation expenses, some interest, and operations and maintenance costs) will be recovered through a dedicated "Wildfire Mitigation Adjustment" (WMA) rider prior to securitization.⁷⁸ These WMA costs will increase over time to a peak of approximately \$9 per

⁷² Decision No. R21-0109: In the Matter of the Application of Public Service Company of Colorado for Approval of Wildfire Mitigation Plan and Wildfire Protection Rider, Proceeding No. 20A-0300E (Colorado Public Utilities Commission February 26, 2021), https://www.dora.state.co.us/pls/efi/EFI.Show_Filing?p_fil=G_772623&p_session_id=.

⁷³ *Decision No. C25-0556*; Colo. Public Util. Comm., "Colorado Public Utilities Commission Approves Unanimous Settlement Agreement for Xcel Energy's Wildfire Management Plan."

⁷⁴ *Decision No. C25-0556*, 33.

⁷⁵ *Hearing Exhibit 137, Unanimous Comprehensive Settlement Agreement*, 23; Direct Testimony of Steven P. Berman on Behalf of Public Service Company of Colorado, Proceeding No. 24A-0296E (Colorado Public Utilities Commission June 27, 2024), 17–20, https://www.dora.state.co.us/pls/efi/EFI.Show_Filing?p_fil=G_817748&p_session_id=.

⁷⁶ *Settlement Testimony and Attachment of Steven P. Berman on Behalf of Public Service Company of Colorado*; *Decision No. C25-0556*.

⁷⁷ *Decision No. C25-0556*, 39; *Hearing Exhibit 137, Unanimous Comprehensive Settlement Agreement*, 21.

⁷⁸ *Direct Testimony of Steven P. Berman on Behalf of Public Service Company of Colorado*, 38; Rebuttal Testimony of Steven P. Berman on Behalf of Public Service Company of Colorado, Proceeding No. 24A-0296E (Colorado Public Utilities Commission March 21, 2025),

month for an average residential customer in 2028.⁷⁹ This is expected to be a temporary spike: securitization will then reduce ratepayers' monthly contributions to WMP expenses, with average residential bills currently anticipated to fall by about 1.5% in 2029 after bonds are issued.⁸⁰

All stakeholders in the settlement agreed that securitizing the expenses would result in lower ratepayer costs as compared to standard rate recovery. Initial estimates indicated that rate recovery of Xcel's proposed WMP expenses would have increased average residential bills by 9.5% per month by 2028.⁸¹ With securitization, total savings for Xcel's Colorado ratepayers are estimated to be approximately \$1.2 billion over a 50-year period, or about \$400 million on a net present value basis.⁸²

Actual ratepayer impacts will be determined only after a final financing order is issued and approved. The financing order proceeding, along with annual prudence reviews of actual WMP expenses over the duration of the plan period, will offer additional opportunities for regulators and other stakeholders to ensure that securitized costs are just and reasonable and represent ratepayer savings. Finally, as expressed in testimony from Xcel in the WMP proceeding, that the utility does not currently intend to pursue securitization for future WMPs, reflecting a belief that the 2025 plan represents an extraordinary expense in response to a rapidly changing risk landscape.⁸³

https://www.dora.state.co.us/pls/efi/EFI.Show_Filing?p_fil=G_823241&p_session_id=; *Settlement Testimony and Attachment of Steven P. Berman on Behalf of Public Service Company of Colorado*, 21–23.

⁷⁹ Colo. Public Util. Comm., “Colorado Public Utilities Commission Approves Unanimous Settlement Agreement for Xcel Energy’s Wildfire Management Plan”; *Direct Testimony of Steven P. Berman on Behalf of Public Service Company of Colorado*.

⁸⁰ *Settlement Testimony and Attachment of Steven P. Berman on Behalf of Public Service Company of Colorado*, 26; Colo. Public Util. Comm., “Colorado Public Utilities Commission Approves Unanimous Settlement Agreement for Xcel Energy’s Wildfire Management Plan.”

⁸¹ Robert Walton, “Xcel Energy Proposes \$1.9B Wildfire Mitigation Plan in Colorado as Risk Areas Nearly Double,” *Utility Dive*, July 2, 2024, <https://www.utilitydive.com/news/xcel-energy-proposes-wildfire-mitigation-plan-colorado/720407/>.

⁸² Net present value is a common approach used to estimate the economic value of a long-term investment by applying a discount rate to future savings, reflecting the higher value of present money than future savings. See estimates from the City of Boulder and Xcel Colorado. “Xcel Energy’s 2025 to 2027 Wildfire Mitigation Plan,” City of Boulder, April 18, 2025, <https://bouldercolorado.gov/xcel-energys-2025-2027-wildfire-mitigation-plan>; *Settlement Testimony and Attachment of Steven P. Berman on Behalf of Public Service Company of Colorado*.

⁸³ “...the non-precedential nature of the Settlement Agreement as it relates to future use of securitization is particularly important to the Company... [S]ecuritization typically is used to recover costs of stranded generation, catastrophic storm damage, or volatile fuel cost fluctuations. Securitizing planned infrastructure investment does not compensate the Company for incremental financial and operational risks through the opportunity for equity returns, and impacts to the Company’s financial integrity. For purposes of this Settlement Agreement only, and in recognition that the Updated WMP initiates new investments (e.g. investments to facilitate Enhanced 1 Powerline Safety Settings (“EPSS”)) and accelerates the scope and timing of resiliency work as a wildfire mitigation (e.g., pole inspection and remediation, small conductor, etc.) to a new, higher baseline of wildfire mitigation work, the Company is willing to pursue securitization for Updated WMP Retail Capital Costs.” *Settlement Testimony and Attachment of Steven P. Berman on Behalf of Public Service Company of Colorado*, 18–19.

3.3 Uses of Securitization for Third-Party Wildfire Liability Costs

Liability costs represent a category of indirect wildfire-related expenses, distinct from the direct costs of building or rebuilding infrastructure to mitigate fire risk or repair wildfire damages. Third-party liability damages, however, represent a much larger share of the financial risk wildfire poses to most utilities than direct system expenses.⁸⁴ As a result, many utilities in the west have faced increasing difficulty securing available, affordable liability insurance that can cover the scale of potential wildfire liabilities.⁸⁵ As a result, several utilities and state policymakers have begun to explore alternative solutions to supplement or replace commercial insurance for wildfire liability, including state backstop funds and self-insurance funds.⁸⁶

California, a state whose utility sector has been profoundly impacted by wildfire, created a state Wildfire Fund via legislation in 2019 that is capitalized by utilities through a combination of ratepayer and shareholder contributions, with shareholder contributions appearing as a fixed, non-bypassable charge on customers' monthly bills.⁸⁷ Southern California Edison (SCE), one of the state's three IOUs, issued a statement arguing that utilities should be able to securitize ratepayers' annual fund contributions, and that doing so would "moderate the impact of rate increases" as a result of required contributions to the fund.⁸⁸ Currently, some capitalization of the Wildfire Fund has come in the form of separate bonds issued by the state's Department of Water Resources, and utility ratepayers' non-bypassable charges have been used both for repayment of those bonds and for direct contributions to the Fund.⁸⁹

While the option may remain under consideration in California, especially as the state continues to grapple with the solvency of its multibillion-dollar fund as annual wildfire damages increase, IOUs in California cannot currently securitize fund contributions or other liability-related costs. Oregon, however, passed legislation in 2026 that does authorize utilities to securitize a liability self-insurance fund in response to wildfire-driven insurance challenges. The case study of Oregon's approach to securitization for liability costs is summarized below.

⁸⁴ Barlow et al., *Wildfire Risk: Review of Utility Industry Trends*.

⁸⁵ Frank C. Graves et al., *Wildfire Financial Risks for Utilities: Proactive Management, Regulatory Policy, and Strategy Recommendations* (Brattle Group, 2025), <https://www.brattle.com/wp-content/uploads/2025/10/Wildfire-Financial-Risks-for-Utilities-Proactive-Management-Regulatory-Policy-and-Strategy-Recommendations.pdf>; Barlow et al., *Wildfire Risk: Review of Utility Industry Trends*.

⁸⁶ Barlow et al., *Wildfire Risk: Review of Utility Industry Trends*; Kousky et al., *Wildfire Costs in California: The Role of Electric Utilities*; Powell et al., *Considerations for a Pooled Insurance Backstop for Utility Wildfire Liability*.

⁸⁷ "California Wildfire Fund," California Earthquake Authority, 2025, <https://www.cawildfirefund.com/>.

⁸⁸ Southern California Edison, *Commission on Catastrophic Wildfire Cost and Recovery Request for Comment* (California Commission on Catastrophic Wildfire Cost and Recovery, 2019), https://download.edison.com/405/files/202210/20190422-wildfire_comments.pdf.

⁸⁹ California Catastrophe Response Council, *California Catastrophe Response Council Report to the Legislature and Department of Finance on the Formation, Administration, and Disposition of the Wildfire Fund ("Statutory Report")* (California Catastrophe Response Council, 2025), <https://www.cawildfirefund.com/sites/wildfire/files/documents/2024/section-3287-statutory-report-2025.pdf>.

3.3.1 Case study: Self-Insurance in Oregon

Oregon passed House Bill (HB) 4077 in 2026, which expanded the definition of costs eligible for securitization to include capitalization of a self-insurance or captive insurance fund.⁹⁰ While Utah and Texas have both adopted legislation permitting utilities to establish self-insurance funds as a supplement or alternative to commercial insurance, HB 4077's passage made Oregon the first state to permit utilities to securitize wildfire liability costs.⁹¹

Securitization authority in Oregon was initially established via HB 3143, which was passed in 2023. HB 3143 allowed utilities to issue securitized bonds to pay for costs resulting from any events that had been declared a federal or state emergency, including "severe weather" or "catastrophic wildfire."⁹² Portland General Electric (PGE), Oregon's largest utility, filed a proposal in 2025 to use this authority to securitize recovery costs related to catastrophic winter storms that had been declared a state emergency in 2024, although the utility ultimately did not pursue securitization and instead received regulatory approval for standard rate recovery of the storm costs in question.⁹³ HB 3179, a second bill passed in 2025, expanded allowed uses of securitization to include asset retirement, regional power or fuel price spikes due to supply constraints, and, notably, any capital investment that would lead to a residential rate increase of more than five percent.⁹⁴

HB 4077, the third utility securitization bill passed in Oregon to date, allows electric and gas utilities to issue ratepayer-backed bonds to establish a regulated self-insurance fund that would be used as an additional layer of coverage for liability costs from wildfires or other major disasters. PGE issued a statement in support of the bill that described it as a predictable, affordable pathway that would allow the utility to fully fund the program up front as opposed to "gradually over many years."⁹⁵ HB 4077 was also endorsed by the Oregon Citizens' Utility Board, the state's utility customer advocate, and was passed with bipartisan support.⁹⁶ Consistent with other uses of securitization in Oregon and in most other states, utilities would have to file and receive approval for a financing order with the Oregon PUC before issuing any bonds. As of June 2026, no such order had yet been filed.

Oregon also proposed, but did not pass, a bill in 2025 that would have created a state catastrophic wildfire fund with similarities to California's. The bill, HB 3917, also included provisions that would have allowed utilities to securitize debt incurred from contributions to the

⁹⁰ AN ACT Relating to the Securitization of a Public Utility's Insurance Program; Amending ORS 757.457; and Prescribing an Effective Date., HB 4077, 83rd Oregon Legislative Assembly 2026 Regular Session (2026), <https://olis.oregonlegislature.gov/liz/2026R1/Measures/Overview/HB4077>.

⁹¹ Kincaid et al., *The Burn Rate: How Wildfire Impacts Energy Affordability*.

⁹² Relating to the Securitization of Public Utility Expenditures Other than Expenditures for Generation Asset Retirement; and Declaring an Emergency., HB 3143, 82nd Oregon Legislative Assembly 2023 Regular Session (2023), <https://olis.oregonlegislature.gov/liz/2023r1/Measures/Overview/HB3143>. Also see Appendix for a table describing securitization legislation by state in more detail.

⁹³ Portland General Electric Company Storm Amortization, UE 458 (Oregon Public Utility Commission April 1, 2026), <https://apps.puc.state.or.us/edockets/docket.asp?DocketID=24620>.

⁹⁴ Relating to Public Utilities; and Declaring an Emergency, HB 3143, 83rd Oregon Legislative Assembly 2025 Regular Session (2025), <https://olis.oregonlegislature.gov/liz/2025r1/Measures/Overview/HB3179>. Also see Appendix for a table describing securitization legislation by state in more detail.

⁹⁵ Becker, *HB 4077: Using Securitization to Protect Energy Affordability*.

⁹⁶ Becker, *HB 4077: Using Securitization to Protect Energy Affordability*; Or. State Legis., "House Committee On Climate, Energy, and Environment: Meeting Details 02/10/2026 8:00 AM, HR 30, HB 4077."

fund.⁹⁷ In the absence of a state fund, the self-insurance option enabled by HB 4077 provides an alternative pathway for utilities to address insurance cost and availability challenges associated with increasing wildfire financial risk.

Securitization would allow PGE or other utilities to immediately capitalize a self-insurance fund without relying on loans from other agencies or entities as used for California's state Wildfire Fund. Consistent with other examples of securitization, utility bond issuance for a given amount of self-insurance fund capitalization would likely come at lower total costs to ratepayers than alternative approaches. Determination of prudence for liability fund expenses may introduce additional questions or challenges, as a liability insurance fund—even more so than grid infrastructure investments for wildfire mitigation, which face similar implementation questions—is forward-looking and not clearly defined.

⁹⁷ Relating to a Catastrophic Wildfire Fund; Declaring an Emergency, House Bill 3917, 83rd Oregon Legislative Assembly 2025 Regular Session (2025), <https://olis.oregonlegislature.gov/liz/2025R1/Downloads/MeasureDocument/HB3917/Introduced>.

4.0 Key Considerations, Risks, and Limitations for Utility Securitization in the Context of Wildfire

While securitization has been proven to be an effective tool to reduce the costs of large utility expenditures for ratepayers, the mechanism is not applicable for all costs and circumstances and involves tradeoffs for utilities and their customers. This section describes key considerations, including risks and limitations, related to the use of securitization to recover wildfire costs. It summarizes risks and benefits to ratepayers, utilities, and regulators, related to the use of securitization for different types of wildfire costs.

4.1 Considerations for utility ratepayers

Securitization's primary benefit to ratepayers is its promise of cost savings. Securitization of a given expense has often been shown to result in lower overall costs for ratepayers as compared to standard rate recovery of those costs, but the permanence of required bond repayments nonetheless exposes customers to a degree of risk. Ratepayer savings from securitization arise from the fact that ratepayer-backed bonds typically have much lower interest rates than a utility's regular rate of return.⁹⁸ For example, in 2024, PG&E issued securitized wildfire recovery bonds with interest rates between 4.8%-5.3%, depending on maturity date; that same year, the utility's authorized rate of return was 7.87%.⁹⁹

A primary reason for these lower rates is that utility-issued securitizations are guaranteed by the utility's ratepayers and irrevocable once issued. Unlike typical utility expenses, where utility shareholders assume some financial risk, ratepayers assume the full risk for securitized costs.¹⁰⁰ Once a financing order is approved, ratepayers—present and future alike—are responsible for repayment of the entire bond amount via monthly bill charges.¹⁰¹ As a result, utilities may not face strong incentives to mitigate or control costs associated with the asset or activity, or to overstate the value of assets to be securitized in order to maximize returns.¹⁰² As previously noted, prior to about 2020, securitization had most commonly been proposed to recover costs from generation assets that had become stranded as a result of utility

⁹⁸ Menhorn, *Securitization: A Valuable Tool for Cost Recovery Opportunities Outside a Normal Rate Case*; Fichera et al., "Ratepayer-Backed Bonds for Utility Financings."

⁹⁹ CPUC, "Rate of Return (ROR) (Actual and Authorized)," California Public Utilities Commission, 2025, <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-costs/historical-electric-cost-data/rate-of-return>; PGE Corp., "Securitizations."

¹⁰⁰ Cassella et al., "Utility Cost Recovery through Securitization Is Credit Positive"; AARP Office of Policy Development & Integration, *Securitization | AARP Policy Book* (AARP, 2026), <https://policybook.aarp.org/policy-book/utilities/energy/securitization>.

¹⁰¹ CLEAResult, "How Can We Make Utilities More Affordable?," CLEAResult, March 31, 2026, <https://www.clearesult.com/insights/how-can-we-make-utilities-more-affordable>; Fichera et al., "Ratepayer-Backed Bonds for Utility Financings"; Cassella et al., "Utility Cost Recovery through Securitization Is Credit Positive."

¹⁰² AARP Office of Policy Development & Integration, *Securitization | AARP Policy Book*; Fichera et al., "Ratepayer-Backed Bonds for Utility Financings"; Keith Goldberg, "Coal Plant Closure Bonds Gain Steam With Shift In Power Mix," *Law360*, March 2019, <https://saberpartners.com/wp-content/uploads/2019/03/Coal-Plant-Closure-Bonds-Gain-Steam-With-Shift-In-Power-Mix-Law360.pdf>; John Farrell and Leslie Glustrom, hosts, *Should Big Utilities Pay for Their Bad Choices?*, episode 124, Local Energy Rules, Institute for Local Self-Reliance, February 24, 2021, <https://ilsr.org/article/energy-democracy/utility-accountability-securitization-ler-124/>; Ritchie and Elkind, *Powering Down Prices*.

restructuring, market factors, or early retirement of generation assets.¹⁰³ Therefore, some history of controversy has attached to securitization, as some customers and consumer advocates balked at the idea of paying full book value for an uneconomic utility asset, even at a lower carrying cost.¹⁰⁴

During the regulatory processes that establish the grounds for a financing order for recovery of funds to pay for mitigation costs, customer advocates will have an interest in making sure that the amount of money to be raised in a securitization process is the “right” amount and that the use of those proceeds is reasonable and efficient. Statutory definitions and criteria are especially helpful in assessing utility actions and promoting quality oversight.¹⁰⁵ In California, for example, state law establishes a detailed process for securing a financing order, including justifications that securitization is in the public interest and will lead to ratepayer savings, as previously noted.¹⁰⁶ After the commission finds costs sought for recovery by a utility are just and reasonable, the commission may approve a financing order if the recovery bonds are reasonably sized, are consistent with the public interest, and the costs of the bonds are less than the traditional utility financing mechanism on a present value basis.

Customer groups’ participation in a financing order process can help shape the outcome. In a 2025 case, the California Public Utilities Commission rejected Pacific Gas and Electric Company’s request to issue bonds and securitize \$2.3 billion of wildfire costs, as described in Section 3.1.¹⁰⁷ The Commission rejected the request because it did not meet the required public interest test based in part on testimony provided by TURN, a utility consumer advocate in California. Especially because securitization commits ratepayers to payment over many years, the consumer voice throughout the regulatory process bring a necessary perspective to decisionmakers. Securitization of proactive investments in grid hardening and liability funds are likely to require additional input and oversight to ensure expenses are prudent and right-sized, given the challenges inherent in defining future expenses intended to mitigate the uncertain risk of potential future disasters.

4.2 Considerations for utilities and shareholders

Investor-owned utility companies and their shareholders also face tradeoffs when considering securitization as alternative to traditional rate recovery. In some cases, notably in California and Hawaii, utilities may be required by law to securitize certain wildfire costs regardless of these tradeoffs. It remains to be seen whether other states will similarly require that utilities securitize certain costs, whether wildfire-related or not.

¹⁰³ Joseph S. Fichera, “Securitization: Is It the Right Tool for Me Today?,” 130th NARUC Annual Meeting and Education Conference, National Association of Regulatory Utility Commissioners (NARUC), 2018, <https://pubs.naruc.org/pub/F51B000A-EFC1-4568-1C63-764920117214>; Menhorn, *Securitization: A Valuable Tool for Cost Recovery Opportunities Outside a Normal Rate Case*.

¹⁰⁴ Murray Clay and Henry Curtis, “Electric Utility Securitization Decision Hinges On How Funds Are Spent,” *Honolulu Civil Beat*, February 28, 2024, <https://civilbeat.org/2024/02/electric-utility-securitization-decision-hinges-on-how-funds-are-spent/>; Goldberg, “Coal Plant Closure Bonds Gain Steam With Shift In Power Mix.”

¹⁰⁵ Herman K. Trabish, “Possible Hundreds of Billions in US Power Sector Securitizations Spur Ratepayer Protection Debate,” *Utility Dive*, February 22, 2021, <https://www.utilitydive.com/news/possible-hundreds-of-billions-in-us-power-plant-securitizations-spur-ratepa/595089/>; Ron Lehr and Mike O’Boyle, *Comparing 2019 Securitization Legislation in Colorado, Montana, and New Mexico* (Energy Innovation LLC, 2020), https://energyinnovation.org/wp-content/uploads/2020/09/Securitization-Brief_September-2020.pdf.

¹⁰⁶ See California Public Utilities Code, Article 5.8, Chapter 4 of Part 1 of Division 1, Sect. 850. Wildfires.

¹⁰⁷ California Public Utilities Commission, Decision 25-08-007, August 18, 2025.

Benefits of securitization for utilities may include:

- When securitization is approved and a utility is able to issue bonds via an SPV, the utility has immediate access to cash in hand, which the utility's ratepayers will pay back to bondholders over the lifetime of the bond. When costs are recovered via standard rate cases, by contrast, ratepayers pay back the utility's investments over time. Although no Oregon utilities have yet applied for a financing order for self-insurance funds as permitted in the state's 2026 legislation, this immediate access to funds is a particular benefit of the use of securitization in the context of liability insurance.
- Securitization is generally viewed as credit-positive by rating agencies: securitized debt is removed from a utility's balance sheet, and bond repayment is guaranteed by the utility's ratepayers.¹⁰⁸
- Once a regulator approves a financing order and bonds are issued, a utility is guaranteed recovery of the full cost amount. As stated throughout this memo, financing orders are irrevocable and cannot typically be adjusted by future commissions in future regulatory reviews.

Potential downsides and tradeoffs may include:

- Utility shareholders do not earn a rate of return on securitized assets. Furthermore, the capital costs for securitized assets reflect only the cost of debt, as opposed to a full weighted cost of capital.¹⁰⁹ These characteristics are major reasons for the ratepayer affordability benefits of securitization, but come at the expense of some utility revenues. In other words, a utility that relies heavily on securitization to finance capital investments will receive lower profits.¹¹⁰ This may indirectly contribute to increases in cost of capital or impact the utility's ability to invest in other programs or priorities or to absorb unexpected costs.¹¹¹ Any increases to a utility's cost of capital directly lead to higher infrastructure costs, which can in turn introduce affordability pressures on the ratepayers expected to recover those costs.¹¹² These cost increases may offset some of the direct ratepayer savings from securitization, and including scenarios related to potential cost of capital impacts in forecasts of securitization's overall ratepayer outcomes may offer a fuller long-term picture.
- If securitization is used for proactive investments, the utility remains responsible for the operation and maintenance of those assets, but with has flexibility to adjust recovered costs in response to operational risks or other changes.¹¹³ A related issue raised during Xcel Colorado's 2025 WMP proceeding is that some utility assets, such as wooden distribution poles, may have a longer expected lifetime than recovery bonds' maximum

¹⁰⁸ Ryan, *The Rationale Behind U.S. Utility Securitization And Reasons For Recent Growth*; Cassella et al., "Utility Cost Recovery through Securitization Is Credit Positive."

¹⁰⁹ *Rebuttal Testimony and Attachments of Todd A. Wehner on Behalf of Public Service Company of Colorado*; Ritchie and Elkind, *Powering Down Prices*.

¹¹⁰ *Rebuttal Testimony of Steven P. Berman on Behalf of Public Service Company of Colorado*.

¹¹¹ *Rebuttal Testimony and Attachments of Todd A. Wehner on Behalf of Public Service Company of Colorado*; *Settlement Testimony and Attachment of Steven P. Berman on Behalf of Public Service Company of Colorado*.

¹¹² Kincaid et al., *The Burn Rate: How Wildfire Impacts Energy Affordability*.

¹¹³ *Rebuttal Testimony of Steven P. Berman on Behalf of Public Service Company of Colorado*.

maturity date.¹¹⁴ These issues have, naturally, not been a concern when securitization has been used to recover investments in stranded assets or other past costs, but have emerged as potential financial risks as more utilities use recovery bonds to pay for new infrastructure and programs that can remain operational for years or decades.

- Regulators may not approve a utility's request for a financing order if the costs are not found to be just, reasonable, and in the public interest, as was the case with the California PUC's denial of PG&E's financing order application in 2025.¹¹⁵ The risk of disallowance is, of course, present in any rate case if a utility seeks to recover costs that a regulator does not find prudent. However, disallowance of securitization may have outsized financial impacts on a utility given the scale and nature of costs that are typically securitized, and may reduce a utility's flexibility to seek recovery for other investments in future rate cases.

4.3 Considerations for public utility regulators

While legislators, not regulators, are responsible for initial definition of a given state's securitization process requirements and eligible costs, it is regulators who review specific proposals and make the ultimate determination to approve or deny a utility's application. Most state utility commissions have limited experience in reviewing and approving financing orders, especially in the context of their emerging application for forward-looking wildfire mitigation or liability investments. As the financial mechanism garners more interest, there are several factors that public utility commissioners may consider in order to ensure that utility securitization proposals are adequately reviewed for their contribution to the public interest.¹¹⁶ These process considerations include establishing clear processes and definitions to reduce ambiguity, ensuring transparency and adequate opportunity for public comment and feedback, objective criteria for evaluating ratepayer impacts and benefits, and taking proactive steps to identify the need for additional resources or expertise.

First, adherence to statutory structure is fundamental to any regulatory process. However, securitization is often a relatively newer authority granted by the legislature, and statutory language does not always offer full clarity on costs' eligibility; a lack of clarity about whether wildfire mitigation plan expenses were eligible for securitization in Xcel's 2025 WMP proceeding prior to the passage of additional legislation that explicitly permitted WMP costs to be securitized illustrate how this ambiguity can lead to challenges and delays.¹¹⁷ Clear process, definitions and objectives are important elements of successful implementation of statutory intent.

In this same vein, process transparency is particularly important for securitization proceedings, as their outcomes can result in customers being held fully and irrevocably responsible for bond repayment over the course of years or even decades. Like other regulatory processes, allowing

¹¹⁴ *Rebuttal Testimony and Attachments of Todd A. Wehner on Behalf of Public Service Company of Colorado.*

¹¹⁵ *Decision 25-08-007: Decision Denying Request by Pacific Gas and Electric Company for Issuance of Recovery Bonds Pursuant to Assembly Bill 1054.*

¹¹⁶ Cynthia B. Hall, *Regulatory Considerations on Debt Securitization Financing* (New Mexico Public Regulation Commission, 2013), <https://www.nmlegis.gov/handouts/WNR%20072618%20Item%206%20Regulatory%20Considerations%20on%20Securitization%20Financing.pdf>.

¹¹⁷ *Decision No. C25-0556.*

affected customers to participate in proceedings can provide valuable information and perspective for decisionmakers. Like other rate cases, financing orders are typically reviewed in proceedings that allow intervenor participation and public comment, although these proceedings may differ from rate cases. In California, for example, some financing order proceedings have been conducted on an expedited timeline, which has sparked objection from utility consumer advocates.¹¹⁸

Utility regulators are used to making decadal decisions, but securitization arguably has less flexibility over the long term compared to other regulatory mechanisms: financing orders are both irrevocable for customers and binding on future commissions. The size of the bond, the length of the payback, and the net impact on customer rates are all important considerations for regulators to weigh when reviewing a securitization proposal. Some statutes establish criteria regulators must use to evaluate the impact of securitization on customer rates, such as a requirement to demonstrate net savings or other benefits. The net present value of any savings, however, can be significantly affected by both the size of the bond and the payback period. Regulators hold a responsibility to “right-size” the bond so that it does not create a larger financial burden for customers than is needed, nor does it relieve the utility of risk that is already being compensated for in the rate of return. Depending on the specific statutory or regulatory process, the prudence of underlying mitigation costs has the potential to become a focus of attention for years after the approval of a financing order. Regulators may have to take special care if the utility continues to have some control over the operation or maintenance of the securitized asset, as is the case when bonds are issued to fund proactive investments in new grid infrastructure.

Finally, securitization can be complex and involves the third-party interests of bondholders and other stakeholders. Securitization also incurs transaction costs that are not normally considered to be within a utility commission’s purview or area of expertise. The regulator may require unique financial or legal advice, and that extra effort and time becomes part of the overall costs of securitization to utility customers.¹¹⁹

Ultimately, regulators are responsible for ensuring that securitization remains a rigorously vetted tool with demonstrable benefits for utility ratepayers. This involves following clear standards for cost savings and reviewing securitization proposals for prudence with similar, or greater, rigor as standard rate cases. Most state legislation includes provisions requiring utilities to demonstrate that securitized costs are just and reasonable and in the public interest, with several laws requiring utilities to demonstrate that securitization will result in lower costs to ratepayers than alternatives. California’s approval of PG&E’s financing order applications in 2021, 2022, and 2024 and its denial in 2025 offers one illustration of how regulators have used these public interest criteria to evaluate securitization proposals in practice and may provide a reference for regulators in other states.

¹¹⁸ Protest of the Utility Reform Network, Application 24-06-013 (California Public Utilities Commission June 20, 2024), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M536/K273/536273499.PDF>.

¹¹⁹ Fichera, “Investor-Owned Utility Securitization Possibilities, Processes, Pitfalls.”

5.0 Conclusions

Utility securitization in the United States has evolved from its original, narrow purpose of allowing utilities to recover stranded asset costs into a tool deployed more broadly to help insulate ratepayers from the skyrocketing costs of wildfires and other natural disasters. A majority of states now authorize investor-owned utilities to issue bonds for recovery of some costs, with eligible uses including early retirement of uneconomic power plants, protection from fuel price spikes, and, increasingly, disaster recovery and wildfire mitigation. Since 2018, the center of gravity of utility securitizations has shifted decisively toward use for disaster costs, with an increasing focus on wildfire in particular.

The financial scale of this shift has been pronounced: nearly half of the historic \$20 billion in utility securitizations issued in 2022 and 2023 were for wildfire costs, primarily in California.¹²⁰ Six western states have passed legislation authorizing investor-owned utilities to securitize certain wildfire-related expenses. As direct and indirect wildfire costs have continued their rapid rise, more states have moved to allow securitization for proactive, forward-looking investments in reducing utilities' wildfire risk, a contrast to its historic deployment for retroactive recovery of expenses related to a specific asset or event. The growing popularity of securitization has come from its proven ability to reduce ratepayer costs when a utility incurs extraordinary expenses. Electricity affordability has become an issue of increasing urgency as millions of Americans struggle to pay utility bills that have risen faster than inflation in recent years.¹²¹ In some western states, wildfire mitigation and liability costs have both been significant contributors to affordability challenges.¹²²

The increasing use of securitization for new and different purposes has, however, introduced new considerations and potential tradeoffs for utilities, ratepayers, and regulators. Precedent for use of utility recovery bonds for recovery of costs associated with rebuilding infrastructure damaged by a catastrophic natural disaster was established by Louisiana in 2006 in the wake of Hurricane Katrina. Although disaster recovery costs are not as clearly bounded as the costs of a specific stranded power plant, for example, securitizing costs incurred in the wake of a specific catastrophic wildfire or other past event is a relatively straightforward process. Capital expenses for new infrastructure with a potential lifespan of decades, however, can be difficult to define and right-size, and securitization of these proactive costs increases ambiguity and financial risk for utilities and their customers. The same is true for securitization of proactive wildfire liability costs, which will require utilities and regulators to reach consensus on the correct size and structure for an insurance fund intended to hedge against uncertain and potentially catastrophic future risk.

Regardless of its specific application, the core tradeoff of securitization remains the same: it is an approach that generally leads to lower costs for ratepayers for a given expense because recovery bonds carry substantially lower interest rates than a utility's authorized rate of return, but it achieves those savings by making cost recovery irrevocable and shifting the full obligation of bond repayment onto present and future ratepayers alike.

¹²⁰ Ryan, *The Rationale Behind U.S. Utility Securitization And Reasons For Recent Growth*.

¹²¹ Powell and Anderson, *Storing Affordability: Battery Storage as an Asset to Reduce Data Center Cost Shifts*; Benson et al., "Regulatory Approaches for Aligning AI Data Center Growth With Residential Energy Affordability"; EIA, "U.S. Electricity Prices Continue Steady Increase," U.S. Energy Information Administration, May 14, 2025, <https://www.eia.gov/todayinenergy/detail.php?id=65284>.

¹²² Wiser et al., "Factors Influencing Recent Trends in Retail Electricity Prices in the United States."

Where eligible costs, processes, and evaluation criteria for utility securitizations are clearly defined in statute, and where specific financing order proposals are rigorously vetted by regulators with opportunities for input from affected customers, securitization can offer a “win-win” proposition for all stakeholders. Ratepayers can contribute at lower costs toward investments that are increasingly necessary to reduce the chance of utility-caused wildfire ignitions, make the grid more resilient to future disasters, and address the potential scale of third-party liability damages. Utilities can improve their credit ratings and overall financial stability, while reducing rate recovery of extraordinary wildfire costs can also create more flexibility for other needed grid investments.

If recent trends are any indication of future developments, applications of securitization for wildfire costs are likely to become more common in response to both wildfire risk and broader affordability pressures. The central question may be less whether more states will authorize utility securitizations and more how state legislators and regulators will structure their approaches to maximize ratepayer benefits and minimize uncertainty and risks. These structural questions include whether more states will follow California’s precedent in requiring the approach for certain cost categories, how regulators will evaluate and review proposals to securitize forward-looking wildfire mitigation investments, and whether and how recovery bonds will be used to finance alternative liability insurance approaches as wildfire risk continues to introduce volatility into the commercial insurance market. Regardless of how these questions are resolved, one durable lesson is that securitization can deliver meaningful and much-needed ratepayer benefits in the face of rising wildfire costs and broader affordability challenges. However, realizing these benefits requires rigorous regulatory review to ensure that securitized costs are prudent and serve the public interest, clear standards for demonstrating ratepayer savings, statutory definitions for eligible costs and process requirements that minimize ambiguity, management of utility financial risks, and opportunities for meaningful input from potentially impacted utility customers.

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Appendix: State Legislation Enabling Utility Securitization

State	Bill or statute	Description of eligible costs	Wildfire costs eligible?	Year Enacted
Arizona	HB 2679	"Significant event recovery costs" defined as arising from extreme weather, wildfire, acts of war or terrorism that damage utility assets; Retirement for any generation, transmission, or distribution facility.	Yes	2025
Arkansas	Act 641	Storm recovery costs, fuel purchased at extraordinary costs, other costs as a result of an emergency declaration	Language implies that wildfire would count as a "significant weather event or natural disaster"	2021
California	SB 901	Costs in excess of insurance proceeds incurred as result of wildfire that occurs after 2019, excluding fines and penalties	Yes, explicitly; recovery costs	2018
California	AB 1054	Requires securitization of initial \$5 billion of collective wildfire mitigation plan capital expenses.	Yes, explicitly; recovery and mitigation costs	2019
California	AB 913	Defines additional eligible expenses, including for wildfire recovery and to offset costs associated with increased bill nonpayment during the COVID-19 pandemic to avoid additional rate hikes.	Yes, explicitly; recovery costs	2020
Colorado	SB 19-236	Electric generating facility retirement and other costs associated with implementing a clean energy plan.	No	2019
Colorado	SB 21-272	Adds securitization eligibility to "programs or projects to mitigate the effects of extreme weather, wildfires, climate change, or other hazards" if approved by the commission.	Yes, explicitly; recovery and mitigation costs	2021
Colorado	SB 25-007	Explicitly clarifies that wildfire mitigation plan expenses are eligible for securitization. Added text: "...including but not limited to the costs associated with an electric utility's wildfire mitigation plan that has been approved by the Commission."	Yes, explicitly; mitigation costs	2025
Connecticut	SB 484	Restructuring stranded costs incurred by transition to competitive retail supply	No	2010
Florida	Statute 366.95	Nuclear generating facility retirement or abandonment, specifically	No	2016
Hawaii	SB 1087	Green infrastructure construction. Utilities impose a "green infrastructure fee" or "public benefits fee" that contributes to a state "green infrastructure bond fund." Utilities may issue financing orders for these costs.	No	2013
Hawaii	SB 897	Resilience investments described in wildfire mitigation plan. Requires securitization of initial investments in plans.	Yes, explicitly; recovery and mitigation costs	2025
Idaho	Statute 61.15	Energy costs, including asset retirement or debt refinancing, as well as extraordinary fuel or supply costs	No	2001
Indiana	SB 386	Retirement of generation facilities if costs "are equal to at least 5% of the electric utility's total electric base rate"	No	2021
Kansas	HB 2072	Retirement of generation facilities, certain extraordinary fuel or energy supply costs	No	2021
Kentucky	SB 192	Retirement of generation facilities and certain storm recovery expenses	No	2023

Louisiana	Acts 2006, No. 64 (HB 887)	Costs associated with rebuilding assets damaged by storms	No	2006
Louisiana	Acts 2010, No. 988 (HB 1207)	Investment recovery bonds may be issued for recovery of certain investment costs as permitted by the PUC, including canceled construction of generation or transmission facilities, any other capital investment over \$350 million, and certain costs associated with acquiring long-term fuel supplies	No	2010
Maryland	SB 1	Restructuring costs from deregulation	No	2006
Massachusetts	Statute XXII.164.1G	Restructuring costs from deregulation	No	1996
Michigan	Statute 460.10	Restructuring costs from deregulation	No	2000
Mississippi	HB 1134	Costs associated with building eligible "clean coal" or "coal gasification" generating facilities	No	2013
Missouri	HB 734	Coal plant retirement	No	2021
Montana	HB 467	Coal plant retirement	No	2019
New Hampshire	RSA 369-B	Costs associated with utility restructuring after deregulation	No	2000
New Jersey	SB869	Cost of retiring existing debt or equity capital as part of restructuring	No	2002
New Mexico	SB 489	Coal plant retirement, specifically	No	2019
New York	SO 9339	Storm ("adverse weather") recovery costs, associated with steps taken to restore service and infrastructure, for any storm damages incurred before July 1, 2024	No - relatively narrow focus on storms, other disasters not eligible	2024
North Carolina	SB 559	Costs from a "storm," defined as "Individually or collectively, a named tropical storm or hurricane, a tornado, ice storm or snow storm, flood, an earthquake, or other significant weather or natural disaster."	Language implies that wildfire would count as a "significant weather event or natural disaster"	2019
North Carolina	HB 951	Coal plant retirement	No	2021
Ohio	Section 4928.143	Restructuring costs from deregulation	No	2012
Oklahoma	SB 1050	Winter Storm Uri costs, including extreme fuel costs purchased at high costs because of the storm.	No	2021
Oregon	HB 3143	Costs incurred by events subject to federal or state emergency declaration, including "severe weather, catastrophic wildfire, pandemic"	Yes, explicitly; recovery costs	2023
Oregon	HB 3179	Any capital investment that by itself will cause residential rates to rise by more than five percent is eligible as a "rate recovery expenditure." This includes asset retirement, site remediation, or costs associated with "an event in which the availability of electricity or natural gas within a regional energy market is significantly constrained," implying fuel costs may also be eligible.	No	2025
Oregon	HB 4077	Costs associated with a self-insurance or captive insurance program	Indirectly	2026
Pennsylvania	Statute 66.2808	Deregulation costs. "To provide each electric utility with an opportunity to recover its transition or stranded costs" from restructuring.	No	1996
Rhode Island	Statute 39-1-45	Restructuring costs from deregulation	No	1997
South Carolina	Bill 157	Direct recovery from a storm, defined as "a named tropical storm or hurricane, a tornado, ice storm or snowstorm, flood, an earthquake, or other significant weather or natural	Language implies that wildfire would count as a "significant weather event or natural disaster"	2025

		disaster," plus additional cost of capital associated with Hurricane Helene only		
Texas	HB 4492	Winter Storm Uri specific expenses only: "Period of emergency' means the period beginning 12:00 a.m., February 12, 2021, and ending 11:59 p.m., February 20, 2021."	No - narrow definition of "period of emergency" applies to one specific event	2021
Virginia	HB 2621	Storm recovery costs, referring to recovery and resilience investments in response to expenses caused by major storms, extraordinary weather events, or natural disasters.	Language implies that wildfire would count as an "extraordinary weather event or natural disaster"	2025
Washington	HB 1990	Costs and expenses from events resulting in federal or state declarations of disaster or emergency	Yes, if declared as emergency by state or federal government	2025
West Virginia	HB 3308	Storm recovery costs, referring to recovery and resilience investments in response to expenses caused by major storms, extraordinary weather events, or natural disasters.	Language implies that wildfire would count as an "extraordinary weather event or natural disaster"	2023
Wisconsin	Wis. Stat. § 196.027(2)	Eligible costs include "retiring of any existing plant, facility, or other property to reduce, control, or eliminate environmental pollution in accordance with federal or state law."	No	2004