September 2021

THUMB ON THE SCALE:

An Examination of Utility Rate Adjustments and the Role of the Virginia Legislature

Prepared by E9 Insight on behalf of

Virginia Poverty Law Center

E9 INSIGHT
BOULDER, COLORADO

EXECUTIVE SUMMARY

This report summarizes the findings of an examination by E9 Insight into the design and use of rate adjustment clauses (RACs) in Virginia. Specifically, the study focuses on the impact of RACs on customer bills and compares how these RACs were established by the Virginia General Assembly to similar mechanisms in other states.

This examination found that RACs in Virginia (1) have been used disproportionately to recover investments in traditional generation assets (that would traditionally be recovered through general customer rates) and (2) were selectively established by the legislature outside of a traditional deliberative regulatory process.

This examination reviewed rate adjustment mechanisms in fourteen states with a particular kind of RAC, generation RACs, focusing on three key questions:

- How are rate adjustment mechanisms being used in the state?
- Are rate adjustment mechanisms applied to generation assets?
- What was the role of the legislature in establishing rate adjustment mechanisms?

The findings from this research complement findings from a 2020 investigation prepared by E9 Insight.[1] That research revealed that earnings mechanisms established by the Virginia General Assembly were prescriptively established without regard for the customary deliberative process that would be led by the Virginia State Corporation Commission.

In short, the legislature has "hard coded" specific earnings for investments that would traditionally be considered by the Virginia State Corporation Commission in the context of their overall impact on customer rates. Our major findings include that:

1. Rate adjustments through RACs that are applied to traditional generation assets are inconsistent with the established use and intent of rate adjustment mechanisms;
2. Rate adjustments established through legislation are extraordinarily prescriptive, ubiquitous and not considered as part of a broader deliberative and rate-setting process;
3. Virginia utilities use generation RACs more than any other state reviewed.

Virginia stands apart from other states in how they have established and applied rate adjustment mechanisms. This is because the legislature has prescribed them in isolation from the context of the rest of the ratemaking process, rendering them untethered from the customary regulatory process that considers their impact to consumers in the context of other utility actions.

[1] E9 Insight, on behalf of Virginia Poverty Law Center. (2020). Reward Without Risk: A Look at Imbalances in Virginia's Unique Regulatory Construct. https://vplc.org/wp-content/uploads/2020/08/E9-Insight-Virginia-Comparative-Analysis.pdf

INTRODUCTION

This report summarizes the findings of an examination by E9 Insight into the design and use of rate adjustment clauses (RACs) in Virginia. Specifically, the study focuses on the impact of RACs for generation resources on customer bills and compares how RACs were established (i.e. legislation, utility proposal, etc.).

Throughout the United States, the "traditional" ratemaking process for utilities is a complicated, multifaceted and layered with historical decisions that, in many cases, establish path dependencies or remain unquestioned. Given these complexities, this examination does not attempt to analyze all aspects of the ratemaking process established in Virginia, but rather focuses on specific rate components and how those were established.[2] Research on Virginia ratemaking revealed seven bills passed by the Virginia General Assembly containing authorization for RACs, resulting in statutory references to RACs over 100 times. Several bills targeted generation RACs explicitly, a practice perceived to be uncommon in other states. In order to assess whether the Virginia legislature's application of RACs were consistent with or anomalous from other states, generation RACs across the U.S. were identified and investigated.

This review draws from legislation, academic studies, regulatory filings and interviews with commissioners, staff and industry stakeholders to confirm how and why generation RACs were established. "Peer states," with comparable geographies, demographics and regulatory legacies as identified by Virginia statute, were included.

Our major finding is that Virginia stands apart from other states. This is not because there are rate adjustment mechanisms in place or even that they are being applied to generation assets. Rather, these RACs are anomalous because of the manner in which the legislature prescribed them in isolation from the rest of the ratemaking process, rendering them untethered from customary holistic rate review, performance metrics and regulatory context.

To understand this context, it is valuable to review the history of RACs and rate adjustments both broadly and in the specific context in Virginia.

RATE ADJUSTMENT CLAUSES: A POWERFUL REGULATORY TOOL

Automatic adjustment clauses (AACs), or rate adjustment clauses (RACs), were first utilized by utilities in 1917 in response to coal prices during World War I. Following the Oil Embargo of 1973 and associated elevated fuel prices,[3,4] policy discussions at the state legislatures

[2] Rate adjustment mechanisms are charges that are applied directly to a utility customer's bill and separate from the general rates applied based on energy usage. They may be referred to by a variety of commonly used terms such as "rider" or "trackers", For consistency with the common usage in Virginia, we use the term "rate adjustment clause" or "RAC"

[3] Carver, John A. Jr. (1976). Developments in Regulation: Adjustment Clauses. Denver Law Journal. Vol. 53, Iss. 4, pg. 663. https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=3234&context=dlr

[4] Duffy, Kevin F (1979). *Electric Fuel Adjustment Clause Review in Ohio.* Akron Law Review: Vol. 12: Issue 3, Article 4. http://ideaexchange.uakron.edu/akronlawreview/vol12/iss3/4

and public utility commissions (PUCs) supported the establishment of a new ratemaking tool to recover temporary, volatile costs in between rate cases. RACS were applied in a variety of states to specifically recover fuel procurement for electricity generation. In the 1980's and 1990's, RACs were also referred to as "riders" that were added on to the base rates charged to consumers. The application of RACs expanded during the late 1990's and early 2000's as multiple states transitioned to competitive markets with new fuel purchase procedures.[5,6]

Today, many states use RACs for numerous purposes,[7] though the majority of utilities today use RACs for fuel variability, power purchases and conservation program expenses. Additional RAC categories include, but are not limited to, decoupling for energy efficiency, weather aberrations, economic downturns, infrastructure, regional transmission organization (RTO) expenses, and environmental compliance costs (Figure 1).[8]

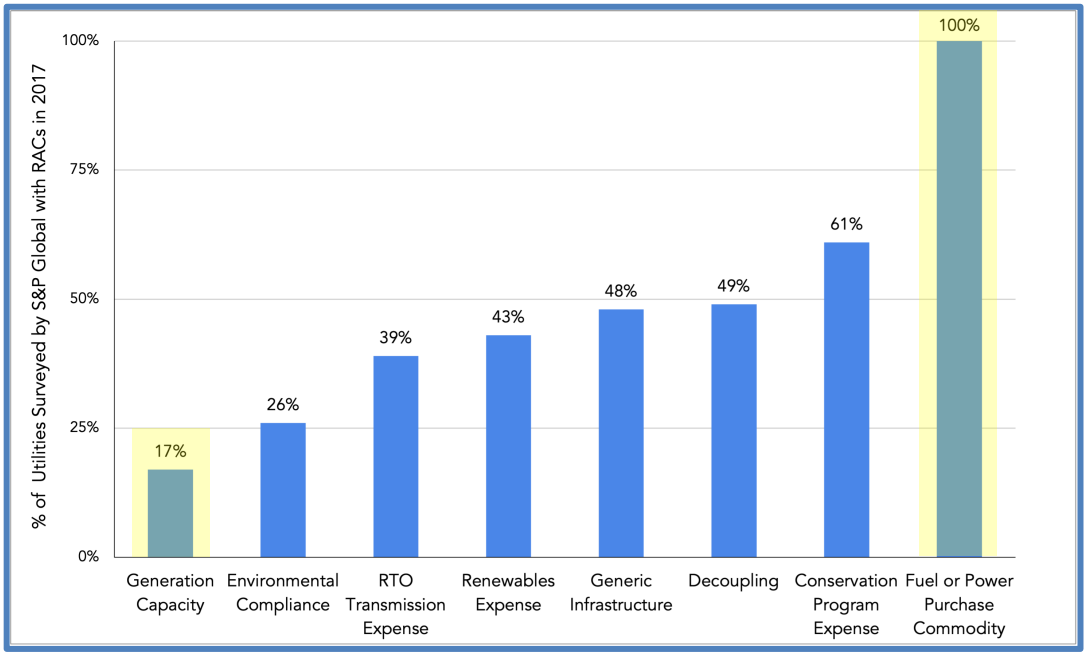

Figure 1: S&P Global, Survey of Adjustment Clauses in 53 utilities across the U.S. in 2017. Highlighted bars demonstrate the proportion of utilities that used RACs for generation capacity, the least common category, compared to fuel or power purchase commodity. Fuel or power purchase commodity RACs were used by all surveyed utilities.

[5] Leaffer, Marshall A (1980). *Automatic Fuel Adjustment Clauses: Time for a Hearing.* Indiana University Maurer School of Law. https://www.repository.law.indiana.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1947&context=facpub

[6] Golec, J. (1990). *The Financial Effects of Fuel Adjustment Clauses on Electric Utilities.* The Journal of Business, 63(2), 165-186. http://www.jstor.org/stable/2353215

[7] AARP (2012). *Increasing Use of Surcharges on Consumer Utility Bills.* AARP. Prepared by Larkin and Associates. May 2012. https://www.aarp.org/content/dam/aarp/aarp_foundation/2012-06/increasing-use-of-surcharges-on-consumer-utility-bills-aarp.pdf

[8] S&P Global (2017). *RRA Regulatory Focus: Adjustment Clauses, A state-by-state overview.* S&P Global Market Intelligence. September 12, 2017. https://www.spglobal.com/marketintelligence/en/documents/adjustment-clauses-state-by-state-overview.pdf

Despite the broadly applicable use of RACs in many states, various advocates, regulators and scholars recommend limiting RACs to highly variable fuel or procurement costs. For example, the Electricity Consumers Resource Council stated that RACs should not be used as a catch-all for nonfuel costs: "Inclusion of cost items that do not satisfy the magnitude, volatility and control criteria may allow a utility to collect extra revenues that it might not be entitled to collect had the increased costs been examined in the context of the utility's overall operations, as would occur in a general rate case proceeding."[9] In review of a generation RAC in Arkansas, **the Arkansas Attorney General commented, "The Attorney General is skeptical of riders in general and thus does not support an open-ended rider that could become a blank check for new purchases."**[1] 2011 research on the impact of RACs on utility return on equity (ROE) revealed that PUC decisions to adjust authorized ROE frequently lacked proper consideration of the impact of RACs. Academic studies have both criticized the trend toward greater RAC utilization, and in other instances, defended RAC use as suitable under specific conditions, especially for fuel costs.[2,3]

Academic studies have both criticized the trend toward greater RAC utilization, and in other instances, defended RAC use as suitable **under specific conditions**.

The 21-century electricity system is undergoing a transition to a more advanced and renewable energy grid, requiring significant capital investment and modernization of infrastructure and utility rate design. According to the U.S. Energy Information Administration, the number of electric utility rate cases has been on an increasing trend since 2000, and in 2018, "89 utilities—or nearly half of all major U.S. electric utilities—tried to change electricity rates by filing rate cases with state regulatory commissions; [...] the largest number since 1983".[4] As costs and the expectations of utilities grow, questions related to equity and affordability are also growing. Financial strategies to addressing these needs, including the use of RACs, can have significant effects on the long- and short-term ratepayer impacts.

RATEMAKING AND ADJUSTMENT CLAUSES IN VIRGINIA

Relevant Statute

Virginia's laws governing electric utilities are codified in the Code of Virginia, Title 56, Public Service Companies.[10] RAC categories and procedures are contained in section § 56-585.1, section 5 and 6. § 56-585.1 6 A is most commonly cited by the utilities as the enabling statute for RACs, though § 56-235.2 also broadly supports cost recovery. Statute dictates

[9] ELCON (2021). *Fuel Adjustment Clauses & Other Cost Trackers. Electricity Consumers Resource Council.* https://elcon.org/fuel-adjustment-clauses-cost-trackers/

[10] Virginia Legislative Information System (2021). Code of Virginia, Title 56. Public Service Companies, Chapter 23. Virginia Electric Utility Regulation Act. https://law.lis.virginia.gov/vacode/title56/chapter23/

that RACs must be considered on a stand-alone basis, and the SCC may use its discretion to evaluate their prudence. The SCC exercised its discretion in 2021 by denying an Appalachian Power Co. request for a new RAC to recover investments in two coal-fired power generation facilities.[11]

Legislative History and RACs

The Virginia General Assembly has provided prescriptive ratemaking direction to the State Corporation Commission (SCC) and the state's largest investor-owned utilities, Dominion Energy Inc. (Dominion) and APCo (APCo). Prior to 1999, the SCC had broad authority to adjust electric utility rates based on the utility's costs of service to meet "reasonable and just" requirements. Rate cases were frozen in 1999 when the Virginia Electric Utility Restructuring Act (SB 1416) outlined steps to create a competitive electric market, but the process was killed by the 2007 Virginia Electric Utility Regulation Act. This "Re-Regulation" bill[12] significantly modified Virginia's ratemaking procedures, created new utility spending incentives, established

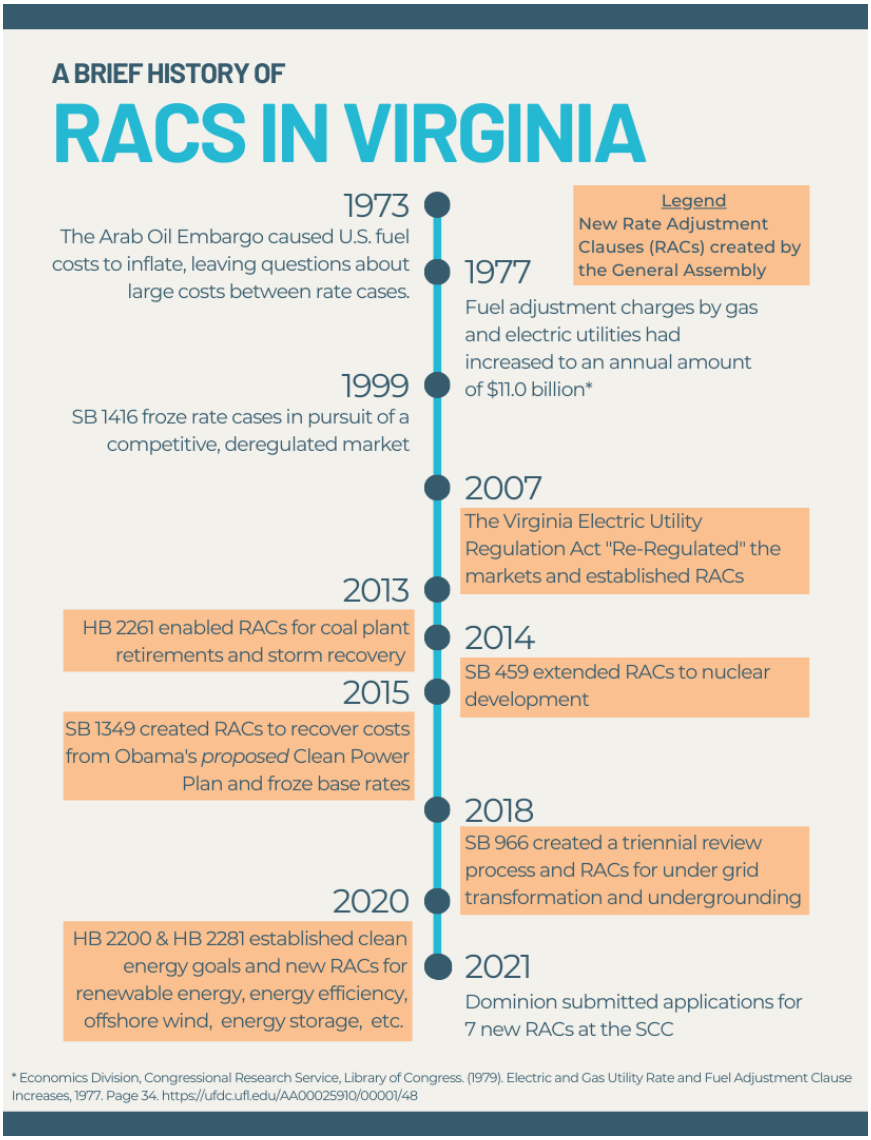

Figure 2: A brief history of RACs in Virginia, including eight bills and general RAC context in the U.S.

[11] Virginia State Corporations Commission (2021). Docket No. PUR-2020-00258. Appalachian Power Company - For approval of an Environmental Rate Adjustment Clause, Rider E-RAC. https://scc.virginia.gov/DocketSearch#/caseDetails/141574

[12] GreeneHurlocker Attorneys at Law (2018). *Guide to Electric Utility Regulation in Virginia, Updated with 2018 amendments.* https://www.greenehurlocker.com/wp-content/uploads/2018/04/GreeneHurlocker-Guide-to-Electric-Regulation-in-Va-2018.pdf

a ceiling on customer refunds, and created a new rate mechanism to recover new generation project costs RACs. The Re-Regulation bill also prevented the SCC from considering base rate earnings when utilities proposed project recovery through RACs. In practice, this language restricts the SCC from denying a RAC rate increase if Dominion was overearning on its base rates.[13]

In 2013 and 2014, the General Assembly passed HB 2261[14] and SB 459,[15] allowing Dominion to recover costs related to coal plant retirements, storm recovery costs, offshore wind, and nuclear plant development via RACs instead of long-term base rate components. In 2015, a new cost recovery provision was established by SB 1349[16] to seek special recovery of compliance costs, including coal plant retirements, associated with the Obama Administration's proposed Clean Power Plan (CPP). This bill also suspended the rate review process until 2021, prohibited the SCC from requiring any refunds during the "transitional rate period," and despite the failed execution of the CPP, retained revenue collected. A triennial rate review process was created by the Grid Transformation and Security Act (GTSA) of 2018, with new restrictions which prevented the SCC from reducing base rates by more than $50 million. The GTSA also created a new "customer credit reinvestment offset" mechanism to allocate over-earnings to "grid transformation" projects, which could also be recovered through RACs. Each of these laws reduced utility base rate earnings by shifting certain costs to RACs.

The 2020 Virginia Clean Economy Act (VCEA, HB 2200 and HB 2281[17,18]) implemented sweeping reform to ratemaking and resource planning, clean energy goals, and other policies. Statute modified by the VCEA contained numerous references to RACs, and new RAC categories were created for new solar and onshore wind; energy efficiency pilot programs (and modifications of energy efficiency RAC application); offshore wind; and zero-carbon generating facilities and energy storage resources. In 2021, RACs were extended to transportation electrification programs in HB 2282[19] and broadband expansion programs in

[13] Clean Virginia (2020). *The Dominion Scam: How a Utility Monopoly Overcharged Virginians $2 Billion (And Got Away With It).* https://www.cleanvirginia.org/wp-content/uploads/2020/01/The-Dominion-Scam-Report.pdf
[14] Virginia General Assembly (2013). *HB 2261. Investor-owned electric utilities; electric utility ratemaking. Emergency.* https://lis.virginia.gov/cgi-bin/legp604.exe?131+sum+HB2261&131+sum+HB2261
[15] Virginia General Assembly (2014). *SB 459. Electric utility regulation; recovery of nuclear costs, rate adjustment clauses.* https://lis.virginia.gov/cgi-bin/legp604.exe?141+sum+SB459
[16] Virginia General Assembly (2015). *SB 1349. Electric utility regulation; suspension of regulatory revies of utility earnings.* https://lis.virginia.gov/cgi-bin/legp604.exe?151+sum+SB1349
[17] Virginia General Assembly (2020). *HB 2200. Electric utilities; triennial review.* https://lis.virginia.gov/cgi-bin/legp604.exe?211+ful+HB2200
[18] Virginia General Assembly (2021). *HB 2281. Virginia Clean Economy Act; non-bypassable charges, energy intensive trade-exposed (EITE).* https://lis.virginia.gov/cgi-bin/legp604.exe?211+sum+HB2281
[19] Virginia General Assembly (2021). *HB 2282. State Corporation Commission; transportation electrification; utility recovery of certain costs.* https://lis.virginia.gov/cgi-bin/legp604.exe?212+sum+HB2282

HB 2304[20]. As of 2021, Dominion applied ten generation riders to its bills, while Appalachian Power Co. included one (Figure 3). In addition to the ten generation RACs reviewed below, Dominion employed seventeen other riders related to transmission, green tariffs, undergrounding projects, energy efficiency, taxes, and other categories.[21] APCo bills included nine additional riders in similar categories.[22]

Utility	*Name*	*Alternate name*	*Detail*	*Initial Docket*
Dominion Energy	Rider B	Biomass conversions	Converting coal plants to biomass	PUE-2011-00073
	Rider BW	Brunswick County Power Station	Combined cycle construction and operation (Brunswick County Power Station)	PUE-2012-00128
	Rider CE	Solar Projects	Solar PPAs	PUR-2020-00134
	Rider GV	Greensville Power Station	Gas construction and operation (Greensville Power Station)	PUE-2015-00075
	Rider R	Bear Garden Generating Station	Combined cycle construction and operation (Bear Garden Generating Station)	PUE-2009-00017
	Rider S	Virginia City Hybrid Energy Center	Coal construction and operation (Virginia City Hybrid Energy Center)	PUE-2009-00011
	Rider US-2	2016 solar projects	Solar construction and operation	PUE-2015-00104
	Rider US-3	Solar projects	Solar construction and operation	PUR-2018-00101
	Rider US-4	Solar Projects	Solar construction and operation	PUR-2019-00105
	Rider W	Warren County Power Station	Combined cycle construction and operation (Warren County Power Station)	PUE-2011-00042
Appalachian Power Co.	Rider G-RAC	Generation Rate Adjustment Clause Rider	Acquisition of Dresden Generating Station	PUE-2011-00036

Figure 3: Generation rate adjustment clauses used by Virginia's two largest investor-owned utilities, Dominion Energy and Appalachian Power Co.

Bill Impacts

The SCC conducts a yearly investigation and report on the status of implementation of VEURA which includes analysis of the impact of RACs on the electricity customer bill over

[20] Virginia General Assembly (2021). *HB 2304. Phase I or Phase II electric utilities; provision of broadband capacity.* https://lis.virginia.gov/cgi-bin/legp604.exe?212+sum+HB2304
[21] Dominion Energy (2021). *Residential Rates.* https://www.dominionenergy.com/virginia/rates-and-tariffs/residential-rates
[22] Appalachian Power Co. (2021). *Standard Rate Schedules Terms and Conditions.* *https://www.appalachianpower.com/lib/docs/ratesandtariffs/Virginia/Tariff26-MASTER-Standard-Sept7-2021-Tariff1EE-RACPIPP.pdf*

time.[23] The 2020 Status Report[24] demonstrated that the RAC portion of the monthly bill for Dominion customers grew from $0.00 in 2007 to **$27.81** in 2020, while fuel costs fell by $3.25 and base rates rose by $3.25. As illustrated by the SCC's comparative bill analysis (Figure 4), Dominion's base rates stayed relatively flat from 2007 to 2020 despite a 28%, or **$26.10,** overall bill increase, demonstrating that over 100% of bill growth since 2007 can be attributed to the use of RACs. APCo customers also experienced bill growth between 2007 and 2020 of about 64%, or $42.42, but the use of RACs grew by a total of $14.49, from $1.84 in 2007 to $16.33 in 2020.

Dominion's base rates stayed relatively flat from 2007 to 2020 despite a $26.10 overall residential bill increase, while RACs grew from $0 to $27.81. This demonstrates that over 100% of bill growth since 2007 can be attributed to RACs.

Appalachian Power Co. residential bills also increased by $42.42 from 2007 to 2020, with RACs accounting for $14.49 of the growth.

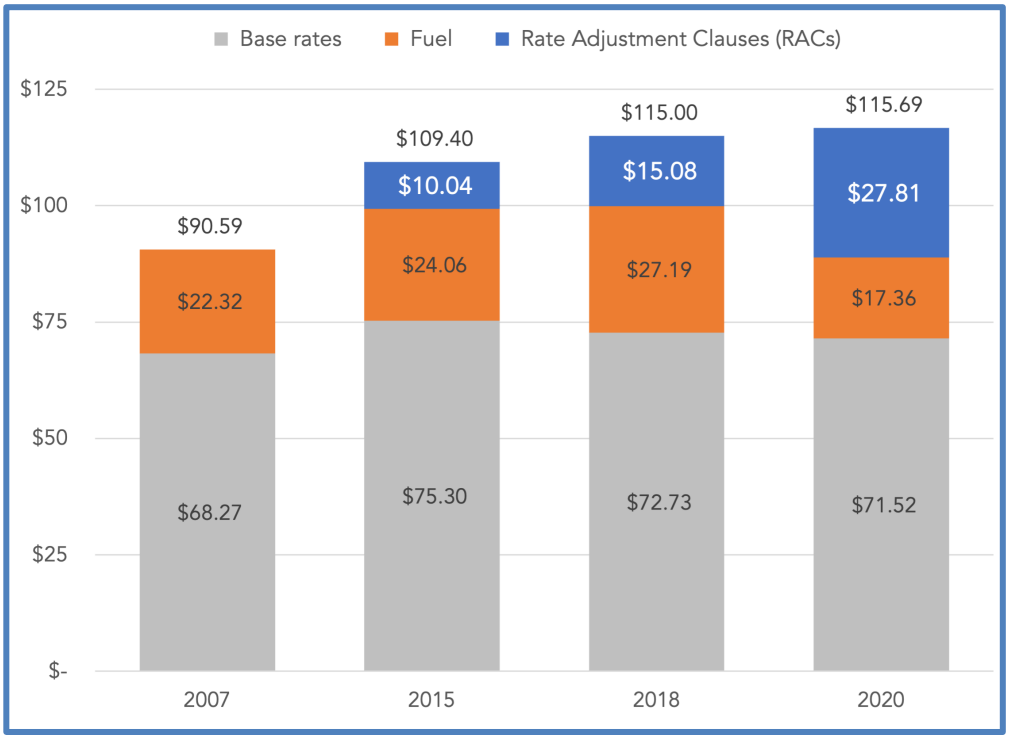

Figure 4: Dominion Energy Virginia Residential Bill components according to a 1,000 kWh / month consumption level in July of each year. Data acquired through the 2020 annual SCC review of utility rates, pursuant the 2007 Virginia Electric Utility Regulation Act.[25]

[23] Reports can be found at the Virginia State Corporations Commission site: https://www.scc.virginia.gov/pages/Energy-Regulation
[24] Virginia State Corporations Commission (2020). Status Report: Implementation of the Virginia Utility Regulation Act Pursuant to § 56-596 B of the Code of Virginia. https://www.scc.virginia.gov/getattachment/bef130f2-2e42-4c45-b128-f796ab2fa444/2020veur.pdf
[25] Ibid.

Ratepayer funds that flow through RACs are not evaluated in the general base rate cases, and RAC schedules typically are awarded a flat, generous rate of return without adjustments to reflect utility performance. By shifting base rate cash flow to RACs, utilities guarantee returns with significantly lower risk of penalty. According to data provided in the SCC's 2020 Status Report, the percentage of RACs are growing, and in 2020, RACs made up 24% of Dominion residential bills and 15% of APCo residential bills (Figure 5).

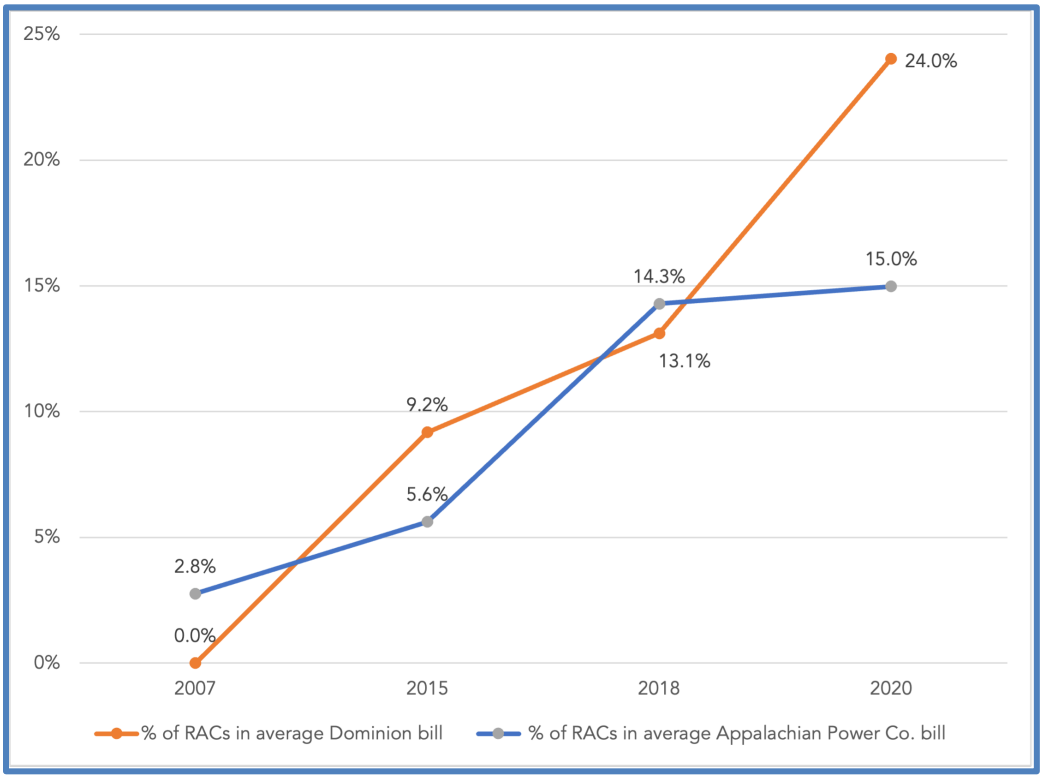

Figure 5: A comparison of rate adjustment clause (RAC) contribution by percentage to average residential consumer bills, based on 1,000 kW/month usage in July of each year. Data for Dominion Energy Virginia and Appalachian Power Co. Virginia utility customers was acquired through the 2020 annual SCC review of utility rates, pursuant the 2007 Virginia Electric Utility Regulation Act.[26]

RESEARCH METHODOLOGY

To contextualize the application of RACs, fifteen states including Virginia with "generation RACs," defined as any RAC tied to investment in generation resources, were reviewed. General categories of generation RACs included interim capacity additions, construction work in progress, decommissioning or retirement, renewable energy investment, and other related categories. "Peer states" with generation RACs were identified according to Virginia Code), which defines "peer group" utilities in the southeast to compare rate information. Peer states with generation RACs include Alabama, Arkansas, Florida, Georgia, Kentucky,

[26] Ibid.

Louisiana, South Carolina. Other reviewed states include from West to East, Hawaii, Arizona, Colorado, South Dakota, North Dakota, Indiana, and Massachusetts (Figure 6).

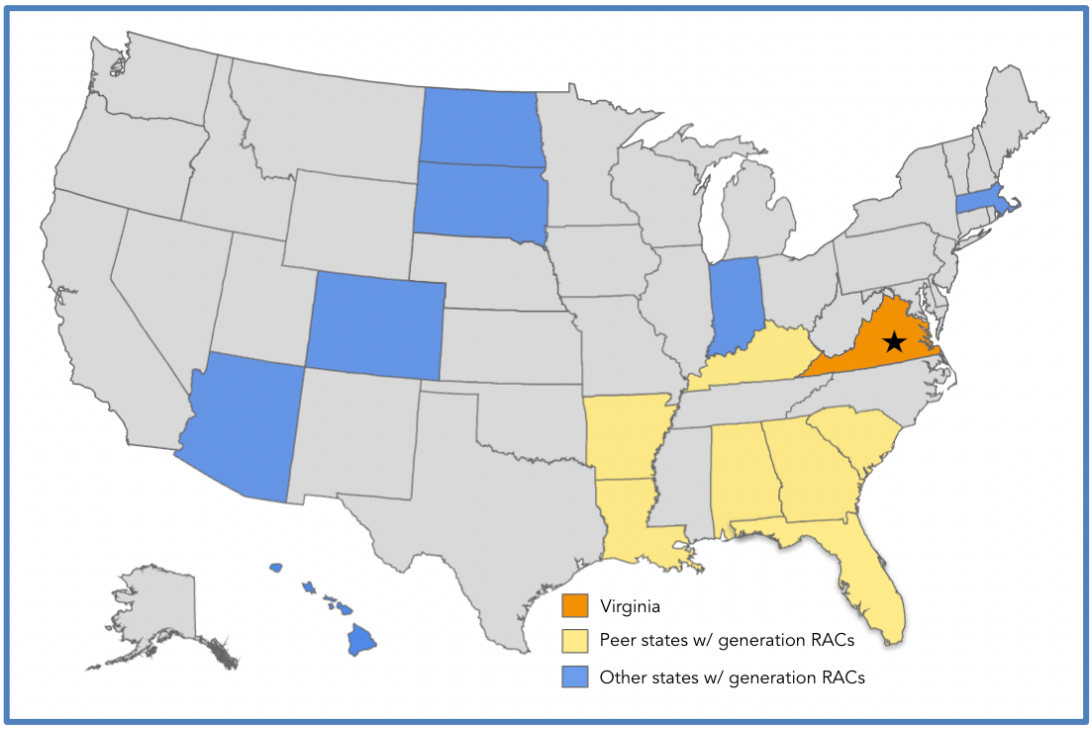

Figure 6: Fifteen states with generation RACs reviewed in this report. Peer states were chosen in accordance to Virginia code "peer group" definitions, § 56-585.1(A)(2)(a-b).

Generation RACs were identified through review of existing literature, commission websites and utility tariffs. Commission staff, local advocates, and other stakeholders were interviewed in each state to determine 1) The history of RACs and regulatory authority of the commission; 2) Applicability of RACs, especially to generation; and 3) Bill impact tools and requirements. Interview responses were verified through the location of relevant statute, docketed proceedings, and court cases. Individual generation RACs were categorized by how the RAC was created using the following categories:

Source of RAC	*RAC enabled by*
Utility proposal	Broad statutory authority, unclear when statute was established. PUC and/or supreme courts found RACs were reasonable.
Legislation: Single Issue	Legislation that addressed a specific event, type of generation, requirement, etc.
Legislation: Multiple RACs	Legislation with multiple types of generation, project categories, etc. permitted.
Legislation: PUC Interpretation	Legislation which allowed the PUC to make determinations or rules about cost recovery through litigated proceedings

Figure 7: Categories for different sources of generation Rate Adjustment Clauses (RACs).

SUMMARY OF KEY FINDINGS

Full details for each state are included in the *Appendix: Detailed State Profiles* on page 15 of this report.

Source and Type of RACs

The fifteen states reviewed featured generation RACs used for divergent use cases ranging from utility proposals for renewable generation to legislative interventions for abandoned projects. In most of the states surveyed, only one or two generation RAC categories were identified (i.e. generation capacity additions and decommissioning), and individual utilities used two or fewer generation RACs. Only utilities in Colorado, Indiana and Virginia applied more than two generation RACs on customer bills in 2021.

Nine of the fifteen states surveyed implemented generation RACs as a result of legislation, only two of which, Hawaii and Arkansas, used legislation to enable the Public Utilities Commission to interpret broad new cost recovery strategies (Figure 8). Four state assemblies passed "single issue" RACs, creating new cost recovery provisions for specific types of generation (i.e. renewable or nuclear) or plant issues (i.e. Georgia Power's Vogtle Units 3 and 4). Some "single issue" legislation delegated the utility regulator's authority to create the appropriate cost recovery mechanism, and the regulator chose to use a rider (i.e. Entergy Louisiana's Little Gypsy conversion project). Three other states – Florida, South Dakota, and Indiana – implemented RACs through legislation which permitted multiple types of generation and project categories, similar to Virginia's approach. The South Dakota legislature did not make distinctions regarding application generation type, while Florida lawmakers addressed nuclear and clean coal. Virginian legislation added provisions for renewable energy, decommissioning of fossil fuels, capacity acquisitions, and other categories.

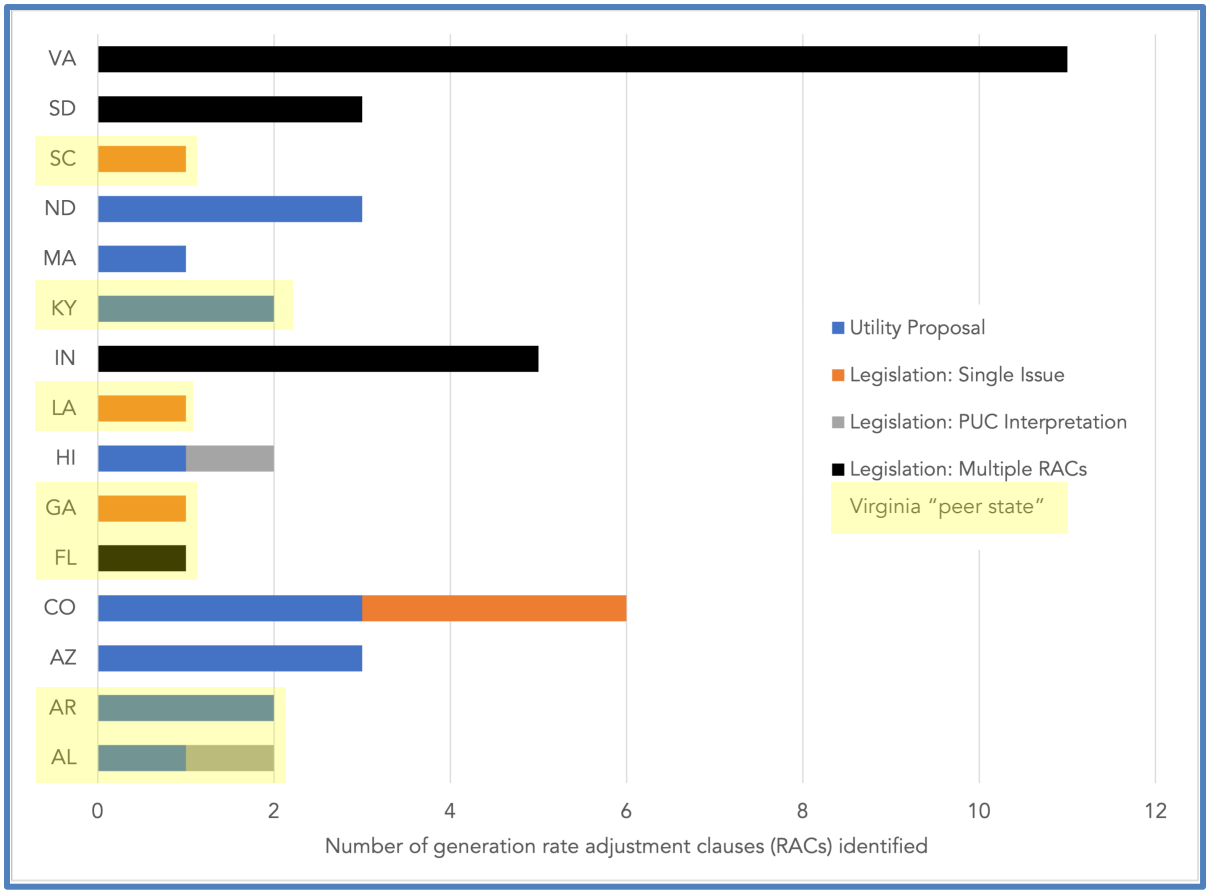

Figure 8: The number of generation Rate Adjustment Clauses (RACs) identified in the fourteen reviewed states plus Virginia, categorized by how the RAC was created ("source of RAC"). One RAC is defined by a unique, approved utility rider or tariff used to fund generation assets. Virginia peer states are defined by Virginia statutes, generally, as states with geographies and markets similar to Virginia (defined in § 56-585.1(A)(2)(a-b)).

Most utilities, including Dominion, established new RACs for specific projects (i.e. the acquisition of a specific generating facility or build-out of solar stations) and petitioned the utility commission for approval of the RAC. While the practice of commission review was consistent across the states, **Virginia stands out with significantly more approved generation RACs, all of which were enabled by statute which distinctly permitted RACs for multiple project types.** Notably, Dominion's ten generation RACs alone account for 28% of the 40 identified generation RACs in the review (see Figure 3 for a list of Dominion RACs).

> In a review of 15 states, the number of Dominion's generation RACs alone account for 28% of generation RACs surveyed.

Variety in generation RACs created by legislation can be further characterized by the intent of the authors. Construction Work in Progress (CWIP) is one tool within generation RACs that demonstrates amongst RACs, particularly because it authorizes cost recovery before the investment is operational and prudently operated. The Florida, South Carolina and Georgia General Assemblies authorized recovery of CWIP costs

for expensive nuclear generation projects, and only one corresponding RAC was created in each state. By contrast, all eleven generation RACs identified in Virginia contain CWIP cost recovery authorization, including recovery of Dominion's North Anna 3 nuclear project. In Georgia and South Carolina, CWIP legislation was later repealed when project delays and costs created public controversy. Only Indiana permits CWIP cost recovery for multiple generation projects in a manner similar to Virginia.

Many generation RACs identified were created to support specific policy goals or generation plants. Lawmakers in Colorado and Virginia created generation RACs to support new statewide clean energy goals, but Colorado's legislation limited the applicability of rate adjustments to only pertain to renewable energy while Virginia legislation addressed multiple types of generation. In Hawaii, one generation RAC rose from the Public Utilities Commission's investigatory proceeding into performance-based rates, while in Arkansas a formula rate plan component was later used for generation assets. Louisiana legislators created a RAC outside of the formula rate plan to recover costs associated with an abandoned generation conversion project. In both Louisiana and Georgia, issues with specific generation plants prompted discussions between utilities and legislators to implement new cost recovery mechanisms. Florida, South Dakota and Indiana, the only other states besides Virginia to create multiple generation RACs from legislation, each target distinct cost categories related to construction (CWIP) or phased-in project costs, representing early-phase financing for multiple types of generation.

In other states, including Alabama, Arkansas, Arizona, Colorado, Hawaii, Kentucky, Massachusetts, and North Dakota, generation RACs were proposed by utilities through general statutory interpretation, and the commissions agreed that the RACs were lawful. In Arizona and Kentucky, commission authority to approve RACs was tried at the state supreme court, where the courts ruled in favor of the commissions' "plenary authority." Only Hawaii and Colorado utilities created generation RACs from more than one source, through utility proposals and in reaction to legislation.

Bill Impacts

The presence and number of RACs does not necessarily indicate the impact of RACs on customer bills, however, bill impact data for each RAC was not available across utilities. Review practices are not standardized and may vary by year, depending on the proceeding. RAC impact on bills may also vary by year, depending on market conditions and utility spending. For example, in 2019, nearly 40%, of Duke Energy Indiana customer bills were attributable to RACs. The Indiana Utility Regulatory Commission explained, "[t]he relative weighting of elements in customer bills varies in part due to the size of a utility's

construction program and how much time has passed since its last base rate case." While the RAC portion of an average ratepayer bill was small for other Indiana utilities, it was high in 2019 for Duke Energy.

As noted in previous sections, the Commission retains the authority to approve or deny utility applications for RACs. Statute in some states includes additional requirements for RACs, including the impact on ratepayer bills or projected impacts by rate class. For example, in Arkansas, state code authorizes cost recovery via interim rate schedules, but dictates that the Commission may adjust proposed changes so that no rate class would see an increase of more than 10%. South Dakota state law enables authorization of RACs for additions to power plants but mandates a full cost of service analysis from the utility and provides an option to conduct a full public review. Other states conduct other, regular rate examination outside of RAC proceedings. For example, Louisiana Public Service Commission staff regularly conduct a residential bill analysis of all rate components each month. Utility commissions in Colorado, Florida, Indiana, and Virginia have published analyses of the bill impact of RACs on the average residential consumer bill in specific incidences or as part of regular reviews. Some commissions have also created unique review processes and standards for proposed RACs, such as the Colorado Public Utilities Commission's three evaluation principles, developed through several RAC proceedings: 1) the costs are volatile; 2) the volatile cost changes are large in magnitude, and 3) the volatile cost changes are beyond the utility's control. Other tools and resources identified in this review for mitigating RAC impact are summarized in Figure 9.

Example Bill Impact Tools and Procedures

Limits on rate impact

- Arkansas interim rate adjustments may not increase any rate class by more than 10%
- Certain Colorado rate adjustment clauses (RACs) were limited to a 2% or 5% rate impact

Filing and Legislative Requirements

- Legislation in Colorado must include a fiscal note with customer bill impacts
- In Massachusetts, proposed rate increases must include bill impact analyses
- Phase-in rate plans in South Dakota must reflect a full cost of service study, review timelines, and include follow-up reports

Informal expectations to conduct customer impact analyses

- Hawaii utilities are expected to file bill analyses in rate cases with customer class and usage data. Impact analyses are also expected for generation and PPA proposals
- Kentucky utilities are expected to complete bill impact analyses in all rate proposals

On-bill rider comparisons

- South Dakota utility rider tariffs describe per kWh charge for each rate class
- Colorado RACs are itemized on utility bills

Special RAC evaluation procedures

- Colorado regulators created three evaluation principles to evaluate RACs:
  1. The costs are volatile
  2. The volatile cost changes are large in magnitude, and
  3. The volatile cost changes are beyond the utility's control

Rate analysis publications from the utility regulator

- Louisiana Public Service Commission staff releases a monthly residential bill analysis with all rate components and increases
- A monthly comparison of bill components is published on the Massachusetts Department of Public Utilities website

Annual reviews

- Annual proceedings are conducted to review Duke Energy Florida's nuclear RAC.
- In Virginia, an annual rate analysis report is completed to assess the impact of legislation
- Required utility annual earnings reports in South Dakota include rider details

Figure 9 from the 2021 E9 Insight report, "Thumb on the Scale: An Examination of Rate Adjustment Adjustments and the Role of the Legislature." Example bill impact tools and procedures identified in the fifteen states analyzed in this report. Cited tools are specific to rate adjustment clauses and riders.

CONCLUDING REMARKS

A comparison of fourteen states with generation RACs demonstrated that Virginia is anomalous in its proliferate use of RACs. Each of these RACs was prescribed by the Virginia General Assembly in wide-reaching legislation that included multiple project types. Unlike the other states profiled, which passed at most two bills deliberately creating generation RACs, the Virginia General Assembly selectively established RACs through seven bills, four of which created major regulatory reform. This prescriptive procedure hinders the ability of the SCC to conduct a comprehensive rate review. Beyond prescribing specific aspects of the ratemaking process, several statutory provisions explicitly limited the SCC's authority to consider the impact of RACs. Few, if any, other state legislatures have rewritten ratemaking and rate adjustment clause provisions as deeply or frequently as the Virginia General Assembly.

Few, if any, other state legislatures have rewritten ratemaking and rate adjustment clause provisions as deeply or frequently as the Virginia General Assembly. Only the General Assembly can change the existing RAC framework and requirements.

By detailing RAC allowances in statute, the General Assembly created multiple pathways for Virginia utilities to recover costs outside of the rate base. The unusual use of this mechanism has become standard practice in the Virginia ratemaking process, resulting in a base rate review process that omits nearly a quarter of total customer costs. Dominion alone established ten generation RACs, while utilities in other states used no more than three each. As our analysis has demonstrated, for over a decade, 100% of increases in customer bills can be attributed to the proliferation of generation RACs, particularly by Dominion.

APCo and Dominion are likely to request new RACs as a result of the 2020 VCEA, which created at least five new RAC-applicable investment categories (i.e. energy storage resources and zero-carbon generating facilities). While the SCC ultimately possesses authority to review and deny RACs, the SCC responds to the responsibilities and definitions provided in statute. Only the General Assembly can choose to restrict the use of RACs, add rate impact restrictions, require certain regular analyses, limit recovery to certain generation, or empower the SCC, as other jurisdictions have done.

The use of RACs in Virginia is disproportionately high when compared with other states. Because the legislature prescribed the details of these RACs in isolation from a deliberative process – placing their "thumb on the scale" – the SCC's duty to provide a fair and equitable balance between ratepayers and the utility has become skewed. The profligate use of RACs to recover generation assets means that some utility investments avoid the level of scrutiny they would receive in other states.

APPENDIX: DETAILED STATE PROFILES[27]

ALABAMA

Context	**Alabama allows little insight into its ratemaking and cost recovery procedures. Alabama Power's Rate CNP recovers certain generation and compliance costs.** Alabama has not litigated its rate cases since 1982, and hearings are present only in new power plant cases. In 2013, Alabama Power's rate review process switched from a traditional cost of service model to a weighted cost of return system with ad hoc testimony after Commissioner Terry Dunn raised questions about Alabama's lack of public process. Advocates report that the state reflects hostility towards regulation and intervention, and regulatory engagement has dropped. The 2020 Code of Alabama Title 37, Chapter 4, Article 1 governs rates and other regulations governed by the Public Service Commission. Certificates of Convenience and Necessity are addressed but generation recovery is not.[5]
Source of RACs	Utility Proposal AND Legislation: PUC Interpretation.
Generation RACs	Alabama Power's Rate CNP is used outside of the Formula Rate Plan for environmental compliance and new generation capacity projects. Rate CNP is divided into three parts: Part A, "Plant Factor" for non-mandated costs associated with new generating resources built or acquired by the utility; Part B, "Purchase Factor" for directed costs associated with PPAs; and Part C, "Compliance Factor" for environmental compliance. CNP was most recently requested to recover all costs of a new 726 MW boiler at Plant Barry and acquisition of a 915 MW Central Alabama combined cycle generating station.[6] After commercial operation of Plant Barry, revenue and associated costs flow through the Rate Stabilization and Equalization Factor (Rate RSE), which was introduced via the formula rate plan. Rate RSE was designed to recover expenses that aren't tied to a specific plant but benefit the system (e.g., transmission assets), but other projects have also used this mechanism. According to tariff sheets, Rate RSE works as a true-up mechanism to "lessen the impact, frequency, and size of retail rate increase requests."[7]
Legislation	None.
Other Activities	The Alabama Public Service Commission established a Rate Stabilization and Equalization (RSE) framework in November 1982[8] as a mechanism to adjust utility rates. In February 2013, the Public Service Commission held public hearings and opened an investigation into investigate consistent over-earnings by Alabama Power. The concluding order in August 2013[9] created a new staff review process and modified its RSE to reflect a formula rate plan structure. Docket information on the initial Plant Barry units 1-7 and associated Rate CNP, filed in docket no. 26115 starting in 1997, are not available at the Public Service Commission.
Bill Impact Resources	The Alabama Attorney General has produced bill analyses in some proceedings.

[27] Citations for detailed state profiles are provided as endnotes, included at the end of this report. Peer states, as defined by statute, are highlighted in yellow.

ARKANSAS

Context	**Generation RACs were established before the Formula Rate Review Plan (FRP) structure and are phasing out. Interim cost recovery is still permitted between rate cases.** In March 2015, the Arkansas General Assembly passed HB 1655, Act 725, to reform utility ratemaking and declare a rate affordability emergency in the state.[10] The law permitted public utilities to use FRPs with annual adjustments. Arkansas Code § 23-4-501, permits cost recovery via interim rate schedules if certain conditions are met (e.g., environmental compliance).[11] Arkansas Code § 23-4-422 dictates that the Public Service Commission may adjust rate changes so that no rate class increases more than 10%.[12]
Source of RACs	Utility Proposal.
Generation RACs	In 1977, Arkansas Power & Light, now Entergy Arkansas Inc. (EAI), requested special recovery of decommissioning costs for its 1,839 MW Arkansas Nuclear One (ANO) plant via a rate rider (initially M26, re-named Nuclear Decommissioning Cost Rider (NDCR) in 2007), functions alongside an internal "trust." EAI's NDCR was suspended in 2020 as the trust became capable of funding costs. The Capacity Acquisition Rider (Rider CA)[13] was initially used for EAI's acquisition of a 789 MW combined cycle generating facility, Ouachita Power. The rider was expanded in 2008 to non-fuel costs associated with the ownership of the plant. Accumulated deferred income tax is collected separately under base rates. Rider CA was utilized again in 2012 for purchase of 620 MW Hot Spring Electric Energy Facility,[14] and in 2015 for a 1,980 MW combined-cycle gas turbine PPA, Power Block 2.[15] Rider CA is used for recovery or return of any true-up balances after financing moved to base rates. The Public Service Commission has noted the importance of case-by-case approval to prevent excessive spending.
Legislation	In March 2015, the Arkansas General Assembly passed HB 1655, Act 725 to reform utility ratemaking and declare an emergency in the state due to shifting utility rate costs; the need for stable rates; and problems with affordability. The new law permitted public utilities to electively regulate rates under a formula rate review plan.[16] The law did not explicitly permit rate adjustment clauses.
Other Activities	None.
Bill Impact Resources	According to a 2014 rate case order, Public Service Commission staff evaluate rate cases according to the total bill impact to each customer class and then make allocation recommendations. No requirement exists for utilities or staff to analyze individual rider impacts.[17]

ARIZONA

Context	**The Arizona Corporation Commission possesses a unique authority to modify utility requirements and cost recovery procedures. RACs are primarily applied to DSM programs and recovery of renewable energy.** Arizona courts have construed the Commission's ratemaking authority as an exclusive and plenary grant of power with which neither the legislature nor the judiciary may interfere. According to Arizona Corporation Commission attorneys, this exclusive jurisdiction extends beyond the setting of actual rates to matters that are necessary to the ratemaking process.[18] The 1978 Arizona state court case Scates v. Arizona Corporation Commission[28] affirmed the Arizona Corporation Commission's authority to adjustment clauses, which have been used for a variety of categories. Multiple rate case settlements for Arizona Public Service Co. (APS) include provisions to reduce various RACs by moving their values into base rates.[19]
Source of RACs	Utility Proposal.
Generation RACs	APS uses a Renewable Energy Adjustment Charge (REAC) to recovery costs of compliance with the Arizona Renewable Energy Standard, including some renewable generation. In 2019, Salt River Project, the other major electric utility in Arizona, altered recovery for renewable energy and energy efficiency investments. SRP eliminated the Environmental Programs Cost Adjustment Factor (EPCAF), and instead collects the costs of renewable energy and related programs through base rates and the Fuel and Purchased Power Adjustment Mechanism (FPPAM), including renewable power purchase agreements.[20] In a 2012 rate case settlement, APS was given authority to request a rate adjustment to recover costs associated with expenses for APS's purchase of Southern California Edison's share of Four Corners Generating Station Units 4 and 5, and retirement of APS Units 1, 2, and 3. APS requested recovery through the Four Corners Rate Rider in the same rate case,[21] and the rider was approved.
Legislation	None.
Other Activities	The 2021 rate case for APS examines capital expenses and adjustor mechanisms in greater detail and has drawn comments from numerous stakeholders.[22] A new adjustor mechanism for clean energy investments and lost fixed costs was proposed in the rate case.
Bill Impact Resources	The Residential Utility Consumer Office (RUCO), submitted a brief in the 2021 APS rate case, stating that the Court in the Scates case cautioned that piecemeal ratemaking can be fraught with potential abuse, and be a disincentive for reductions in cost in other areas of operations. In the brief, RUCO's analysis concludes that riders appeal to utilities, and that riders can result in higher revenues than recovery via traditional ratemaking, costing ratepayers more.[23]

COLORADO

Context	**The Colorado legislature has changed the requirements of the Public Utilities Commission and Colorado utilities through various bills. RACs have been included in both legislation and utility proposals.** Rate adjustment clauses have been in use in Colorado since the 1980s. The Public Utilities Commission has applied its "broad ratemaking authority" to a variety of riders using three criteria, not reflected in codes: 1) the costs are volatile; 2) the volatile cost changes are large in magnitude, and 3) the volatile cost changes are beyond the utility's control.[24] Colorado Revised Statutes Section 40-2-124(1)(f)(IV) mandates that recovery of eligible energy resources consider "rate recovery mechanisms that provide for earlier and timely recovery of costs […] including rate adjustment clauses until the costs […] can be included in the utility's base rates".[25]
Source of RACs	Legislation: Single Issue AND Utility Proposal.
Generation RACs	The Clean Air Clean Jobs Act (CACJA) rider, initially proposed in 2010[26] and to be phased out soon, recovers costs associated with CACJA, including generation to replace coal. The Renewable Energy Standard Adjustment (RESA) is collected as a percentage of sales within Public Service Co. of Colorado (PSCo) and Black Hills Electric Co., up to a 2% retail impact cap, and may be used to pay for the incremental costs of renewable energy over traditional energy resources. The Colorado Energy Plan Adjustment (CEPA) recovers the incremental depreciation costs associated with the early retirements of PSCo's Comanche 1 and Comanche 2 generating units,[27] proposed by PSCo in a follow-up to the Colorado Energy Plan proceeding. The Energy Cost Adjustment (ECA) is also used by PSCo and Black Hills without enabling statute for some for some utility-owned generation, though it primarily covers fuel costs.[28]
Legislation	The 2004 ballot initiative Amendment 37[29] established the Renewable Energy Standard in Colorado and added text to create a RESA. In 2010, the CACJA (HB 10-1365)[30] required regulated utilities to develop plans to meet air emissions requirements, fully recoverable via "special regulatory practice" (40-3.2-207). The law added text that allowed the utilities to develop, own and recover new generating plants to replace coal-fired units. The 2019 Sunset PUC bill (SB 19-236)[31] created a variety of new Public Utilities Commission and utility requirements, including 100% Clean Energy Plans, an associated revenue rider restricted to an 5% bill impact per year, and an electric utility retail rates survey to identify high bills and solutions.[32] The 2020 Modernize PUC bill (SB 21-272)[33] also allowed utilities to own or purchase renewable energy via rate riders.
Other Activities	PSCo has proposed riders for other investments, including grid investments.
Bill Impact Resources	Any legislation impacting rates will have a special fiscal note attached describing the impact on consumers. RACs are itemized on bills, and sometimes limited by percentage impact.

FLORIDA

Context	**Generation recovery in Florida is characterized by debate over the early cost recovery of nuclear plants.** Generation plant recovery is governed by Florida Statute, Title XXVII: Railroads and Other Regulated Utilities § 366.93; Cost recovery for the siting, design, licensing, and construction of nuclear and integrated gasification combined cycle power plants.[34] A 2013 Florida Supreme Court case questioned the constitutional authority of the nuclear cost recovery mechanism, but the Court ruled that, "Authorizing recovery of preconstruction costs through customer rates in order to promote utility company investment in new nuclear power plants, even though those plants might never be built, is a policy decision for the Legislature."[35]
Source of RACs	Legislation: Multiple RACs.
Generation RACs	In a 2017 Duke Energy rate case settlement,[36] the Florida Public Service Commission approved the *Asset Securitization Charge Factor*, representing a "Nuclear Asset-Recovery Charge" as the cost recovery method for certain nuclear facilities. The charge is adjusted semi-annually to ensure timely payment of principal, interest and financing costs of nuclear asset-recovery bonds. As designed by the Public Service Commission, a Special Purpose Entity was created and is the owner of all rights to the Nuclear Asset-Recovery Charge.
Legislation	In 2006, the Florida General Assembly passed a bill which directed the Public Service Commission to create a recovery mechanism designed to promote utility investment in nuclear power plants and to provide early cost recovery for expenditures. The law also addressed integrated gasification combined cycle ("clean coal") facilities in less detail. In 2013, SB 1472[37] modified this statute to modify the Public Service Commission plant review process prior to issuance of cost recovery and follow-up review and modified the applicable rate of return structure.
Other Activities	The Public Service Commission issued several orders related to the conditions of nuclear cost recovery. Annual proceedings are opened to reconsider the nuclear charges. [38]
Bill Impact Resources	Advocacy and public interest groups including AARP have raised objections to Storm Protection Plans and related RACs, claiming that spending was not cost-effective.[39]

GEORGIA

Context	**Recovery of Georgia Power's Vogtle plants is enabled by statute but has been challenged at the Public Service Commission. Multiple delays in the Vogtle project have resulted in lower allowed ROE, and cost recovery remains contentious.** The Environmental Compliance Cost Recovery (ECCR) was one of the first riders established in Georgia, designed to break out the "unavoidable costs" associated with environmental regulation compliance. Ga. Code § 46-2-23 governs the general ratemaking powers of the commission.[40]
Source of RACs	Legislation: Single Issue.
Generation RACs	Georgia Power's Construction Work in Progress (CWIP) rider was established to recover financing costs (debt financing, shareholder equity financing and profit, income tax recovery, etc.) associated with new additions, units 3 and 4, to the Plant Vogtle nuclear facility. Georgia Public Service Commission staff argued against recovery of construction financing through the CWIP because the proposed methodology "violates the matchmaking principles that ensures the basic fairness." The CWIP rider was re-named the Nuclear Construction Cost Recovery (NCCR) and is based on customer usage, with special treatment for high-load customers. The CWIP proposal was approved in docket 27800 and was filed as the NCCR in docket no. 32539.[41]
Legislation	The Nuclear Energy Financing Act (SB 31),[42] signed in 2009 and applied in docket no. 27800,[43] "significantly altered the framework under which the Commission operates"[44] by mandating the recovery of financing costs associated with nuclear power plants, to begin within five years of the Commission's certification of the facility. SB 31 was overridden by SB 355 in 2018, which determined that the NCCR may not be applied to any future nuclear plants after January 2018. The NCCR will be phased out.[45]
Other Activities	Capital expenditures related to Vogtle Unit 3 may not be collected until one month after the unit comes online, though in 2014 the Public Service Commission approved a settlement which ruled that $4 billion in "already spent" funds would be considered prudent. Unit 3 was "decoupled" from other nuclear units in 2017/2018 to incentivize the utility to finish Unit 3. Docket no. 43838, opened in 2021, will examine prudent costs above $4 million and the NCCR.[46]
Bill Impact Resources	Georgia Power released a rate impact analysis for Plant Vogtle which reflects a peak rate impact around 10%, though an additional 5% is already included in rates because of the NCCR. A 2020 Public Service Commission filing demonstrated that total project costs have increased by 78%.[47] Energy burden issues were also discussed in the 2019 rate case.[48]

HAWAII

Context	**The Hawaii Public Utilities Commission remodeled its provisions for major utility investments, including generation projects, after the statutory implementation of performance-based ratemaking (PBR). Some generation flows through other PBR mechanisms.** Ratemaking in Hawaii is governed by HI Rev Stat § 269-16 (2020), though the details of the mandatory PBR framework are contained in dockets. [49,50]
Source of RACs	Legislation: PUC Interpretation AND Utility Proposal.
Generation RACs	Under the PBR framework, the Hawaiian Electric (HECO) companies use a Revenue Balancing Mechanism (RBA) which allows HECO to true-up its target revenue and approved revenues. A portion of this provision considers costs related to "major capital projects," characterized as projects over $2.5 million and requiring separate applications with the Public Utilities Commission. The Major Project Interim Recovery (MPIR) was established via an examination of decoupling mechanisms as an interim recovery mechanism used to recover funds between rate cases.[51] As of June 2021, the MPIR was phased out in lieu of the Exceptional Project Recovery Mechanism (EPRM), which operates similarly but was extended beyond capital expenditure to include O&M expenses, program costs, and groups of small projects. Special exemption from competitive bidding requirements must be requested for generation projects requesting to use the EPRM. The Renewable Energy Infrastructure Program (REIP) Surcharge, created in 2008,[52] recovers the cost of infrastructure designed to encourage the development of third-party renewable energy, maintain current renewable energy resources, and enhance energy choices for customers. The surcharge raises capital to provide investors assurance of timely recovery.
Legislation	Six days after the Public Utilities Commission opened a PBR investigation,[53] Governor Ige signed SB 2939 into law, stating that only performance-based rates will be considered "just."[54]
Other Activities	The MPIR was applied to the 50 MW Schofield Generating Station.[55]
Bill Impact Resources	HECO companies customarily file bill analyses in rate cases, and the Public Utilities Commission requests impact analyses with various customer class and usage data if not provided. The Public Utilities Commission also requests impact analyses for generation and PPA proposals. In the Distributed Energy Resources investigation, the Public Utilities Commission is investigating advanced rate design to move from the current, flat usage pattern assumptions to one which reflects changing patterns and prices.[56]

INDIANA

Context	**Indiana utilities use several generation rides which contain Construction Work in Progress (CWIP) provisions. Applicable projects include environmental compliance projects, renewable energy, and combined cycle plants.** Indiana's general regulatory statutes allow rate adjustment mechanisms, also known as trackers, generally in either an "expense tracker" category or "capital investment tracker," used for clean coal technology and grid improvements.[57] The Indiana Utility Regulatory Commission stated in 2020 that RACs "provide timelier flow-through of specifically defined and approved costs to retail rates, compared to adjustments that would occur as the result of a rate case."[58] Over the past decade, legislative changes specific to RACs have resulted in either restrictions or expansions to the Commission's regulatory authority.
Source of RACs	Legislation: Multiple RACs.
Generation RACs	Duke Energy's Renewable Energy Project Adjustment was created through a settlement process in the Crane Solar Facility docket, including CWIP ratemaking treatment, for a variety of costs (depreciation, property taxes, operation and maintenance, etc.).[59] Settling parties stated that the rider would provide more transparency than would be likely if the project was included the existing Environmental Cost Recovery (ECR) riders. Duke Energy's Environmental Compliance Investment Adjustment, or Rider 62, provides CWIP ratemaking treatment for investments in qualified pollution control property and clean energy projects using a historical cut-off period.[60] Duke Energy proposed the Edwardsport integrated combined cycle generating facility (IGCC) project and plant rider in 2006. The rider was a combination rate recovery mechanism that incorporated aspects of Rider 62 and Rider 71, the Clean Coal Operating Cost Adjustment. The IGCC rider was also used to recover CWIP costs. [61] Indiana Michigan Power Co. (I&M) employs a Life Cycle Management Rider (LCMR) to recover costs associated with the D.C. Cook Nuclear Plant through its operating license.[62] I&M also uses a Solar Power Rider to recover investments in the St. Joseph Solar Project.[63]
Legislation	Several CWIP bills failed in the 1980s, but Senate Bill 29, passed in 2002, allowed utilities to charge CWIP during the construction of coal-fired power plants. Other legislation enables RACs for environmental compliance (Senate Bill 251, 2011[64]) and for transmission and distribution system improvements (SEA560[65]).
Other Activities	In 2019, a large percentage of Duke Energy customer bills was for riders. The Indiana Utility Regulatory Commission explained that "[t]he relative weighting of elements in customer bills varies in part due to the size of a utility's construction program and how much time has passed since its last base rate case."[66] The RAC portion was small for other utilities.
Bill Impact Resources	The Indiana Office of Utility Consumer Counselor publishes rider comparison tools.

KENTUCKY

Context	**The Kentucky Public Service Commission has approved a variety of utility-proposed generation riders, citing its authority to approve rates outside of typical rate cases.** In 2001, Duke Energy Kentucky (Duke) filed an application to recover a new Accelerated Main Replacement Program (AMRP) via a new rider. The Public Service Commission approved the application, and the Attorney General appealed its decision at the Circuit and Supreme courts. In Kentucky Service Commission v. Commonwealth Conway, 2010, the Kentucky Supreme Court affirmed that the Public Service Commission possesses plenary authority to regulate rates, and nothing in statutes prohibits "single-issue ratemaking."[67] This precedent has been used to justify additional riders. The Public Service Commission has supported the use of regulatory assets because state-supported debt rates will be lower than utility rates, though the application to early coal retirements is unclear. Of note, budget reductions of nearly $1.4 million over two years have reduced the Kentucky Public Service Commission staff size from 200 to approximately 70.
Source of RACs	Utility Proposal.
Generation RACs	Kentucky Power's Big Sandy Retirement Rider (BSRR) is referred to as a decommissioning rider, created out of the Public Service Commission's plenary authority and regulatory asset precedent in 2013.[68] The rider uses two general categories for cost recovery: a regulatory asset that accrues a weighted average cost of capital, and costs associated with decommissioning (e.g., ash ponds). The rider is set to stop accruing in 2021 as decommissioning projects are complete, though the rider will remain in effect through 2040.[69] Louisville Gas & Electric and Kentucky Utilities' Retired Asset Recovery Rider (RAR) operates similarly to the BSRR, earning a return on the remaining book value, retirement costs, and decommissioning costs of various generation plants. The utilities have the burden of proof to book remaining asset value.[70,71]
Legislation	None.
Other Activities	None.
Bill Impact Resources	Utilities complete bill impact analyses in their rate case testimony. Exhibits in the cost-of-service studies will show schedules and a typical bill for demand-metered rate schedules. This requirement is not codified, but is expected.

LOUISIANA

Context	**Louisiana utilities rely on storm recovery riders outside of Formula Rate Plans (FRPs), and have also applied RACs to an unfinished conversion project.** Louisiana's first FRP, with various riders embedded, was established in 1995 in response to a proposal by Louisiana Power & Light (now called Entergy Louisiana, docket no. U-20925).[72] In 2005, Entergy established a securitization rider to recover the costs of hurricanes Katrina and Rita through a state-sponsored bond. This method was modeled after Florida's storm recovery approach, applied in Louisiana to address cash flow issues and to take advantage of low rates and risk associated with state bonds. Rider securitization bond sales, roughly between 3% and 6%, have allowed the utilities to build up their storm reserves to mitigate rate increases.
Source of RACs	Legislation: Single Issue.
Generation RACs	Entergy Louisiana's Securitized Little Gypsy Recovery Rider (SLGR-L) was established[73] to recover the costs of an incomplete combustion turbine conversion project. The project was proposed towards the end of the Little Gypsy plant useful life, but during construction, Entergy petitioned the Public Service Commission to shut down the project because the shale gas discovery significantly reduced gas prices, rendering the project uneconomic. The Public Service Commission determined that Entergy could not obtain a typical rate of return on expenditures, and recommended analysis of securitization laws.
Legislation	Entergy worked with legislators to add the "Louisiana Investment Recovery Securitization Act (HB 39) to allow securitization for cancelled construction of generating or electric facilities (e.g., Little Gypsy) as a result of an event designated as a state emergency, if the expenses, unrecovered costs, or capital expenditures or write-offs are approved by the Public Service Commission. State bonds could be held at 2.5% as opposed to the 9.5% ROE.[74]
Other Activities	None.
Bill Impact Resources	Public Service Commission staff produce a residential bill analysis document once a month comparing all Louisiana utility rate components, accessible via e-mail request to Donnie Marks, Utilities Administrator, at Donnie.marks@la.gov. This process was not established by any statute but is a long-standing Public Service Commission practice.

MASSACHUSETTS

Context	**The only generation RAC present in Massachusetts is designed to recover costs with new solar generation projects, proposed in response to clean energy legislation.** Massachusetts has restructured electricity markets, and distribution utilities no longer own power generation facilities. The Massachusetts Department of Public Utilities hosts rules on its website (Title 220 of the Code of Massachusetts Regulations).[75] Tariffs and general ratemaking procedures are reviewed in 220 CMR 5.00.[76]
Source of RACs	Utility Proposal.
Generation RACs	National Grid's Solar Cost Adjustment Factor (SCAF) recovers costs associated with investment and ongoing maintenance costs of solar generation projects constructed, owned and operated by either Massachusetts Electric Co. or Nantucket Electric Co. The SCAF applies to facilities listed in Schedule 1, which may be edited to include new projects.
Legislation	The 1997 Electric Utility Restructuring Act[77] deregulated Massachusetts' electricity markets and created the Renewable Energy Trust, funded in part by a non-bypassable Renewable Energy Charge excise tax levied on customer bills. This was based on similar structures in Connecticut, New Jersey, and other restructured states. The trust fund was created to ensure that policy decisions related to new electricity generation would be made through the competitive market, overseen by the Massachusetts Clean Energy Center.[78] Following the passage of the Green Communities Act in 2008,[79] which set a goal to meet at least 20% of Massachusetts' electric load by 2020 with new renewable generation, National Grid proposed the SCAF in docket no. 09-38 to recover costs associated with 5 MW of solar generation at five separate sites.[80] The SCAF was modified in docket no. 12-126 to recover the revenue requirement associated with solar facilities from each class based on a distribution revenue allocator.[81]
Other Activities	Public utilities also collect a $0.0005 per kWh Renewable Energy Charge to provide funding to the Massachusetts Renewable Energy Trust Fund.
Bill Impact Resources	The Massachusetts Department of Public Utilities provides information about bill components on its website,[82] and produces a chart of monthly and fixed prices by utilities in a downloadable spreadsheet.[83] Utilities are required by statute to provide a typical bill impact analysis with proposed rate increases (220 CMR 5.06).

NORTH DAKOTA

Context	**North Dakota utilities have proposed various riders to support new renewable energy and interim capacity additions, all of which were approved.** N.D. Cent. Code § 49-02-03 provides the North Dakota Public Service Commission the power to revise public utility rates,[84] and § 49-05-04, pertaining to rate increases, has been cited in riders.[85]
Source of RACs	Utility Proposal.
Generation RACs	Otter Tail Power (OTP) proposed the state's first generation rider to recover costs associated with a 40.5 MW ownership share of the Langdon wind farm.[86] Public Service Commission staff affirmed that OTP sought the Renewable Resource Rider (RRR) "because owning wind is cheaper than buying it."[87] The RRR is applied to utility-owned renewable energy facilities, including O&M, depreciation, income, taxes, and returns. Northern States Power Co. (NSP) uses a Renewable Energy Rider (RER) to recover the costs of renewable projects located in North Dakota and approved by the Public Service Commission. NSP's 2013 rate case[88] settlement created the RER. The RER was applied in this case to recover the costs of the Border Winds Project. MDU modeled its Generation Resource Recovery Rider (GRRR) in 2014[89] off of the RRR. MDU requested the mechanism to provide recovery of the North Dakota allocation of the Heskett III 88 MW simple cycle combustion turbine, transmission facilities, and natural gas pipelines to serve the facility. The GRRR was also expanded to the addition of the Reciprocating Internal Combustion Engines co-located with the Lewis and Clark Generating Station. MDU described the GRRR as a means to phase in generation additions in between rate cases and minimize rate shock to customers. Applicable costs include O&M, depreciation, taxes, and current return on the project costs during construction.
Legislation	None.
Other Activities	None
Bill Impact Resources	No bill impact resources were identified.

SOUTH CAROLINA

Context	**Legislation enabled generation recovery for the construction of nuclear plants, but only one utility, South Carolina Electric & Gas (SCE&G, later acquired by Dominion Energy) used the provision. The nuclear project was never completed and resulted in multiple lawsuits.** S.C. Code chapter 33[90] governs utility facility siting and environmental protection, and § 58-33-280 governs requests for approval of revised rates.
Source of RACs	Legislation: Single Issue.
Generation RACs	In 2008, SCE&G requested cost recovery for the construction of nuclear Units 2 and 3 at the V.C. Summer Nuclear Power Station, pursuant the Base Load Review Act (BLRA).[91] Between 2008 and 2017, SCE&G received nine rate increases during the construction of the units. In 2017, after $9 billion of expenditures, the reactors were abandoned due to rising costs, delays, and contractor bankruptcy issues.[92] BLRA costs were not treated as a typical rider but were considered under special circumstances.
Legislation	The Base Load Review Act (BLRA)[93] was enacted in 2007 to create consistent procedures for utilities to follow when building nuclear power plants. The BLRA allows for annual adjustments to rates during construction of nuclear units, subject to a Base Load Review order from the South Carolina Public Service Commission. After commercial operation, the cost recovery provisions change. Project development, construction plans, cost recovery, and other matters were subject to the review of the Public Service Commission. At least one year after the BLRA application, the utility is permitted to request approval of revised rates, including Construction Work in Progress costs. Act 258 of 2018[94] repealed BLRA provisions by stating that the Public Service Commission must not accept any new base load review applications or requests. Act 258 also addressed the SCE&G/Dominion merger and directed the Public Service Commission to implement an experimental rate to reduce rates in an amount equal to the costs imposed the BLRA.
Other Activities	Following the decision to stop construction of V.C. Units 2 and 3, multiple class action lawsuits were filed against company executives of SC&EG's parent company, SCANA, in various state courts and the federal district court. Shareholders and former employees of the nuclear projects alleged breach of fiduciary duty, conspiracy, fraud, unfair trade practices, and other issues.[95] SCANA and SCE&G denied the allegations, but arranged settlement which included $2 billion in rate credits, $115 million cash payments to shareholder funds, and transfer of real estate and sales proceeds.[96] A subsequent proceeding at the Public Service Commission discussed the rate implications of the SCANA/Dominion Energy merger, abandonment of the V.C. units, Act 258 provisions, rate reductions, and other issues.[97]
Bill Impact Resources	The South Carolina Office of Regulatory Staff has a resources page related to the BLRA with rate impact, prudence review, and approved rate increase summary sheets.[98]

SOUTH DAKOTA

Context	**South Dakota's "Phase-In" rate plan statute enables utilities to recover costs associated with plant additions that are anticipated to have a material impact on rates.** The rate plan, which was permitted via a RAC by the Public Utilities Commission, may include rate increases to be phased in prior to the commencement of commercial operation. Legal support for riders comes from South Dakota Codified Law (SDCL), Chapter 49-34A, which governs gas and electric utility regulation, and specifically 49-34A-73.[99] Other allowances for the RAC mechanism and rules for Commission oversight are explicitly stated in sections 49-34A-4, 49-34A-6, 49-34A-8, 49-34A-10, and 49-34A-12.[100] Additionally, the codified Administrative Rules of South Dakota (ARSD), Chapter 20:10:13, governs general Public Utilities Rate Filing Rules, and as such includes several points related to filing of tariffs and administration of adjustment clauses.[101]
Source of RACs	Legislation: Multiple RACs
Generation RACs	Northern States Power Co. established the Infrastructure Rider, originally titled "Phase-In Rider," in its 2012 rate case[102] as a tool to recover the costs of several discreet projects, including generation additions and modifications. According to later rate cases, this rider was established under the Public Utilities Commission's broad ratemaking authority. Montana-Dakota Utilities established its Infrastructure Rider to recover the costs associated with the Thunder Spirit Wind facility in its 2015 rate case.[103] Black Hills Energy filed an application in 2012[104] for the phase-in of rates related to the construction financing costs of Cheyenne Prairie Generating Station.
Legislation	In 2012, House Bill 1121[105] amended the 1992 S.D. Codified Laws § 49-34A-73 "phase-in" rate plan statute to expand the types of investments eligible for inclusion for a phase-in rate plan and rider to include plant additions. Eligible costs include investments in fixed generation, transmission, and distribution assets, whether purchased or constructed; operations and maintenance expenses directly related to those fixed assets; real property; and new power purchases. Additional provisions were added for inclusion of a full cost of service study, timing of the rider proposal, and review processes. In 2015, HB 1120[106] revised this section again.
Other Activities	To support decision-making in the public interest, the Public Utilities Commission required annual earnings reports from utilities with riders, dating back to a 2010 Docket, EL-10-015, in which Otter Tail proposed a transmission rider and agreed to annual reporting.[107]
Bill Impact Resources	Section 3 and Section 4 of each utility's Electric Tariff, compiled at the Public Utilities Commission, contains per kWh charges related to riders applicable to various rate classes.[108]

E9 INSIGHT

E9 Insight is a research and advisory firm that offers comprehensive regulatory analysis and engagement services. E9 Insight provides tailored research services to help organizations understand complex regulatory and policy issues that directly affect their operations, business development and policy strategies. Clients include a wide range of technology companies, government agencies, trade organizations and advocacy coalitions. More information is available at: www.e9insight.com.

The principal author for this report is Marguerite Behringer, supported by Cameron Brooks, Michael Hughes and the E9 Insight team. We are deeply appreciative of the many experts who shared their time and knowledge in preparing this research.

DETAILED STATE PROFILE CITATIONS

[1] Alabama Public Service Commission (2013). *Docket No. 13-028-U. Direct Testimony of William B. Marcus on behalf of The Arkansas Attorney General.* Pp. 78. http://www.apscservices.info/pdf/13/13-028-u_220_1.pdf

[2] Blair, Kaserman, and Pacey (1985). *A Note on Purchased Power Adjustment Clauses.* The Journal of Business, 58(4), 409-417. http://www.jstor.org/stable/2352834

[3] Brattle Group (2006). *Electric Utility Automatic Adjustment Clauses: Benefits and Design Considerations.* Prepared for Edison Electric Institute by Graves, Hanser, and Basheda of The Brattle Group. June 2006. http://files.brattle.com/files/6314_electric_utility_automatic_adjustment_clauses_graves_et_al_june_2006.pdf

[4] EIA (2018). *Today in Energy, July 19, 2019: The number of electric utility rate cases increased in 2018.* U.S. Energy Information Administration. https://www.eia.gov/todayinenergy/detail.php?id=40133

[5] Justia (2021). *US Law, 2020 Code of Alabama, Title 37, Public Utilities and Public Transportation.* https://law.justia.com/codes/alabama/2020/title-37/chapter-4/article-1/

[6] Alabama Public Service Commission (2021). *Docket Number: 32953.* https://www.pscpublicaccess.alabama.gov/pscpublicaccess/PSC/DocketDetailsPage.aspx?DocketId=dbf70c38-8945-4edf-ad99-c6820bd4c559

[7] Alabama Power (2021). *Rate RSE, Rate Stabilization and Equalization Factor.* https://www.alabamapower.com/content/dam/alabama-power/pdfs-docs/Rates/RSE.pdf

[8] Alabama Public Service Commission (2001). Annual Report. http://psc.alabama.gov/News/annual%20report/2001annualnew/elec.html

[9] Alabama Public Service Commission (2013). Order on Rate RSE. Docket Nos. 18117 and 18416. https://s3.documentcloud.org/documents/6952076/REPORT-and-ORDER-for-RATE-RSE-RATE-STABILIZATION.pdf

[10] OpenStates (2021). *Arkansas 2015, HB 1655.* https://openstates.org/ar/bills/2015/HB1655/

[11] FindLaw (2021). *Arkansas Code Title 23. Public Utilities and Regulated Industries § 23-4-501.* https://codes.findlaw.com/ar/title-23-public-utilities-and-regulated-industries/ar-code-sect-23-4-501.html

[12] FindLaw (2021). *Arkansas Code Title 23. Public Utilities and Regulated Industries § 23-4-422.* https://codes.findlaw.com/ar/title-23-public-utilities-and-regulated-industries/ar-code-sect-23-4-422.html

[13] Arkansas Public Service Commission. *Docket No. 06-152-U. Request for Approval of Acquisition of New Capacity.* http://www.apscservices.info/efilings/docket_search_results.asp?casenumber=06-152-U

[14] Arkansas Public Service Commission. *Docket No. 11-069-U. Acquisition of the Hot Springs Plant.* http://www.apscservices.info/efilings/docket_search_results.asp?casenumber=11-069-U

[15] Arkansas Public Service Commission. *Docket No. 14-118-U. Acquisition of a Generating Unit at the Union Power Station.* http://www.apscservices.info/efilings/docket_search_results.asp?casenumber=14-118-U

[16] Arkansas General Assembly (2015). House Bill 1655. To Reform Rate Making Of Public Utilities; And To Declare An Emergency. https://openstates.org/ar/bills/2015/HB1655/

[17] Arkansas Public Service Commission. Docket No. 13-028-U. Order Number 21. December 30, 2013. http://www.apscservices.info/pdf/13/13-028-U_431_1.pdf

[18] Scates *v.* Arizona Corp. Commission, 578 P.2d 612 (Ariz. Ct. App. 1978)

[19] Filing by attorneys for the Arizona Corporation Commission in docket no. WS-02987A-18-0050, September 2019. https://law.arizona.edu/sites/default/files/ASC-CV190105%20-%209-16-2019%20-%20FILED%20-%20RESPONDENTS-APPELLEES%20AZ%20CORP%20COMMISSION%20ET%20ALS%20SUP%20BRIEF.pdf

[20] Salt River Project (2021). *Public Pricing Process, Sustainability Programs. What is EPCAF and why is it going away?* https://www.srpnet.com/prices/priceprocess/2019/epcaf.aspx

[21] Arizona Corporations Commission (2011). *Docket No. E-01345A-11-0224. In the matter of the application of Arizona Public Service Company for a hearing to determine the fair value of the utility property of the company for ratemaking purposes, to fix a just and reasonable rate of return thereon, to approve rate schedules designed to develop such return.* https://edocket.azcc.gov/search/docket-search/item-detail/16914

[22] Arizona Corporation Commission (2021). Docket No. E-01345A-19-0236. Arizona Public Service Company. https://edocket.azcc.gov/search/docket-search/item-detail/23468

[23] Arizona Corporation Commission (2021). *Docket No. E-01345A-19-0236. RUCO's Closing Brief. Page 23.* https://docket.images.azcc.gov/E000012695.pdf?i=1626977682274

[24] Colorado Public Utilities Commission (2020). Docket No. 20AL-0301E. Public Service Company of Colo-AL-1828 Tariff 8 (AGR), Advanced Grid Rider. Direct Testimony of Steven P. Berman. https://www.dora.state.co.us/pls/efi/efi.show_document?p_dms_document_id=929610&p_session_id=

[25] FindLaw (2021). Colorado Revised Statutes Title 40. Utilities § 40-2-124. Renewable energy standards. https://codes.findlaw.com/co/title-40-utilities/co-rev-st-sect-40-2-124.html

[26] Colorado Public Utilities Commission (2010). Docket No. 10M-245E. PSCO Compliance with HB 10-1365 -Clean Air-Clean Jobs Act. https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=10M-245E

[27] Colorado Public Utilities Commission (2017). *Docket No. 17A-0797E. Public Service Company of Colorado Accelerated Depreciation – AD/RR.* https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=17A-0797E

[28] NARUC (2015). *Fuel and Purchased Power Survey Results – Staff Subcommittee on Accounting and Finance.* https://pubs.naruc.org/pub/4AA28D50-2354-D714-5149-B773EFC3EFEF

[29] Colorado Legislative Council Staff (2004). *Fiscal Impact Statement, Amendment 37.* https://www.colorado.gov/pacific/sites/default/files/04%20Amendment37fiscalimpact,0_1.pdf

[30] Colorado General Assembly. House Bill 10-1365. Incentives for Electric Utilities to Reduce Air Emissions. http://www.leg.state.co.us/clics/clics2010a/csl.nsf/fsbillcont3/0CA296732C8CEF4D872576E400641B74?open&file=1365_enr.pdf

[31] Colorado General Assembly. *Senate Bill 19-236. Continuation of the Public Utilities Commission.* https://leg.colorado.gov/sites/default/files/2019a_236_signed.pdf

[32] Colorado Public Utilities Commission (2020). *Docket No. 20M-0251E. Investigation of Electric Utility Retail Rates.* https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=20M-0251E

[33] Colorado General Assembly (2021). *Senate Bill 21-272. Measures To Modernize The Public Utilities Commission* https://leg.colorado.gov/bills/sb21-272

[34] The Florida Senate. 2020 Florida Statutes Title XXVII, Chapter 366, Section 93. https://www.flsenate.gov/Laws/Statutes/2020/0366.93

[35] Southern Alliance for Clean Energy vs. Art Graham, etc., et al., May 2, 2013. https://www.floridasupremecourt.org/content/download/242759/file/sc11-2465.pdf

[36] Florida Public Service Commission (2015). Docket No. 2015-0171-EI. https://www.floridapsc.com/ClerkOffice/DocketFiling?docket=20150171

[37] Florida Senate. *Senate Bill 1472. Bill Analysis and Fiscal Impact Statement.* April 16, 2013. https://www.flsenate.gov/Session/Bill/2013/1472/Analyses/2013s1472.ca.PDF

[38] Duke Energy (2021). *Rate Schedule BA-1, Billing Adjustments.* https://www.duke-energy.com/_/media/pdfs/for-your-home/rates/rates-fl/pe-rates-ba-1.pdf?la=en

[39] AARP Florida (2021). *Electric Utility Storm Protection Plans, A Bonanza for Utilities.* Prepared by the Wired Group. http://nebula.wsimg.com/36ca59efe76ef25b0262a1812d00e871?AccessKeyId=8AF7098D30C5BF55909C&disposition=0&alloworigin=1

[40] Code of Georgia. Ga. Code § 46-2-23 https://casetext.com/statute/code-of-georgia/title-46-public-utilities-and-public-transportation/chapter-2-public-service-commission/article-2-jurisdiction-powers-and-duties-generally/section-46-2-23-rate-making-power-of-commission-generally-special-provisions-concerning-telecommunications-companies

[41] Georgia Public Service Commission (2010). *Docket Number 32539. Georgia Power Company Nuclear Construction Financing Cost Recovery Tariff NCCR-1.* https://psc.ga.gov/search/facts-docket/?docketId=32539

[42] Georgia General Assembly (2010). *SB 31, Georgia Nuclear Energy Financing Act.* https://www.legis.ga.gov/legislation/26144

[43] Georgia Public Service Commission (2008). *Docket No. 27800. Vogtle certification filing.* https://psc.ga.gov/search/facts-docket/?docketId=27800

[44] Georgia Public Service Commission (2009). *Docket No. 27800. GPSC Certification Order*. https://psc.ga.gov/search/facts-document/?documentId=118949

[45] Georgia General Assembly (2018). *SB 355, Nuclear Generating Plant; recovery of the costs of financing the construction; provisions; change*. http://www.legis.ga.gov/legislation/en-US/Display/20172018/SB/355

[46] Georgia Public Service Commission (2021). Docket No. 43838. Georgia Power Company's Application to Adjust Rates to include certain Plant Vogtle Unit 3 and Common Costs. https://psc.ga.gov/search/facts-docket/?docketId=43838

[47] Georgia Public Service Commission (2020). Docket no. 29849. Direct Testimony and Exhibits of Tom Newsome, PE, CFA Philip Hayet, lane Kollen, CPA, CMA, CGMA on behalf of the Georgia Public Service Commission Public Interest Advocacy Staff. . https://services.psc.ga.gov/api/v1/External/Public/Get/Document/DownloadFile/183342/65221

[48] Georgia Public Service Commission (2019). Docket no. 42515. Georgia Power 2019 Rate Case. https://psc.ga.gov/facts-advanced-search/docket/?docketId=42516

[49] Justia (2021). *US Law, 2020 Hawaii Revised Statutes, Title 15, 269-16 Regulation of utility rates; ratemaking procedures.* https://law.justia.com/codes/hawaii/2020/title-15/chapter-269/section-269-16/

[50] Hawaii Public Utilities Commission (2020). *Summary of Phase 2 Decision & Order Establishing a PBR Framework.* https://puc.hawaii.gov/wp-content/uploads/2020/12/PBR-Phase-2-DO-5-Page-Summary.Final_.12-22-2020.pdf

[51] Hawaii Public Utilities Commission (2013). *Docket No. 2013-0141. Instituting an Investigation to Reexamine the Existing Decoupling Mechanisms.* https://dms.puc.hawaii.gov/dms/dockets?action=details&docketNumber=2013-0141

[52] Hawaii Public Utilities Commission (2016). *Docket No. 2016-0342. Application for Approval of Waiver from the Framework for Competitive Bidding.* https://dms.puc.hawaii.gov/dms/dockets?action=details&docketNumber=2016-0342

[53] Hawaii Public Utilities Commission (2018). *Docket No. 2018-0088. Instituting a Proceeding to Investigate Performance-Based Regulation.* https://dms.puc.hawaii.gov/dms/dockets?action=details&docketNumber=2018-0088

[54] State of Hawaii Legislature (2018). *S.B. 2939. A Bill for an Act Relating to Energy.* https://www.capitol.hawaii.gov/session2018/bills/SB2939_.HTM

[55] Hawaii Public Utilities Commission (2017). *Docket No. 2017-0213. Application for Approval to Recover Costs for Schofield Generating Station.* https://dms.puc.hawaii.gov/dms/dockets?action=details&docketNumber=2017-0213

[56] Hawaii Public Utilities Commission (2019). *Docket No. 2019-0323. Instituting a Proceeding to Investigate Distributed Energy Resource Policies.* https://dms.puc.hawaii.gov/dms/dockets?action=details&docketNumber=2019-0323

[57] Indiana Utility Regulatory Commission (2019). *Indiana Utility Guide, 2019 Edition.* https://www.in.gov/iurc/files/IURC-Utility-Guide-LoRes_2-min.pdf

[58] Indiana Utility Regulatory Commission (2020). *2020 Annual Report. Energy Division, Electricity, Customer Bills. Residential Bill Components.* Page 32. https://www.in.gov/iurc/files/IURC-2020-AR-WEB.pdf

[59] Indiana Utility Regulatory Commission (2016). *Docket No. 44734. Petition for Crane Solar Facility CPCN and Cost Recovery.* https://iurc.portal.in.gov/docketed-case-details/?id=370d6d8d-db81-e611-8107-1458d04eabe0

[60] Indiana Utility Regulatory Commission (2020). *Docket No. 45253. Final Order.* https://iurc.portal.in.gov/_entity/sharepointdocumentlocation/7b316e6f-1bba-ea11-a812-001dd8018831/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45253%20ORDER%20062920.pdf

[61] Indiana Utility Regulatory Commission (2006). Case Filings for: 43114. *Edwardsport CPCN and Cost Recovery.* https://iurc.portal.in.gov/docketed-case-details/?id=6c6657ef-dc81-e611-8107-1458d04eabe0

[62] Indiana Utility Regulatory Commission (2013). *Docket No. 44182. Petition of Indiana Michigan Power Co. for a Proposed Life Cycle Management Project at the Donald C. Cook Nuclear Plant.* https://iurc.portal.in.gov/docketed-case-details/?id=c067b983-d981-e611-8107-1458d04eabe0

[63] Indiana Utility Regulatory Commission (2019). *Docket No.45245. Indiana Michigan Power Co. 20 MW Solar Project and Recovery.* https://iurc.portal.in.gov/docketed-case-details/?id=d2f3e329-d78d-e911-8150-1458d04eaba0

[64] Indiana General Assembly (2011). *Senate Bill 251: Clean Energy.* https://legiscan.com/IN/bill/SB0251/2011

[65] Indiana State Legislature (2013). *Senate Bill 560, Utility Transmission.* https://legiscan.com/IN/bill/SB0560/2013

[66] Indiana Utility Regulatory Commission (2020). *2020 Annual Report. Energy Division, Electricity, Customer Bills. Residential Bill Components.* Page 32. https://www.in.gov/iurc/files/IURC-2020-AR-WEB.pdf

[67] FindLaw (2021). Supreme Court of Kentucky. *Kentucky Public Service Commission, Appellant v. Commonwealth of Kentucky, ex rel. Jack Conway.* https://caselaw.findlaw.com/ky-supreme-court/1542403.html

[68] Kentucky Public Service Commission (2012). *Docket No. 2012-00578. Adjustment of Electric and Gas Rates.* https://psc.ky.gov/Case/ViewCaseFilings/2012-00578

[69] Kentucky Public Service Commission (2014). *Docket No. 2014-00396. Application for an Order Approving Tariffs and Riders.* https://psc.ky.gov/Case/ViewCaseFilings/2014-00396

[70] Kentucky Public Service Commission (2020). *Docket No. 2020-00349. Approval of Certain Regulatory and Accounting Treatments.* https://psc.ky.gov/Case/ViewCaseFilings/2020-00349

[71] Kentucky Public Service Commission (2020). *Docket No. 2020-00350. Adjustment of Electric and Gas Rates.* https://psc.ky.gov/Case/ViewCaseFilings/2020-00350

[72] Louisiana Public Service Commission (2008). *Docket No. U-20925 (FRP-2007). 2007 Test Year Formula Rate Plan Filing.* https://lpscpubvalence.lpsc.louisiana.gov/portal/PSC/DocketDetails?docketId=17910

[73] Louisiana Public Service Commission (2011). *Docket No. U-31894. Application for Approval to Securitize Investment Recovery Costs.* https://lpscpubvalence.lpsc.louisiana.gov/portal/PSC/DocketDetails?docketId=19729

[74] Louisiana State Legislature (2020). *House Bill 39, Relative to the Louisiana Electric Utility Investment Recovery Securitization Act.* http://www.legis.la.gov/legis/BillInfo.aspx?s=201ES&b=HB39&sbi=y

[75] Massachusetts Department of Public Utilities. *Title 220 of the Code of Massachusetts Regulations.* https://www.mass.gov/info-details/220-cmr-department-of-public-utilities

[76] Massachusetts Department of Public Utilities. *220 CMR 5.00: Tariffs, schedules, and contracts.* https://www.mass.gov/files/220_cmr_5.00_9-8-17_0.pdf

[77] Commonwealth of Massachusetts (1997). *Session Laws, Acts (1997). Chapter 164. An Act Relative to Restructuring the Electric Utility Industry.* https://malegislature.gov/laws/sessionlaws/acts/1997/chapter164

[78] Massachusetts Clean Energy Center (2021). *Financial Information, Renewable Energy Trust Fund.* https://www.masscec.com/financial-information

[79] Commonwealth of Massachusetts (2008). Session Laws, Acts (2008). Chapter 169. *An Act Relative to Green Communities.* https://malegislature.gov/laws/sessionlaws/acts/2008/chapter169

[80] Massachusetts Department of Public Utilities (2009). *Docket No. 09-38. Solar Generation.* https://eeaonline.eea.state.ma.us/DPU/Fileroom/dockets/bynumber/09-38

[81] Massachusetts Department of Public Utilities ((2014). *Docket No. 12-126. Investigation.* https://eeaonline.eea.state.ma.us/DPU/Fileroom/dockets/bynumber/12-126

[82] Massachusetts Department of Public Utilities (2021). *Consumer Information. Understanding your utility bill.* https://www.mass.gov/info-details/understanding-your-utility-bill

[83] Massachusetts Department of Public Utilities (2021). *Basic Service Rates.* https://www.mass.gov/doc/view-basic-service-prices/download

[84] North Dakota Statute (2021) *Code, Chapter 49-02.* https://www.legis.nd.gov/cencode/t49c02.pdf#nameddest=49-02-03

[85] North Dakota Statute (2021) *Code, Chapter 49-05.* https://www.legis.nd.gov/cencode/t49c05.pdf#nameddest=49-05-04

[86] North Dakota Public Service Commission (2006). *Docket No. PU-06-466.* https://e9radar.link/ab71b0

[87] North Dakota Public Service Commission (2006). *Docket No. PU-06-466. Otter Tail Corporation Renewable Resource Rider Application.* https://psc.nd.gov/database/documents/06-0466/025-010.pdf

[88] North Dakota Public Service Commission (2012). *Docket No. PU-12-813.* https://e9radar.link/9ce32e

[89] North Dakota Public Service Commission (2014). *Docket No. PU-14-108.* https://e9radar.link/45e640

[90] South Carolina Legislature (2016). *1976 South Carolina Code of Laws Unannotated. Title 58 – Public Utilities, Services and Carriers, Chapter 33, Utility Facility Siting and Environmental Protection.* https://www.scstatehouse.gov/Archives/CodeofLaws2016/t58c033.php

[91] South Carolina Public Service Commission (2008). *Docket No. 2008-196-E. South Carolina Electric & Gas Company Application for CPCN and Base Load Review Order for Construction and Operation of a Nuclear Facility.* https://dms.psc.sc.gov/Web/Dockets/Detail/103552

[92] Columbia Business Report (2018). *SCANA: Judge asks for orders calling BLRA unconstitutional.* https://columbiabusinessreport.com/news/law/75401/

[93] South Carolina General Assembly (2007). *A16/S 431. Base Load Review Act.* https://www.scstatehouse.gov/sess117_2007-2008/bills/431.htm

[94] South Carolina General Assembly (2018). *A258/H4275, Utility Plants and projects, rates.* https://www.scstatehouse.gov/sess122_2017-2018/bills/4375.htm

[95] United States Securities and Exchange Commission (2018). SCANA Corporation and South Carolina Electric & Gas Company, Form 10-Q, for the quarterly period ended September 30, 2018. https://www.sec.gov/Archives/edgar/data/91882/000075473718000246/a2018930-10q.htm

[96] PR Newswire (2018). *SCANA and SC&E Settle Class Action Lawsuit with Attorney General and Plaintiffs Related to V.C. Summer Nuclear Costs.* https://www.prnewswire.com/news-releases/scana-and-sceg-settle-class-action-lawsuit-with-attorney-general-and-plaintiffs-related-to-vc-summer-nuclear-costs-300754881.html

[97] South Carolina Public Service Commission (2017). *Docket No. 2017-370-E. Application of South Carolina Electric & Gas Company and Dominion Energy for Review of Proposed Business Combination of SCANA and Dominion Energy and Prudency Determination Regarding the Abandonment of the V.C. Summer Units 2 & 3 Project.* https://dms.psc.sc.gov/Web/Dockets/Detail/116542

[98] South Carolina Office of Regulatory Staff (2021). *Base Load Review Act Rate Reviews.* https://ors.sc.gov/regulated-utilities/electric-natural-gas/new-nuclear-development/vc-summer-units-2-and-3/base-load

[99] South Dakota Codified Laws. *Section 49-34A-73. Phase in rate plan for rate increases due to plant additions.* https://sdlegislature.gov/Statutes/Codified_Laws/2070757

[100] South Dakota Codified Laws. *Chapter 49-34a, Gas and Electric Utilities Regulation.* https://sdlegislature.gov/Statutes/Codified_Laws/2070801

[101] South Dakota Administrative Rules. *Chapter 20:10:13, Public Utilities Rate Filing Rules.* https://sdlegislature.gov/Rules/Administrative/7782

[102] South Dakota Public Utilities Commission (2012). *Docket No. EL12-046. In the Matter of the Application of Northern States Power Company dba Xcel Energy for Authority to Increase its Electric Rates.* https://puc.sd.gov/Dockets/Electric/2012/EL12-046.aspx

[103] South Dakota PUC (2015). *Docket no. EL15-024. In the Matter of the Application of Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. for Authority to Increase Its Electric Rates.* https://puc.sd.gov/commission/dockets/electric/2015/el15-024/settlement.pdf

[104] South Dakota Public Utilities Commission (2012). *Docket No. EL12-062. In the Matter of the Application of Black Hills Power, Inc. for the Phase in of Rates Regarding Construction Financing Costs of Cheyenne Prairie Generating Station.* https://puc.sd.gov/Dockets/Electric/2012/EL12-062.aspx

[105] Legiscan, South Dakota Legislation (2012). *House Bill 1121. Amend rate stability provisions to include plant additions.* https://legiscan.com/SD/bill/HB1121/2012

[106] Legiscan, South Dakota Legislation (2015). *House Bill 1120.* Revise the provisions related to phase in rate plans for plant additions. https://legiscan.com/SD/text/HB1120

[107] South Dakota Public Utilities Commission (2010). Docket No. EL10-015 - In the Matter of the Petition of Otter Tail Power Company to Establish a Transmission Cost Recovery Tariff. https://puc.sd.gov/Dockets/Electric/2010/el10-015.aspx

[108] South Dakota Public Utilities Commission (2021). Electric Tariffs. https://puc.sd.gov/Tariffs/electrictariff.aspx#nw