POWERLINES

UTILITY SPENDING IS RISING

A Review of Utility Capital Expenditure Plans

APRIL 2026

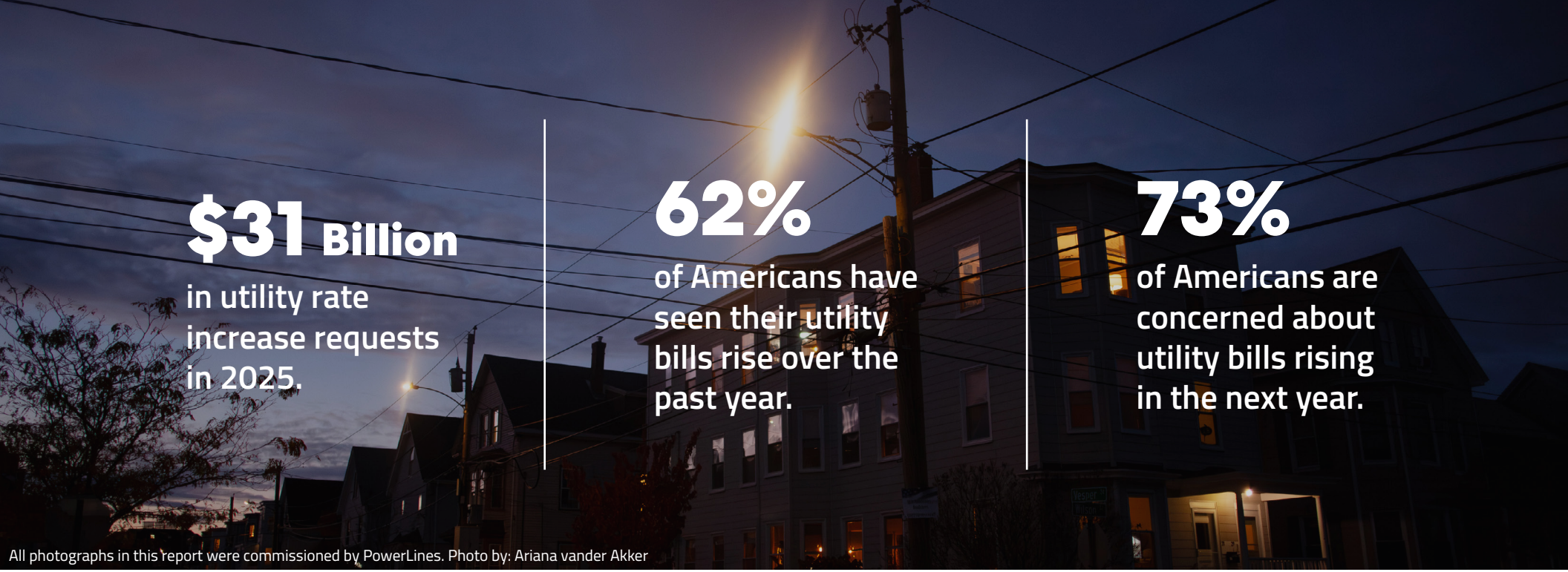
Executive **Summary**

Utility affordability remains a top issue for energy consumers across the U.S. as rising electricity demand and an aging grid coincide with increasing costs across the energy supply chain. In a comprehensive review of 51 investor-owned utility earnings calls in recent months, PowerLines found that investor-owned utilities proposed to spend at least $1.4 trillion over the next five years through 2030 on capital expenditures (CapEx)—a more than 21 percent increase over the $1.1 trillion over a five-year period outlined last year.

Much of these CapEx costs could eventually be passed on to consumers, as utilities file rate increase requests that could result in higher utility bills. This spending comes at a time when utility bills are already rising. PowerLines analysis has shown that utility bills have increased approximately 40 percent since 2021, with no signs of slowing down. In 2025 alone, utilities requested $31 billion[1] in rate increases. Most utilities expect high levels of capital spending to continue through 2030, a trend that promises to intensify growing rate pressures.

Utility affordability has become a major flashpoint across the political spectrum—a development that has caught the attention of utility investors. A 2025 PowerLines Poll[2], conducted by Ipsos, found that the majority of Americans, 62 percent, have seen their electric and/or gas bills rise over the past year, while even more, 73 percent, are concerned that their bills will rise further in the next year. The specter of political pressure on regulators to keep rates low drove many investor questions toward the end of 2025, prompting frank responses from utility executives.

1 powerlines.org/wp-content/uploads/2026/01/0126_PowerLines_Rising-Utility-Bills-Q4-Update-FINAL.pdf
2 www.ipsos.com/en-us/most-americans-report-higher-electricity-gas-bills-compared-year-ago



All photographs in this report were commissioned by PowerLines. Photo by: Ariana vander Akker

These rate increases are not inevitable, however. If managed effectively, utilities could leverage rising electricity demand to spread fixed costs over a larger customer base, lowering prices for all consumers. However, the existing utility regulatory system, which provides a financial incentive for capital spending but not operational efficiency measures, stands in the way. State utility regulators approve capital investments and set the rate of return that utilities receive for them. These bodies are increasingly approving higher rates. Over the last five years, regulators have approved, on average, 64 percent of the dollar value of rate increase requests, a jump from 52 percent over the previous 20 years.[3]

To be clear, modernizing an aging grid will require significant investment and spending. But lower-capital solutions focused on energy efficiency, demand-side solutions, and grid-enhancing technologies that squeeze more electricity out of existing grid infrastructure are often not properly incentivized. They must be prioritized in an affordability-constrained environment. Changing this reality will require policy action and strong regulatory enforcement from states across the country.

3 eta-publications.lbl.gov/sites/default/files/2026-03/retail_price_trends_2026_edition.pdf

Key **Findings**

Overview of Total Capital Spending

PowerLines' analysis of 51 investor-owned utility earnings calls in recent months found that investor-owned utilities proposed to spend at least $1.4 trillion over the next five years through 2030, as evidenced by their five-year CapEx plans—a more than 21 percent increase over the $1.1 trillion over a five-year period outlined last year.

While these proposed spending amounts do not necessarily equate on a one-to-one basis to rate increases, utility CapEx plans are often a leading indicator of incoming rate increase requests. Because of how monopoly utility incentives are structured, utilities generally earn a financial return on equity for CapEx but not operational expenditures (OpEx). Thus, the more a utility spends on large, capital-intensive projects, the more costs it can recover from consumer rates to both pay for and profit from that spending. In other words, these growing costs could become the key driver behind utility rate increase requests over the next five years.

Capital Expenditures (CapEx)

Includes expenses on physical assets such as power plants, transmission lines, distribution poles and wires, and other hardware.

Operational Expenditures (OpEx)

Includes the amount that utilities spend on daily operations and maintenance such as salaries, fuel, rent, waste management, software, and other costs needed to operate.

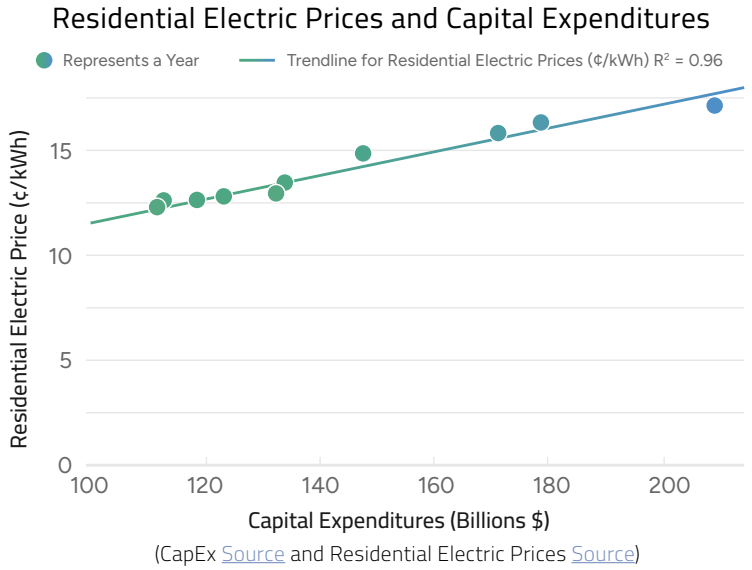
Rate of Return

Used to determine the amount of money a regulator authorizes a utility to earn on its capital investments and physical assets.

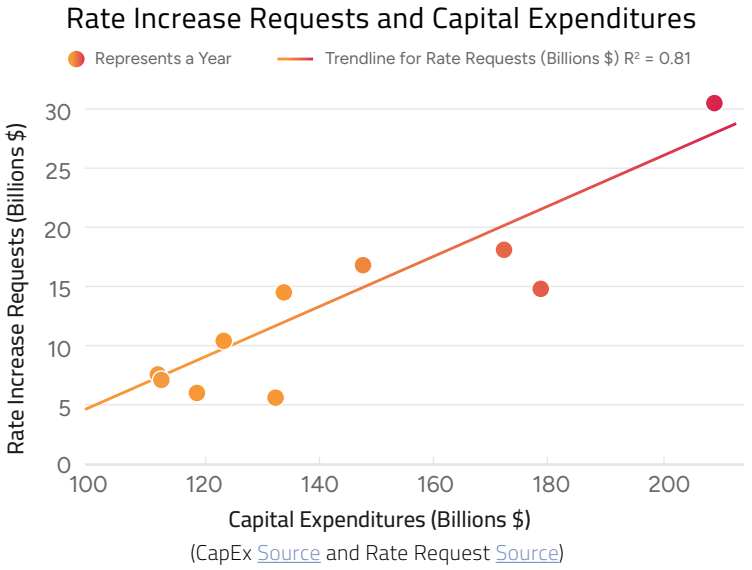
Potential Rate Impacts Based on Historic Trends

As the figures to the right illustrate, there has historically been a strong correlation between utility CapEx and rate increase requests, as well as a strong correlation between utility CapEx and the retail electricity price. Each dot on the scatterplots represents a year between 2016 and 2025, and the associated amount of capital expenditures, rate increase requests, and residential retail electricity prices for that year. There is no guarantee that rising CapEx necessitates a linear increase in rate increase requests and/or retail residential electricity prices. Indeed, how these trends take shape over the next five years depends on the actions and decisions of utilities and their regulators.

If historic trends continue, PowerLines estimates that residential customers could be on the hook for nearly half of planned utility capital spending in the near future. Cost allocation is generally driven by the principle of cost-causation, or setting rates based on the costs of serving that particular class of customer. Last year, residential customers comprised nearly half (47 percent) of total spending on electricity, while commercial customers made up 36 percent, industrial customers accounted for 16 percent, and transportation customers constituted the remainder.[4] According to this breakdown and general cost allocation trends, of the utilities' $1.4 trillion in proposed capital spending, over $0.7 trillion could be allocated to residential customers.



(CapEx Source and Residential Electric Prices Source)



(CapEx Source and Rate Request Source)

4 These estimates are based on the retail price of electricity and total electricity consumption across all utility types (investor-owned, cooperative, and municipally/publicly-owned) as provided by official, publicly available U.S. Energy Information Administration data. The estimated shares may not be fully reflective of the breakdown by customer class for investor-owned utilities specifically.

	Retail Price of Electricity (¢/kWh)[5]	Total Electricity Consumption (thousands of MWh)[6]	Total Amount of Electricity Spending ($B)[7]	Percent Share
Residential	17.3	1,514,993	$262.1	47 percent
Commercial	13.4	1,493,486	$200.1	36 percent
Industrial	8.6	1,042,217	$89.6	16 percent
Transportation	13.8	7,311	$1.0	0 percent
Total		**4,058,007**	**$552.8**	**100 percent**

How CapEx Plans Impact Rates

1 Utilities share their proposed capital spending plan with their investors.

(This spending plan may or may not necessarily align with the actual numbers they provide a regulatory body in a formal PUC filing.)

2 Utilities file a plan (e.g., integrated resource plan, integrated distribution system plan) to their regulatory body that outlines their proposed investments.

(Not every state may require this plan.)

3 Utilities file for a rate case to seek approval from their state PUC to recover prudently incurred costs that are used and useful.

4 Spending that the PUC approves flows through consumer rates.

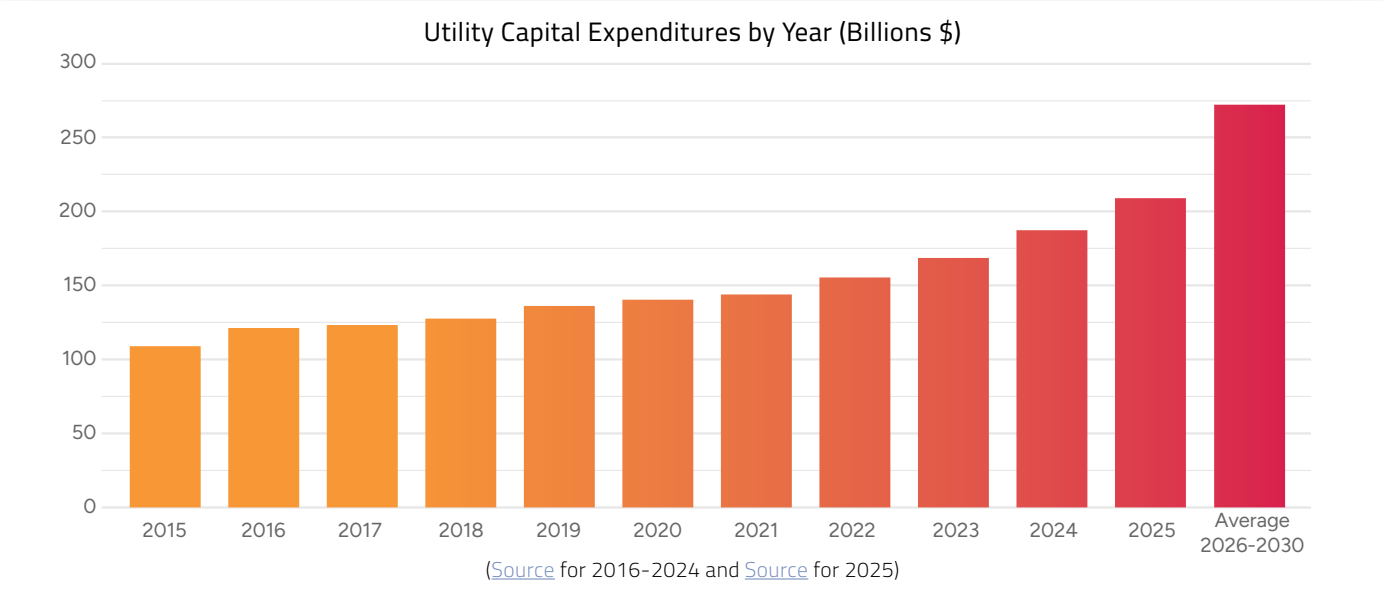
5 emp.lbl.gov/sites/default/files/2026-03/Retail%20Price%20Trends_2026%20edition.pdf

6 www.eia.gov/electricity/monthly/epm_table_grapher.php?t=table_5_03

7 This number was calculated by multiplying the retail price of electricity across all utility types in cents per kilowatt hour times one thousand, to standardize the units of measurement, and then by the total consumption across all utility types in megawatt hours listed in the table above. Then, the total amount in electricity spending was divided by how much each customer class paid, respectively. The share each class paid was multiplied by the $1.4 trillion number to estimate how much each customer class could pay going forward.

This increased spending appears to be concentrated among a handful of high spenders. PowerLines' analysis found that the 10 utilities with the largest amount of proposed CapEx combined to represent $707 billion in proposed capital spending, almost 53 percent of all national five-year capital expenditures, a larger share than the roughly 44 percent of electricity consumers they represent.[8]

As conditions change, forecasted capital spending does not always fully materialize. However, historic data suggests that the actual amount of utility capital spending has generally tracked with the projected amount of utility spending: on average, over the past 10 years, actual annual capital spending has been roughly 95 percent of the amount of projected capital spending.[9] Even so, actual annual capital spending has increased significantly over the last decade and is forecasted to continue increasing:



(Source for 2016-2024 and Source for 2025)

8 Based on an estimated number of customers served by the top 10 utilities relative to the average total U.S. electricity customers, according to Edison Electric Institute.

9 Edison Electric Institute classifies all capital expenditures made in a calendar year as actual capital expenditures and the expected capital expenditures as the expected amount of functional capital expenditures made for a given calendar year. The projection is based on the most recent projection for that calendar year.

Top 10 Utilities with the Highest Proposed Capital Expenditures:

1. **Duke** | $102.8B
   (FL, IN, KY, NC, OH, SC)
2. **NextEra** | $94.2B
   (FL)
3. **Southern Company** | $81.2B
   (AL, GA, IL, MS, VA, TN)
4. **Pacific Gas & Electric** | $73.5
   (CA)
5. **American Electric Power** | $72.0B
   (AR, IN, KY, LA, MI, OH, OK, TN, TX, VA, WV)
6. **Sempra Energy** | $64.9B
   (CA, TX)
7. **Dominion** | $64.7B
   (NC, SC, VA)
8. **Xcel** | $60.0B
   (CO, MI, MN, ND, NM, SD, TX)
9. **Exelon** | $50.5B
   (DC, DE, IL, MD, NJ, PA)
10. **Entergy** | $43.5B
    (AR, LA, MS, TX)

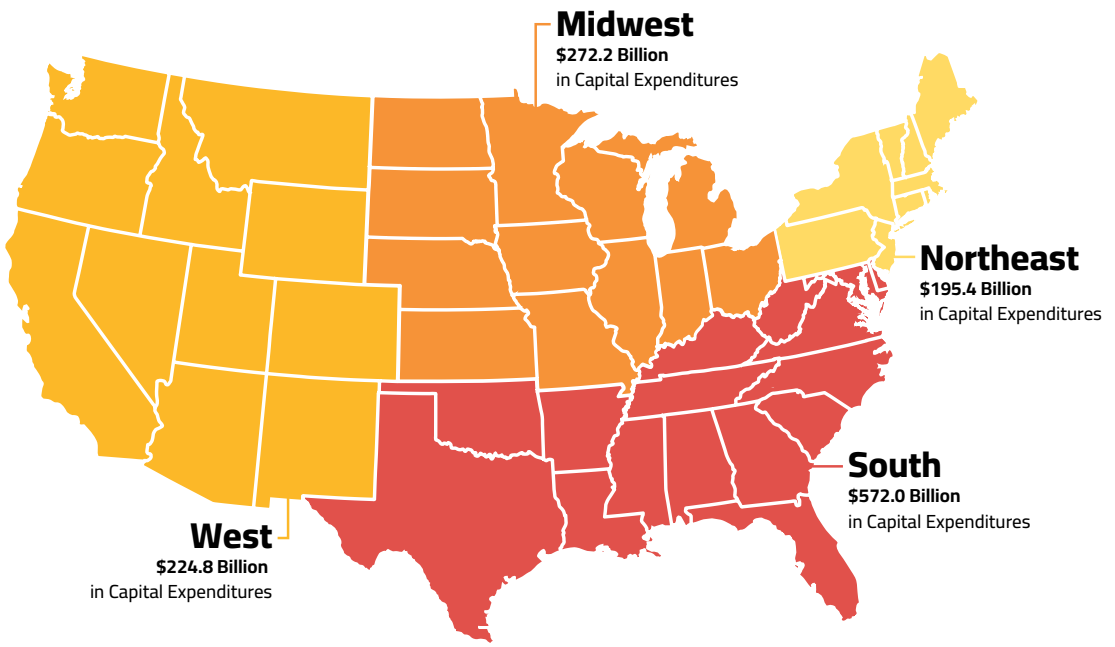
Individual sources can be found in **Appendix A.**

Regional Trends

Utilities in the South make up nearly half of total proposed capital spending, the greatest share of any region. More than half a trillion dollars will be invested into utility CapEx projects in the South, driven by large utilities' plans to meet rising demand across customer classes, as well as to protect their systems against increasingly severe storms. Of the ten largest CapEx plans, nine of them came from utilities with some investments in the South.

Projected CapEx will be substantial in other regions as well, with utilities in both the Midwest and West investing more than $200 billion to remedy a number of pressing issues, such as meeting rising electricity demand and fortifying the grid against the impacts of severe weather, including wildfires. Utilities are also investing heavily in modernizing aging grid infrastructure to bolster reliability and resilience. In the Northeast, utilities are projecting nearly $200 billion for a broad range of reasons, including replacing aging infrastructure and hardening their transmission and distribution systems.

Breakdown of Capital Spending by Region



*The sum of these will not equal the national total because there are some capital expenditures that will cross regional boundaries and five utilities did not report capital expenditures in a way that is conducive to regional analysis.

Individual sources can be found in **Appendix A.**

Methodology

PowerLines reviewed Q4 2025 utility earnings calls, releases, and presentations, as well as utility Securities and Exchange Commission (SEC) Form 10-K financial performance reports, to analyze how utilities across the U.S. are approaching their 2026-2030 CapEx plans.[10] For utilities that did not include an updated plan in that call, the most recent capital plan was included. These are the plans utilities are making for all capital spending over the time period between 2026 and 2030.[11] Those documents were compiled into a database to identify additional insights into how utilities are describing their spending plans in the context of growing energy demand and rising affordability concerns.

PowerLines also compiled data on past CapEx plans to compare against this year's plans. Previous plans captured proposed capital spending between 2025 and 2029, providing a useful reference point to contextualize this year's forward-looking capital spending estimates. These earnings calls tend to foreshadow upcoming and planned utility spending requests before their state regulators. These may be done through rate cases or other dockets where utilities can propose spending requests, such as integrated resource planning or integrated distribution system planning proceedings.

10 14 of the 51 utilities reported capital expenditure plans that were shorter than five years. For these utilities, PowerLines counted the total reported amount, even if it covered a time period fewer than five years. Since those amounts do not represent a full five-year time horizon, it is likely that the estimated spending of $1.4 trillion is an underestimate of utilities' planned five-year capital spending. The duration of the capital expenditure plans for each utility is noted in the appendix.

11 These numbers are representative of the plans for the entire holding company, not any of the specific subsidiary utilities.

CapEx and Ratemaking

Utilities in the U.S. must go through a ratemaking process with their state regulators, often referred to as public utilities commissions (PUCs) or public service commissions (PSCs), in order to recover their prudently incurred costs from customers. The intent of the ratemaking process is to ensure that utilities' spending, and the subsequent cost increases borne by customers, are "just and reasonable"—i.e., necessary to maintain reliable, cost-effective service.[12] This role is critical in the utility industry because investor-owned utilities are considered natural monopolies and are therefore not subject to full market competition.[12]

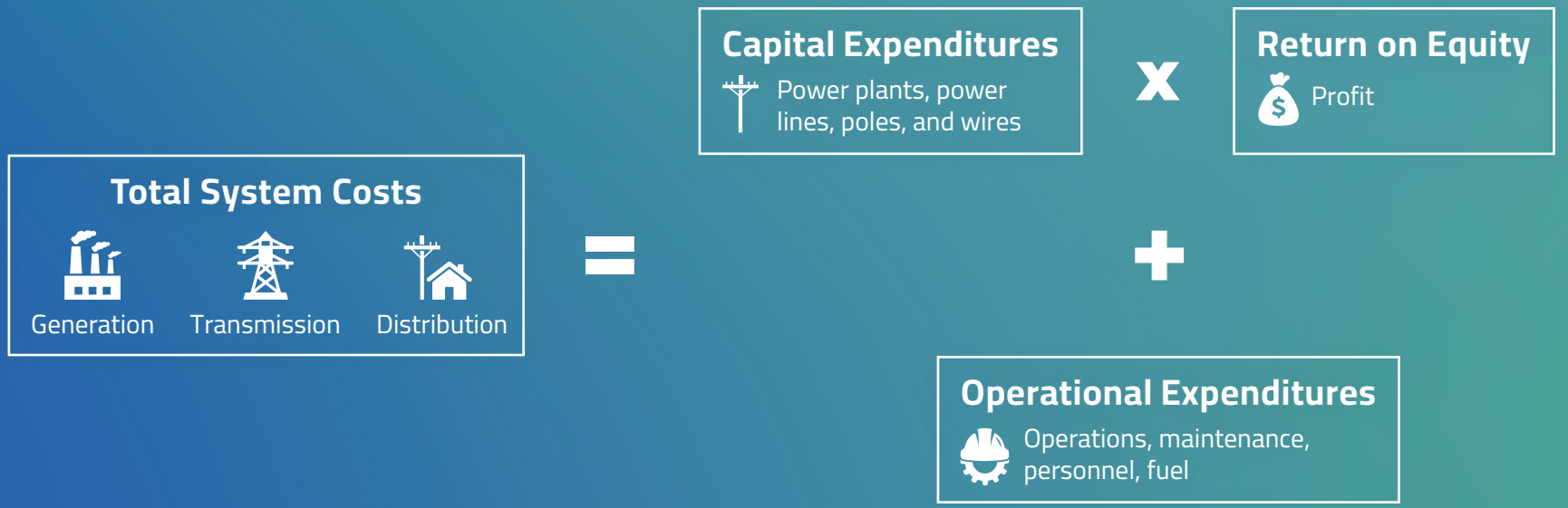
Under the regulatory process, utilities come to the PUC with proposed rates based on a number of factors including its revenue requirement, which is the amount of money the utility needs to recover in order to operate. These regulatory bodies ultimately determine how much utility costs are allowed to be recovered through customer rates.

Costs recovered from customers do more than just pay for the cost of service and operations: they also ensure utilities remain profitable by rewarding utility capital spending with a return on equity on top of the recovered money spent. This same financial incentive does not apply to most regular operational expenditures (OpEx), including fuel, purchased power, and other fixed operations and maintenance (O&M) costs. This means utilities are highly motivated to invest in projects that involve CapEx, because this is the primary form of spending from which they can profit.

12 www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_01

How do utilities earn a profit, and how does this structure shape their investment decisions?

Utilities generally earn a rate of return, which determines their profits, on capital expenditures but not operational expenditures. As a result, utilities tend to favor capital-intensive infrastructure investments over other types of investments, as these capital investments can yield greater financial returns for their shareholders than deployment of solutions that enhance operational efficiency, even when such solutions may lower utility bills. It is incumbent on state PUCs and consumer advocates to ensure that utility investments are sufficiently protecting the public interest and maximizing consumer benefits, despite these structural incentives.

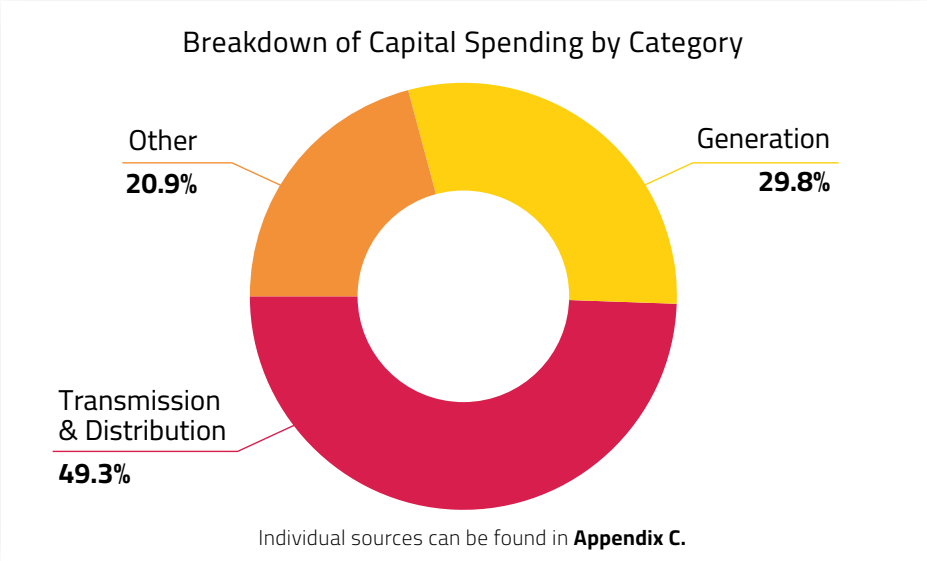


What is Driving **Utility CapEx Increases?**

Stated Reasons for Capital Expenditures by Utility

The majority of utilities directly cited data centers and load growth (32 of 51), as well as system resiliency and extreme weather mitigation (28 of 51), as top drivers of their CapEx plans in their earnings calls, according to PowerLines' review of investor earnings call transcripts. Replacing aging infrastructure (16 of 51) was also a top-cited reason behind utility CapEx plans. See Appendix B for a comprehensive tallying of these trends.

Utility spending is largely going to transmission and distribution grid infrastructure. Of the utilities that included a breakdown of capital expenditures by generation, transmission, and distribution (which account for about $1 trillion of the total proposed $1.4 trillion five-year capital expenditures), almost half of proposed spending was for the grid.



Individual sources can be found in **Appendix C.**

Transmission and distribution made up a plurality of disclosed expenditures, likely driven by efforts to harden utility systems against extreme weather, replace aging infrastructure, and incorporate new generation resources onto the grid. Notably, generation investments lagged relative to transmission and distribution infrastructure as growing supply chain constraints, permitting hurdles, and other barriers to building new generation persist. Other expenditures encompass a broad range of additional capital expenditures including corporate property improvements and non-specified investments into gas infrastructure.

Load Growth and Economic Development

As artificial intelligence becomes more widespread, data centers remain a huge driver of utility forecasted load growth across the country. According to PowerLines' analysis of utility earnings calls, 32 of the 51 utilities reviewed explicitly mentioned data centers as a driver of current or future growth projections, with nine utilities expecting to each see more than 5,000 megawatts of growth driven by new facilities. Several utilities cite rising demand for power and economic development within their footprint as key factors necessitating higher CapEx plans.

How rising electricity demand impacts electricity prices comes down to how utilities manage this rising electricity demand and how PUCs scrutinize utility spending.

While utilities may cite new customers, such as data centers, as justification for the significant buildout of capital-intensive infrastructure, it is not always the case that such capital spending is required in order to serve these customers. For one thing, load forecasts represent only predicted, not guaranteed, demand—and utilities risk overcharging consumers for unnecessary infrastructure if they build more than is needed. Furthermore, cheaper, more cost-effective solutions such as grid enhancing technologies, energy efficiency, and demand-side solutions—which often reduce the amount of capital spending needed to achieve similar performance—are not always fully considered or leveraged.

New electricity consumers such as data centers can actually apply downward pressure on rates by providing utilities more sources of revenue while spreading fixed costs over a larger customer base.

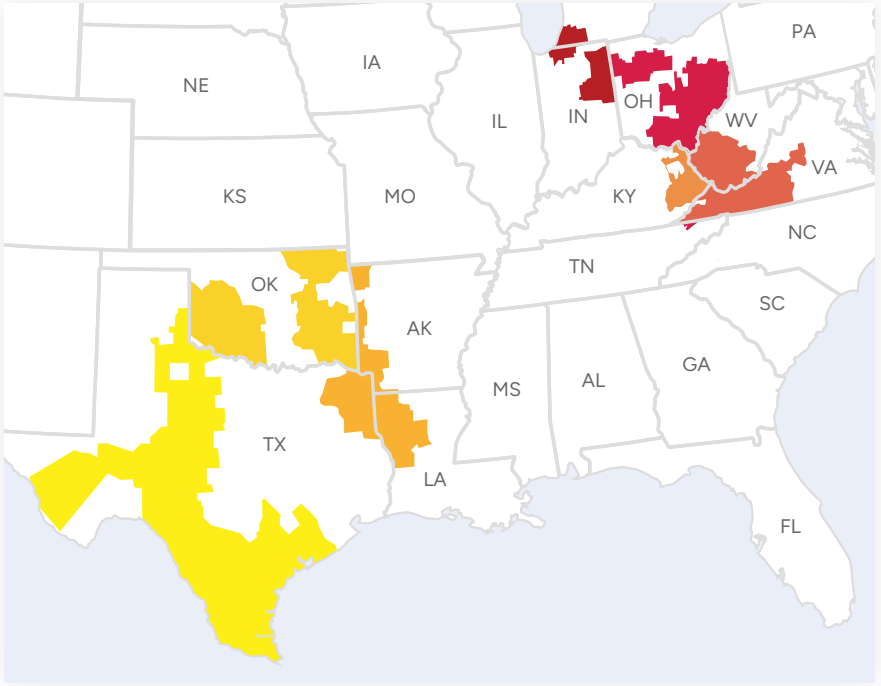
Through effective regulatory oversight of CapEx plans, PUCs can ensure that utilities leverage customers to spread costs over more users, thereby lowering per-unit electricity prices.

Eleven-state utility AEP is expecting the largest volume of load growth of any utility analyzed over the studied period. The utility doubled its load growth forecast in its last earnings call, updating its projected 28,000 megawatts of new demand by 2030 to 56,000 megawatts. The vast majority—88 percent—of new demand growth is driven by data centers, and the remaining 12 percent is driven by industrial customers. The utility's Texas territory—increasingly popular for data center development because of its abundant energy resources and relatively smooth interconnection process—is driving a significant amount of that growth at 36,000 megawatts, up from a previous projection of 13,000 megawatts. Its Ohio territory, meanwhile, is responsible for another 11,000 megawatts.

AEP is planning to spend $72 billion through 2030, with a heavy focus on building new infrastructure to meet rising demand growth. The plan includes $30 billion in transmission spending, $21 billion on generation assets, $17 billion on the distribution system, and another $4 billion in other investments. This massive spending plan is likely to increase even further, according to AEP, because it was developed based on the utility's original 28,000 megawatt projection of demand growth.

"As we continue to see new opportunities materialize across our service territory, the capital plan will continue to expand," AEP Executive Vice President and Chief Financial Officer Trevor Malik told investors on the company's Q4 2025 earnings call.

American Electric Power Coverage Map



(Source)

Minnesota-based Xcel Energy expects a 3 percent increase in retail electric sales across its eight-state footprint through 2031, requiring an additional 5,400 megawatts of new capacity—and the utility is expecting to double its contracted capacity for data centers from 3,000 megawatts to 6,000 megawatts by the end of 2027. CEO Bob Frenzel describes the utility's $60 billion capital plan as a "once-in-a-generation opportunity" to meet growing electrification and data center needs while generating economic growth.

System Reliability

Reliability also remains a key driver of CapEx plans, with several utilities focused on upgrading their aging transmission and distribution systems to maintain reliability. Like nearly all utility spending, reliability expenditures don't occur in a vacuum, with utilities citing aging infrastructure, increasingly volatile weather, and rising load growth as key factors necessitating new reliability investments.

Ohio-based FirstEnergy is planning to spend $36.2 billion in capital investments—an $8 billion or nearly 30 percent increase over its previous five-year plan. A central driver of the plan is transmission, making up $19 billion of the company's planned investments. The utility's Senior Vice President and Chief Financial Officer Jon Taylor told investors the plan is "100% … focused on improving customer reliability and resiliency of the system."

Southern California Edison (SCE) plans to spend roughly more than 85 percent of its capital investments on the utility's distribution system, which it cites as essential infrastructure to meet grid reliability and resilience.

System reliability is also at the center of New England utility Eversource's five-year CapEx plan, which calls for $27.8 billion in spending by 2030, a $3.6 billion increase over the utility's previous plan. Those investments are primarily focused on the utility's natural gas and electric distribution systems, driven by aging infrastructure

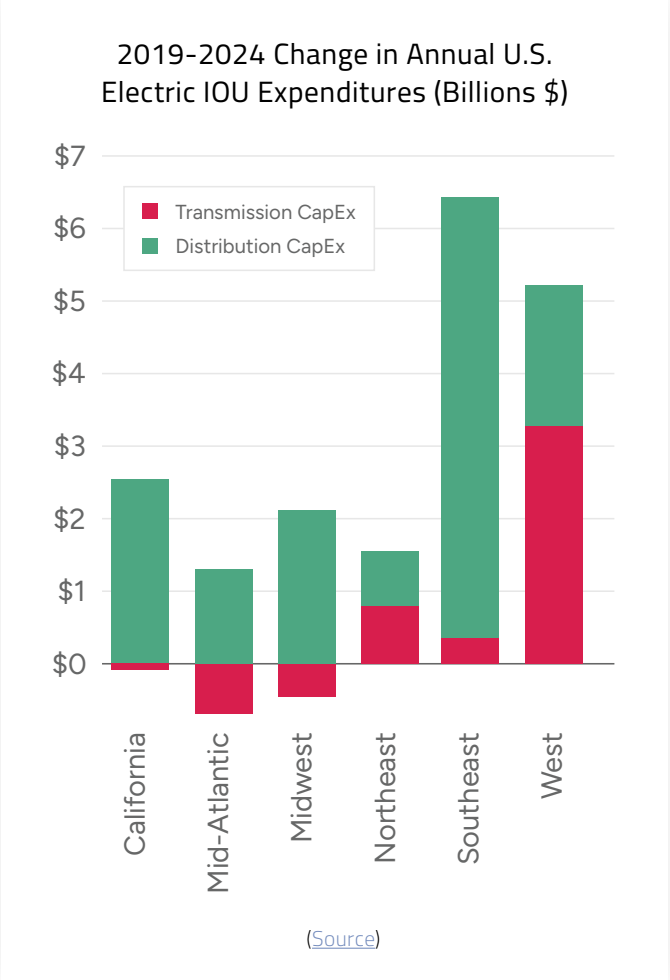
issues, compliance with state safety regulations, and undergrounding and modernization of cable programs aimed at increasing reliability.

Extreme Weather

Extreme weather is also a central driver of CapEx increases closely tied to system reliability. Particularly for utilities in regions vulnerable to wildfires or hurricanes, extreme weather is an increasingly relevant driver of CapEx increases as utilities ramp up spending to fix already-damaged infrastructure while hardening new and existing infrastructure.

Southeast utility Entergy ties its rising CapEx costs directly to "the increase over the past two decades in frequency and intensity of major storm activity along the Gulf Coast." The company's Louisiana subsidiary filed a 10-year, $5 billion plan focused entirely on resilience, including hardening its system and vegetation management, while its separate New Orleans subsidiary filed its own $1 billion plan to invest in storm-hardening over the next decade. CenterPoint Energy in Texas, meanwhile, plans to spend nearly $3.2 billion across its distribution system over the next four years following a series of catastrophic events in the utility's territory, including Hurricane Beryl and Winter Storm Uri.

Exelon, whose territory stretches from the Mid-Atlantic to Chicago, plans to spend $50.5 billion in CapEx between 2025 and 2029, representing a $3.3 billion or 9 percent increase over its previous four-year planning period. The vast majority of these planned



(Source)

Photo by: Ryan Christopher Jones

investments, 70 percent, are driven by transmission costs, which the utility says are needed to withstand increasingly volatile weather, while also meeting new load growth. In its 10-K filing, the utility says extreme weather risks are raising its capital and maintenance costs while reducing reliability, noting these risks will only be exacerbated by increasingly unpredictable weather.

Pennsylvania-based PPL Electric Utilities will spend $23 billion through 2029, which is expected to lead to an average rate base increase of 10.3 percent per year. PPL President and CEO Vince Sorgi told investors that extreme weather is increasingly necessitating larger investments in the grid's transmission and distribution system. About $3 billion of its increased spending will focus specifically on strengthening its grid against extreme weather and accelerating power restoration after storms hit.

The utility industry's first quarter transmission and distribution performance "is trending worse overall for the industry as a result of more frequent and severe storms as well as more extreme weather events," Sorgi said. "This is causing utilities across the country to increase their capital investment plans significantly to combat Mother Nature. And the same applies here at PPL."

Affordability **in Focus**

All 51 utilities analyzed mentioned affordability during their earnings calls. Several utilities committed to keeping bills below inflation or below the national average even as they aggressively ramp up spending. Whether these commitments materialize comes down to what utilities propose to their PUCs in subsequent rate cases and regulatory dockets and the decisions these regulatory bodies make in these proceedings.

"We always put affordability as the governor for our growth plans and our investments," said Joi Harris, president and CEO of DTE Energy. "And affordability remains top of mind for us, which is why, as we make these investments, we're trying to keep the bills as low as possible and deliver the reliability improvements."

At the same time, utilities acknowledged that affordability has become more politically relevant, and described difficult communications with state lawmakers, regulators, and the public around rising utility spending in particular.

"Our business model is hard to understand," said Pacific Gas and Electric CEO Patricia Poppe. "And it's hard for people to believe and see that you can raise profits and lower rates all at the same time."

At least one utility company, Algonquin Power, said growing affordability concerns may ultimately impact the utility's ability to raise rates. "Affordability is an absolute headwind regardless of what the actual price to value might actually be," said CEO Rod West. "The narrative around affordability is influencing our regulators' receptivity to additional rate recovery."

What is the relationship between utilities' investor materials and their regulatory filings?

The difference in information provided by utility executives to their investors during quarterly earnings calls versus that provided to their regulators can be pronounced. While utilities undoubtedly have an internal capital spending plan, which may be disseminated in full or in part to investors during quarterly earnings calls or on an ad hoc basis, whether this plan is filed publicly with the utility's state regulator on any regular cadence is often inconsistent across jurisdictions. In some instances, utilities may provide regulators with a copy of their five-year capital spending plan as an exhibit to a rate increase application; however, the five-year period covered by the plan may lapse before a new rate case is filed or undergo significant revisions in the interim. In other instances, the regulator may receive a preview or snapshot of a specific portion of the five-year capital spending plan in the context of a policymaking docket.

Ultimately, the number of jurisdictions requiring comprehensive distribution system planning in which this information would be regularly collected and screened remains low. Moreover, the information provided on earnings calls may ultimately prove inconsistent or difficult to reconcile with that submitted to regulators during cost recovery proceedings regarding the underlying capital spending. For example, while touted as a growth opportunity for investor purposes, justification for the same expenditure provided in the context of a rate case may instead lean more heavily toward a reliability or system hardening motive.

What Are Utilities **Blaming for Rate Increases?**

Macroeconomics

Utilities cite severe inflationary pressures, including rising costs of labor, equipment, and materials—alongside global supply chain constraints, tariff uncertainty, and high interest rates—as key contributors to rising operational and capital costs. Other utilities deflected some blame for the affordability crisis onto other industries entirely, in some cases downplaying the role of rising energy costs in the national debate.

"What we're seeing in the latest round of data is that Americans clearly are concerned about the cost of groceries, health care, housing and utilities in that order," said DTE's Harris. CMS' Rochow also cited data from Detroit News finding that Michigan voters are most concerned about grocery prices. "80 percent of Michigan residents said the issue with cost of living was groceries. It wasn't energy," he said.

And Duke CEO Harry Sideris cited other competing economic pressures as primary drivers of affordability concerns. "It's not just electricity prices that they have on their mind. It's really housing, health care, food prices," he said.

Notably, PowerLines polling has consistently shown energy costs remain top of mind for U.S. consumers. Polling from 2025 found that 3 out of 4 Americans were worried about their utility bills rising that year, while another 4 in 5 felt powerless to fight these rising costs.[13] A majority also reported utility bills adding to their financial stress.

13 powerlines.org/wp-content/uploads/2025/04/PowerLines_Utility-Bills-Are-Rising_2025-1.pdf

Aging Infrastructure

At least 16 utilities explicitly cite aging infrastructure, including direct replacement of old equipment and retiring power plants, as major drivers of their CapEx plans, according to PowerLines' analysis. Several utilities cite power equipment failures and potentially high capital costs of maintaining old power plants as necessitating immediate investments.

Missouri-based Ameren warned that reliability problems stemming from aging infrastructure could even impact the utility's ability to profit from its capital spending.

"Even when the system is properly maintained, its reliability may ultimately deteriorate and negatively affect our ability to serve our customers, which could result in increased costs subject to regulatory recovery risk," the utility wrote in its 10-K filing. State law requires the utility to maintain low frequency and duration of customer outages to meet performance standards. "Any failure to achieve these standards will result in a reduction in Ameren Illinois' allowed [return on equity] on electric distribution assets," the filing states.

FirstEnergy says 60 to 70 percent of its entire system will reach the end of its useful life over the next decade, requiring a "huge amount" of transmission investment. SCE has allocated 22 percent of its distribution grid capital investments—driving 28 percent of bundled rate growth—directly to "infrastructure replacement." And NorthWestern Energy, which serves territories across South Dakota, Montana, and Nebraska, said 70 percent of its CapEx plan, roughly $2.3 billion, is focused on transmission and distribution, with the primary aim "to reverse the trend in aging infrastructure" alongside maintaining reliability, safety, and adding capacity.

Extreme Weather

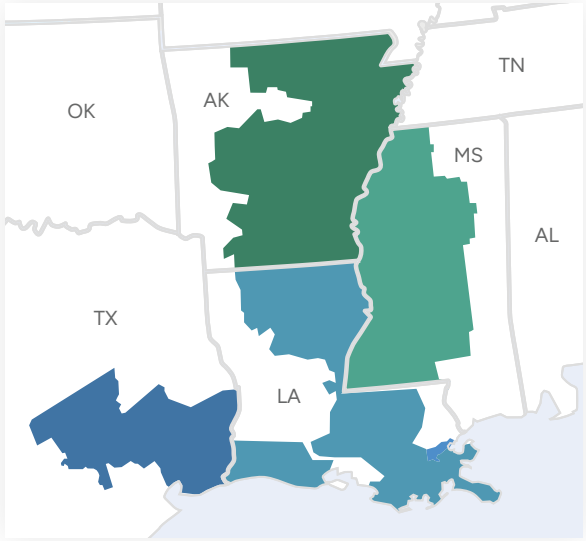
Several utilities cited massive investments needed to upgrade an aging power system and add more clean power to the system, while also hardening it for extreme weather events. Pacific Gas and Electric—which went bankrupt after its equipment sparked a series of deadly wildfires from 2017 to 2018—offered perhaps the most dire outlook on these rising pressures, even questioning whether it can sustain financial viability.

Photo by: Ariana vander Akker

The utility said in its 10-K filing that the utility "may be unable to manage its costs effectively" amid the need to balance a range of safety, policy, and operational priorities. Any savings it can find in its operational budget may have to be spent on "emerging priorities" including emergency response, low-income bill assistance, and wildfire mitigation.

On the other side of the country, Entergy cited 2026's Winter Storm Fern—the second deadliest winter storm since Texas's Winter Storm Uri—as an unexpected driver of new capital costs this year. The storm, which brought prolonged freezing temperatures, heavy ice accumulation, and strong winds, caused "severe damage" to Entergy's infrastructure. The utility estimates the total cost of mobilizing labor and restoring power to be roughly $460 million to $560 million, mostly across its Louisiana and Mississippi territories "with the majority of the costs being capital."

Entergy Coverage Map



Coverage area is approximate. (Source)

Photo by: Ryan Christopher Jones

Potential **Solutions**

Significant capital spending will undoubtedly be needed to address the mounting pressures facing the grid going forward. As evidenced by this report, investor-owned utilities are leaning heavily into capital spending to address these challenges. However, what remains uncertain is the amount of capital spending that is truly necessary and optimal for consumer benefit, particularly when lower-cost solutions that improve the efficiency of the grid but do not earn a financial return for utilities are often underutilized or overlooked.

Furthermore, limited transparency around utility spending makes it challenging for consumers to know definitively that the most cost-effective solutions were prioritized. A comprehensive and transparent accounting of utilities' consideration of these alternatives is missing in these investor-oriented materials. In regulatory filings, regulators must effectively scrutinize whether the spending utilities seek to undertake result in prudent expenditures that yield just and reasonable rates.

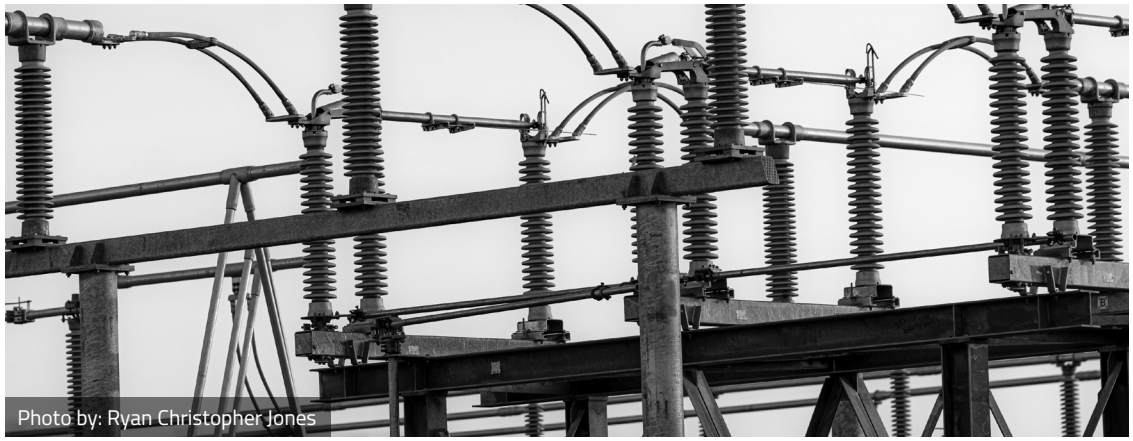


Photo by: Ryan Christopher Jones

To ensure that the amount of capital spending is optimal for consumers, experts have identified several potential solutions that state policymakers and regulators can adopt to address rising CapEx trends, including:

Reforming utility incentive structures and rate design to better incentivize utility performance and efficiency over capital spending.

Improving load forecasting to more accurately quantify the amount of new demand coming onto the system and ensuring customers are not paying for infrastructure that ultimately may not be fully utilized.

Ensuring effective regional grid planning, in line with the goals of FERC Order 1920, which calls for transmission owners to plan ahead for needed regional transmission to ensure new lines are built and paid for efficiently.

Resourcing state PUCs and consumer advocate offices appropriately to ensure effective consumer protection and regulatory oversight.

Reigning in "Construction Work in Progress" costs, which allow utilities to charge consumers for infrastructure projects that are not yet operational.

Reforming the nation's permitting and interconnection queue processes to ensure the infrastructure needed to connect electricity from generation resources to end-user customers can be built in a timely and cost-effective manner.

Addressing the growing backlog of critical grid equipment and components.

Modernizing integrated resource planning (IRP) processes to ensure integration of best practices.

Requiring greater transparency of capital spending on distribution system infrastructure.

Advancing solutions that improve grid efficiency by squeezing more power out of existing grid infrastructure, including grid-enhancing technologies and demand-side solutions.

Conclusion

The factors driving increased utility spending are no doubt complicated, and often closely intertwined, as volatile geopolitics, inflationary pressures, rising electricity demand, and extreme weather events disrupt supply chains and aging infrastructure. The pressures facing the grid are only becoming more intense and urgent.

Utilities understand that the growing affordability crisis is fueling energy affordability concerns across regulatory bodies, legislatures, and consumers. Many utilities remain concerned that there is only so far they can go to stop costs from spiraling out of control while still remaining profitable. They argue that without major capital investments in the power system, consumers risk paying for outdated, unreliable, and even dangerous energy infrastructure.

But policymakers and regulators have the power to address these concerns while protecting consumers. New strategies are emerging to help tamp down on growing affordability concerns, including increasing utilization of the existing grid, finding efficiencies in operational expenditures, and leveraging growing data center demand to lower costs for residential consumers by spreading fixed costs over more consumers.

It is incumbent upon state and federal regulators and lawmakers to ensure these critical solutions are enacted. Meanwhile, consumers of all kinds—from residential consumers to major commercial and industrial customers—have the power to engage with their state regulators and policymakers to ensure that their voices are heard. Through strategic engagement, consumers can elevate these issues and hold utilities, regulators, and policymakers accountable to maintaining an affordable and reliable grid.

Through strategic engagement, consumers can elevate these issues and hold utilities, regulators, and policymakers accountable to maintaining an affordable and reliable grid.

Photo by: Dustin Chambers

APPENDIX A

Five-year Capital Expenditure Plans by Utility

POWERLINES

Five-Year Capital Expenditure Plans by Utility

Utility	States	Amount ($B)	CapEx Plan Timeline	Source
American Electric Power	AR, IN, KY, LA, MI, OH, OK, TN, TX, VA, WV	72.0	2026-2030	American Electric Power
AES	IN, OH	6.4	2025-2027[1]	AES
Algonquin	AR, CA IA, IL, KS, MO, NH, OK	3.2	2026-2028	Algonquin
ALLETE	MN	5.0	2025-2029[2]	Utility Dive
Alliant	IA, WI	13.4	2026-2029	Alliant
Ameren	IL, MO	31.8	2026-2030	Ameren
Avangrid	CT, MA, ME NH, NY, RI, VT	18.5	2026-2028	Avangrid
Avista	ID, OR, WA	3.4	2026-2030	Avista
Berkshire Hathaway Energy	CA, IA, ID, NV, OR, UT, WA, WY	33.3	2026-2028	Berkshire Hathaway Energy
Black Hills	AR, CO, IA, KS, NE, MT, SD, WY	4.7	2026-2030	Black Hills
CenterPoint Energy	IN, MN, OH, TX	33.1	2026-2030	CenterPoint Energy
Chesapeake Utilities	DE, FL, MD, OH	1.6	2026-2030	Chesapeake Utilities
Cleco	LA	5.0	2026-2030	Cleco
CMS Energy	MI	24.1	2026-2030	CMS Energy

1 AES's most recent publicly available multi-year plan spanned 2025-2027.
2 Allete's most recent publicly available five-year plan spanned 2025-2029.

Five-Year Capital Expenditure Plans by Utility

Utility	States	Amount ($B)	CapEx Plan Timeline	Source
Consolidated Edison	NY	37.7	2026-2030	Consolidated Edison
Dominion	NC, SC, VA	64.7	2026-2030	Dominion
DTE	MI	36.5	2026-2030	DTE
Duke	FL, IN, KY, NC, OH, SC	102.8	2026-2030	Duke
Duquesne Light	PA	2.7	2026-2030	Duquesne Light
Edison International	CA	40.6	2026-2030	Edison International
El Paso Electric	NM, TX	3.5	2025-2029[3]	Fitch Ratings
Emera	FL	16.8	2026-2030	Emera
Entergy	AR, LA, MS, TX	43.5	2026-2029	Entergy
Evergy	KS, MO	21.6	2026-2030	Evergy
Eversource	CT, MA, NH	27.8	2026-2030	Eversource
Exelon	DC, DE, IL, MD, NJ, PA	50.5	2025-2029[4]	Exelon
FirstEnergy	MD, NJ, OH, PA, WV	36.2	2026-2030	FirstEnergy
Fortis	AZ, IA, IL, KS, MI, MN, MO, NY, OK, WI	18.0	2026-2030	Fortis
Hawaiian Electric Industries	HI	2.7	2025-2027[5]	Hawaiian Electric Industries

3 El Paso Electric's most recent publicly available plan spanned 2025-2029.
4 Exelon presented a four year plan in its earnings review. The most recent publicly available five-year plan spanned 2025-2029.
5 Hawaiian Electric's most recent publicly available plan spanned 2025-2027.

Five-Year Capital Expenditure Plans by Utility

Utility	States	Amount ($B)	CapEx Plan Timeline	Source
IDACORP	ID, OR	7.2	2026-2030	IDACORP
MGE Energy	WI	1.9	2026-2030	MGE Energy
MDU Resources Group	MT, ND, SD, WY	3.4	2026-2030	PR Newswire
National Grid	MA, NY	35.0	2026-2030	National Grid
NextEra	FL	94.2	2026-2030	NextEra
NiSource	IN, KY, MD, OH, PA, VA	28.4	2026-2030	NiSource
NorthWestern Energy	MT, NE, SD	3.2	2026-2030	NorthWestern Energy
Oklahoma Gas & Electric	AR, OK	7.3	2026-2030	Oklahoma Gas & Electric
Otter Tail	MN, ND, SD	1.9	2026-2030	Otter Tail
Pacific Gas & Electric	CA	73.5	2026-2030	Pacific Gas & Electric
Pinnacle West	AZ	10.4	2025-2028[6]	Pinnacle West
Portland General Electric	OR	7.6	2026-2030	Portland General Electric
PPL	KY, PA, RI	23.0	2026-2029	PPL
Public Service Enterprise Group	NJ, NY	25.5	2026-2030	Public Service Enterprise Group

6 Pinnacle West's most recent publicly available multi-year plan spanned four years, 2025-2028.

Five-Year Capital Expenditure Plans by Utility

Utility	States	Amount ($B)	CapEx Plan Timeline	Source
Puget Sound Energy	WA	14.5	2026-2030	Puget Sound Energy
Sempra Energy	CA, TX	64.9	2026-2030	Sempra
Southern Company	AL, GA, IL, MS, VA, TN	81.2	2026-2030	Southern Company
Texas-New Mexico Power	NM, TX	7.8	2025-2029[7]	Texas-New Mexico Power
UGI	PA	4.7	2026-2029	UGI
Unitil	MA, ME, NH	1.2	2026-2030	Unitil
WEC Energy	IL, MI, MN, WI	37.5	2026-2030	WEC Energy
Xcel	CO, MI, MN, ND, NM, SD, TX	60.0	2026-2030	Xcel

7 TNMP's most recent publicly available five-year plan spanned 2025-2029.

APPENDIX B

Breakdown of Justifications
for Capital Spending by Utility

POWERLINES

Breakdown of Justifications for Capital Spending by Utility

Utility	Data centers and load growth	Replacing aging infrastructure	System resiliency and extreme weather mitigation
American Electric Power	✓		
AES	✓		
Algonquin			
ALLETE			
Alliant			
Ameren	✓	✓	✓
Avangrid			
Avista	✓		✓
Berkshire Hathaway Energy			
Black Hills	✓	✓	✓
CenterPoint Energy	✓	✓	✓
Chesapeake Utilities			
Cleco			
CMS Energy	✓		✓
Consolidated Edison			✓
Dominion	✓		✓

Breakdown of Justifications for Capital Spending by Utility

Utility	Data centers and load growth	Replacing aging infrastructure	System resiliency and extreme weather mitigation
DTE	✓	✓	✓
Duke	✓		✓
Duquesne Light			
Edison International	✓	✓	✓
El Paso Electric			
Emera			✓
Entergy	✓		✓
Evergy	✓		✓
Eversource	✓	✓	✓
Exelon	✓	✓	✓
FirstEnergy	✓	✓	✓
Fortis	✓		
Hawaiian Electric Industries			✓
IDACORP		✓	
MGE Energy			
MDU Resources Group	✓		

Breakdown of Justifications for Capital Spending by Utility

Utility	Data centers and load growth	Replacing aging infrastructure	System resiliency and extreme weather mitigation
National Grid		✓	
NextEra	✓		
NiSource	✓	✓	✓
NorthWestern Energy	✓	✓	
Oklahoma Gas & Electric	✓	✓	✓
Otter Tail	✓		
Pacific Gas & Electric	✓		✓
Pinnacle West	✓		✓
Portland General Electric	✓		✓
PPL	✓		✓
Public Service Enterprise Group	✓	✓	✓
Puget Sound Energy			
Sempra Energy	✓		
Southern Company	✓	✓	✓
Texas-New Mexico Power			
UGI			

Breakdown of Justifications for Capital Spending by Utility

Utility	Data centers and load growth	Replacing aging infrastructure	System resiliency and extreme weather mitigation
Unitil			✓
WEC Energy	✓	✓	✓
Xcel	✓		✓
Total # of Utilities	**32**	**16**	**28**

APPENDIX C

Breakdown of Capital Expenditures
by Functional Type

POWERLINES

Breakdown of Capital Expenditures by Functional Type

Utility	Spending on Generation ($B)	Spending on Transmission and Distribution ($B)	Spending on Generation (% of Total)	Spending on Transmission and Distribution (% of Total)
American Electric Power	21.0	36.0	29	50
Alliant	5.0	4.3	37	32
Ameren	14.5	15.4	46	48
Berkshire Hathaway Energy	4.9	15.8	15	47
CenterPoint Energy	0.1	20.8	0	63
Chesapeake Utilities	0.1	0.7	7	43
Cleco	2.8	2.1	56	41
CMS Energy	8.8	8.6	37	36
Dominion	25.9	29.1	40	45
DTE	15.0	11.0	41	30
Duke	50.8	39.6	49	39
Emera	6.2	4.7	37	28
Entergy	24.9	17.4	57	40
Evergy	11.5	8.8	53	41
Exelon	0.0[1]	46.7	0	93

1 Exelon does not own generation assets. Thus, it is not making any capital expenditures in generation.

Breakdown of Capital Expenditures by Functional Type

Utility	Spending on Generation ($B)	Spending on Transmission and Distribution ($B)	Spending on Generation (% of Total)	Spending on Transmission and Distribution (% of Total)
FirstEnergy	0.4	35.6	1	98
Fortis	0.6	10.6	3	59
IDACORP	0.9	1.1	12	15
NiSource	8.2	4.0	29	14
Oklahoma Gas & Electric	1.5	5.1	21	70
Otter Tail	0.6	1.1	34	59
Pacific Gas & Electric	3.0	58.0	4	79
Pinnacle West	2.3	4.4	22	43
Portland General Electric	0.9	5.1	11	67
PPL	5.7	15.1	25	66
Southern Company	22.0	20.0	27	25
Texas-New Mexico Power	0.7	6.9	9	88
WEC Energy	20.2	8.9	54	24
Xcel	23.5	29.2	39	49

The following utilities did not provide a full, publicly reported breakdown of generation, transmission, and distribution spending: AES, Algonquin, ALLETE, Avangrid, Avista, Black Hills, Consolidated Edison, Duquesne Light, Edison International, El Paso Electric, Eversource, Hawaiian Electric Industries, MGE Energy, MDU Resources Group, National Grid, NextEra, NorthWestern Energy, Public Service Enterprise Group, Puget Sound Energy, Sempra Energy, UGI, Unitil.

Photo by: Dustin Chambers