US Utilities: Searching for Summer Deals

Minimizing disaster risk while meeting peak demand is a long-term growth opportunity that the market is ignoring.

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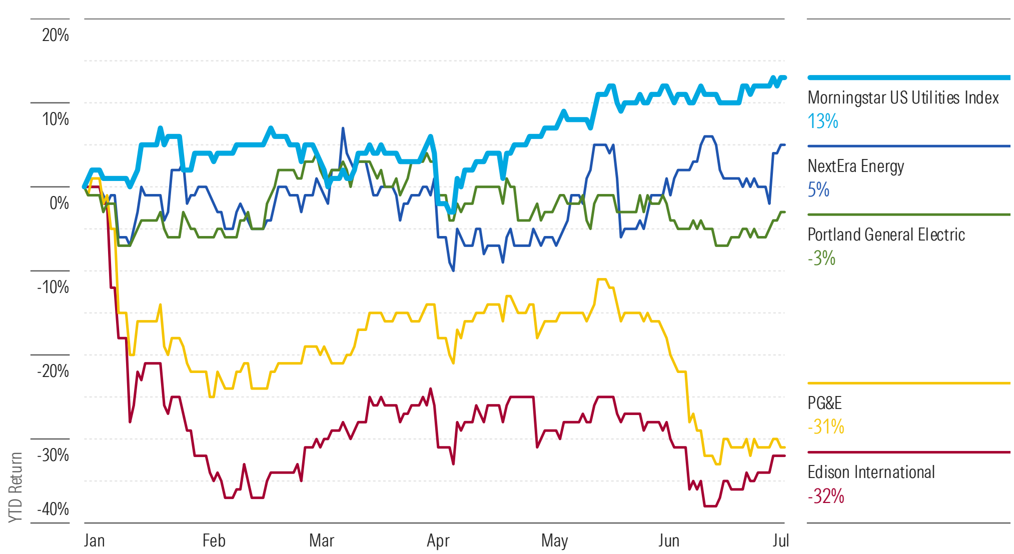
Wildfires and Hurricanes Raise Concern; Reliability Investments and Demand Growth Offer Upside

Summer is always critical for utilities as energy usage peaks and storm seasons intensify. Hurricanes in 2024 and heightened wildfire concerns are reminders that natural disasters, particularly, are key operating and financial risks for utilities and their shareholders. These risks elevate and draw more attention in summer as many utilities expect record-breaking peak energy demand from new data centers, manufacturing, and electrification. Investments in clean energy, reliability, safety, and resiliency are important growth opportunities for utilities. Although we think most utilities are overvalued, there are still a few with well-supported capital investment plans, good earnings growth, and attractive stock valuations.

Key Takeaways

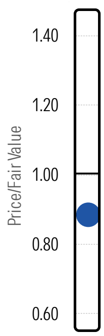
- Climate change concerns and energy demand growth from customers like data centers are boosting utilities' growth investments in clean energy, safety, reliability, and resiliency.
- The Southern California fires in January spooked many investors going into the traditional summer wildfire season. We think the market has overreacted, offering some attractive values.
- The NOAA forecast released in May suggests a more active season than normal with 13-19 named storms. Watch for opportunities to buy high-quality utilities in the Southeast US at better prices.

Exhibit 1 West Coast Utilities, NextEra Among Worst-Performing Utilities This Year



Source: Morningstar Direct. Data as of July 3, 2025.

US Utilities: Top Picks

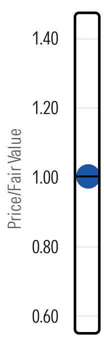


Market Cap
$24 Bil
Rating
★★★★
P/FV
0.88
Moat
None
Yield
4.7%
P/E
13.6x

Eversource Energy (ES)

Northeast Aiming for Better Reliability, Lower Energy Costs

- Eversource will miss out on most of the data center growth excitement, but has plenty of investment opportunities in transmission and distribution to support at least 6% annual earnings growth, at least through 2028.
- Eversource has largely eliminated its offshore wind exposure and is expected to derive all its earnings from its rate-regulated utilities by 2025.
- We think Eversource can offset regulatory challenges in Connecticut by adding projects in Massachusetts, where regulation is more constructive. A turnaround in Connecticut offers earnings and valuation upside.
- Eversource's balance-sheet leverage should be back to the normal range by the end of this year as it collects cash from its water business sale and charges customers for costs that regulators have approved.

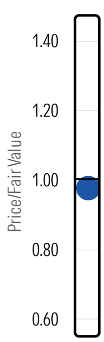


Market Cap
$91 Bil
Rating
★★★
P/FV
1.00
Moat
Narrow
Yield
3.6%
P/E
18.5x

Duke Energy (DUK)

Constructive Regulation Supports Grid, Generation, and Demand Growth

- Duke has a clear pathway to achieving management's 5%-7% annual earnings growth target supported by the company's regulated subsidiaries.
- Duke's $83 billion capital investment plan for 2025-29 is focused on clean energy, grid infrastructure upgrades, and supporting load growth. We don't think the market appreciates the upside to Duke's capital plan and additional electricity demand growth from data centers.
- In North Carolina, Duke's most important jurisdiction, regulation has improved significantly due to recently passed legislation, which provided for forward-looking rates and additional support for the company's investment plan.

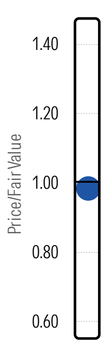


Market Cap
$16 Bil
Rating
★★★
P/FV
0.98
Moat
Narrow
Yield
3.3%
P/E
19.2x

Alliant Energy (LNT)

New Data Centers Support High End of Management's Conservative Growth Expectations

- We continue to assume earnings growth at the high end of management's 5%-7% earnings guidance, which we view as achievable given the company's current capital investment plan. Additional data center opportunities at the sites in Wisconsin and Iowa could push our annual growth forecast above 7%.
- Alliant's four-year $11.5 billion capital investment plan drives our earnings growth and is supported by constructive regulation across its operating subsidiaries.
- Alliant's capital plan is up 26% in the last six months as data center opportunities materialize. Alliant has additional data center opportunities in Wisconsin and Iowa, supporting future growth.



Market Cap
$152 Bil
Rating
★★★
P/FV
0.99
Moat
Narrow
Yield
3.1%
P/E
20.1x

NextEra Energy (NEE)

Policy and Regulatory Headlines Will Keep Volatility High and Investors on Edge

- We think NextEra Energy Resources' renewable backlog remains achievable and continue to expect renewable development despite near-term policy noise. Renewables will play a key role in meeting data center demand as technology companies require clean energy, and natural gas turbine supply remains strained.
- Its subsidiary FPL moved forward on its rate-case filing in Florida, and we think the utility will continue to seek a settlement with regulators. We expect regulators to approve an 11% allowed return on equity, below the company's 11.9%, but well above the national average.
- We forecast NextEra will grow earnings at the high end of its 6% to 8% earnings guidance range through our five-year forecast.

Source: Morningstar. Data as of June 24, 2025.

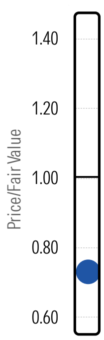
West Coast Utilities: Growth, Value Offset Wildfire Concerns

Market Cap
$20 Bil
Rating
★★★★★
P/FV
0.66
Moat
Narrow
Yield
6.3%
P/E
8.7x

Edison International (EIX)

Market Overestimating Worst-Case Wildfire Scenarios for Edison

- Edison's stock is down $30 per share, or $11.6 billion of market value since the January fires.
- We think Edison will qualify for California's AB 1054 Wildfire Fund, which should eliminate nearly all shareholder losses. We estimate that an AB 1054 worst-case scenario is $4.4 billion of losses, or $8 per share after tax.
- Widespread electrification to meet California's 2045 carbon-neutral target is a huge growth opportunity. Edison is set to invest more than $7 billion annually during the next four years, supporting 7% average annual earnings growth, at the high end of management's 5%-7% target.
- An upcoming regulatory ruling related to past wildfire expense recovery could reduce interest expense drag.

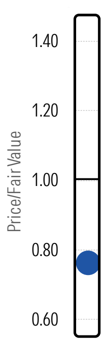


Market Cap
$31 Bil
Rating
★★★★
P/FV
0.73
Moat
None
Yield
0.7%
P/E
9.3x

PG&E (PCG)

Wildfires a Risk and a Growth Opportunity

- PG&E has regulatory, political, and customer support for most of its plan to invest $12 billion annually during the next four years, a large share of which is going to wildfire mitigation. Recent legislation supports its plan to bury 10,000 miles of power lines underground in high fire threat areas at an estimated $30 billion.
- We estimate PG&E's investment plan will support 9% average annual earnings growth, among the fastest growth in the utilities sector.
- Since 2020, PG&E's equipment has ignited only one major fire, the Dixie fire in 2021. PG&E is on track to receive reimbursement from California's Wildfire Fund for the estimated $925 million of liabilities exceeding its $1 billion insurance.



Market Cap
$5 Bil
Rating
★★★★★
P/FV
0.76
Moat
Narrow
Yield
5.1%
P/E
12.7x

Portland General Electric (POR)

Investors Overreacting to Wildfire Risk and Affordability Concerns

- Portland General has lower wildfire risk than most utilities because of its urban service territory and wet climate. Investors have been spooked by nearby utility PacifiCorp's wildfire-related legal troubles.
- Affordability concerns in Portland have ramped up since late 2024 as the state grapples with the need for investments in wildfire mitigation, clean energy, and electricity demand growth. Portland General has received mostly constructive regulatory outcomes recently, but that could be at risk if affordability gets more attention.
- Portland General has not received a premium valuation like other utilities for its data center demand growth upside. We expect demand growth and new investment to support 7% annual earnings growth.

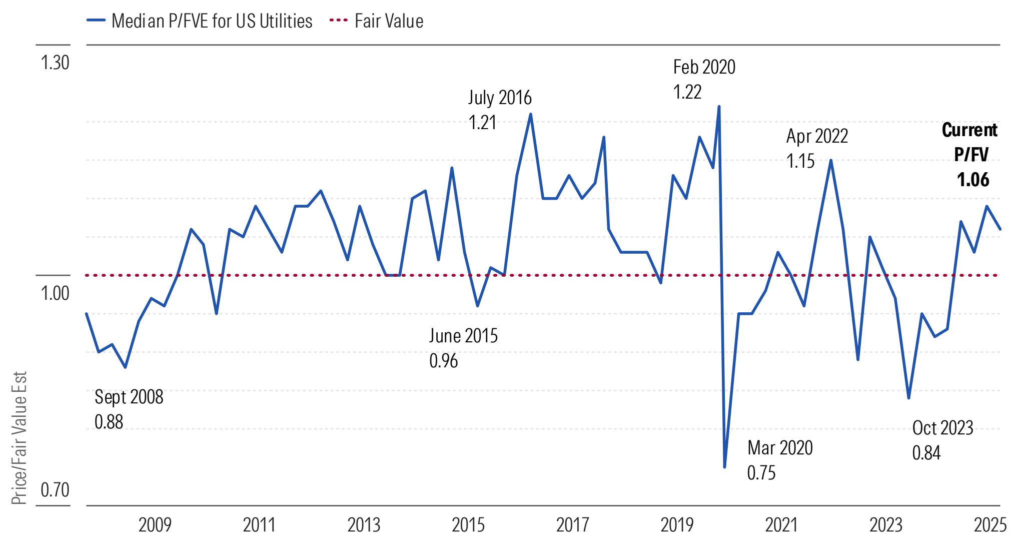
Source: Morningstar. Data as of July 3, 2025.

US Utilities: Few Buying Opportunities

The Morningstar US Utilities Index is up 13% year to date and up 62% from its bottom in late 2023, including dividends, handily beating the US market. This has resulted in few attractive long-term buying opportunities among US utilities.

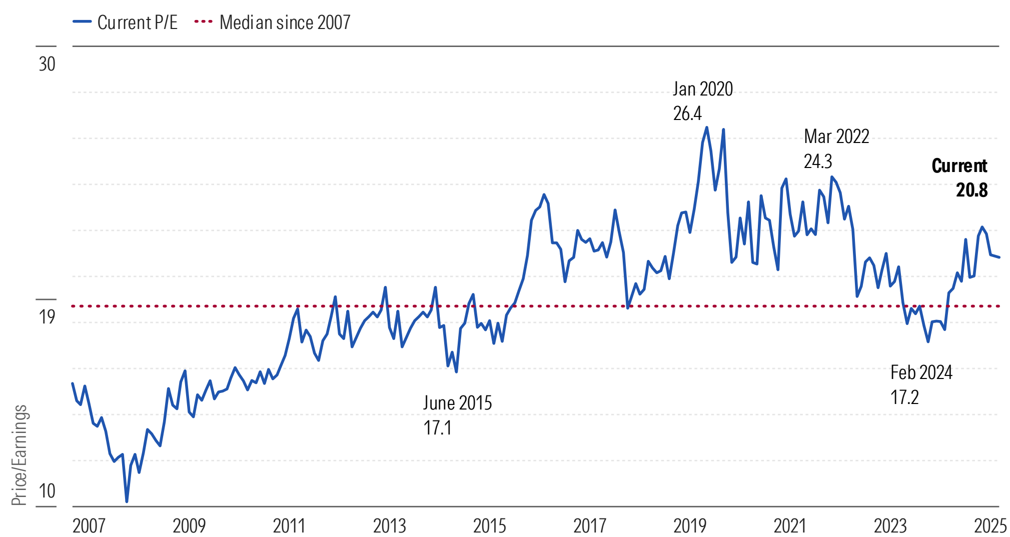
We consider the US utilities sector 6% overvalued on a median basis as of early July (Exhibit 2). Only five of the 39 North American utilities we cover trade at greater than 10% discounts to our fair value estimates. Valuation multiples are well above long-term averages, and dividend yields are historically low (Exhibit 3).

Exhibit 2 Utilities' Valuations Rich After 2024-25 Rally



Source: Morningstar. Data as of July 3, 2025.

Exhibit 3 Utilities' Valuation Multiples are Above Long-Term Averages



Source: Morningstar. Data as of July 3, 2025.

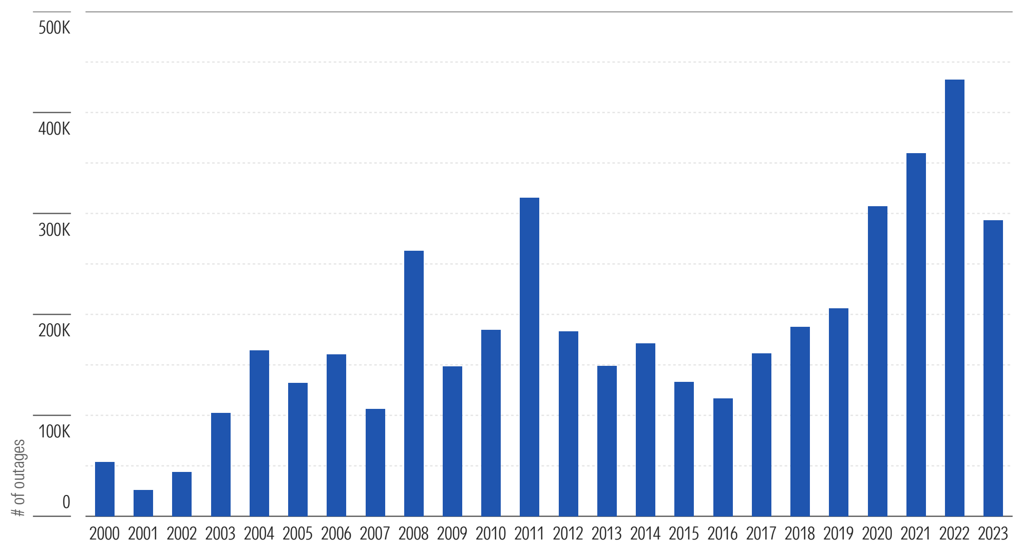
Disasters and Demand: Investing in Reliability

Why Disasters Hurt Utilities

Utilities with regulated, mostly fixed customer rates face a significant near-term earnings impact when severe weather strikes. Operating and capital costs to restore customer services after a disaster can reach billions of dollars. Revenue drops if customers have no service or can't pay their bills.

Regulators often allow utilities to recover those costs through future customer rate increases, but the cash flow timing lag can stretch for years, raising financing costs and slowing earnings and dividend growth. More frequent large natural disasters in recent years have led to more customer outages, increasing regulatory and financing risk for utilities in disaster-prone areas (Exhibit 4).

Exhibit 4 Number of Customer Outages Trending Upward Amid Increased Natural Disasters



Source: Climate Central. Data as of January 2025.

Regulators in some states deny full storm cost recovery if they determine the utility was too slow to restore services. However, regulators typically stop short of penalties, issuing fines, or other customer rate changes that would create significant credit risk.

Victim Liabilities

Utilities typically don't face victim liability risk for weather-related disasters. However, wildfires present a unique risk given the possibility that a utility's equipment might ignite a fire. This could open a utility to paying victims' damage claims. In California, utilities regulators and the state courts have established a strict liability standard for utilities known as “inverse condemnation.” Hawaiian Electric, PacifiCorp, and Xcel Energy have also faced significant victim liabilities in other states related to wildfires that their equipment might have caused.

Finding Value: Utilities Investing in Reliability, Demand Growth

Utilities' valuations remain elevated. Headline-grabbing forecasts drive this fervor, with robust earnings expectations tied to skyrocketing data center growth and reliability investment needs. Many utilities have large investment growth plans that focus on serving new demand with reliable, clean energy. However, many of these stocks trade at premium valuations.

We think the market is overlooking other utilities with cheaper valuations, but similar investment growth plans that can produce at least 6% annual earnings growth.

Eversource Energy ES (★★★★) Yield: 4.7%

P/FVE: 0.88 | Moat Rating: None | Morningstar Uncertainty Rating: Low

Exhibit 5 Eversource's Stock Lagged the US Utilities Sector by a Wide Margin in 2024

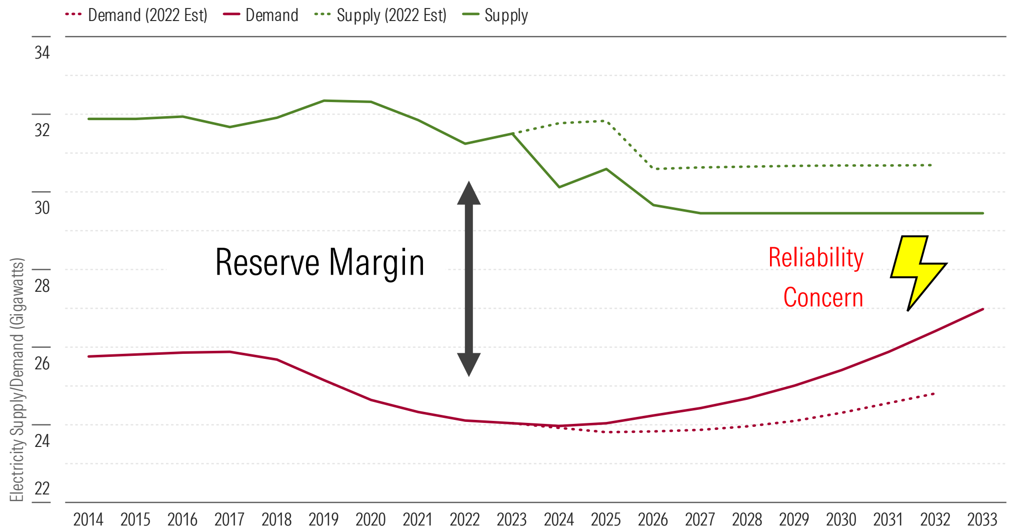
Source: PitchBook. Data as of July 3, 2025.

Eversource Energy has returned to its roots as a mostly rate-regulated distribution utility in the Northeast. Clean energy goals and reliability concerns in Northeast US create ample growth opportunities for Eversource's distribution utilities to integrate renewable energy, improve reliability, and reduce energy costs. However, some state regulators have been stingy with customer rate increases due to high energy prices, potentially limiting the upside for shareholders.

We assume Eversource will invest $18 billion during 2024-27 at its electric and gas utilities to help meet regional clean energy targets and strengthen the grid. This should support 6% annual average earnings and dividend growth through at least 2027.

Electric transmission investments are among the best ways to reduce regional energy costs and improve reliability as reserve margins tighten (Exhibit 6). Although the Northeast is unlikely to experience data center energy demand growth like other regions, the regional grid operator is expecting accelerating demand growth from electric vehicles and home heating electrification. State clean energy goals in the Northeast are leading to fossil-fuel plant retirements, shrinking energy supply.

Exhibit 6 New England's Tight Reserve Margin Means New Infrastructure Is Needed to Ensure Reliability



Source: ISO-New England. Data as of June 2025.

Eversource has been investing more than $1 billion per year in transmission since 2021, and we expect that investment rate to continue. Transmission earnings are already 40% of consolidated earnings, and that share should climb. Transmission to connect offshore wind projects is another growth opportunity.

Challenging rate regulation in Connecticut could affect Eversource's growth plans in the state. If management doesn't see a clear path to earning a fair return on its investments, it might shift investment to other states in its service territory. Massachusetts remains an attractive area for investment with constructive regulation, support for grid modernization investments, and ambitious clean energy legislation. Almost all Eversource's revenue is decoupled from usage, supporting consistent cash flow growth.

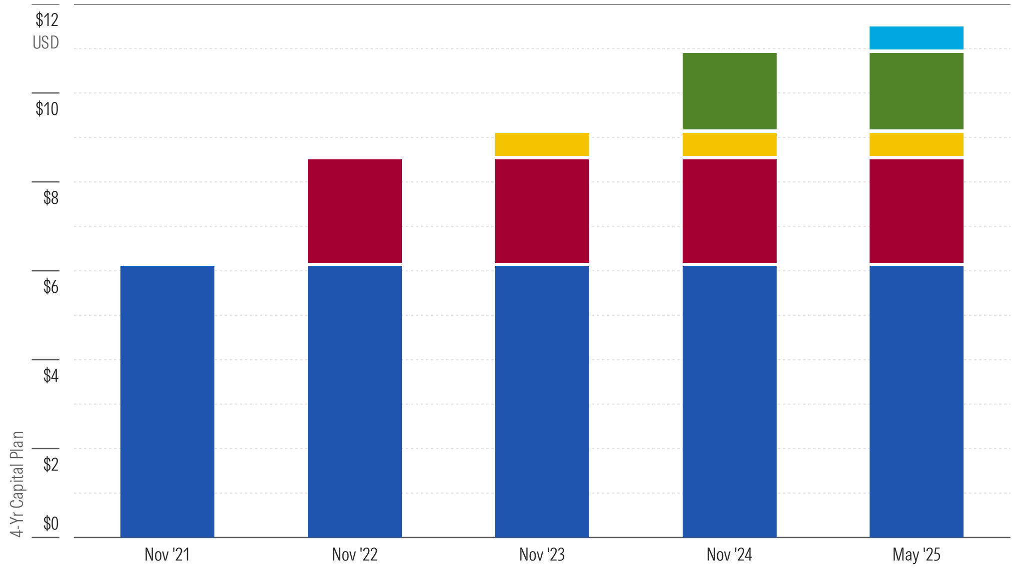
Eversource was one of the first US utilities to pursue offshore wind development, but management reversed course in 2022 and took nearly $2 billion of impairment charges after tax in 2023. Despite the losses, Eversource will avoid potential cost overruns by exiting its 50% stake in three projects. This gives Eversource more flexibility to fund its transmission and distribution growth projects, which earn a steady regulated return.

Alliant Energy LNT (★★★) Yield: 3.3%

P/FVE: 0.98 | Moat Rating: Narrow | Morningstar Uncertainty Rating: Low

Alliant Energy has consistently been finding growth, from renewable investments and accelerating data center demand in its Iowa and Wisconsin territories (Exhibit 7).

Exhibit 7 Incremental Investment Additions Support Accelerating Data Center Demand in Iowa and Wisconsin



Source: Morningstar, company filings. Data as of June. 6, 2025.

Alliant Energy operates two utilities in the Midwest, Wisconsin Power and Light and Interstate Power and Light, which operates in Iowa.

Management increased its 2025-28 capital investment plan to $11.5 billion, nearly double its investment plan less than four years ago. The increase is largely to support increasing electricity demand and renewable energy investments. Alliant forecasts 3%-5% electric sales growth from 2024-32. We expect continued investments to support this growth. Management has said they are continuing to plan for growth beyond their base case, suggesting further growth. We forecast the company will achieve the high end of management's 5%-7% annual earnings growth target.

In Iowa, Alliant has significant data center electricity demand in Cedar Rapids. IP&L will continue to build out renewable energy in Iowa in addition to new natural gas generation. In addition to new wind generation, IP&L plans to install significant solar generation and distribute energy resources.

At WPL, there is a new opportunity for a data center in Beaver Dam, Wisconsin. Renewable energy is also a focus as the company begins replacing retiring coal generation. WPL plans sizable solar energy investments paired with battery storage.

Alliant aims to reduce greenhouse gas emissions by 2030, from 2005 levels, while eliminating all coal from its generation fleet by 2040. By 2050, it aims to reach net-zero greenhouse gas emissions. These goals are in line with many other utilities.

Alliant benefits from operating in two constructive regulatory jurisdictions. To maintain earned returns near allowed returns during this period of high investment, management has worked to reduce regulatory lag, received above-average allowed returns across its subsidiaries, and aims to continue reducing operating costs for the near term.

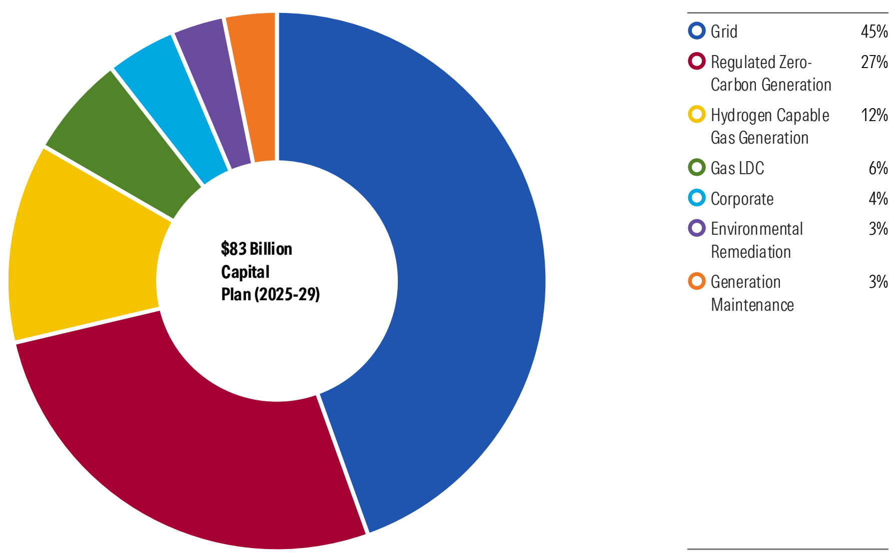
American Transmission, which we consider a wide-moat business, is tucked away from consolidated results (16% equity interest). Transmission offers higher returns relative to other rate-regulated investments.

Duke Energy DUK (★★★) Yield: 3.6%

P/FVE: 1.00 | Moat Rating: Narrow | Morningstar Uncertainty Rating: Low

Like Alliant Energy, Duke Energy has also significantly increased its capital growth plans. The company's $83 billion capital investment plan is up $10 billion from its prior five-year plan. It's focused on grid resiliency investments to mitigate the impact from severe storms and new generation to meet accelerating demand growth, from data centers and population growth across its territories.

Exhibit 8 Duke's Capital Investment Plan Focused on Grid Resiliency and New Generation



Source: Morningstar, Company filings. Data as of June. 6, 2025.

Duke Energy is one of the largest regulated utilities in the United States. Duke has significant regulatory clarity across its numerous subsidiaries, with over 90% of investment recovered through customer ratemaking mechanisms that significantly reduce regulatory lag.

Florida is Duke's most constructive and attractive jurisdiction, with higher-than-average load growth and best-in-class regulation that allows for higher-than-average returns on equity, forward-looking rates, and automatic base-rate adjustments.

In North Carolina, Duke's largest service territory, the outlook has improved significantly. Legislation allows for multiyear rate plans, including rate increases for projected capital investments. Duke recently received constructive outcomes at its Carolina utilities, which included increases in allowed returns on equity and thicker equity layers. State legislation also allows for performance incentive mechanisms, usage-decoupled rates for residential customers, and supports utilities' investment to meet the state's clean energy targets.

Indiana remains constructive. The subsidiary is allowed recovery for investments in renewable energy and future recovery of investments in coal ash remediation, with a forward-looking test year. The unit's 20-year integrated resource plan includes significant investment in renewable energy, energy storage, and natural gas generation.

Electricity demand remains a significant tailwind for Duke. Annual customer demand growth remains over 2% at its subsidiaries in the Carolinas and Florida. Management noted data center demand is expected to grow to more than 10% of commercial load by 2029, which we view as conservative, with additional opportunities likely to materialize, particularly in the Carolinas and Indiana, before then. Duke's 1.5%-2% annual electricity demand growth expectations for the next two years should accelerate to 3%-4% beginning in 2027.

We expect Duke to invest more than $83 billion through 2029, in line with management's plan, and this supports our expectations for earnings growth at the high end of management's 5%-7% annual earnings growth range.

Wildfires: Are West Coast Utilities Investable?

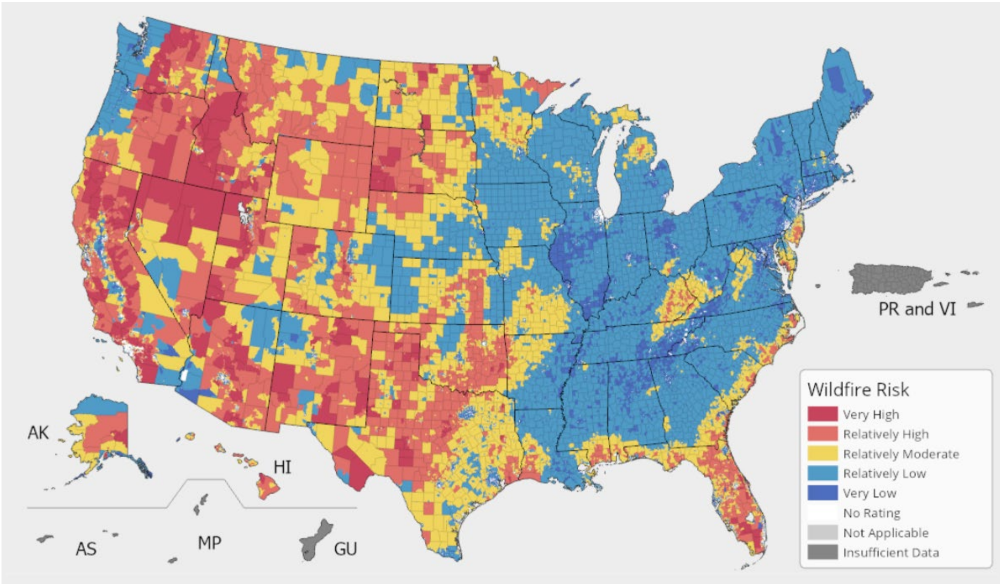
Key Investor Takeaways

- We think AB 1054 will protect investors from worst-case scenarios like PG&E faced in 2017-18. If the legislation works as written, Edison International and PG&E stocks are substantially undervalued.
- California's electric utilities have sector-leading growth opportunities as the state pushes electrification to meet its environmental goals while maintaining reliability, safety, and affordability.
- Portland General's stock trades at a discount to peers even though it has low wildfire risk and a robust growth investment pipeline to serve growing energy demand from technology companies.

Unique Risks in California

California's topography and climate make it especially prone to wildfires (Exhibit 9). Eight of the 10 most destructive wildfires in US history, as measured by financial losses, were in California (Exhibit 10).

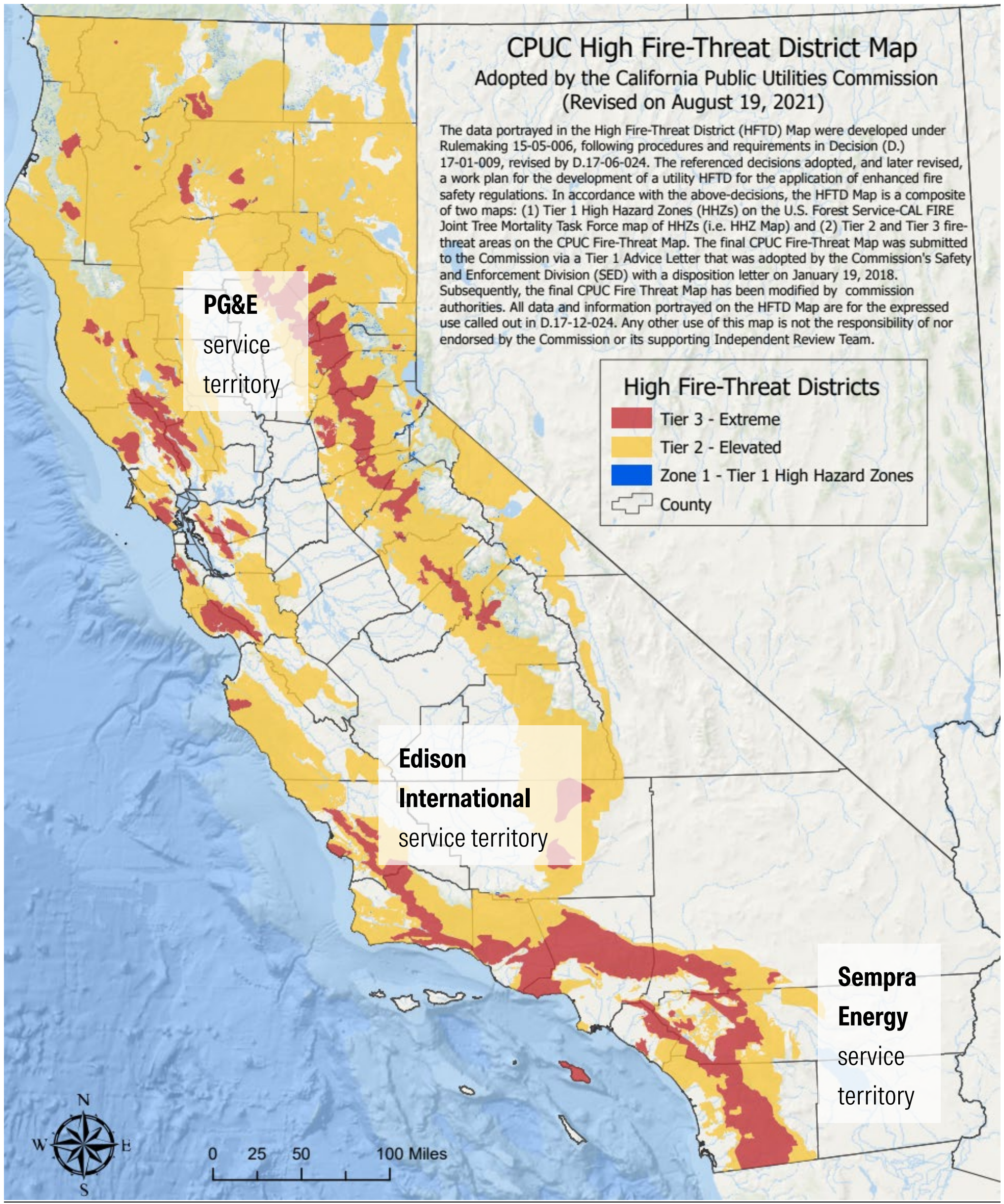
Exhibit 9 Wildfire Frequency and Risk of Potential Losses Are High Across the Western US



Source: US Federal Emergency Management Agency. Based on National Risk Index methodology. As of June 2025.

Within California, the service territories for all three investor-owned utilities—PG&E, Edison International, and Sempra Energy—cover areas with high wildfire risk (Exhibit 10).

Exhibit 10 All California Utilities Have Wildfire Risk in Their Service Territories



Source: California Public Utilities Commission. As of June 2025.

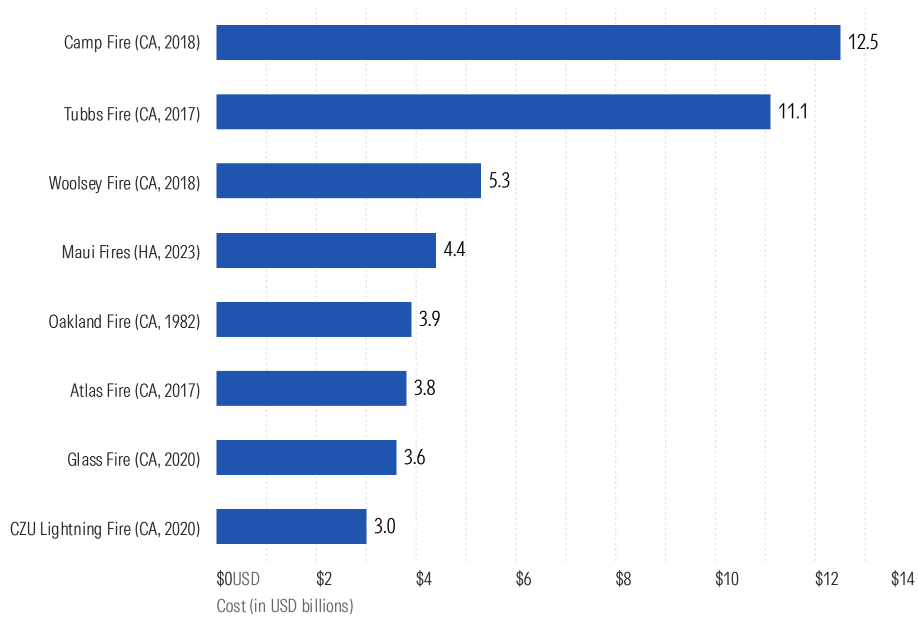
California's Strict Liability Standard for Utilities

Wildfires in California pose a unique risk to utilities because of the state's inverse condemnation legal doctrine, which holds utilities strictly liable for damages they cause regardless of weather or a utility's mitigation efforts. A state regulatory ruling in 2017, later upheld by state courts, requires a utility's investors to pay all liabilities. All other US states typically use a prudent operator standard to determine a utility's liabilities and the amount it can recover from customers. This means states will consider a utility's preparedness or restoration response when determining if it breached its legal duty.

PG&E Bankruptcy 2018-20

Wildfires in 2017 and 2018 were by far the most damaging in US history (Exhibit 11). Liabilities related to these wildfires led PG&E to file for Chapter 11 bankruptcy in January 2019 when investigators determined PG&E's equipment ignited the fires.

Exhibit 11 The Most Expensive Wildfires in US History Have Been in California



Source: Aon, Inflation adjusted (2024).

PG&E's bankruptcy exit settlement in mid-2020 made bondholders whole with newly secured debt, but resulted in approximately a $30 billion loss for shareholders after payments to insurers, fines, and other costs. The bankruptcy court established a $13.5 billion Fire Victim Trust comprising $6.75 billion of cash from PG&E and 478 million shares of PG&E common stock, equal to a 22.2% ownership stake, to pay uninsured claims. Common shareholders ended up with 26% ownership. The trust sold its shares in late 2023.

Changes Since PG&E Bankruptcy: Protecting Investors

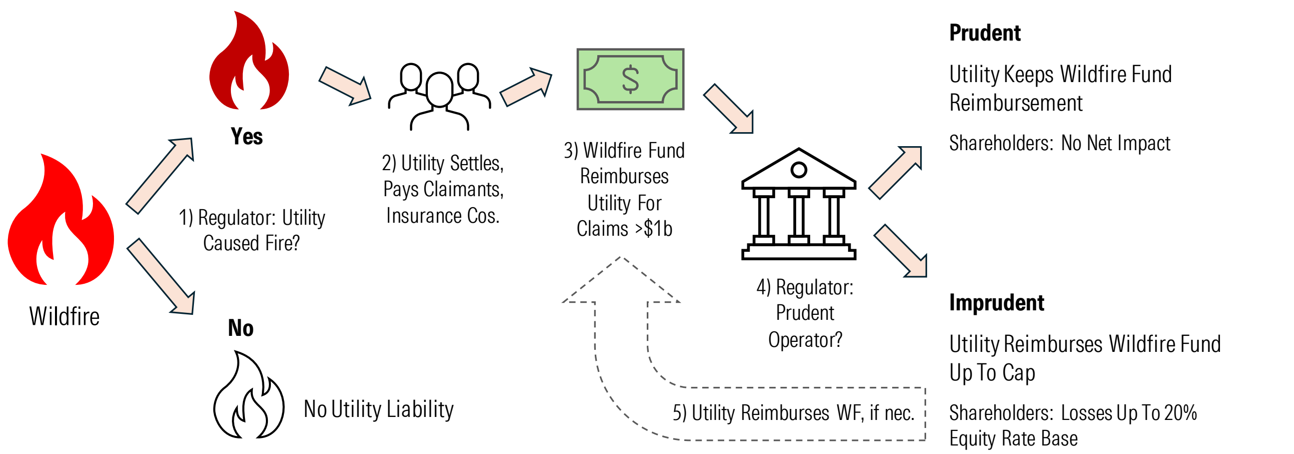
Assembly Bill 1054

State law AB 1054, signed by Gov. Gavin Newsom, D-Calif., in July 2019, was the capstone policy change that aimed to restore PG&E's financial health and support utilities' investment-grade credit ratings. The legislation did not address inverse condemnation, but it created a $21 billion California Wildfire Fund that effectively caps a utility's wildfire liability if the utility meets certain criteria.

California Wildfire Fund

The fund reimburses utilities for claims exceeding $1 billion from a wildfire caused by a utility's equipment if regulators determine the utility is a prudent operator, like other states' standard. If regulators determine a utility was imprudent, the utility must reimburse the fund up to 20% of its regulatory equity rate base (Exhibit 12). These pretax maximums for 2025 are about $4.7 billion for PG&E, $3.9 billion for Edison International, and $1.5 billion for Sempra Energy's San Diego Gas & Electric. Edison's maximum is the highest of the three as a share of current market capitalization as of early July. All three utilities currently meet the prudent operator standard in AB 1054, so we think there is a low probability that regulators would require the maximum reimbursement.

Exhibit 12 California AB 1054 California Wildfire Fund Limits a Utility's Financial Exposure to Wildfire Liabilities



Source: Morningstar, Company reports, California Earthquake Authority Wildfire Fund Administrator. Data as of June 2025.

The California Wildfire Fund is backed by:

- $10.5 billion authorization for California's Department of Water Resources to issue bonds secured by a 15-year extension of a monthly charge on all customers' utility bills;
- $7.5 billion cumulative contribution in 2019 from the state's three investor-owned utilities (PG&E, Southern California Edison, and San Diego Gas & Electric); and
- $3 billion comprising $300 million cumulative annual contributions from the three IOUs in 2019-28.

Requirements to access the fund include:

- 2019 Wildfire Mitigation Plan approved by the California Public Utilities Commission;
- Safety certificate issued annually by California's Office of Energy Infrastructure Safety.
- Determination from the CPUC that the utility acted prudently. Any finding of imprudence could require the utility to reimburse the fund up to the predetermined liability cap. A finding of conscious or willful disregard would eliminate the cap, although we think this finding is unlikely for IOUs.

The fund had $12.5 billion of net funds available as of March 31, and claim-paying capacity exceeding $21 billion, according to a fund administrator report on May 1. The fund has been tapped once since 2019. PG&E has been reimbursed $350 million as of April 2025 for claims from the Dixie fire in 2021.

PG&E continues to settle claims and has estimated total reimbursements of $925 million, more than its $1 billion insurance.

Other Changes in California Since 2019

California utilities have also implemented or accelerated wildfire mitigation initiatives, including:

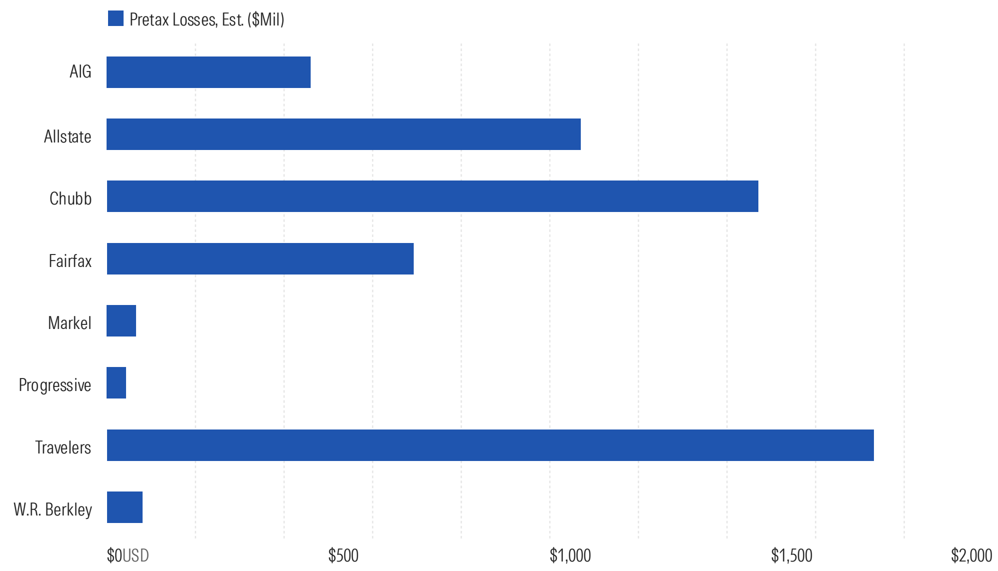
- Enhanced and more frequent vegetation management;
- More investment in system hardening, such as burying power lines underground in high fire risk areas and installing covered conductors;
- Public safety power shutoffs on days when weather forecasts expect high fire risk, typically associated with high winds;
- Monitoring and inspection equipment such as cameras, weather stations, drones, remote light sensors and modeling, and satellite;
- Fast-trip circuit breakers, or enhanced power system safety settings, that shut off power when there is a disturbance on the lines.
- Edison International bought two new Bell 429 GlobalRanger helicopters to conduct aerial inspections of power lines.

Eaton Fire: Will Claims Exhaust the California Wildfire Fund?

The Eaton fire, which hit parts of Edison International's service territory, was one of the largest among several wildfires that ignited in Southern California in January. Eaton burned 14,000 acres, destroyed or damaged more than 10,000 structures, and resulted in 17 deaths.

High-end estimates for total losses from the Southern California fires, including Eaton, top $30 billion. Our financial analysts estimate several large insurers could face more than $1 billion of pretax losses (Exhibit 13). We estimate uninsured losses could be double that amount based on the 2017-18 fires.

Exhibit 13 Southern California Wildfire Liability Estimates Top $1 Billion for Some Insurers



Source: Morningstar. Data as of June 2025.

Investigations are ongoing, but Edison's management said in April, they were not able to rule out the possibility that Edison's equipment contributed to the fire ignition. Management acknowledged that material losses were "probable," suggesting the inverse condemnation doctrine might apply.

We expect Edison will be able to access the California Wildfire Fund for reimbursement of claims exceeding $1 billion. However, high-end damage estimates suggest that Edison's reimbursements might exhaust this fund or leave little capital for future fires. Legislation to expand the fund appears unlikely this year. California politicians have held public hearings and proposed dozens of bills related to wildfires during the 2025 legislative session, but no bills addressing the California Wildfire Fund passed either the California Assembly or the California Senate before the June 6 deadline. The legislative session ends Sept. 12.

'Fire' Stocks Are Cheap: Edison International, PG&E, Portland General

Edison International EIX (★★★★★)

P/FVE: 0.66| Moat Rating: Narrow | Morningstar Uncertainty Rating: Medium | Yield 5.1%

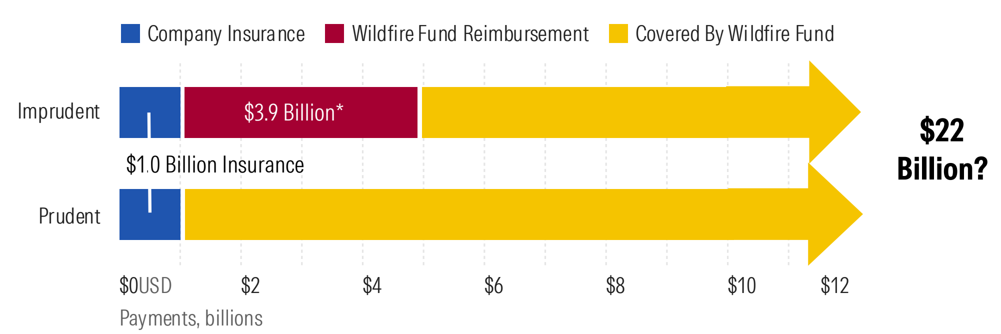
Exhibit 14 Wildfire Liability Fears Sunk Edison International's Stock In January

Source: Morningstar. Data as of July 3, 2025.

What the Market Is Missing

AB 1054 should protect Edison shareholders from any significant losses due to the January 2025 fires and future fires. Edison has an approved wildfire mitigation plan and valid safety certificate, so we expect California utilities regulators will deem Edison a prudent operator, allowing it to keep all California Wildfire Fund proceeds exceeding its $1 billion insurance coverage. If regulators rule Edison was imprudent, pretax shareholder losses should be capped at $3.9 billion (Exhibit 15).

Exhibit 15 Edison's Liability Exposure Is Limited To $3.9 Billion Based On AB 1054



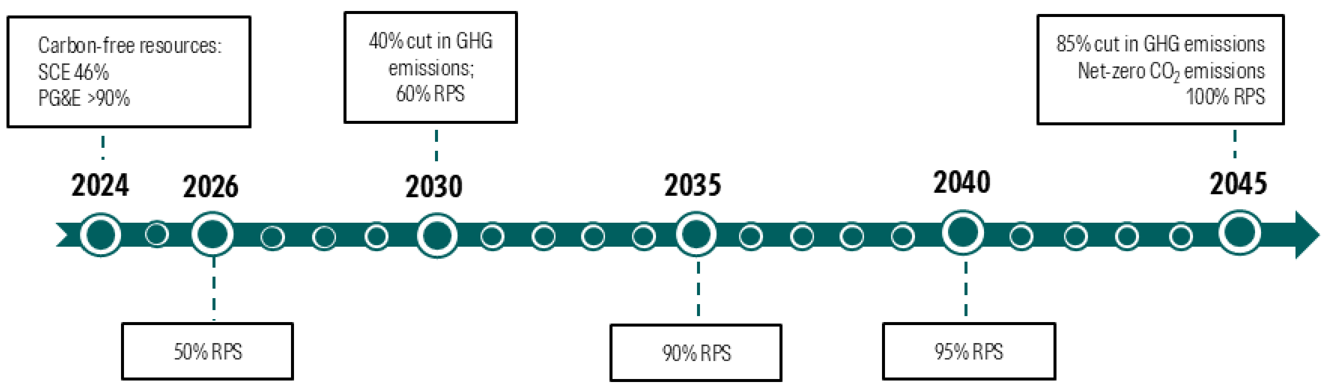
Source: Edison International. Data as of June 2025.
*Shareholder funded, based on 20% of equity rate base in 2024.

We think California politicians will expand the California Wildfire Fund reimbursement authorization if payments top $22 billion (including Edison's $1 billion insurance coverage). The claims determination, settlement, and payment process likely will take years. This gives California politicians several legislative sessions to consider changes to the fund before shortfalls hit Edison shareholders.

Edison's Core Business Is Strong and Growing

Earnings at Edison's Southern California Edison subsidiary are set to grow faster than most utilities' earnings. California's quest to reach 60% renewable energy by 2030 and eliminate carbon emissions from its economy by 2045 will require a huge buildout of the state's electric grid infrastructure (Exhibit 16).

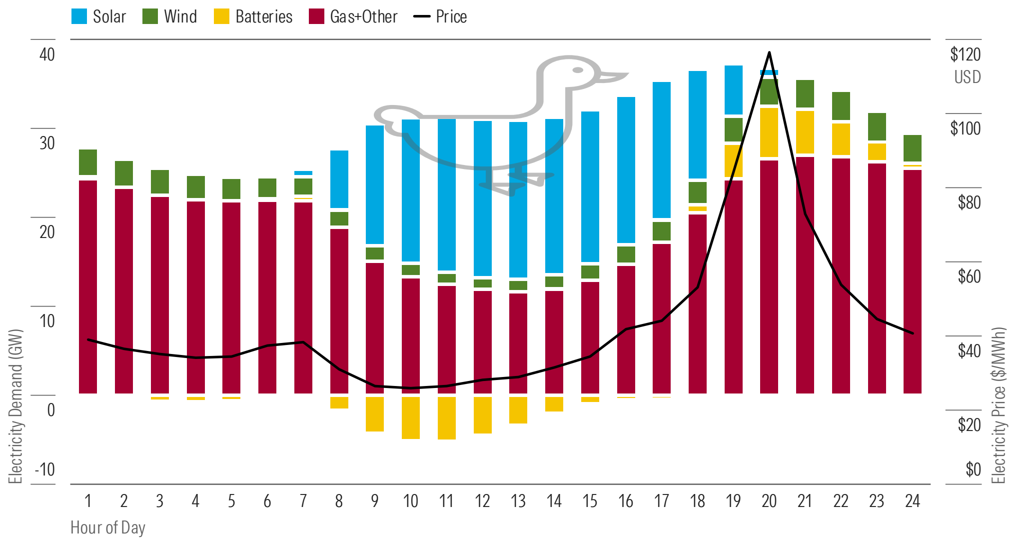
Exhibit 16 Electrification Using Renewable Energy Will Be Necessary for California to Meet Its Ambitious Clean Energy Goals



Source: Morningstar, company reports. Data as of June 2025.
*RPS represents the percentage of retail sales that a utility must deliver from carbon-free sources by a certain date.

A major challenge that will require substantial grid upgrades will be maintaining reliability during early evenings when solar struggles to meet demand and prices spike. The duck curve plot refers to a graphical representation of electricity demand from the grid on days when renewable energy (especially solar energy) production is high and demand in the grid is low. When plotted on a graph, the lines/curves form a duck shape (Exhibit 17).

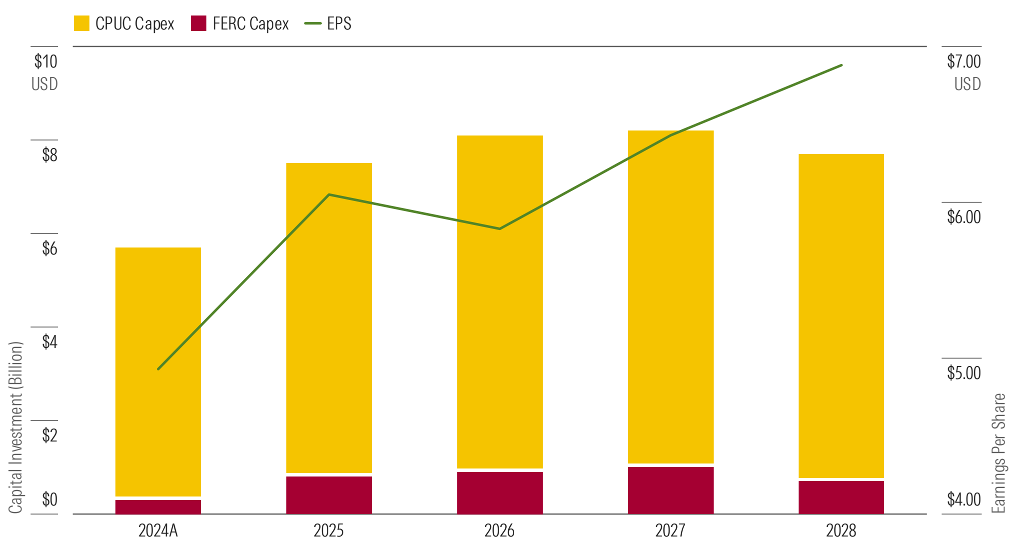
Exhibit 17 Managing California's Duck Curve Will Require More Advanced Energy Infrastructure



Source: California ISO, Thunder Said Energy. Data as of 2024.

We forecast Edison will invest nearly $8 billion annually for at least the next five years to support grid safety, renewable energy, electric vehicles, distributed generation, and energy storage. This investment should produce 7% annual core earnings growth from 2024 (Exhibit 18).

Exhibit 18 Edison's Investment Plan



Source: Morningstar. Data as of July 2025. 2026-28=forecast.

Regulatory proceedings such as Edison's 2025-28 general rate case will determine the next phase of Edison's investment plan. Operating cost discipline will be critical for Edison to avoid large customer bill increases related to its investment plan.

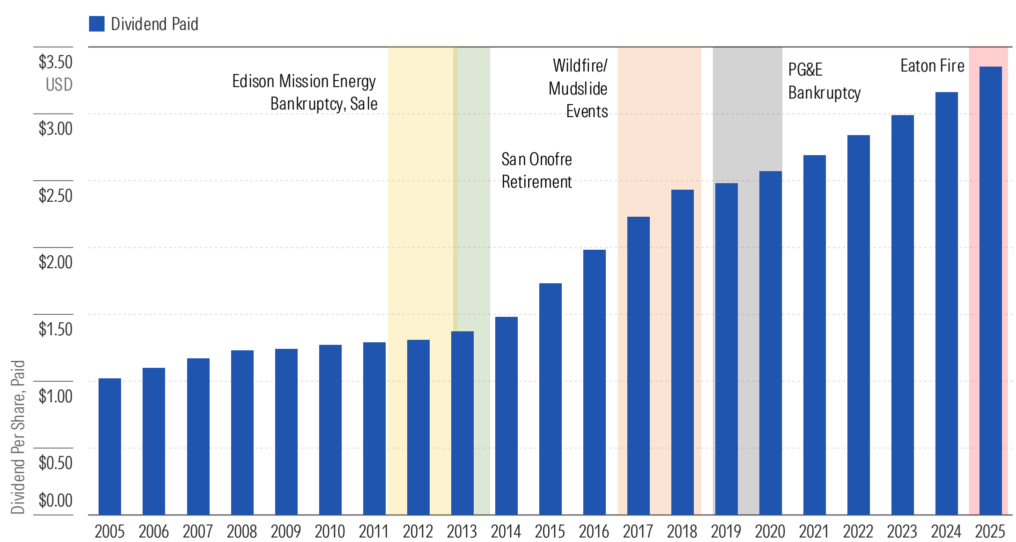
Edison is also working to resolve cost recovery from past disasters, notably the 2017-18 wildfires and mudslides. Recovering some of the $9.9 billion costs from the 2017-18 disasters will bring in substantial cash in 2025-26, reducing interest costs. Edison likely will have to wait until 2026 for regulators to decide on its $5.4 billion cost recovery proposal related to the 2018 Woolsey fire. We assume regulators approve about one-third of Edison's request.

Edison’s Dividend Record Illustrates Business Strength

Even if Edison faces modest fire costs and liabilities, we think it will be able to continue its streak of 21 consecutive annual dividend increases (Exhibit 19). It has maintained this streak despite the bankruptcy and sale of its merchant power generation business in 2012-14, unanticipated repairs and the retirement of the San Onofre nuclear plant in 2013, and several extreme wildfires and other natural disasters in recent years.

Management’s long-standing dividend policy to pay out 45%-55% of subsidiary Southern California Edison’s regulated earnings is more conservative than most utilities that pay out up to 60% of earnings. This conservatism gives Edison enough flexibility to grow the dividend even if the company faces a temporary drop in cash flow. Partial recovery of legacy wildfire costs in the next two years would give Edison a $2 billion-$3 billion cash cushion to retire debt or cover any 2025 fire costs.

Exhibit 19 Edison Has Raised Its Dividend 21 Consecutive Years Despite Adversities



Source: Morningstar. Data as of July 2025.

PG&E PCG (★★★★) Yield: 0.7%

P/FVE: 0.73 | Moat Rating: None | Morningstar Uncertainty Rating: Medium

Exhibit 20 Renewed Wildfire Concerns Have Sent PG&E's Stock Falling Since January

Source: Morningstar. Data as of July 3, 2025.

What the Market Is Missing

PG&E's stock fell 16% in two trading days when the fires broke out in Southern California, the largest two-day stock price drop since it exited bankruptcy in mid-2020. The stock had decreased another 12% since then. The fires were outside of PG&E's Northern California service territory, and PG&E faces no liabilities. However, investors fear that large losses from the Southern California wildfires could drain the $21 billion California Wildfire Fund, leaving little capital in the fund to cover future wildfires that involve PG&E.

Wildfire Mitigation Investment Is a Growth Opportunity

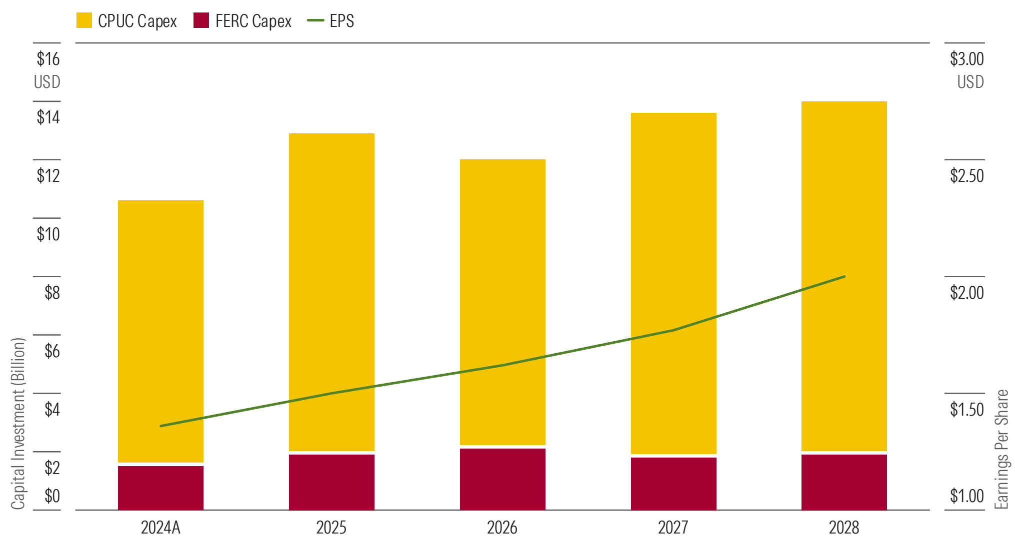
Half of PG&E's service territory has been designated a high fire threat by California regulators, giving PG&E political and regulatory support to dedicate large-growth investments in wildfire mitigation. Some of these investments include:

- Underground Power Lines: California Senate Bill 884 was passed and signed in 2022; it requires the California Public Utilities Commission and Office of Energy Infrastructure Safety to create an expedited pathway for burying power lines underground. PG&E has discussed a $30 billion investment to bury 10,000 miles of distribution lines in districts that have a high fire threat, or about 10% of its total distribution network. PG&E plans to submit its 10-year underground power line cost-recovery plan with regulators this year. It has completed about 1,000 miles since 2021 and had hoped to complete 2,000 miles by the end of 2025, but California regulators denied PG&E's request in its 2023-26 general rate case for funding to meet that target.

- Overhead system upgrades: PG&E has upgraded to stronger poles, covered power lines, and other system hardening on 2,100 miles of its network since 2018.
- Situational awareness: Deployed 1,600 weather stations and 650 high-definition cameras. Also conducts drone inspections from land and air.
- Vegetation management: Most of these are operating costs, but there could be some opportunities for capital investment to make line inspections and trim trees faster and more efficiently.

We expect PG&E's total capital investment plan, including wildfire mitigation investments, will lead to 10% annual rate base growth and 9% earnings growth during the next five years (Exhibit 21).

Exhibit 21 PG&E's Large Investment Plan Set to Generate High Earnings Growth



Source: Morningstar. Data as of June 2025. 2026-28=forecast.

Dividend Is Back, but Not Growing Quickly

PG&E paid a dividend in 2024 for the first time in six years after meeting bankruptcy exit requirements. The board has raised it to $0.10 per-share annualized payment this year from its initial $0.04 per-share payment in 2024. We expect minimal dividend growth for at least the next few years as PG&E finances its growth investment. Management has discussed a 20% payout target for 2028, which would mean an annualized dividend around $0.40 per share. Most utilities pay out 50%-60% of earnings, which would imply an annualized dividend of nearly $1 per share by 2028.

Portland General POR (★★★★★) Yield: 5.1%

P/FVE: 0.76 | Moat Rating: Narrow | Morningstar Uncertainty Rating: Low

Exhibit 22 Portland General a Victim of Investors' Downside Fears

Source: Morningstar. Data as of July 3, 2025.

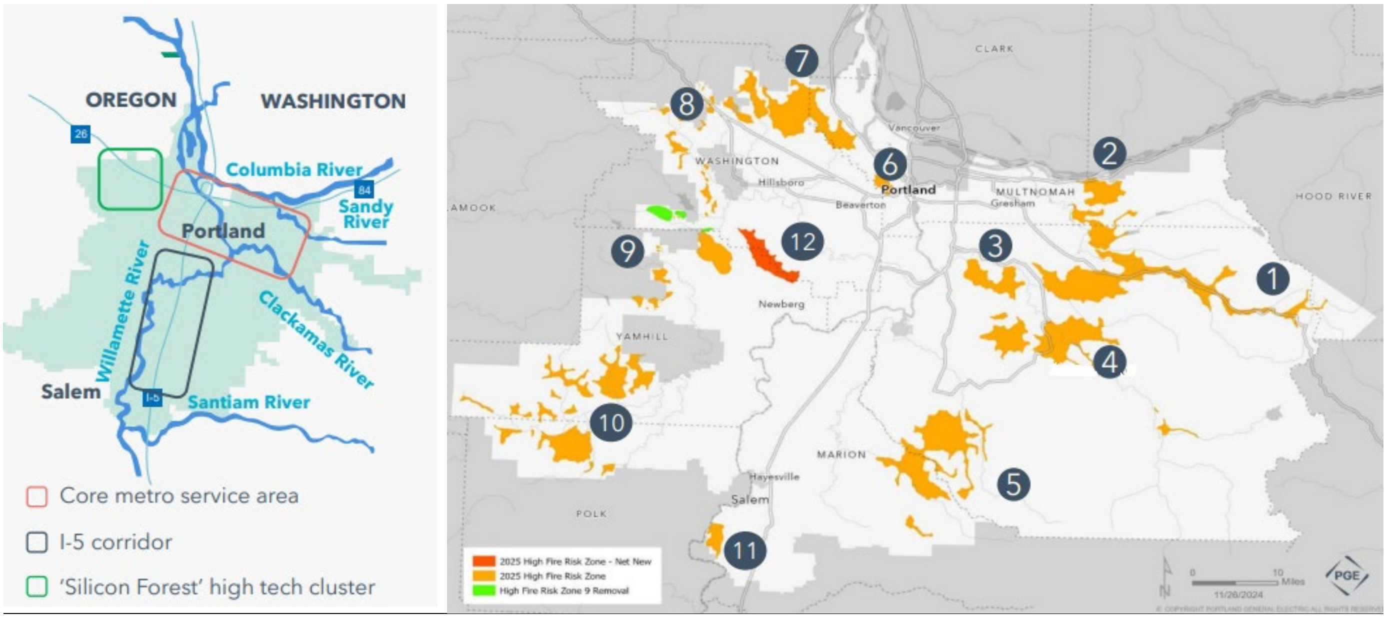
Wildfire risk is one part of a wide-ranging public debate about energy costs in Oregon that is making investors skittish about Portland General. The state's history of challenging regulation and an increasing realization among politicians about the cost associated with the state's clean energy policies are causing investors to ignore Portland General's growth potential.

What the Market Is Missing

Portland General faces risks that all utilities face—regulatory, political, environmental, and operational. We think the company is doing a good job managing those risks, but the market isn't giving it enough credit for those efforts and the results.

Portland General's small, urban service territory and wet climate result in among the lowest wildfire risks of any Western US utility. Management estimates that only 3% of its customers live in areas with high fire risk, and only 9% of its distribution line miles are in areas with high fire risk.

Exhibit 23 Portland General's Urban and Wet Service Territory Reduces Fire Risk; High Fire Risk Zones Outside Areas With Large Customer Concentration



Source: Portland General. Data as of March 2025.

However, the market became nervous about Oregon utilities' wildfire risks after a jury in 2023 found PacifiCorp, a larger utility to the south and east of Portland General, was negligent when its equipment sparked fires in 2020. PacifiCorp has estimated $51 billion of potential liabilities and has paid about $1.3 billion for claims and settlements through March.

Portland General and other utilities have pushed state legislators to pass proposed bills that would establish a wildfire safety certificate process, like the one in California, to limit the risk that a jury will find a utility negligent. Portland General already maintains a five-year wildfire mitigation plan. Legislation to create a wildfire insurance fund for Oregon utilities did not make it out of committee in this legislative session, which ends June 29, and we think it is unlikely to pass in Oregon's one-month 2026 legislative session.

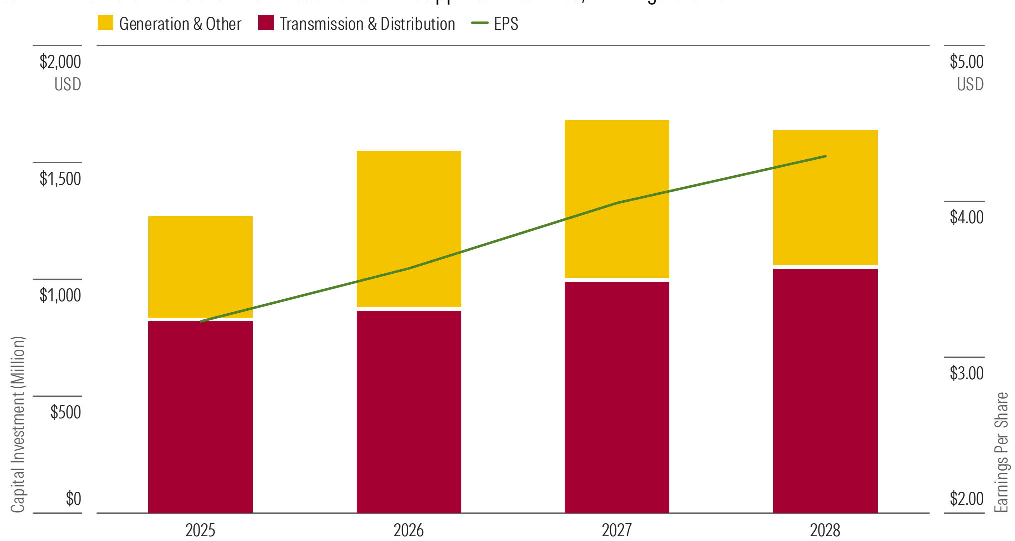
Strategic Growth Plan on Track

Solid year-to-date earnings, a regulatory filing in May to recover Seaside battery project costs, work with state legislators to address wildfire risk, and a holding company proposal are signs that Portland General's near- and long-term strategic priorities are on track.

In May, Portland General requested a $47 million revenue increase to recover costs related to the Seaside battery project. Oregon regulators last year approved this expedited filing, and we expect they will approve all or most of Portland General's request, boosting earnings in 2026.

Renewable energy and related infrastructure need to meet Oregon's 80% carbon emissions reduction goal by 2030, offering upside to management's five-year $6.5 billion investment plan (Exhibit 24).

Exhibit 24 Portland General's Investment Plan Supports Rate Base, Earnings Growth



Source: Morningstar. Data as of July 2025. 2026-28=forecast.

Although more growth capital expenditure should produce strong earnings growth, public pressure to limit rate increases could slow earnings growth. Management will have to navigate these challenges in 2025 and 2026 to keep earnings growth on track:

- Operating cost efficiencies are critical to help Portland General avoid what could be a contentious general rate case. Portland General had reached four consecutive GRC settlements before receiving a GRC decision late last year that cut its allowed return on equity and resulted in a revenue increase that was half of what Portland General had requested.
- Utility bills have become political. In November, Sen. Ron Wyden, D-Ore. sent a letter to Portland General CEO Maria Pope asking her to detail why customer rates had gone up by 40% since 2021, a number that Wyden referenced based on his review of news reports. In March, Gov. Tina Kotek, D-Ore. asked Oregon utility regulators—all three of whom Kotek appointed or reappointed—to balance customer affordability with the state's clean energy goals. Most of the rate increases have been due to higher earnings-neutral pass-through costs.

Data Center, Technology Sector Demand Growth

The perceived wildfire risk and affordability concerns are two reasons Portland General's stock has not rallied like other utilities that have similar growth opportunities from new data center and manufacturing development (Exhibit 25). Electricity demand from Portland General's industrial customers, which include technology sector manufacturing and data centers, has grown 8.2% annually on average during the last five years. We expect similar tech-related growth for at least the next few years based on projects in development and requests for electric grid access.

Exhibit 25 Other Utilities With Data Center Growth Are Outperforming Portland General

Source: Morningstar. Data as of July 3, 2025.

Dividend Set to Grow 5%

In 2020, PGE's board made an unusual pause in its typical annual dividend growth cadence by waiting until July to announce a 6% increase. The board reverted to its typical second-quarter annual dividend policy announcement in 2021 and has increased the dividend 5% annually since then.

We expect dividends to continue growing near 5% annually, slightly slower than earnings growth, given the amount of capital necessary to fund the company's investment plan. We think PGE's strong financial position can support management's 60%-70% target payout.

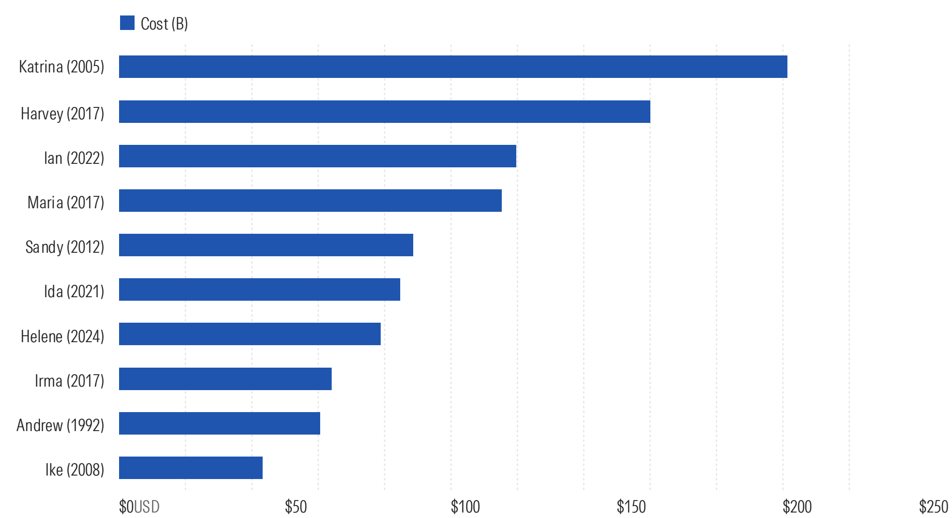
Hurricanes: Manageable Natural Disaster Risk

Key Investor Takeaways

- Utilities, on average, have shown a strong track record for managing hurricanes' customer impact, creating regulatory goodwill.
- Higher restoration costs suggest climate resilience and mitigation investments will be increasingly critical. This presents an additional opportunity for utilities, like NextEra's Florida Power & Light, to make storm-hardening investments if they can prove to regulators that the investments are worth it.
- Florida, Carolina, and Louisiana utilities remain best-in-class in storm recovery. Look for utilities to propose storm-hardening investments that support higher earnings growth.
- CenterPoint Energy remains most at risk heading into peak hurricane season, given the company's disappointing response in 2024.

The 2024 hurricane season was among the most active on record, with 18 named storms, including 11 hurricanes, of which six were Category 3 or higher. Hurricanes Helene, Milton, and Beryl were the most damaging, hitting utility infrastructure across most of the Southeast US. Of the 2024 hurricanes, Hurricane Helene was the most destructive since Hurricane Ida in 2021, causing an estimated $78 billion of damage. Nine of the 10 most damaging hurricanes have occurred since 2000. Six of the 10 most costly hurricanes have occurred in the last decade (Exhibit 26).

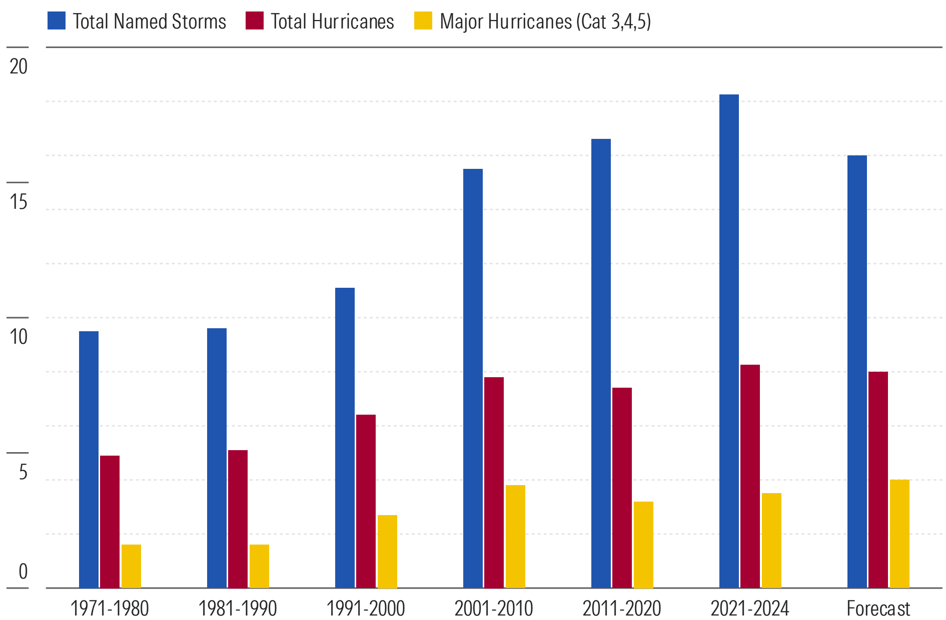
Exhibit 26 Majority of Hurricanes Occurred Within Last Decade



Source: National Oceanic and Atmospheric Administration. Data as of January 2025.

The number of hurricanes has increased notably since the 1970s, from an average of nine hurricanes per year to over 18 in the last three years. The most damaging major hurricanes, classified as Category 3 or higher, have doubled (Exhibit 27).

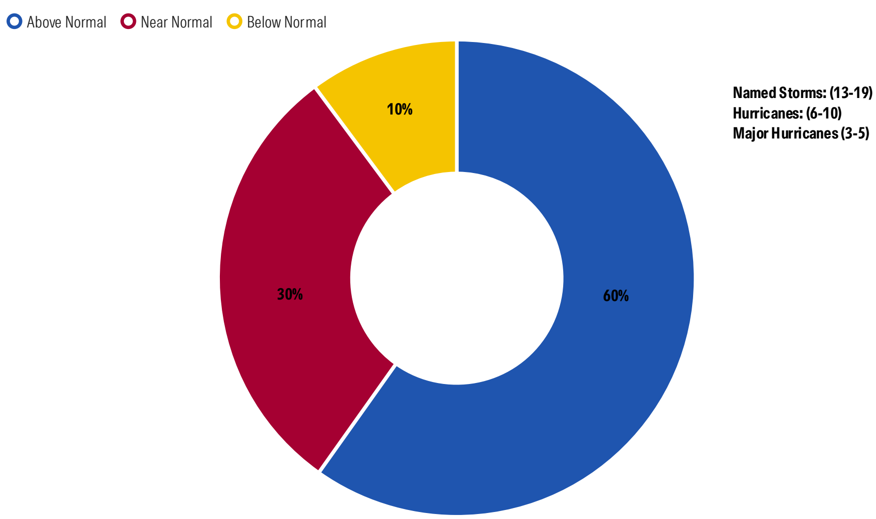
Exhibit 27 Number of Hurricanes Has Increased Over Past Five Decades



Source: National Oceanic and Atmospheric Administration. Data as of January 2025.

The forecast for 2025 suggests this elevated hurricane activity is expected to persist. The National Oceanic and Atmospheric Administration predicts a 60% probability for an above-average number of named storms, between 13 and 19 this year (Exhibit 28).

Exhibit 28 High Probability for Average 2025 Hurricane Season



Source: National Oceanic and Atmospheric Administration, May 2025.

The report also outlines the following 2025 probabilities for major hurricane landfalls, highlighting the risk for utilities along the US coastline:

- 51% for the US coastline, compared with a historical average of 43%.

- 26% for the US East Coast, compared with a long-term average of 21%.
- 33% for the Gulf Coast region, above the historical norm of 27%.

Utilities Have Experience Managing Storm Risk

While investors have become comfortable with most utilities' ability to handle severe weather, hurricanes result in high restoration costs and increased regulatory risk for recovery of those restoration costs. Utilities' restoration efforts sometimes also fail to meet stakeholder expectations.

Utilities with larger footprints in states with high hurricane probability (Florida, Louisiana, North Carolina) are at greater risk of incurring restoration expenses. Duke Energy and Southern Company have the broadest risk due to their large service territories. NextEra Energy and Emera have the most concentrated risk since Florida's hurricane probability is well above bordering states (Exhibit 29).

Exhibit 29 Hurricane Risk High for Select Utilities

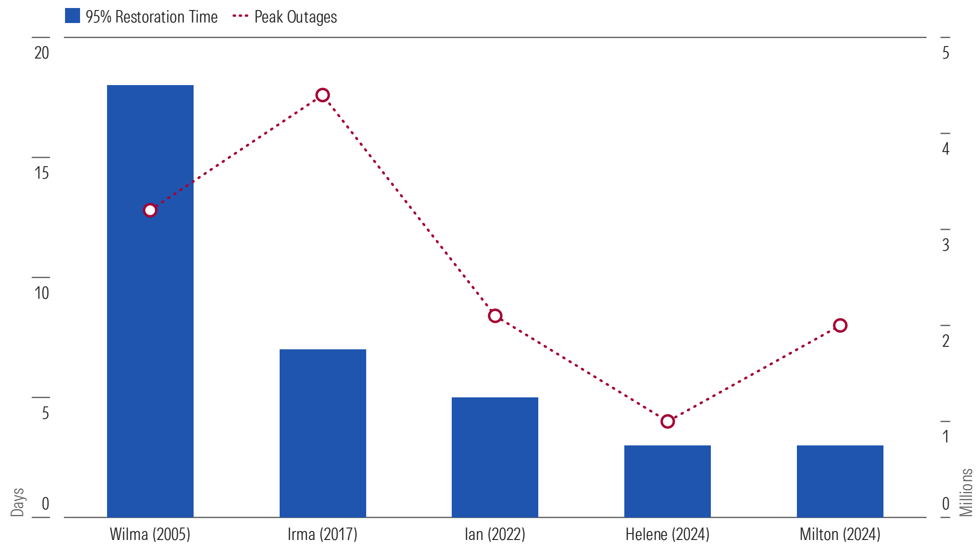
State	Probability of Hurricane	Utilities Affected
Alabama	34%	Southern Company (SO)
Florida	65%	Duke Energy (DUK), Emera (EMA), NextEra Energy (NEE)
Georgia	37%	Southern Company (SO)
Louisiana	46%	Southern Company (SO)
Mississippi	35%	Southern Company (SO)
North Carolina	46%	Duke Energy (DUK)
South Carolina	35%	Dominion Energy (D), Duke Energy (DUK)
Texas	44%	CenterPoint Energy (CNP), Sempra (SRE)
Virginia	24%	Dominion Energy (D), Duke Energy (DUK)

Source: Colorado State University. Data as of April 2025.

Utilities are improving their restoration times. Utilities that can show evidence of shorter restoration times should be better positioned to persuade regulators to approve additional storm-hardening investment.

NextEra Energy's restoration time declined from 18 days in 2005 after Hurricane Wilma to just three days after Hurricane Helene, the most damaging storm in 2024 (Exhibit 30).

Exhibit 30 NextEra's FP&L Response Time Has Improved Markedly With Increased Investment



Source: Company filings, Morningstar.

FP&L's improving response time provided regulatory support for nearly $5 billion in storm hardening since 2005, with nearly 50% of the company's power lines now below ground. In FP&L's most recent Storm Protection Plan, FP&L outlined $15 billion in grid-hardening investments through 2032, furthering the utility's long line of investment opportunities and supporting our 8% earnings forecast.

CenterPoint Energy (★★) Yield: 2.4%

P/FVE: 1.13 | Moat Rating: Narrow | Morningstar Uncertainty Rating: Low

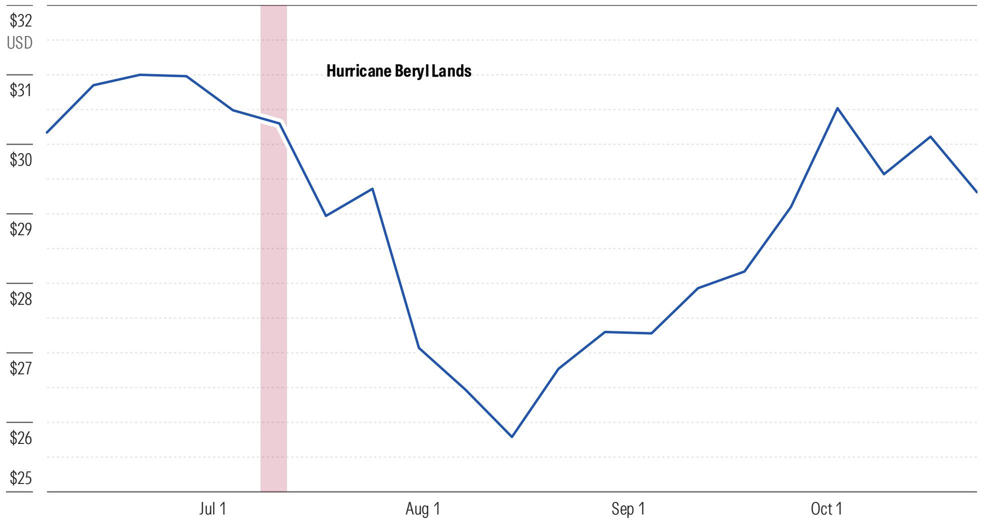
Watch for Heightened Scrutiny in Current Hurricane Season

CenterPoint was an exception to utilities successfully managing the impact of hurricanes in 2024. Hurricane Beryl, a relatively mild Category 1 hurricane, affected more than 80% of CenterPoint subsidiary Houston Electric Light & Power's customers, left some without power for more than 10 days, and resulted in $1.3 billion of restoration costs.

The prolonged outages and communication failures drew sharp criticism from customers, lawmakers, and regulators. Gov. Greg Abbott, R-Texas and the state Public Utility Commission launched investigations into CenterPoint's storm preparedness and response.

Failure to properly prepare for and respond to hurricanes can have significant negative shareholder implications. Hurricane Beryl made landfall in Houston on July 8, 2024, and the following month, the stock dropped 18%, far underperforming the Morningstar US Utilities Index (Exhibit 31).

Exhibit 31 CenterPoint Stock Drops 18% After Failed Storm Response



Source: Morningstar. July 1-Oct. 1 period during 2024.

In response to the scrutiny, CenterPoint developed a comprehensive $5.75 billion Systemwide Resiliency Plan to be completed by 2028. The plan aims to enhance grid resilience and improve utility emergency response. Key components of the plan include:

- Installation of 130,000 storm-resilient poles;
- Burying more than 50% of the power distribution system underground;
- Deployment of over 5,100 automation devices;
- Elevation of 99% of substations above the 500-year flood plain; and
- Implementation of a three-year vegetation management cycle.

While these initiatives represent progress, we think CenterPoint will continue to be under the regulatory microscope during the upcoming hurricane season. CenterPoint management has, for the most part, restored regulatory and customer confidence in our view. However, should CenterPoint disappoint in the upcoming hurricane season, we think it will be much more difficult to mend relationships, likely leading to higher penalties and lower returns for Houston Electric.

Southeast Utilities Managed 2024 Hurricane Season Well

Look for Opportunities if There Is a Market Selloff Before a Large Storm

Duke Energy (★★★) Yield: 3.8%

P/FVE: 0.99 | Moat Rating: Narrow | Morningstar Uncertainty Rating: Low

Carolinas and Florida Continue to Be Best-in-Class for Regulatory Recovery of Restoration Costs

Duke Energy estimates total storm restoration costs from Hurricanes Debby (Category 1, August), Helene (Category 4, September), and Milton (Category 3, October) were nearly $3 billion across its Florida and North Carolina and South Carolina service territories. These storms caused outages affecting approximately 5.5 million customers. Restoration efforts involved replacing over 20,000 poles, 2,100 miles of wire, and 15,000 transformers.

In Florida, Duke has filed with the Florida Public Service Commission to recover approximately $1.1 billion of direct restoration costs, which will result in a temporary surcharge of about $21 per 1,000 kilowatt-hours on residential bills from March 2025 through February 2026. In the Carolinas, Duke is pursuing cost recovery through established regulatory mechanisms, including potential securitization and insurance recoveries.

Emera (EMA) (★★) Yield: 4.8%

P/FVE: 1.17 | Moat Rating: Narrow | Morningstar Uncertainty Rating: Low

Investors Should Be Confident in Florida Recovery, Keep Careful Eye on Emera's Balance Sheet

Emera subsidiary Tampa Electric's 2024 storm response demonstrated the effectiveness of its prior grid investments, enabling expedited power restoration following Hurricanes Helene and Milton. The company mobilized 9,500 out-of-state utility workers, facilitating the restoration of power to nearly all customers within one day after Helene and within seven days after Milton. Total estimated storm restoration costs were $463.6 million, encompassing expenses from Hurricanes Helene and Milton, Hurricane Debby, and Hurricane Idalia in 2023. This figure also includes interest and the replenishment of the storm reserve fund.

To recover these costs, the Florida Public Service Commission approved Tampa Electric's request to implement a temporary storm restoration surcharge. Starting in March 2025, residential customers using 1,000 kilowatt-hours per month will see an additional charge of approximately $19.95 on their monthly bills. This surcharge will be in effect for 18 months, concluding in August 2026.

The financial impact of these storms on Tampa Electric's balance sheet is expected to diminish as the approved rate recovery mechanisms are implemented throughout 2025. This scenario underscores the value of continued investment in grid infrastructure to enhance resilience and expedite future restoration efforts.

NextEra Energy (NEE) (★★★) Yield: 3.1%

P/FVE: 0.99 | Moat Rating: Narrow | Morningstar Uncertainty Rating: Low

We Feel Confident in NextEra's Storm Recovery Track Record, Pending Rate Case

NextEra Energy's substantial investments in grid hardening and smart technologies significantly enhanced subsidiary Florida Power & Light's storm response in 2024, leading to faster power restoration following Hurricanes Debby, Helene, and Milton. These improvements underscore the effectiveness of prior infrastructure upgrades in bolstering grid resilience.

FPL estimates approximately $1.179 billion in storm restoration costs, primarily due to Hurricane Milton, which alone accounted for about $811.1 million. The utility has filed a petition with the Florida Public

Service Commission to recover these costs over a 12-month period starting in January 2025. If approved, residential customers using 1,000 kilowatt-hours per month would see an average monthly bill increase of $12.80.

In addition to storm recovery, FPL continues to expand its renewable energy portfolio. In 2024, the utility commissioned 2.2 gigawatts of new solar capacity, a record addition that contributes to NextEra Energy's broader goal of achieving 90 GW of solar capacity by 2045. These developments reinforce the regulatory case for FPL's significant planned solar buildout in Florida, aligning with the state's increasing emphasis on clean energy solutions

Overall, FPL's proactive infrastructure investments and commitment to renewable energy have not only improved storm response capabilities, but also strengthened its position in advancing Florida's transition to a more resilient and sustainable energy future.

Entergy (ETR) (★) Yield: 2.9%

P/FVE: 1.26 | Moat Rating: Narrow | Morningstar Uncertainty Rating: Low

Reliability Investments Among Top Growth Initiatives

Entergy has a well-developed record and process for storm restoration and cost recovery given its storm-prone service territory in the Gulf Coast. These ratemaking processes—part of state laws in some of Entergy's service territories—include storm cost reserves, storm cost securitization, and expedited regulatory reviews. This helps ensure bondholders and shareholders are well protected from the cash flow impact when large storms hit.

In addition to these ratemaking procedures, regulators are increasingly requesting storm-hardening investments to reduce storm restoration costs. In total, Entergy is pursuing some $10 billion of resiliency-focused investments during the next five years, aiming to reduce restoration costs 20% by 2028. Although regulators are unlikely to approve all of Entergy's proposed investments, some key resiliency investment plans that have received regulatory support include:

- Starting in 2021, Louisiana regulators began a formal process to create a long-term system resiliency investment plan. In April 2024, regulators approved a five-year, $1.9 billion investment plan.
- In 2021, the New Orleans City Council passed a resolution that required Entergy to provide a plan for storm hardening and resiliency. Last year, the council approved a two-year, $100 million investment plan that could eventually total as much as $1 billion of new investment during the next five years.
- In February, Texas regulators approved Entergy's request to invest $335.1 million in projects as part of phase I of the Texas Future Ready Resiliency Plan.

Southern Company (SO) (★★) Yield: 3.2%

P/FVE: 1.27 | Moat Rating: Narrow | Morningstar Uncertainty Rating: Low

Constructive Regulation Helps Minimize Shareholder Impact From Large Storm Expenses

Hurricane Helene was the most destructive storm in Southern Company subsidiary Georgia Power's 140-year history, resulting in 1.5 million outages, more than 11,800 broken power poles, and more than 1,500 miles of downed power lines. This was more damage than Georgia Power's previous three most destructive storms in company history combined.

Management's initial repair cost estimate was $1.1 billion. Southern Company has deferred these costs since it's confident that Georgia regulators will allow it to recover them from customers during the coming years. In 2025, we expect regulators will review Southern's response and expenses to determine if and when Southern will incorporate them into customers' bills. The only immediate shareholder impact was from outages that reduced third-quarter electricity demand by 0.4%, equivalent to a full year of demand growth for many utilities, but not a material value impact for Southern given its size.

Research Methodology for Valuing Companies

Overview

At the heart of our valuation system is a detailed projection of a company's future cash flows, resulting from our analysts' research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modeling templates. We use scenario analysis, in-depth competitive advantage analysis, and a variety of other analytical tools to augment this process. We think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (mines, for example), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss short-term market-price movements), but we believe these negatives are mitigated by deep analysis and our long-term approach.

Morningstar's Equity Research Group ("we," "our") believes that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate in Morningstar terminology. Five-star stocks sell for the biggest risk-adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth.

Four key components drive the Morningstar rating:

- our assessment of the firm's economic moat.
- our estimate of the stock's fair value.
- our uncertainty around that fair value estimate.
- the current market price.

This process ultimately culminates in our single-point star rating.

Economic Moat

The Morningstar Economic Moat Rating is a structural feature that Morningstar believes positions a firm to earn durable excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow-moat companies are those that Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those that Morningstar believes will earn excess returns for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction-related risks related to environmental, social, and governance; industry disruption; financial health; or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

Fair Value Estimate

Each stock's fair value is estimated by using a proprietary discounted cash flow model, which assumes that the stock's value is equal to the total of the free cash flows of the company is expected to generate in the future, discounted back to the present at the rate commensurate with the riskiness of the cash flows. As with any DCF model, the ending value is highly sensitive to Morningstar's projections of future growth.

Fair Value Uncertainty

The Morningstar Uncertainty Rating represents the analysts' ability to bound the estimated value of the shares in a company around the fair value estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, exposure to material ESG risks, and other company-specific factors. Based on these factors, analysts classify the stock into one of several uncertainty levels: Low, Medium, High, Very High, or Extreme. Our recommended margin of safety—the discount to fair value demanded before we'd recommend buying or selling the stock—widens as our uncertainty of the estimated value of the equity increases.

Market Price

The market prices used in this analysis and noted in the report come from exchanges on which the stock is listed, which we believe is a reliable source.

Morningstar Rating for Stocks
The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock's current price relative to the analyst's estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst's educated opinion, is cheap, expensive, or fairly priced. To rate a stock, analysts estimate what they think it is worth (its "fair value"), using a detailed, long-term cash flow forecast for the company. A stock's star rating depends on whether its current market price is above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is close to the analyst's fair value estimate.

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