BEFORE THE

MISSOURI PUBLIC SERVICE COMMISSION

PART 4 OF 4

OF KEITH MAJORS

REBUTTAL SCHEDULE KM-r18

Evergy Metro, Inc., d/b/a Evergy Missouri Metro Case No. ER-2022-0129

Evergy Missouri West, Inc., d/b/a Evergy Missouri West Case No. ER-2022-0130

> Jefferson City, Missouri July 2022

RRA Regulatory Focus

Quarterly State Regulatory Evaluations March 10, 2022

RRA State Regulatory Evaluations — Energy

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Regulatory Research Associates, a group within S&P Global Commodity Insights, evaluates the regulatory climate for energy utilities in each of the jurisdictions within the 50 states and the District of Columbia, a total of 53 jurisdictions, on an ongoing basis. S&P Global Commodity Insights produces content for distribution on S&P Capital IQ Pro. In a recent review, RRA made changes to the ranking of the Kentucky and Railroad Commission of Texas.

For detailed data Access the RRA Evaluations Report Supplemental Data

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Executive Summary

Introduction

Developments in recent months have led Regulatory Research Associates, or RRA, to lower its regulatory ranking of Kentucky, indicating a higher degree of regulatory risk for investors than was previously the case in this jurisdiction. At the same time, RRA raised the ranking of Texas, as it pertains to gas local distribution companies that fall under the purview of the Railroad Commission of Texas, to recognize that recent developments indicate that this jurisdiction has become relatively more constructive previously from an investor viewpoint.

RRA evaluates the regulatory climate for energy utilities in each of the jurisdictions within the 50 states and the District of Columbia, a total of 53 jurisdictions, on an ongoing basis. The evaluations are assigned from an investor perspective and indicate the relative regulatory risk associated with the ownership of securities issued by each jurisdiction's energy utilities.

Each evaluation is based upon consideration of the numerous factors affecting the regulatory process, including gubernatorial involvement, legislation and court activity, and may be adjusted as events occur that cause RRA to modify its view of the regulatory risk for a given jurisdiction.

RRA also reviews evaluations as key rate case and other regulatory decisions are issued when updating Commission Profiles and publishing this quarterly comparative report. The issues considered are discussed in RRA Research Notes, Commission Profiles, Topical Special Reports and rate case analyses. RRA also considers information obtained from contacts with commission, company and government personnel in the course of its research. The final evaluation is an assessment of the probable level and quality of the earnings to be realized by the state's utilities as a result of regulatory, legislative and court actions.

About This Report

This report provides a discussion of recent changes in RRA's energy regulatory rankings, with details regarding the rationale for these changes. The report also identifies jurisdictions where there are ongoing proceedings or developing issues that have the potential to impact the relative regulatory risk for utilities operating within a given jurisdiction and by extension, the ranking of that jurisdiction. RRA also highlights broad-based trends and issues that have implications for utilities across jurisdictions. Finally, the report includes an overview of RRA's ranking methodology and the issues RRA examines in deriving the rankings.

Key Findings

- Regulation in Kentucky has become more restrictive in recent months than it was previously warranting a
 reduction in the ranking of that state.
- Texas regulation as it pertains to the gas local distribution companies is now seen as somewhat more constructive than average.
- RRA has identified 10 other jurisdictions that warrant enhanced scrutiny based on recent or upcoming developments.
- There are several trends/issues that have broad-reaching effects that will impact utilities across the U.S. in the coming months.
- The 2022 midterm elections could lead to changes in regulatory policy across a large swath of the U.S.

The Take

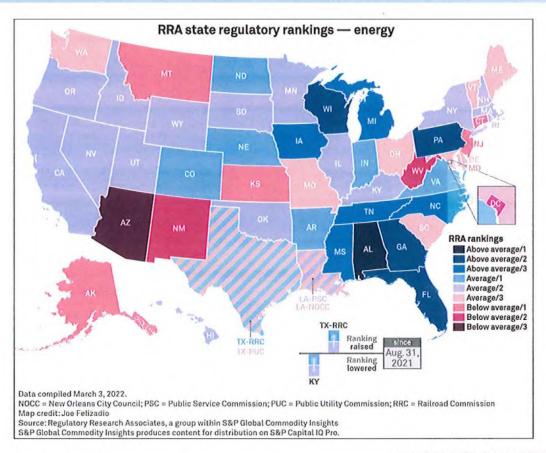
Developments in rate cases decided in Kentucky over the last year, which followed on the heels of changes in the composition of the Kentucky Public Service Commission, caused RRA to reconsider its ranking of that jurisdiction. Previously seen as somewhat more constructive than average from an investor viewpoint, RRA now views the regulatory climate in the state as balanced. Consequently, RRA lowered the ranking of Kentucky by one notch.

Conversely, based largely on how the legislators and regulators have allowed the gas local distribution companies to address excess gas commodity costs associated with the February 2021 winter weather event known as Winter Storm Uri, RRA raised the ranking of that jurisdiction by one grade. The jurisdiction was previously considered to be balanced from an investor viewpoint and RRA now views it as somewhat more constructive than average.

Several other states bear watching closely, as pending proceedings and/or legislation could lead to a change in RRA's assessment of the regulatory climate in those jurisdictions.

In addition, several overarching issues present challenges for utilities and regulators across the U.S. and warrant close observation. How regulators address these issues will be key to utilities' financial performance in the coming years. These include long-term concerns such as the ongoing energy transition and the potential for stranded costs, severe winter events, inflation and rising interest rates and COVID-19 related costs. In addition, the burgeoning conflict in Ukraine could have indirect implications for the energy utilities.

Gubernatorial elections will be held in 36 states in 2022. With increased emphasis on energy and energy transition issues observed in recent years, changes in the chief executive of the jurisdiction could have meaningful impacts on utility-related policymaking as well as bringing changes to the make-up of the regulatory bodies in jurisdictions where the chief executive selects the commissioners.



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Recent ranking changes

At this time, RRA is lowering the ranking of Kentucky regulation to Average/2 from Average/1, to account for the Kentucky Public Service Commission's recent pattern of modifying rate case settlements, specifically for a Duke Energy Corp. subsidiary in Kentucky, NiSource Inc. subsidiary Columbia Gas of Kentucky, Essential Utilities Inc. subsidiary Delta Natural Gas and PPL Corp. subsidiaries Louisville Gas and Electric and Kentucky Utilities. The PSC imposed modest reductions to the stipulated ROEs in several of these proceedings and for Columbia Gas, the commission rejected a settlement provision that called for inclusion of Aldyl-A materials in the company's pipe rider; the PSC also adopted certain other minor adjustments that were not included in the agreements. The commission's composition has changed meaningfully during the past year, and it is unclear whether the actions taken by the PSC in these cases are indicative of a sustained move toward a more restrictive regulatory climate. The proposed sale of American Electric Power's Kentucky Power electric utility to Algonquin Power and Utilities Corp. is pending before the commission and this matter will garner ample attention over the coming months.

RRA state regulatory evaluations

State-by-state listing — energy

Jurisdiction	Ranking	Jurisdiction	Ranking	Jurisdiction	Ranking
Alabama	Above Average/1	LouisianaNOCC	Average/3	Ohio	Average/3
Alaska	Below Average/1	Louisiana—PSC	Average/2	Oklahoma	Average/2
Arizona	Below Average/3	Maine	Average/3	Oregon	Average/2
Arkansas	Average/1	Maryland	Average/3	Pennsylvania	Above Average/2
California	Average/2	Massachusetts	Average/2	Rhode Island	Average/2
Colorado	Average/1	Michigan	Above Average/3	South Carolina	Average/3
Connecticut	Below Average/1	Minnesota	Average/2	South Dakota	Average/2
Delaware	Average/3	Mississippi	Above Average/3	Tennessee	Above Average/3
District of Columbia	Below Average/2	Missouri	Average/3	Texas—PUC	Average/3
Florida	Above Average/2	Montana	Below Average/1	TexasRRC*	Average/1
Georgia	Above Average/2	Nebraska	Average/1	Utah	Average/2
Hawaii	Average/2	Nevada	Average/2	Vermont	Average/3
ldaho	Average/2	New Hampshire	Average/2	Virginia	Average/1
Illinois	Average/2	New Jersey	Below Average/1	Washington	Average/3
Indiana	Average/1	New Mexico	Below Average/2	West Virginia	Below Average/2
lowa	Above Average/3	New York	Average/2	Wisconsin	Above Average/2
Kansas	Below Average/1	North Carolina	Above Average/3	Wyoming	Average/2
Kentucky**	Average/2	North Dakota	Average/1		

Data compiled as of March 3, 2022.

NOCC = New Orleans City Council; PSC = Public Service Commission; PUC = Public Utility Commission; RRC = Railroad Commission

* Ranking raised since Dec. 3, 2021

**Ranking lowered since December 3, 2021

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights

S&P Global Commodity Insights produces content for distribution on S&P Capital IQ Pro.

In recognition of the constructive treatment accorded extraordinary commodity costs incurred by the local gas distribution utilities during the February 2021 extreme weather event known as Winter Storm Uri, RRA is raising the ranking of the Railroad Commission of Texas, or RRC, jurisdiction to Average/1 from Average/2. In the wake of the 2021 storm, House Bill 1520 was enacted authorizing the RRC to allow the gas local distribution companies to securitize extraordinary gas commodity costs associated with natural or human-made disasters, system failures and other catastrophic events, for which the RRC has approved the creation of a regulatory asset. Generally, under securitization, the utilities would each establish a bankruptcy-remote special purpose entity to issue the bonds;

however, under the Texas law, the bonds are to be issued by the Texas Public Finance Authority, obviating the need for the creation of a special purpose entity and removing the deferred gas costs from the utilities' balance sheets. In November 2021, the RRC issued a regulatory asset determination order approving the issuance by the Texas Financing Authority of up to \$3.385 billion of bonds to securitize extraordinary gas supply costs incurred by 11 jurisdictional gas local distribution companies. The RRC issued a financing order on Feb. 8 approving issuance of the bonds in multiple tranches with terms of up to 30 years.

Jurisdictions to watch

In addition to the above-discussed ranking changes, there are several jurisdictions where ongoing trends could signal a shift in the level of regulatory risk for investors.

In RRA's view, the **California** regulatory climate bears continued watching in two respects. The probation judge overseeing Pacific Gas & Electric Co.'s five-year felony probation, which ended Jan. 25, called the company a "continuing menace" and suggested customer safety might better be served if the utility was broken up. Separately, the California Public Utilities Commission recently announced it would delay any decision on changes to solar net metering policy until further notice. The proposal would slash payments for solar power exported to the grid under the state's net energy metering program, impose new fixed charges and negate a previously agreed grandfathering policy.

In the **District of Columbia**, the PSC's approval of a first-of-its-kind multiyear rate plan for Potomac Electric Power Co., is still on appeal before the courts. In addition, several pending grid modernization-related proceedings also bear watching. At the same time, there is a vacancy on the commission resulting from the appointment to the Federal Energy Regulatory Commission of former chairman Willie Phillips.

The Florida regulatory climate bears watching as legislation, supported by Florida Power & Light Co., has been passed by the Florida Legislature that would reduce the incentives for the installation of rooftop solar by cutting the rate paid for excess power back to the utility, an arrangement known as net metering. The legislation, now awaiting the governor's signature, would authorize the Florida Public Service Commission to overhaul the state's net metering policy to include "fixed charges, including base facilities charges, electric grid access fees or monthly minimum bills to help ensure that the public utility recovers the fixed costs" of serving customers with rooftop solar.

Regulators in Louisiana recently resolved a proceeding for Entergy Corp.'s Louisiana subsidiary, approving recovery of more than \$3.3 billion of costs pertaining to several storms that impacted the utility in 2020 and 2021. However, proceedings are ongoing for other major Louisiana utilities. Similar proceedings are pending for the larger utilities in **Mississippi**, as well. RRA is monitoring these cases to gauge the response from the applicable regulatory bodies in these states. Notably, regulators in these two states have a track record of allowing the utilities to securitize costs associated with major storm restoration activities and have permitted certain utilities to establish storm reserves.

In **Pennsylvania**, ongoing tension between the Republican-controlled Senate and Gov. Tom Wolfe, a Democrat, bears watching. The Senate has opposed the governor's moves to implement energy transition-related initiatives, such as joining the Regional Greenhouse Gas Initiative, or RGGI, without enabling legislation. The Senate indicated in April 2021 that it would not act to confirm new appointees to the Pennsylvania Public Utility Commission until/unless the governor rescinds his directives. As a result, there are now two vacancies on the five-member commission, and another commissioner term expires in April 2022.

For the last year, the Public Utility Commission of Texas and lawmakers have been focused on changes to the structure of the electric power market within the Electric Reliability Council of Texas, or ERCOT, the makeup of the Public Utility Commission and ERCOT, and electric system reliability and resiliency issues in the wake of power outages and price spikes that occurred during a severe weather event in February 2021. RRA believes that the Texas climate continues to bear enhanced scrutiny due to the ongoing transition in PUC membership. In RRA's view, appointments made to replace the previous commission members who resigned, as well as those made to fill the new seats on the commission resulting from the expansion of PUC to five members from three, has created a body whose members are of unknown quantities and have no proven track record with respect to their current roles. There is still one vacancy that has yet to be filled. Also, it is unclear if or how the change in the number of commissioners will alter the way regulatory proceedings are conducted.

In RRA's view, the **Virginia** regulatory climate also bears watching. Under the leadership of former Gov. Ralph Northam, a Democrat, policymakers focused on renewables and alternative technologies. With the Nov. 2, 2021, general election, Virginia saw a change not only in the governor, but also in the governor's political party, as Republican Glenn Youngkin defeated Democrat Terry McAuliffe. In addition, Republicans gained control of the House of Delegates. Immediately upon taking office in January 2022, Youngkin issued an executive order that seeks to "re-evaluate Virginia's participation in the [RGGI] and immediately begin regulatory processes to end it." The order followed an opinion issued by Virginia Attorney General Mark Herring on Jan. 11, stating that the Virginia governor cannot, by executive order or another administrative remedy, withdraw Virginia from the RGGI. The outcome of the debate will impact the generation resource planning decisions of the vertically integrated utilities, which have already put plans in place to meet the requirements of the RGGI. Legislation was passed by the House that would roll back some of the energy transition initiatives implemented by the prior administration; however, the measure has not progressed in the Senate. In addition, recent political wrangling regarding the makeup of the commission and the governor's cabinet choices augments the politicization of the regulatory process and adds an incremental measure of risk.

The state of **Washington** also bears watching. Following legislation enacted in early May 2021, the Washington Utilities and Transportation Commission, or WUTC, opened a proceeding to investigate alternatives to traditional cost-of-service ratemaking that may include performance measures or goals, targets, performance incentives and

Above Average/1	Above Average/2	Above Average/3	Average/1	Average/2	Average/3	Below Average/1	Below Average/2	Below Average/3
Alabama	Florida	lowa	Arkansas	California	Delaware	Alaska	Dist. of Columbia	Arizona
	Georgia	Michigan	Colorado	Hawaii	Louisiana- NOCC	Connecticut	New Mexico	
	Pennsylvania	Mississippi	Indiana	Idaho	Maine	Kansas	West Virginia	
	Wisconsin	North Carolina	Nebraska	Illinois	Maryland	Montana		
		Tennessee	North Dakota	Kentucky	Missouri	New Jersey		
			Texas-RRC	Louisiana-PSC	Ohio			
			Virginia	Massachusetts	South Carolina			
				Minnesota	TexasPUC			
				Nevada	Vermont			
				New York	Washington			
				New Hampshire				
				Oklahoma				
				Oregon				
				Rhode Island				
				South Dakota				
				Utah				
				Wyoming				

RRA State Regulatory Evaluations — Energy*

(By category, states to watch highlighted)

Data compiled as of March 3, 2022.

NOCC = New Orleans City Council; PUC = Public Utility Commission; RRC = Railroad Commission *Within a given subcategory, states are listed in alphabetical order, not by relative ranking.

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights

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penalty mechanisms. The WUTC is to convene a workshop on March 17 to discuss Phase 1 of the proceeding, which will establish design principles, as well as regulatory goals and outcomes, and will identify performance metrics. At the end of Phase 1, the WUTC will issue a policy statement, anticipated by March 2023, before moving to Phase 2 in April 2023, which will establish utility-specific performance metrics and examine multiyear rate plan revenue adjustment mechanisms.

Issues to watch

At any given point in time, there may be broad industry issues or macroeconomic trends that can positively or negatively affect the level of risk facing utilities and impact their financial performance. This section discusses the issues that, in RRA's view, are currently top of mind for industry stakeholders.

Russian invasion of Ukraine

Russia's invasion of Ukraine and the ongoing conflict have certain indirect impacts for U.S. utilities and regulators. For the most part, the implications are generally in the category of increasing costs at a time when utility prices are trending upward due to other macroeconomic trends and industry-specific issues.

For the time being, the primary concern appears to be cybersecurity. In February, the U.S. Department of Homeland Security's Cybersecurity & Infrastructure Agency issued a "Shields Up" alert for all U.S. corporations. The industry has been working to beef up security as it pertains to incursions targeted at financial information. Still, certain experts have expressed concern that physical security may be another matter, explaining that larger vertically integrated utilities may be better prepared to withstand an attempted incursion while smaller competitive providers may not be.

Rising fuel costs are also a concern, as S&P Global Ratings has raised its 2022-2023 price assumptions for Henry Hub and AECO. The just-announced ban on Russian energy product imports could cause additional fuel price volatility for U.S. utilities and merchant providers. In addition, generation providers that own nuclear facilities have expressed concern that the U.S. economic sanctions on Russia may ultimately include a ban on uranium imports.

Finally, supply chain disruptions, which have been creating challenges for utilities during the COVID-19 pandemic, are expected to intensify as the conflict wares on causing uncertainty regarding the prices of metals that are inputs for electronic devices, solar panels, smart grid components and steel production.

Inflation and interest rates

From a macroeconomic standpoint, the introduction of inflation for the first time in decades, coupled with the very real prospect for rising interest rates, will also drive increasing rate case activity and, in all likelihood, increases in rates.

Rising interest rates would seem to imply that authorized ROEs, which have been on a downward trajectory for the last four decades, will begin to rise. However, this may not be the case.

The authorized return on equity is one of the most highly contested and subjective issues addressed in a rate case.

What is the regulatory compact?

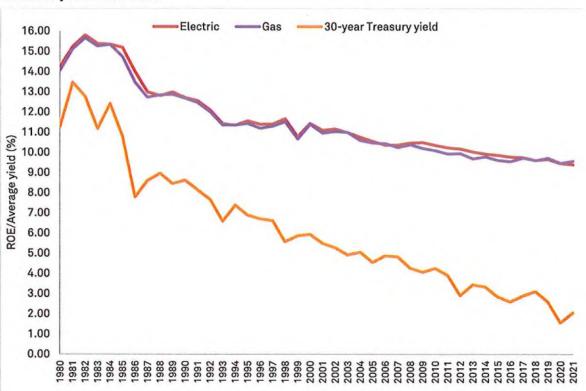
Derives from the "Takings Clause" of the Fifth Amendment to the U.S. Constitution.

The utility is granted a monopoly to provide service in a specific geographic area in exchange for being regulated by a government agency.

The utility agrees to provide safe, reliable service at just and reasonable rates, to all customers in the service area, while the regulator agrees to provide the utility an opportunity to earn a fair return for its investors. While the "regulatory compact" that is the guiding principle calls for regulators to provide the utilities with the opportunity to earn a "fair" return for investors, "fair" is in the eye of the beholder. Even so, regulators generally have a great deal of latitude when determining the fair ROE.

While there are well-known formulas that are commonly used to establish the authorized ROE, such as the discounted cash flow, risk premium and capital asset pricing models, these formulas require subjective judgments with respect to risk, expected growth and what exactly it is investors require to ensure adequate access to capital.

Historically, authorized ROEs have generally followed the direction of interest rates, but there is often a lag because of the amount of time it takes to prepare, file and complete rate cases because regulators often adhere to a concept of gradualism that smooths out the changes, and because of subjective judgement, which is often influenced by macroeconomic factors.



Average authorized ROE in the US/30-year Treasury bond yields Calendar years 1980-2021

Data compiled as of March 3, 2022.

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights

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The average return on equity authorized for electric utilities continued to fall in 2021, reaching an all-time low of 9.38% versus the 9.44% average for cases decided in 2020.

The average ROE authorized for gas utilities was 9.56% for cases decided during 2021, up slightly from the 9.46% observed in 2020 but still near historical lows.

The 2020 and 2021 calendar-year results reflect the impact of interest rate cuts by the U.S. Federal Reserve and the regulatory reaction to the COVID-19 pandemic-induced recession.

Amid increasing concerns over inflation, the U.S Federal Reserve is expected to unwind its monetary policy, causing increases in interest rates. All else being equal, the expectation would be that ROEs would begin to rise once these increases are factored in to rate case outcomes.

However, with aggressive capital spending, energy transitions costs, stranded costs, COVID-19 cost recovery and general inflation placing upward pressure on rates, regulators may be reluctant to approve higher ROEs, particularly in light of economic uncertainty for ratepayers due to the ongoing pandemic.

The last time the industry faced rising inflation and interest rates during a period of aggressive capital spending was in the early 1980s. At that time, the spread between the average authorized ROEs documented by RRA and treasury yields was about 450 basis points. By 2010, the spread had widened to roughly 600 basis points, and continued to expand, reaching close to 800 basis points in 2020.

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In 2021, the spread narrowed a bit to around 750 basis points. Using history as a guide, it appears likely that as interest rates continue to rise, the spread will narrow further. While this may not lead to a continued decline in authorized ROEs, authorized ROEs may well remain flat or rise at a significantly more modest rate than interest rates.

Energy transition-related stranded costs

The pace and scope of the energy transition will continue to impact regulated utilities. For the time being, without a federal policy that lays out a clear path, these issues will continue to be addressed mainly at the state level.

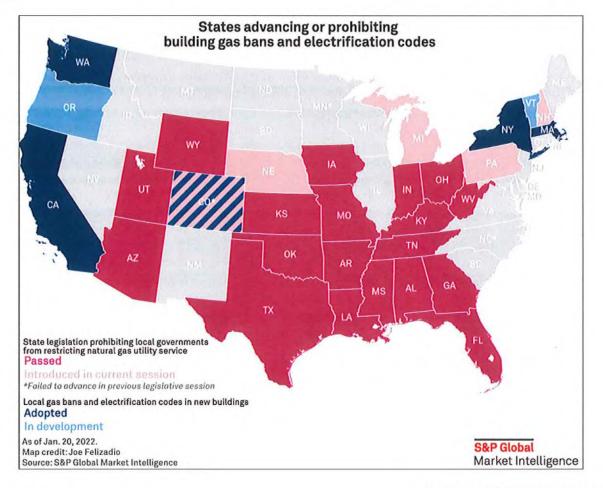
The transition continues to raise the prospect for stranded costs across various segments of the electric and gas industries.

In the early stages of the transition, targeted emissions declines were achieved primarily by substituting coal generation with natural gas generation, leading to "stranded costs" when coal plants are retired prior to the end of their useful lives. As state renewable energy and carbon emission reduction requirements have expanded, coal plants that had been retrofitted to reduce emissions and natural gas facilities face the risk of becoming stranded.

In addition to increasing demand for nontraditional resources, changing market dynamics are impacting nonemitting legacy baseload nuclear facilities. Falling competitive power market prices, largely the result of lower gas prices brought on by the shale gas boom and the switch to lower-cost, more flexible, gas-fired resources, are rendering both coal and nuclear plants uneconomic or unprofitable.

Shifts in the location of the resource mix due to the penetration of renewables are changing transmission needs and could ultimately lead to stranded investments in these assets.

Decentralized configurations, such as distributed generation and microgrids, present potential threats to the utilities' ability to recover fixed distribution system assets and may lead to stranded costs in this segment of the industry.



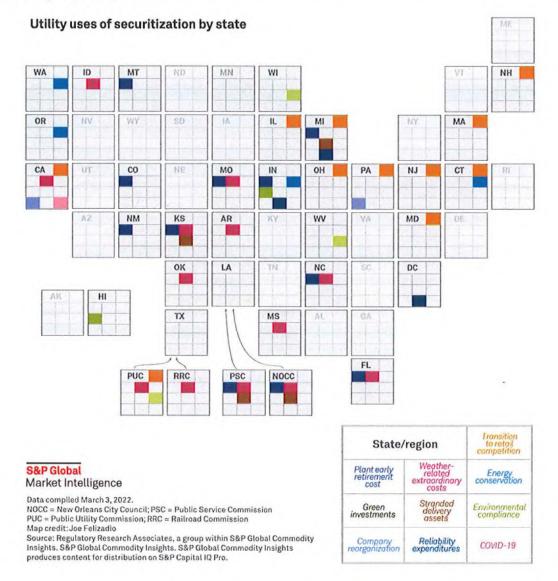
The push to implement advanced metering infrastructure to accommodate new resources and market frameworks has in some instances led to stranded costs in the form of legacy meters that were not fully depreciated or will not yet be when replaced.

While gas utilities contend that integration of the gas and electric system is key to the ongoing energy transition, and many are pursuing technologies that reduce or eliminate natural gas' carbon footprint, over the last couple of years, there have been localized initiatives to ban natural gas in new buildings within certain states, indicating that natural gas local distribution companies could begin facing stranded investments as well.

For regulated utilities, addressing stranded costs falls to regulators, and it is generally agreed that under the "regulatory compact," the utility should be able to recover the assets that have become stranded because of a change in public policy that occurred after the assets were constructed and in operation.

State regulators and policymakers are using various options to address the stranded cost plant balances. The use of accelerated depreciation, creation of regulatory assets, offsetting stranded assets with existing regulatory liabilities and securitization are among the strategies being employed.

According to data gathered by RRA, statutes in 11 jurisdictions allow the commissions to use securitization to address plant early retirement costs.



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Storm cost recovery

Another issue arising with increasing frequency across the sector is the treatment to be accorded extraordinary storm-related costs.

As noted in the "States to watch" section above, regulators in a few states have ongoing proceedings in place related to the recovery of extraordinary costs associated with recent storms.

From a broader perspective, most utilities have provisions in their base rates for "normalized" storm costs; these are generally estimates based on historical averages for varying time frames. However, in recent years, the instances where actual storm-related costs have significantly exceeded the baselines reflected in rates have become more numerous.

Certain states have allowed utilities to include in rates an incremental amount to fund a storm reserve that the utilities can then tap for costs that exceed the baseline levels.

In others, the utilities — through either incident-specific accounting orders or routine commission policy — are permitted to defer "extraordinary" storm costs for future recovery. Recovery is generally addressed in rate cases and is usually authorized over a relatively short period — five to seven years. The utilities are usually permitted to earn a return on the unamortized balance.

In cases where the amounts to be recovered are particularly large, the utilities may be permitted to use securitization to finance the deferred balances and even to replenish the storm cost reserve.

States like Florida, Louisiana, Mississippi and Texas as it pertains to electric utilities have had legislation in place for many years that allows the utilities to use securitization to finance storm-related deferrals. But in the wake of recent major storms, legislatures in Kansas, North Carolina, Missouri, Oklahoma and Texas have enacted new statutes introducing or expanding the use of this financing tool.

Coronavirus/COVID-19

With utility disconnection moratoriums implemented in the wake of the COVID-19 pandemic coming to an end for most, if not all, customers in most states, issues related to the recovery of the related costs are beginning to be addressed in rate cases.

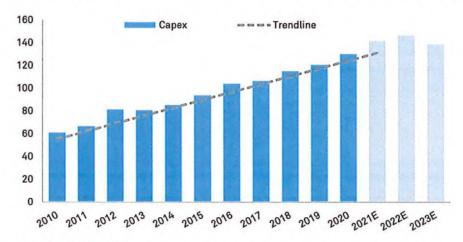
Thus far, recovery has not been particularly contentious. So far, commissions have generally allowed recovery of any related deferrals to occur for a few years, with varying treatment with respect to allowing a return on the unamortized balance. However, in some instances, regulators require the companies to continue to defer some, if not all, of their COVID-19-related costs.

As of March 3, utility shut-off moratoriums had expired for all customers in 52 of the 53 statelevel jurisdictions followed by RRA. In North Carolina, the mandatory moratorium has expired, but Duke Energy Corp.'s operating companies have voluntarily extended the moratorium through March 31, 2022.

It is important to note that these moratoriums are separate from the seasonal moratoriums employed by many states.

Like energy transition stranded costs and extraordinary storm costs, recovery of COVID-19-related deferred costs is putting upward pressure on rates at a time when regulators are grappling with providing utilities rate recognition for robust utility capital spending plans.

Energy utility actual and estimated capital expenditures (\$B)



Compiled Nov. 18, 2021.

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights S&P Global Commodity Insights produces content of distibution on S&P Capital IQ Pro.

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As of late 2021, capital spending for the 47 major investor-owned utility holding companies in RRA's coverage universe was expected to aggregate to \$427 billion over the years 2021 through 2023.

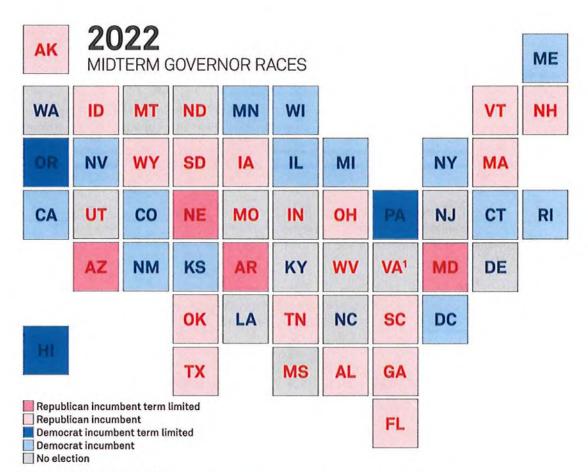
Planned spending for 2021 was expected to exceed \$141 billion, almost a 9% increase versus actual 2020 spending and more than double 2010 spending of \$61 billion.

Estimates for 2022 are even higher than 2021 at \$147 billion. This varies from our experience with these forecasts, as RRA has generally observed a slight decline in the two latter years of the rolling three-year periods we analyze. RRA believes this anomaly is occurring because utilities scaled back previous plans for 2020 and 2021 due to the COVID-19 pandemic.

These factors will continue to challenge utility cash flow metrics and place additional upward pressure on rates at a time when utilities and regulators are struggling to moderate impacts on customers in an uncertain economy. Coupled with inflation, these considerations will continue to put downward pressure on authorized ROEs at a time when it could be argued that industry risk is on the rise.

2022 elections

The 2022 midterm elections will include 36 gubernatorial elections, a mayoral election in the District of Columbia and 16 utility commissioner elections across 10 states. In seven of the gubernatorial races, the incumbent is ineligible to seek reelection due to term limits.



Data compiled as of Dec. 5, 2021.

Red font represents Republican governor states; blue font represents Democrat governor states. Republican Glenn Youngkin was elected governor during the 2021 General Election.

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights S&P Global Commodity Insights produces content for distribution on S&P Capital IQ Pro.

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In 28 of the 37 jurisdictions, including the District of Columbia, the chief executive of the jurisdiction appoints the commissioners who serve on the state's utility regulatory bodies. Additionally, in 21 of the 28 jurisdictions, the chief executive of the jurisdiction appoints the chairman of their respective regulatory body.

RRA's rankings process

RRA State Regulatory Evaluations* Energy

Above Average 1	Average 1	Below Average 1
Alabama	Arkansas	Alaska
	Colorado	Connecticut
	Indiana	Kansas
	Nebraska	Montana
	North Dakota	New Jarsey
	Texas—RRC	
	Virginia	
Above Average 2	Average 2	Below Average 2
Florida	California	Dist. of Columbia
Georgia	Hawaii	New Mexico
Pennsylvania	Idaho	West Virginia
Wisconsin	Illinois	
	Kentucky	
	Louisiana-PSC	
	Massachusetts	
	Minnesota	
	Nevada	
	New York	
	New Hampshire	
	Oklahoma	
	Oregon	
	Rhode Island	
	South Dakota	
	Utah	
	Wyoming	
Above Average 3	Average 3	Below Average 3
lowa	Delaware	Arizona
Michigan	Louisiana-NOCC	
Mississippi	Maine	
North Carolina	Maryland	
Tennessee	Missouri	
	Ohio	
	South Carolina	
	TexasPUC	
	Vermont	
	Washington	

NOCC = New Orleans City Council; PSC = Public Service Commission; PUC = Public Utility Commission; BRC = Railcoad Commission

*Within a given subcategory, states are listed in alphabetical

order, not by relative ranking. Source: Regulatory Research Associates, a group within S&P

Global Commodity Insights

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RRA maintains three principal rating categories, Above Average, Average and Below Average, with Above Average indicating a relatively more constructive, lower-risk regulatory environment from an investor viewpoint and Below Average indicating a less constructive, higherrisk regulatory climate.

Within each principal rating categories, the numbers 1, 2 and 3 indicate relative position.

The designation 1 indicates a stronger or more constructive rating from an investor viewpoint; 2, a midrange rating; and 3, a less constructive rating.

Hence, if you were to assign numeric values to each of the nine resulting categories, with a "1" being the most constructive from an investor viewpoint and a "9" being the least constructive from an investor viewpoint, then Above Average/1 would be a "1" and Below Average/3 would be a "9."

Methodology

While numerical scores are employed, the rankings are subjective and are intended to be comparative in nature.

The rankings are designed to reflect the interest of both equity and fixed-income investors across more than 30+ individual metrics. The individual scores are assigned based on the covering analysts' subjective judgement.

The scores are then aggregated to create a single score for each state, with certain categories weighted more heavily than others.

The states are then ranked from lowest to highest and distributed among the nine categories to create an approximate normal distribution.

This distribution is then reviewed by the team, and individual state rankings may be adjusted based on the covering analysts' recommendations, subject to review by a designated panel of senior analysts.

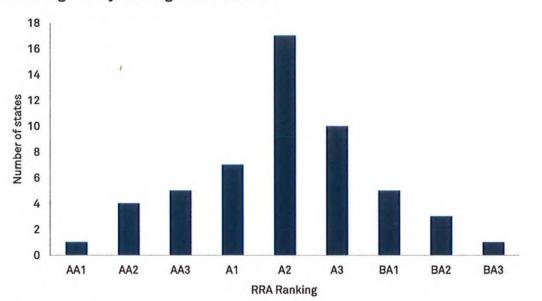
The variables that RRA considers in determining each state's ranking are largely the broad issues detailed in Commission Profiles and those that arise in the context of rate cases, generic policy proceedings, legislation and gubernatorial directives. RRA's articles and reports on these issues are accessible through the S&P Capital IQ Pro platform, as are the aforementioned jurisdictional commission profiles and RRA's database of major investor-owned utility rate case decisions going back to 1980.

As implied by the above discussion, the rankings not only reflect the decisions rendered by the state regulatory commission, but also reflect the impact of the actions taken by the governor, the legislature, the courts and consumer advocacy groups. The policies

examined pertain largely to rate cases and the ratemaking process, but issues such as industry restructuring, corporate governance, treatment of proposed mergers and the ongoing energy transition are also considered.

In the charts within this report that depict the rankings by category, the jurisdictions in each category are listed in alphabetical order rather than by relative position within the category.

Since the rankings are meant to be comparative in nature, RRA endeavors to maintain an approximately "normal" distribution with the majority of the ranking in the three average categories and the remainder split roughly evenly between the Above Average and Below Average categories.



State regulatory rankings distribution*

Data compiled as of March 3, 2022.

* Graph is based on rankings of regulatory climate for energy utilities only.

AA = Above Average; A = Average; BA = Below Average

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights

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Overview of issues examined

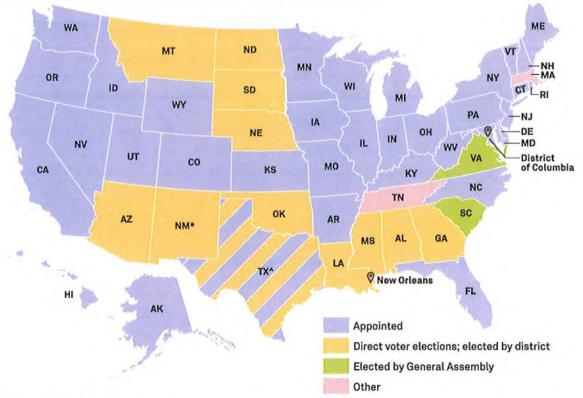
The summaries below provide an overview of the variables RRA looks at, including a brief discussion of how each can impact the ranking of a given regulatory environment.

Governor/Mayor — The impact the governor, or in the District of Columbia the mayor, may have depends largely on the individual; the issue of elected versus appointed commissioners is evaluated separately.

RRA takes no view on which political party is the more or less constructive option. However, attributes of the governor or the gubernatorial election process that can move the needle here are: whether energy issues were a topic of debate in recent elections and what the tone/topic of the debate was, whether the governor seeks to become involved in the regulatory process, and the type of influence the governor is seeking to exert.

Commissioner selection process/membership — RRA looks at how commissioners are selected in each state. All else being equal, RRA attributes a greater level of investor risk to states in which commissioners are elected rather than appointed. Generally, energy regulatory issues are less politicized when they are not subject to debate in the context of an election.

Realistically, a commissioner candidate who indicates support for the utilities and their shareholders or appears to be amenable to rate increases is not likely to be popular with the voting public. In addition, there might not be specific experience requirements to run for commissioner, so, a newly elected candidate may have a steeper learning curve with respect to utility regulatory and financial issues, which could make discerning what decisions that individual might make more difficult and could increase uncertainty.



Commissioner selection methods in the US

Data as of March 3, 2022.

* Beginning in 2023, members of the New Mexico Public Regulation Commission will be appointed by the governor.

^ The Public Utility Commission of Texas members are appointed by the governor, while members of the Railroad Commission of Texas are elected in statewide elections.

Map credit: Augusto Justiniano Jr.

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights.

However, there have been some notable instances in which energy issues played a key role in gubernatorial/ senatorial elections in states where commissioners are appointed, with detrimental consequences for the utilities, e.g., Illinois, Florida, Maryland and more recently New York, all of which were downgraded by RRA at the time in order to reflect the increased risk associated with increased political scrutiny of the regulatory process and policies within the jurisdiction.

In addition, RRA looks at the commissioners themselves and their backgrounds. Experience in economics and finance and/or energy issues is generally seen as a positive sign. Previous employment by the commission or a consumer advocacy group is sometimes viewed as a negative indicator.

In some instances, new commissioners have very little experience or exposure to utility issues, and in some respects, these individuals represent the highest level of risk, simply because there is no way to foresee what they will do or how long it will take them to "get up to speed." Controversy or "scandal" surrounding an individual and/or the potential for a conflict of interest are also red flags.

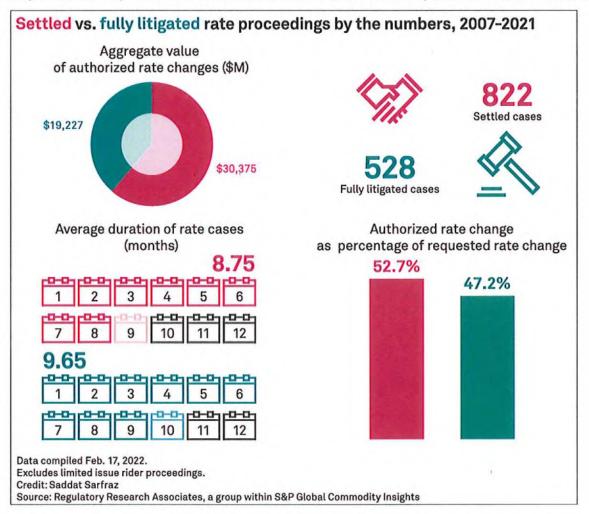
Similarly, a high rate of turnover or the tendency to allow vacancies to stand unfilled for a long period of time add to the level of regulatory risk in RRA's view.

Commission staff/consumer interest — Most commissions have a staff that participates in rate proceedings. In some jurisdictions, the staff has a responsibility to represent the consumer interest and in others, the staff's statutory role is less defined. In addition, there may or may not be additional state-level organizations that are charged with representing the interests of a certain class or classes of customers, such as the Attorney General or the Consumer Advocate; private consortia or lobbying groups that represent certain customer groups; and/or large-volume commercial and industrial customers that intervene directly in rate cases.

Generally speaking, the greater the number of consumer intervenors, the greater the level of uncertainty for investors. The level of risk for investors also depends on the caliber and influence of the intervening parties and the level of contentiousness in the rate case process. Even though a commission may not adopt an extreme position taken by an intervenor, the inclusion of an extreme position in the record for the case widens the range of possible outcomes, reducing certainty and increasing the risk of a negative outcome for investors. RRA's opinion on these issues is largely based on experience and observations.

Settlements — In increasing number of cases in recent years have been resolved by settlements. Rather than through a fully litigated process. There are often clear incentives for utilities and entities with vested interests in the sector to embrace compromise. Utilities often obtain settlement benefits in the form of key utility policy objectives and more timely and favorable rate case outcomes than would otherwise be achievable.

In some instances the settlement sets out all of the typical rate case parameters, such as rate of return and rate base, but many are resolved by "black-box" settlements, which are filed when the parties are able to settle all, or



nearly all, of their differences in the proceeding, but none of the parties wants to disclose the final outcome on a given issue because they want to avoid establishing a precedent. Or during settlement discussions each party may have contemplated a certain revenue change amount as acceptable and may have performed calculations regarding the rate base and rate-of-return parameters behind their revenue requirement positions. However, different values for these parameters could be used in varying combinations to determine the same revenue requirement.

In most instances, the ability of the parties to reach agreement without having to go through a fully litigated proceeding is considered constructive, particularly since it reduces the likelihood of court review after the fact. However, RRA also endeavors to ascertain whether the settlements arise because of a truly collaborative approach among the parties, or if they result from concern by the companies that the commissioners' views may be even less favorable than the intervenors', or that the intervenors will take a much more extreme position in a litigated framework than in a closed-door settlement negotiation, resulting in a less constructive outcome.

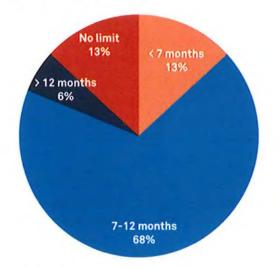
In some instances, the parties may agree on only certain issues and will execute a partial settlement on those issues, while the remaining issues in the case will be litigated. In the years 2007 through 2021, RRA tracked 1,350 electric and gas utility base rate cases across the U.S. Of these proceedings, 822 were deemed to be "settled" — indicating that issues accounting for the bulk of the revenue requirements in these cases were ultimately settled

Rate case timing — For each state commission, RRA considers whether there is a set time frame within which a rate case must be decided, the length of any such statutory time frame and the degree to which the commission adheres to that time frame.

Generally speaking, RRA views a set time frame as preferable, as it provides a degree of certainty as to when any new revenue may begin to be collected.

About two-thirds of state commissions nationwide have a rule or statute that requires a rate case to be decided within seven to 12 months of filing.

Rate case time frame



Data compiled as of March 3, 2022. Source: Regulatory Research Associates, a group within S&P Global Commodity Insights S&P Global Commodity Insights produces content for distribution on S&P Capital IQ Pro. Shorter time frames may apply for limited-issue proceedings, but there are very few states where a rate case will take less than seven months to be decided.

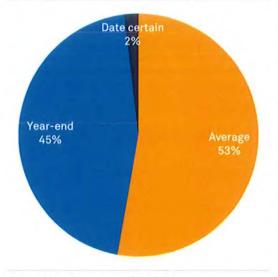
In addition, a shorter time frame for a decision generally reduces the likelihood that the actual conditions during the first year the new rates will be in effect will vary markedly from the test period utilized to set new rates, thus keeping regulatory lag to a minimum.

Interim procedures — The ability to implement all or a portion of a proposed rate increase on an interim basis prior to a final decision in a rate case is viewed as constructive. However, should the commission approve a rate change that is markedly below the rates implemented on an interim basis, the utility would be required to refund any related over-collections, generally with interest.

In some instances, commission approval is required prior to the implementation of an interim increase and may or may not be easy to obtain, while in others, state law or commission rules permit the companies to implement interim rate increases as a matter of course. In some instances, the commission may establish a date prior to the final decision in the case that will be the effective date of the new rates. In these instances, the company may be permitted to recoup any revenue that was not collected between the effective date and the decision date.

Rate base — A commission's policies regarding rate base can also impact the ability of a utility to earn its authorized ROE. These policies are often outlined in state statutes, and the commission usually does not have much latitude with respect to these overall policies.

Rate base valuation method



Data compiled as of March 3, 2022. Source: Regulatory Research Associates, a group within S&P Global Commodity Insights S&P Global Commodity Insights produces content for distribution on S&P Capital IQ Pro. With regard to rate base, commissions are about evenly split between those that employ a year-end, or terminal, valuation and those that utilize an average valuation, with one using a "date certain." In some instances, the commission may employ a different rate base valuation method depending on the utility type or the type of case — general rate case or limited-issue proceeding — or based on the test year selected by the company.

In general, assuming rate bases are rising, i.e., new investment is outpacing depreciation, a year-end valuation is preferable from an investor viewpoint.

Again, this relates to how well the parameters used to set rates reflect actual conditions that will exist during the rate-effective period; hence, the more recent the valuation, the more likely it is to approximate the actual level of rate base being employed to serve customers once the new rates are placed into effect.

Some commissions permit post-test-year adjustments to rate base for "known and measurable" items, and in general, this practice is beneficial to the utilities.

However, the rules with respect to what constitutes a known and measurable adjustment are not always specific, and there can be a good deal of controversy about what does and does not pass muster.

Another key consideration is whether state law and/or the commission generally permit the inclusion in rate base of

construction work in progress, or CWIP, for a cash return. CWIP represents assets that are not yet, but ultimately will be, operational in serving customers.

Investors generally view inclusion of CWIP in rate base for a cash return as constructive, since it helps to maintain cash flow metrics during a large construction cycle. Alternatively, the utilities accrue allowance for funds used during construction, which is essentially booking a return on the construction investment as a regulatory asset that is recoverable from ratepayers once the project in question becomes operational.

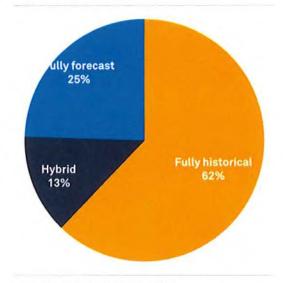
While this method bolsters earnings, it does not augment cash flow and does not support credit metrics. For a more in-depth look at rate base issues, refer to the RRA report entitled Rate base: How would you rate your knowledge of this utility industry fundamental?

Test period — With regard to test periods, there are a number of different practices employed, with the extremes being fully forecast at the time of filing, which is considered to be most constructive, on the one hand, and fully historical at the time of filing, considered to be least constructive, on the other.

Some states utilize a combination of the two, in which a utility is permitted to file a rate case that is based on data that is fully or partially forecast at the time of filing and is later updated to reflect actual data that becomes known during the course of the proceeding.

In these cases, the test year is historical by the time a decision is ultimately rendered due to which regulatory lag remains a problem.

Rate case test year



Data compiled as of March 3, 2022. Source: Regulatory Research Associates, a group within S&P Global Commodity Insights S&P Global Commodity Insights produces content for distribution on S&P Capital IQ Pro.

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In some states, the commission uses a historical test year for single-year base rate cases, but forward-looking test years for multiyear rate cases, alternative regulation plans and/or adjustment clauses.

Almost two-thirds of the 53 jurisdictions covered by RRA utilize a test year that is historical at the time of filing. As with rate base valuation, in some states, commissions use different test period types for different types of proceedings or for different utility types.

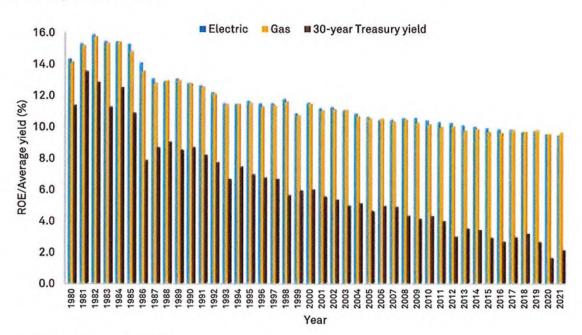
Many of the jurisdictions allow for known and measurable adjustments to the test year, but there is considerable variability regarding how far beyond the end of the test year these adjustments may go, and statutes governing the definition of known and measurable can be ambiguous. Consequently, there can be wide disagreement among the rate case parties as to which adjustments qualify.

Return on equity — ROE is perhaps the single most litigated issue in any rate case. There are two ROE-related issues that RRA considers when evaluating an individual rate case and the overall regulatory environment: (1) how the authorized ROE(s) compares to the average of returns authorized for energy utilities nationwide over the 12 months or so immediately preceding the decision and (2) whether the company has been accorded a reasonable opportunity to earn the authorized return in the first year of the new rates.

In establishing rankings, RRA looks at the ROEs historically authorized utilities in a given state and compares them to utility industry averages, as calculated in RRA's Major Rate Case Decisions Quarterly Updates. When referring to these "averages," RRA means the average ROE approved in cases decided in a particular year; returns carried over from prior years are not included in the averages.

Interest rates have been a key factor driving authorized ROEs downward, but commission determinations that various alternative or innovative ratemaking mechanisms have reduced risk for the companies and their investors across the board have played a role as well.

Authorized ROEs overall have been declining steadily since 1980, falling below 10% for the first time in 2011 for gas utilities and 2014 for electric utilities and remaining below that benchmark since.



Average authorized ROE in the US/30-year Treasury bond yields Calendar years 1980-2021

Data compiled as of March 3, 2022.

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights S&P Global Commodity Insights produces content for distribution on S&P Capital IQ Pro.

Between 2015 and 2018, RRA had observed a modest recovery in authorized ROEs, as the U.S. Federal Reserve unwound its quantitative easing policy and implemented a series of gradual interest rate increases. As has typically been the case, authorized ROEs lagged interest rate trends somewhat and so continued to rise modestly during 2019 even though the Fed lowered interest rates to combat a slowing economy.

In 2020, with the U.S. economy challenged by fallout from the COVID-19 pandemic, the average of the equity returns authorized for both electric and gas utilities nationwide fell to their lowest levels then on record. In 2021, the average gas ROE rebounded slightly to 9.56%, versus the 9.46% observed in 2020, but still near historical lows. The average electric ROE fell to an all-time low of 9.38% versus the 9.44% average for cases decided in 2020.

The need to recognize the planned capital spending and other costs associated with the energy transition, flat-tomodest sales growth absent the pandemic and the political distaste for approving rate increases when the country is in the middle of a crisis are shrinking "headroom" in utility rates.

More frequent severe weather events, supply chain disruptions, the potential for increases in federal corporate tax rates and inflationary pressures, represent significant unplanned costs on the system that will only serve to increase the pressure on regulators to reduce authorized ROEs.

In addition, consumer advocacy organizations continue to argue that lower returns on equity are warranted because of risk-reducing factors, such as limited-issue riders, decoupling mechanisms, alternative regulation constructs and changes to basic rate design.

This presents a stark contrast to views held by both fixed-income and equity investors that utilities are becoming increasingly risky because of the very factors that are leading regulators to approve lower ROEs.

Intuitively, authorized ROEs that meet or exceed the prevailing averages at the time established are viewed as more constructive than those that fall short of these averages.

However, in the context of a rate case, a utility may be authorized a relatively high ROE, but factors such as capital structure changes, the age or "staleness" of the test period, rate base and expense disallowances, the manner in which the commission chooses to calculate test year revenue and other adjustments may render it unlikely that the company will earn the authorized return on a financial basis.

With respect to capital structure, most commissions utilize the company's actual capital structure at a given point in time, but in some instances, the commission may rely on a hypothetical capital structure that represents a mix of debt and equity that the commission views as more reasonable or economically efficient. If the commission uses a capital structure that is more highly leveraged than the company's actual structure, this will lower the authorized overall return and the revenue requirement ultimately approved and may render it more difficult for the company to earn the authorized return on its actual equity.

Even if a utility is accorded a "reasonable opportunity" to earn its authorized ROE, there is no guarantee that the utility will do so. The revenue requirement and ROE established in a rate case are targets that the commission believes the established rates will allow the utility to attain.

Various factors such as weather, management efficiency, unexpected events, demographic shifts, fluctuations in economic activity and customer participation in energy conservation programs may cause revenue and earnings to vary from the targets set.

Hence, the overall decision may be restrictive from an investor viewpoint even though the authorized ROE is equal to or above the average.

Accounting — RRA looks at whether a state commission has permitted unique or innovative accounting practices designed to bolster earnings. Such treatment may be approved in response to extraordinary events such as storms or for volatile expenses such as pension costs. Generally, such treatment involves deferral of expenditures that exceed the level of such costs reflected in base rates. In some instances, the commission may approve an accounting adjustment to temporarily bolster certain financial metrics during the construction of new generation capacity.

From time to time, commissions have approved frameworks under which companies were permitted to, at their own discretion, adjust depreciation in order to mitigate under-earnings or eliminate an overearnings situation without reducing rates. These types of practices are generally considered to be constructive from an investor viewpoint.

Federal tax law changes enacted in 2017 and effective in 2018, particularly the reduction in the corporate federal income tax rate to 21% from 35%, had sweeping impacts on utilities, with a flurry of ratemaking activity during 2018 and 2019. While the issues have been addressed for most of the RRA-covered companies, there are still some that have not.

For most of the companies that have already addressed the implications with regulators, rates have been reduced to reflect the ongoing impact of the lower tax rate, refunds to return to ratepayers related to deferred overcollections are occurring over a relatively short time period, and amortization of the related excess accumulated deferred income tax liabilities is occurring over varying time periods — generally over the lives of the companies' assets for protected amounts and most often five to 10 years for unprotected amounts. RRA has been monitoring these developments and their impact on credit ratings and investor risk.

Formula-based ratemaking	Multiyear rate plans	Earnings sharing	Incentive ROEs	Electric fuel/Gas costs	Capacity release/Off- system sales
Alabama	California	Alabama	Colorado	Indiana	Colorado
Arkansas	Connecticut	Arkansas	lowa	Idaho	Delaware
Georgia	Dist. of Columbia	Connecticut	Kansas ²	lowa	Florida
Hawaii	Florida	Florida	Mississippi	Illinois	Indiana
Illinois	Georgia	Georgia	Montana2	Kansas	lowa
Louisiana— NOCC	Hawaii	Hawaii	Nevada	Kentucky	Kentucky
Louisiana—PSC	Louisiana—NOCC	Idaho	Ohio	Maryland	Louisiana
Maine	Maine	lowa	Virginia	Missouri	Massachusetts
Massachusetts	Maryland	Kansas	Washington ²	Montana	Missouri
Minnesota	Massachusetts	Louisiana-NOCC	Wisconsin	New Jersey	New Jersey
Mississippi	Minnesota	Louisiana—PSC		Oregon	New York
Pennsylvania	New Hampshire	Maine		Tennessee	North Dakota
Tennessee	New York	Massachusetts		Rhode Island	New Jersey
Texas—RRC	Ohio	Mississippi		Utah	Oklahoma
Vermont	Pennsylvania ²	Nevada		Vermont	Pennsylvania
	Rhode Island	New Mexico		Virginia	Rhode Island
	South Carolina	New York		Wyoming	South Dakota
	Utah	Oklahoma			Tennessee
	Vermont	Oregon			Texas—PUC
	Washington ²	Rhode Island			Texas—RRC
	Wisconsin	South Dakota			Utah
		Vermont			
		Virginia			
		Washington			
		Wisconsin			

Overview of select alternative regulation plans in the US¹

Data compiled as of March 3, 2022.

NOCC = New Orleans City Council; PSC = Public Service Commission; PUC = Public Utility (les) Commission; RRC = Railroad Commission.

1Mechanism in place for at least one utility in the state unless otherwise noted. This list is not intended to be comprehensive.

2 Specifically permitted by rule, law or commission order; no mechanism currently in place.

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights

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The prospect for tax rate changes under the Biden administration that would reverse, at least in part, the 2018 corporate income tax rate reduction raises the level of risk for all companies across the sector.

Another accounting-related issue that RRA has been following over the past year and a half is the treatment that is being accorded costs associated with the COVID-19 pandemic; specifically, whether the commissions have approved deferral of the costs, and how recovery of those deferrals is being or is to be addressed. Recovery of these deferrals will place upward pressure on rates and further shrink headroom for increases associated with investments in strategic initiatives.

In the wake of the energy transition, increasing numbers of fossil generation facilities are being retired early. RRA is monitoring how commissions are treating these stranded costs — in some states, the companies have been permitted to accelerate depreciation of the facilities in order to complete recovery of the investment prior to closure, and in others the utilities are being permitted to defer the remaining book value at closure as a regulatory asset that is to be recovered over a period of years.

As the transition progresses, other classes of assets may become stranded, as well. So, this is an issue RRA will be monitoring on an ongoing basis.

Alternative regulation — Generally, RRA views as constructive the adoption of alternative regulation plans that are designed to streamline the regulatory process and cost recovery or allow utilities to augment earnings in some way. These plans can be broadly or narrowly focused. Narrowly focused plans may: allow a company or companies to retain a portion of cost savings relative to a base level of some expense type, e.g., fuel, purchased power, pension cost, etc.; permit a company to retain for shareholders a portion of off-system sales revenues; or provide a company an enhanced ROE for achieving operational performance and/or customer service metrics or for investing in certain types of projects, e.g., demand-side management programs, renewable resources, new traditional plant investment.

The use of plans with somewhat broader scopes, such as ROE-based earnings sharing plans, is, for the most part, considered to be constructive, but it depends upon the level of the ROE benchmarks specified in the plan and whether there is symmetrical sharing of earnings outside the specified range.

Some states employ even more broad-based plans, known as formula-based ratemaking. Formula-based ratemaking plans generally refer to frameworks where the commission establish a revenue requirement, including a target ROE, capital structure and rate of return for an initial rate base as part of a traditional cost of service base rate proceeding. Once the initial parameters are set, rates may adjust periodically to reflect changes in expenses, revenue and capital investment. These changes generally occur on an annual basis, and there may be limitations on the percentage change that can be implemented in a given year or period of years.

Others use multiyear rate plans, under which the commission approves a succession of rate changes that are designed to consider anticipated changes in revenues, expenses and rate base. The commission may approve a static authorized ROE, or the plan may provide for adjustments to the ROE during the plan's term. These plans often include true-up mechanisms to ensure that the company makes the investments it has committed to make at the inception of the plan. The plans often include earnings sharing mechanisms and may also include performance-based ratemaking provisions.

Court actions — This aspect of state regulation is particularly difficult to evaluate. Common sense would dictate that a court action that overturns restrictive commission rulings is a positive. However, the tendency for commission rulings to come before the courts and for extensive litigation as appeals go through several layers of court review may add an untenable degree of uncertainty to the regulatory process. Also, similar to commissioners, RRA looks at whether judges are appointed or elected, as political considerations are more likely to influence elected jurists.

Legislation — While RRA's Commission Profiles provide statistics regarding the makeup of each state legislature, RRA has not found a specific correlation between the quality of energy legislation enacted and the political party controlling the legislature. Of course, in a situation where the governor and legislature are of the same political party, generally speaking, it is easier for the governor to implement key policy initiatives, which may or may not be focused on energy issues.

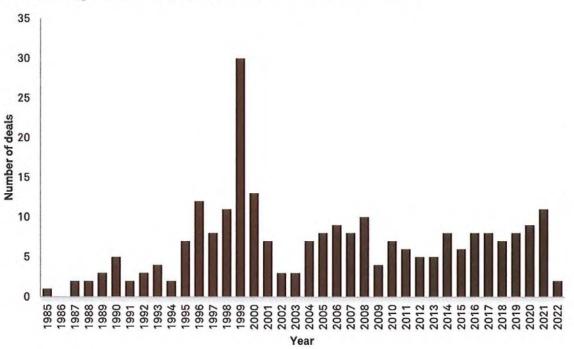
Key considerations with respect to legislation include how proscriptive newly enacted laws are; whether the bill is clear or ambiguous and open to varied interpretations; whether it balances ratepayer and shareholder interests rather than merely "protecting" the consumer; and whether the legislation takes a long-term view or is a "knee-jerk" reaction to a specific set of circumstances.

Legislative activity impacting utility regulatory issues has been robust in recent years, as state policymakers, utilities and industry stakeholders seek to address "disruptors" that challenge the traditional regulatory framework. RRA follows these developments closely with an eye toward assessing whether the states are taking a balanced, sustainable approach and how legacy utility providers will be affected by the policies being adopted.

Corporate governance — The term corporate governance generally refers to a commission's ability to intervene in a utility's financial decision-making process through required preapproval of all securities issuances, limitations on leverage in utility capital structures, dividend payout limitations, ring fencing and authority over mergers. Corporate governance may also include oversight of affiliate transactions.

In general, RRA views a modest level of corporate governance provisions to be the norm, and in some circumstances, these provisions, such as ring fencing, have protected utility investors as well as ratepayers. However, a degree of oversight that would allow the commission to "micromanage" the utility's operations and limit the company's financial flexibility would be viewed as restrictive.

Merger and acquisition activity — During the 1980s and early 1990s, there was not a lot of merger and acquisition activity in the sector. The years 1998 through 2000 saw a spike in activity, a lot of which centered around electric industry restructuring. After that, activity moderated but has remained fairly steady. Though merger and acquisition activity slowed during the first half of 2020 due to the COVID-19 pandemic, the pace picked up in the second half, and there were ultimately nine mergers announced, with an aggregate transaction value of about \$34 billion. Thus far in 2021, seven deals have been announced that RRA is following, with an aggregate transaction value of roughly \$56 billion.



Utility mergers and acquisitions announced 1985 - 2022

Data compiled as of March 3, 2022.

Source: Regulatory Research Associates, a group within S&P Global Commodity Insights S&P Global Commodity Insights produces content for distribution on S&P Capital IQ Pro.

Aside from the involved entities' boards of directors and shareholders, deals involving regulated utilities must pass muster with some, or all, of a variety of federal and state regulatory bodies. The states generally look at the day-today issues, such as the impact on rates, safety and reliability.

Looking more closely at the role of state regulators, 50 of the 53 non-federal jurisdictions RRA follows have some type of review authority over proposed mergers. In Indiana and Florida, preapproval by state regulators is not required before a transaction can proceed. In Texas, prior approval by the Public Utility Commission of Texas is required before a transaction involving an electric utility can take place, but Railroad Commission of Texas approval is not required for a transaction involving a local gas distribution company.

In evaluating a commission's stance on mergers, RRA looks at several broad issues such as whether there is a statutory time frame for consideration of a transaction and how long the process actually took.

For the 50 jurisdictions where commission preapproval is required, the review process and standards vary widely. In 20 of the jurisdictions, the commission must complete a merger review within a prescribed period, but in the remaining jurisdictions, there is no timeline for their merger reviews, which means a commission could effectively "pocket veto" a transaction by delaying a decision until the merger agreement between the applicants expires or until pursuing the transaction is no longer feasible.

In addition, RRA considers whether a settlement was reached among the parties and, if so, whether the commission honored that settlement or required additional commitments. RRA also examines how politicized the process was: Did the governor, or in the District of Columbia the mayor, play a role? Did the transaction garner a lot of local media attention in the affected jurisdiction?

The definition of what constitutes a transaction that is subject to review can vary widely and may include sales of individual assets or a marginal minority interest as well as larger transactions where a controlling interest or the whole company is changing hands. State law often lacks specificity with respect to what constitutes a transaction that is subject to regulatory review.

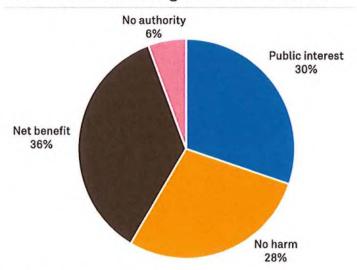
In cases where the state commission has authority over mergers, RRA reviews the type of approval standard that is contained in state law and/or has been applied by in specific situations.

For discussion purposes, RRA groups the statutory standards into three general buckets: public interest, which is generally thought to be the least restrictive, no net ratepayer harm, which is somewhat more restrictive, and net ratepayer benefit, which is the most restrictive.

In many instances, regulators have broad discretion to interpret what the statutes may mean by these terms. So, the standard of review is often more readily apparent by looking at how prior transactions were addressed than by reading the statutory language — one commission's public interest might be another's net ratepayer benefit.

More narrowly, RRA reviews the conditions placed on the commission's approval of these transactions, including: whether the company will be permitted to retain a portion of any mergerrelated cost savings; if guaranteed rate reductions or credits are required that are or are not directly related to merger savings; whether certain assets were required to be divested; what type of local control and workforce commitments are required; whether there are requirements for certain types of investment to further the state's public policy goals that may or may not be consistent with the companies' business models and whether the related costs will be recoverable from ratepayers; and whether the commission placed stringent limitations on capital structure and/or dividend policy or composition of the board of directors.

State commission merger review standards



Data compiled as of Feb. 28, 2022.

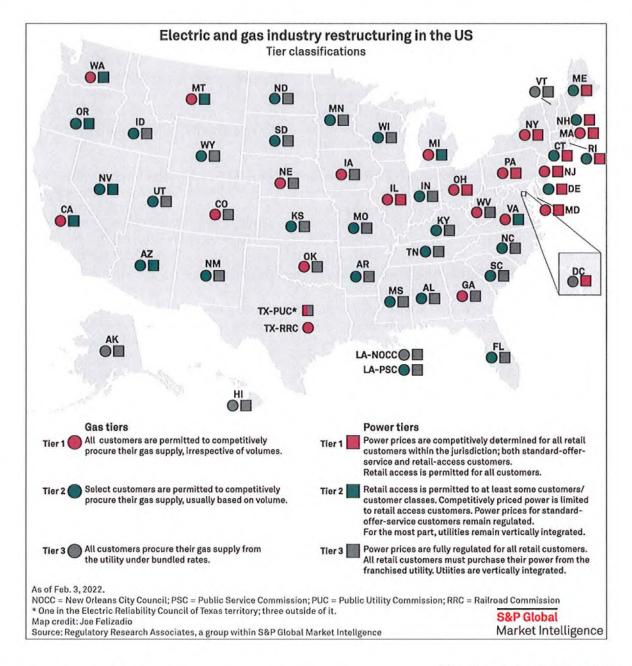
Source: Regulatory Research Associates, a group within S&P Global Commodity Insights

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Electric regulatory reform/industry restructuring — Electric industry restructuring refers to the implementation of a framework under which some or all retail customers have the opportunity to obtain their generation service from a competitive supplier of their choice. In a movement that began in the mid-1990s, about 20 jurisdictions have implemented retail competition for all or a portion of the customers in the utilities' service territories. The last of the transition periods ended as recently as 2011, when restructuring-related rate freezes concluded for certain Pennsylvania utilities.

RRA classifies each of the regulatory jurisdictions into one of three tiers based on their relative electric industry restructuring status.

Now that transition periods are completed, RRA has focused more on how standard-offer or default service is procured for customers who do not select an alternative provider and how much, if any, market-price risk the utility must absorb.



However, initiatives are underway in Arizona and Virginia that could lead to an expansion of retail competition in those jurisdictions. In addition, in several states, initiatives are underway to revamp the way the transmission and distribution system is configured. These efforts have arisen from expansion of renewables and a desire by corporate off-takers to enhance their reputations as "green" companies with a focus on grid reliability/resiliency. RRA refers to this trend as electric industry restructuring phase two, but the trend is more commonly subsumed under the broader Energy Transition.

In addition to addressing the recovery of stranded costs, ways to ensure universal service and the need to ensure not only the physical, but also the cybersecurity of the grid, are real concerns.

Several states got out in front of these issues and are addressing them in a broad-based way, while others are taking a more piecemeal approach dealing with deployment of advanced metering, distributed generation and net metering, time-of-use rates, cybersecurity and other issues on an individual basis. How these issues are resolved by regulators and public policymakers will have lasting implications for the financial viability of the incumbent utilities.

Gas regulatory reform/industry restructuring — Retail competition for gas supply is more widespread than is electric retail competition, and the transition was far less contentious as the magnitude of potential stranded asset costs was much smaller. Large volume customers in most states can select their gas supply provider; the availability of gas customer choice is much more limited for small-volume customers. Like electric retail competition, RRA generally does not view a state's decision to implement retail competition for gas service as either positive or negative from an investor viewpoint. RRA primarily considers the manner in which stranded costs were addressed and how default-service obligation-related costs are recovered.

Securitization — As it pertains to utilities, securitization refers to the issuance of bonds backed by a specific existing revenue stream that has been "guaranteed" by regulators and/or state legislators.

Securitization generally requires a utility to assign an eligible regulatory asset and a designated revenue stream for that asset to a "bankruptcy remote" special-purpose entity or trust; in some instances, a state financing authority fulfills this role. The trust or financing authority in turn issues bonds that will be serviced by the transferred revenue stream. The funds raised by the bond issuance flow to the utility, and in many cases, are used to retire outstanding higher-cost debt and/or buy back common equity, thus lowering the company's weighted average cost of capital.

While it is unclear if securitization requires legislation, a specific legislative mandate generally improves the rating accorded the securitization bonds and lowers the associated cost of capital, given that a legislatively supported revenue stream may be more difficult to rescind than a stand-alone order of a state commission. In RRA's experience, no state commission has authorized securitization in the absence of enabling legislation.

What is Securitization?

Refers to the issuance of bonds backed by a specific existing revenue stream that has been "guaranteed" by regulators and/or state legislators.

Generally requires a utility to assign the designated revenue stream to a "bankruptcy remote" special purpose entity, which in turn issues bonds that will be serviced by the transferred revenue stream.

The funds raised by the bond issuance flow to the utility.

Securitization is viewed as an attractive option because it allows regulators to minimize the customer rate impacts related to recovery of a particular utility asset. The carrying charge on the asset would be the lower interest rate applied to a highly rated, usually AAA, corporate bond rather than the utility's weightedaverage cost of capital or even the interest rate on typical utility bonds, which are generally rated BBB and carry higher interest rates.

At the same time, securitization reduces the investment risk for the utility by providing the utility up front recovery of its investment in what are usually nonrevenue-producing assets. The company can then redeploy those investment dollars elsewhere.

The energy industry's introduction to asset securitization occurred in the mid-1990s, when legislation was enacted in certain states enabling utilities to securitize mandated conservation investments.

In the late 1990s and early 2000s, several states that implemented retail competition for electric generation enacted legislation allowing securitization to be used for recovery of uneconomic generating or other physical assets, abovemarket-priced purchased power contracts, regulatory assets, nuclear decommissioning costs, etc., that had the potential to become unrecoverable, or stranded, in a fully competitive market for generation supply.

In recent years, changing industry dynamics have once again begun to raise concerns about the prospects of stranded costs, and securitization is being used to address generation facilities that are retired prematurely.

Securitization has also been used as part of reorganization plans, to finance fuel/purchased power balances, distribution system improvements and extraordinary storm costs.

Adjustment clauses — Since the 1970s, adjustment clauses have been widely utilized to allow utilities to recover fuel and purchased power costs outside a general rate case, as these costs are generally subject to a high degree of variability. In some instances, a base amount is reflected in base rates, with the clause used to reflect variations from the base level, and in others, the entire annual fuel/purchased power cost amount is reflected in the clause.

Over time, the types of costs recovered through these mechanisms were expanded in some jurisdictions to include such items as pension and healthcare costs, demand-side management program costs, FERC-approved regional transmission organization costs, new generation plant investment, and transmission and distribution infrastructure spending.

RRA generally views the use of these types of mechanisms as constructive but also looks at the frequency at which the adjustments occur, whether there is a true-up mechanism, whether adjustments are forward-looking in nature where applicable, whether a cash return on construction work in progress is permitted and whether there may be some ROE incentive for certain types of investment.

Another class of adjustment clauses known as revenue decoupling mechanisms allow utilities to adjust rates between rate cases to reflect fluctuations in revenues versus the level approved in the most recent base rate case that are caused by a variety of factors.

Some of these factors, such as weather, are beyond a utility's control, and the mechanism can work both ways — in other words, it can allow the company to raise rates to recoup revenue losses associated with weather trends that reduce customer usage and can also require the company to reduce rates when weather trends cause usage to be higher than normal.

As energy efficiency initiatives have expanded, decoupling mechanisms have also been implemented to reduce the disincentive for utilities in pursuing energy conservation programs by making the utilities whole for reductions in sales volumes and revenues associated with customer participation in these programs.

Some of these mechanisms also allow the utility to adjust rates to reflect fluctuations in customer usage that are brought about by broader economic issues, such as demographic shifts, the migration of large commercial/ industrial customers to other service areas, the shutdown of such businesses due to changes in their respective industries, recessions and, theoretically, crises such as the current COVID-19 pandemic.

RRA considers a decoupling mechanism that adjusts for all three of these factors to be a "full" decoupling mechanism and designates those that address only one or two of these factors as "partial" decoupling mechanisms.

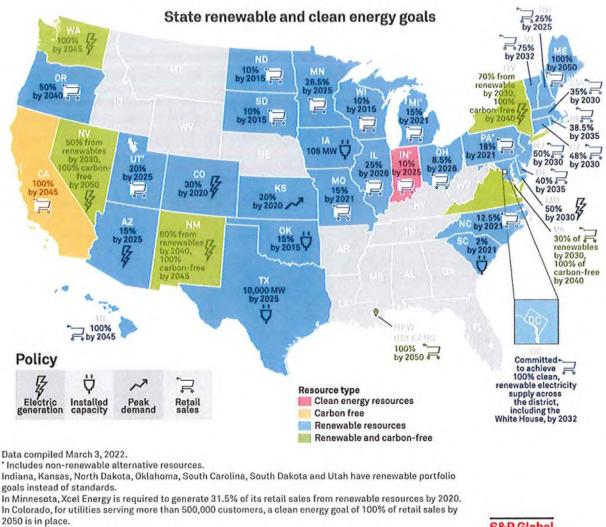
Generally, an adjustment mechanism would be viewed as less constructive if there are provisions that limit the utility's ability to fully implement revenue requirement changes under certain circumstances, e.g., if the utility is earning more than its authorized return.

Another consideration is whether revenue requirement changes implemented under these mechanisms reflect historical changes in the relevant expenses or investment rather than forward-looking values.

Integrated resource planning — RRA generally considers the existence of a resource-planning process to be constructive from an investor viewpoint, as it may provide the utility at least some measure of protection from hindsight prudence reviews of its resource acquisition decisions. In some cases, the process may also provide for preapproval of the ratemaking parameters and/or a specific cost for the new facility. RRA views these types of provisions as constructive, as the utility can make more informed decisions as to whether it will proceed with a proposed project.

Renewable energy/emissions requirements — As with retail competition, RRA does not take a stand as to whether the implementation of renewable portfolio standards, or RPS, or an emissions reduction mandate is positive or negative from an investor viewpoint. However, RRA considers whether there is a defined preapproval and/or cost-recovery mechanism for investments in projects designed to comply with these standards.

RRA also reviews whether there is a mechanism such as a rate increase cap that ensures that meeting the standards does not impede the utility's ability to pursue other investments and/or recover increased costs related to other facets of its business. RRA also looks at whether incentives, such as an enhanced ROE, are available for these types of projects.



Map credit: Joe Felizadio

Source: Regulatory Research Associates, a group within S&P Global Market Intelligence

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In recent years, the focus on renewables has surged across the U.S.; all but 13 jurisdictions have some type of RPS currently in place. The proliferation of renewables, particularly those that are customer-sited or distributed resources, and the related rise of battery storage and electric vehicles have raised questions regarding the traditional centralized industry framework and whether that framework needs to change, perhaps ushering in a second phase of electric industry restructuring. How these changes are implemented is something RRA is considers in its rankings.

With respect to emissions, the threat of a federal carbon emissions standard for utilities and the spread of statelevel initiatives have caused many companies to rethink legacy coal-fired generation, causing plants to be shut down earlier than anticipated. How the commissions address these "stranded costs" also poses a risk for investors and is factored into the rankings.

The zero-carbon movement has also caused utilities/states to reexamine investments in nuclear facilities and, in some cases, to develop programs designed to support the continued operation of those facilities even though they may not be economic from a competitive-markets standpoint. How these issues are addressed is something that RRA takes into account.

Rate structure — RRA looks at whether there are economic development or load-retention rate structures in place and, if so, how any associated revenue shortfall is recovered.

Fixed vs. variable costs

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Data compiled as of March 3, 2022. Source: Regulatory Research Associates, a group within S&P Global Commodity Insights. S&P Global Commodity Insights produces content for distribution on S&P Capital IQ Pro. RRA also looks at whether there have been steps taken over recent years to reduce/eliminate interclass rate subsidies, i.e., to equalize rates of return across customer classes.

In addition, RRA considers whether the commission has adopted or moved toward a straight-fixed-variable rate design, under which a greater portion of a company's fixed costs are recovered through the fixed monthly customer charge, thus providing the utility greater certainty of recovering its fixed costs.

This is increasingly important in an environment where weather patterns are more volatile, organic growth is limited due to the economy and the proliferation of energy efficiency/conservation programs and large amounts of non-revenue-producing capital spending is required to upgrade and strengthen the grid.

In conjunction with the influx of renewables and distributed

generation, the issue of how to compensate customer-owners for excess power they put back into the grid has become increasingly important and, in some instances, controversial. How these pricing arrangements, known as net metering, are structured can impact the ability of the utilities to recover their fixed distribution system costs and by extension their ability to earn their authorized returns.

Outlook

In RRA's view, the regulatory climate in Kentucky has become more restrictive from an investor viewpoint in recent months, while that for the gas local distribution companies in Texas has become more constructive. In Texas the electric and gas utilities are regulated by two separate commissions.

RRA has identified 10 other jurisdictions that are in a state of flux, meaning that the outcome of ongoing proceedings or policy developments could cause a change in the future posture of the regulatory climate — California, the District of Columbia, Florida, Louisiana, Mississippi, Pennsylvania, Texas as it pertains to the electric utilities, Virginia and Washington. There are two jurisdictions in Louisiana, as the New Orleans City Council sets rates for the investor-owned utility that operates within the city.

In addition, there are several issues that will likely impact a broad swath of jurisdictions that RRA has been watching closely over the last couple of years, including the energy transition and the treatment of stranded costs, the end of COVID-19 pandemic-related moratoriums on disconnections and recovery of the related costs, and extreme weather events and the related impacts on costs and customer service.

New challenges have presented themselves in recent months, namely, the conflict in the Ukraine, rising interest rates and inflation, increasing the overall uncertainty for the economy, and presenting unique hurdles for this capital intensive, economically regulated industry. Regulators will play a pivotal role in determining the direction and magnitude of the impact of these challenges on the utilities' financial performance.

It is important to keep in mind that RRA's rankings are from an investor perspective and are intended to provide insight into the relative risk associated with owning the securities of the jurisdictions in question. They are not an assessment of whether regulators are "doing a good." In addition, the rankings look at not only the commission's actions, but those taken by the jurisdiction's legislature and chief executive, as well as the various stakeholders that intervene in the regulatory process.

Further Reading

With Delta Natural Gas rate order, Ky. PSC continues to modify settlements Okla. utilities allowed to securitize February 2021 storm costs Texas RRC approves issuance of \$3.4B in gas cost securitization bonds P.A. battle over RGGI goes to court Va. SCC gets new chair, as commissioner spot remains in question Russia-Ukraine conflict further strains market for solar raw materials Russian invasion of Ukraine adds additional strain to stretched supply chains U.S. utilities prepare for heightened cybersecurity risk from Russia Gas utility approved returns rise modestly in 2021 but remain at historic lows Electric ROE authorizations sink to record low in 2021 Industry reassures Wall Street: Gas utilities are part of clean energy future A variety of stranded cost recovery, abatement strategies emerging in U.S. energy transition. Utility shut-off bans, while ending, continue to challenge utility financials Energy utility capex plans on-track for record-breaking 2021 and 2022 Review of utility regulatory settlements shows it pays to set aside differences The Big Picture: 2022 Electric, Natural Gas and Water Utilities Outlook **The Commissions** The rate case process: a conduit to enlightenment Rate base: How would you rate your knowledge of this utility industry fundamental? Utility Asset Securitization in the U.S.

See it in charts: Energy research, February 2022

For detailed information about each jurisdiction's policies and regulatory ranking, visit the S&P Capital IQ Pro <u>Commissions page</u>.

For a full listing of past and pending rate cases, rate case statistics and upcoming events, visit the S&P Capital IQ Pro Energy Research Home Page.

For a complete, searchable listing of RRA's in-depth research and analysis, please go to the S&P Capital IQ Pro <u>Energy</u> <u>Research Library</u>.

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