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DIRECT TESTIMONY OF THEODORE N. GEISLER
On Behalf of Arizona Public Service Company
Docket No. E-01345A-22-0144

October 28, 2022

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ATTACHMENT LIST

Excerpt from S&P Global, *Adjustment Clauses: A State by State Overview*, Regulatory
Focus Topical Special Report (July 18, 2022)Attachment TNG-01DR

**DIRECT TESTIMONY OF THEODORE N. GEISLER
ON BEHALF OF ARIZONA PUBLIC SERVICE COMPANY
(Docket No. E-01345A-22-0144)**

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, ADDRESS, AND OCCUPATION.

A. My name is Theodore N. Geisler. I am the President of Arizona Public Service Company (APS or Company), a subsidiary of Pinnacle West Capital Corporation (Pinnacle West). As President, I have oversight and responsibility for the Company's core utility functions, including transmission and distribution, non-nuclear generation, resource management, customer experience, regulatory, information technology and supply chain. My business address is 400 N. 5th Street, Phoenix, Arizona 85004.

Q. WHAT IS YOUR PROFESSIONAL BACKGROUND?

A. I received a Bachelor of Science degree from Colorado State University and a Master of Business Administration from Arizona State University. I joined APS in 2001 in the generation area and have served in a variety of roles throughout the Company since then, including leadership roles in resource operations, transmission and distribution operations, investor relations, corporate strategy, information technology, and most recently as Chief Financial Officer.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to provide a general overview of APS's request in this proceeding. I discuss APS's commitment to serve all customers with safe and reliable energy, as well as the steps the Company is taking to ensure that the APS energy grid is resilient to meet any challenges that we may face. I explain the importance of the Company's financial stability to customers. I also provide insight into the proposed changes to our adjustment mechanisms.

1 **Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.**

2 A. APS has a strong track record of providing safe and reliable electric service. I
3 reaffirm our commitment to ensure reliability and resilience of the energy grid,
4 secure a clean, balanced energy supply of electricity, and continuously improve
5 our customers' experience with us.

6
7 APS does not file this rate request lightly and we recognize the Commission's role
8 in balancing what is in the best interest of the public today and over the long term.
9 This rate case is necessary to ensure that APS has the financial stability to reliably
10 serve our customers – today and in the future. APS continues to experience
11 substantial customer growth in our service territory that has required significant
12 additional investment during the Test Year. We expect growth to continue, in
13 addition to growing needs for energy resiliency and grid security.

14
15 To compete for and obtain low-cost financing in the market, which is necessary to
16 fund the infrastructure investments customers need, APS must demonstrate that (i)
17 it is a financially stable utility; (ii) it has reasonable opportunity to recover its costs
18 in a timely manner; and (iii) it has the ability to provide a competitive, market-
19 aligned return on equity for investors. Restoring financial stability reduces credit
20 rating risk and ensures lower cost of financing to keep rates low for customers. Our
21 rate case proposal seeks relief that will allow us to establish financial stability so
22 we can borrow the capital needed to meet our customers' needs. Included in this
23 rate case are several modifications to our adjustment mechanisms to simplify them,
24 while maintaining the financial benefits of timely recovery of specified costs that
25 promote rate gradualism and minimize rate case filings. APS must regularly add
26 new generation resources in coming years to keep up with customer growth while
27 ensuring grid reliability and resiliency. APS expects substantial growth in clean
28

resources to create a balanced resource mix while delivering the benefits of clean resources to customers. This rate case realigns our adjustment mechanism to ensure steady and competitive procurement of new clean resources to keep up with growth and grid resiliency while minimizing customer impact.

II. MEETING THE NEEDS OF APS CUSTOMERS

Q. PLEASE PROVIDE AN OVERVIEW OF APS.

A. Since 1886, APS and its predecessors have been a vital part of Arizona's communities, growth, and innovation. Arizonans have relied on us to deliver critical public service that has become an increasingly important part of their lives. Today, we proudly serve more than 1.3 million homes and businesses in 11 of Arizona's 15 counties.

APS serves nearly 35,000 square miles of territory and is one of the most geographically diverse regions which includes a variety of elevations, climates, and terrains. We maintain more than 33,000 miles of transmission and distribution lines; we are a co-owner and the operator of Palo Verde, the largest nuclear generation facility in the country; and we contribute an estimated \$3.4 billion annually in economic impact to the state.

More than a company, APS is the nearly 6,000 women and men who work outside on the grid, in warehouses, at power plants, in control rooms, and all throughout the state to meet the needs of our customers 24 hours a day, 365 days a year. When storms roll in, APS employees are there to protect the grid and restore service when needed. In blistering 115-degree temperatures, APS employees have materials staged and crews standing by to rapidly respond.

1 APS is also the Customer Experience Center employees answering customer calls
2 through the night, the cybersecurity control room operators protecting against
3 threats, and many other employees working around the clock to ensure reliable
4 service for our customers.

5
6 It is because of this team that APS is ranked in the top quartile nationally for electric
7 service reliability. In fact, Arizona's energy grid was recently recognized as one of
8 the most reliable in the country according to *U.S. News & World Report*. More
9 specifically, APS frequently ranks in the top quartile of Edison Electric Institute
10 (EEI) reliability metrics, compared to peer utilities in the industry.

11
12 Maintaining superior reliability also requires diligent planning and securing
13 adequate resources to meet the growing needs of Arizona, upgrading and
14 maintaining existing equipment to anticipate and avoid problems before they
15 happen, and investing in new infrastructure. Importantly, this planning and
16 infrastructure investment must occur before our customers need it on those
17 blistering summer days. On average, we continue to invest roughly \$1.5 billion
18 annually in building a reliable, more resilient energy grid.

19 **Q. HOW IS APS'S RATE CASE FILING DESIGNED TO MEET CUSTOMER**
20 **NEEDS?**

21 A. APS customers are at the center of the work we do and we have made, and are
22 continuing to make, investments to serve and support our customers with safe,
23 reliable, and clean energy. APS needs the requested rate relief to enable it to
24 continue to meet the following commitments to its customers:

- 25 • Ensure reliability and resilience of the energy grid;
- 26 • Secure a clean, balanced energy supply for Arizona; and
- 27 • Improve customer support.

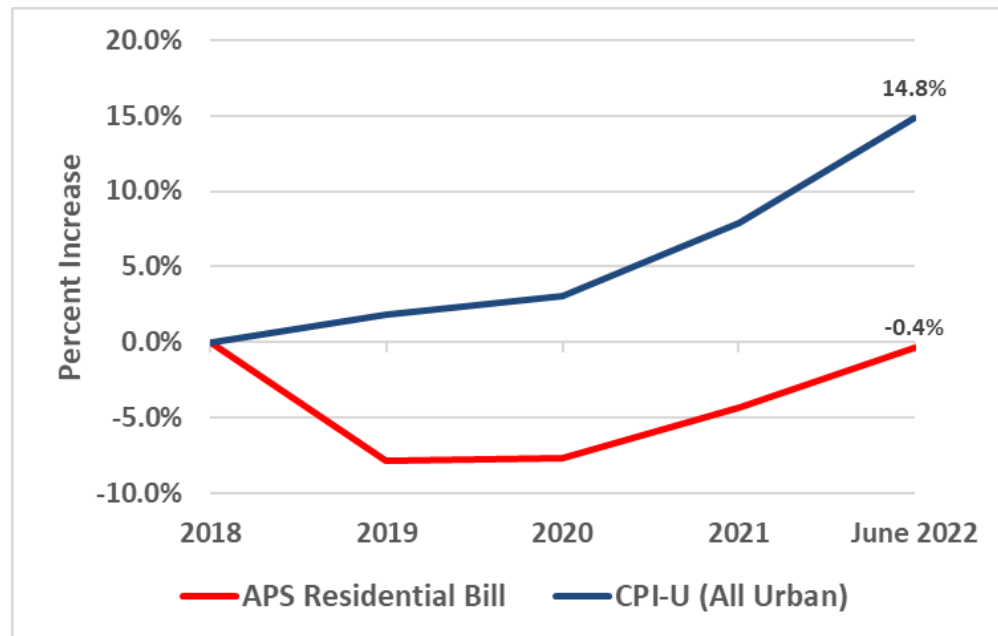
1 All three commitments are critical to meeting the needs and expectations of
2 customers now and in the future – a responsibility APS takes very seriously.
3

4 The fact is, however, that since our last rate case filing in October 2019, which had
5 a test year ending in June 2019, we have made significant investments in the energy
6 grid to maintain a strong, reliable, and resilient energy infrastructure and to keep
7 up with the substantial growth our state is experiencing. The challenges of
8 maintaining reliability and resiliency continue to increase and it is also critical now
9 to make investments that will secure an adequate and predictable energy supply for
10 the future. Arizonans expect us to be responsible stewards of the grid and the
11 requested rate increase is necessary to fulfill our responsibilities and commitments.

12 **Q. WHAT STEPS HAS APS TAKEN TO REDUCE COSTS AND KEEP RATES**
13 **AFFORDABLE FOR CUSTOMERS?**

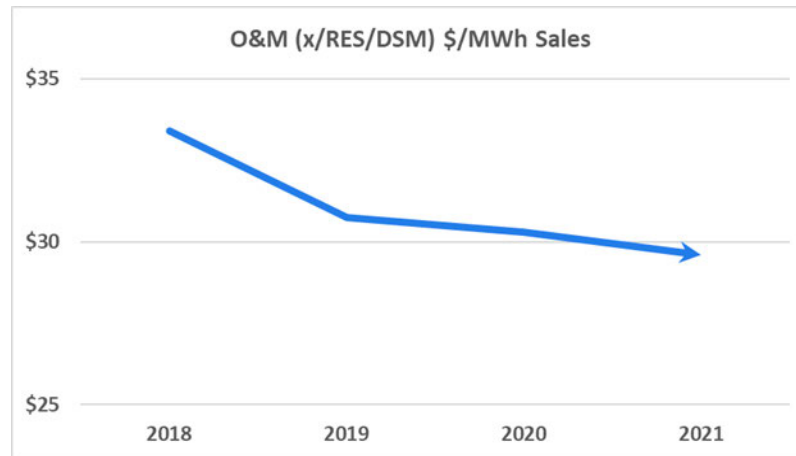
14 A. APS electricity rates are flat compared to 2018 levels and, for the past six years,
15 have remained below the national average, while energy rates across the country
16 rose, on average, 8.1% from December 2018 through December 2021, according
17 to the Energy Information Administration. During this period, APS has engaged in
18 careful capital management and planning, taken proactive steps to ensure that tax
19 reform savings are passed on to customers, managed purchased fuel and power to
20 ensure that savings are passed on to customers through adjustment mechanisms,
21 and carefully balanced its assets, liabilities, and equity. Furthermore, APS rates
22 remain well below the Consumer Price Index – All Urban (CPI-U) category. The
23 CPI-U is a relative measure of consumer inflation and represents the average price
24 paid over time for consumer goods. The CPI-U rose by 14.8% since 2018, while
25 the average APS residential bill was 0.4% lower at the end of the Test Year than
26 in 2018, as evidenced in Figure 1 below.

Figure 1. Percent Increase in an Average APS Residential Bill vs. Consumer Price Index-All Urban (CPI-U) through the End of the Test Year



Cost control is crucial to keeping rates affordable and enhancing APS's ability to invest the capital necessary to serve customers. APS has consistently focused on cost management, with an overall declining operations and maintenance (O&M) cost per MWh sales over the last several years, as shown in Figure 2. This helps to offset a portion of the required capital investment-related costs.

Figure 2. Operations and Maintenance Costs per MWh Sales



Relative to broader economic conditions, APS's aggressive cost-control measures can only go so far in keeping electricity rates low for customers, especially given recent inflationary trends (i.e., the CPI-U inflation rate was 9.1% as of Test Year end compared to just 0.6% two years earlier in June 2020¹). APS expects these high prices to continue into 2023 due to long lead times, inventory turnover, and an unstable geopolitical environment. With the substantial investments APS is making to improve the customer experience, ensure reliable service from a resilient grid, and develop a more balanced and cleaner portfolio of resources, APS's rate request is necessary to meet the needs of its growing customer base.

Q. PLEASE EXPLAIN WHY APS'S FINANCIAL STABILITY IS IN THE BEST INTERESTS OF THE COMPANY'S CUSTOMERS AND ALL OF ARIZONA.

A. To fund operations and build infrastructure to serve customers and further support Arizona's energy security, APS must raise hundreds of millions of dollars of financing each year. Because the costs of financing these investments can be

¹ United States Bureau of Labor Statistics, Database for Consumer Price Index for all Urban Consumers, accessed September 27, 2022 at <https://data.bls.gov/cgi-bin/surveymost>.

1 substantial, customers benefit when APS has access to low-cost capital on
2 reasonable terms, both in the form of debt and equity.

3
4 As APS witness Andrew Cooper explains in his direct testimony, to compete for
5 and obtain low-cost financing in the market, APS must demonstrate not only that
6 it is a financially stable utility, but that it has reasonable opportunity to recover its
7 costs from customers in a timely manner and that it can provide a competitive,
8 market-aligned return on equity. In addition, lenders evaluate credit metrics to
9 determine if they want to lend financing and at what cost. Companies with higher
10 risks of recovery, longer lag time in recovery or deteriorating credit metrics, will
11 have increased capital costs because there are fewer lenders willing to offer capital
12 under these circumstances. This reduced group of lenders results in less
13 competition for capital, which ultimately increases the financing costs for
14 customers. Thus, maintaining a healthy credit rating and financial outlook is
15 critically important to APS's ability to keep costs affordable for customers. All of
16 this translates into lower electricity rates for customers and higher quality of
17 service. For these reasons, there is a direct relationship between APS's financial
18 health and its customers' experience.

19 **III. APS'S RATE CASE REQUEST**

20 **Q. DID APS WORK WITH STAKEHOLDERS PRIOR TO FILING THIS**
21 **APPLICATION?**

22 **A.** Yes. APS collaborated with a broad coalition of stakeholders to discuss potential
23 solutions and gather feedback on a variety of customer-oriented issues. In 2022,
24 the Company held 23 rate case-specific group stakeholder collaboration meetings
25 involving more than 40 organizations. Specifically, APS collaborated with
26 stakeholders on the following items: proposed enhancements to its limited income
27 support program; modifications to its large customer generation buy-through
28

1 program, AG-X; modifications to adjustment mechanisms; and other proposals as
2 required by Decision No. 78317 (November 9, 2021). Our collaboration efforts
3 have resulted in a proposed modification to Service Schedule 4 that provides
4 schools with money-saving metering options, a revised scheduling protocol for
5 AG-X customers that is expected to reduce the cost of imbalance settlements, and
6 the filing of two Commission-requested electric vehicle (EV) rates for customers.

7
8 In addition to stakeholder collaboration focused on items specific to this rate case,
9 various APS teams continue to meet regularly with stakeholders to discuss topics
10 of interest to APS customers and Arizona's energy future. For example, APS
11 engages monthly with the Resource Planning Advisory Council, Consumer Work
12 Group and Customer Advisory Board, to solicit feedback and continue improving
13 the customer experience. APS is strongly committed to continuing stakeholder
14 discussions on items included in the rate case and other ongoing efforts as we
15 recognize this collaboration is key in developing outcomes that meet the needs and
16 expectations of our customers.

17 **Q. PLEASE PROVIDE AN OVERVIEW OF APS'S REQUEST IN THIS**
18 **PROCEEDING.**

19 A. APS is requesting an overall net customer rate increase of \$460 million which
20 represents a 13.6% increase to base revenues, and the Company is requesting rates
21 reflecting an increase in that amount to become effective on December 1, 2023.
22 This request is based on a Test Year ending June 30, 2022, an ROE of 10.25%, and
23 results in a 7.17% weighted average cost of capital. APS is also requesting a return
24 on the fair value increment of 1.0%, resulting in a proposed fair value rate of return
25 of 4.92%.

1 APS is also proposing the inclusion of 12 months of post-Test Year plant (PTYP)
2 in its request. Projects that have or are expected to enter service and become used
3 and useful during the period July 1, 2022 through June 30, 2023 have been included
4 in the request. APS witness Jacob Tetlow will discuss these investments in more
5 detail in his testimony. In alignment with recent Company PTYP requests and
6 Commission decisions, APS has removed growth-related plant from its PTYP
7 request and has rolled forward accumulated depreciation and taxes, which
8 significantly reduces the Company's PTYP request.

9
10 In this case, APS also proposes a comprehensive, customer-focused revision to the
11 Company's current set of seven rate adjustment mechanisms, which I discuss in
12 further detail later in my testimony.

13
14 The day-one net bill impact of the requested rate increase on all customers is an
15 average of 13.6%. Both residential and general service class will see an average
16 bill impact of 13.6%.

Figure 3. Overview of APS's Request²

Overview of Rate Increase	Dollars	Bill Impact
<i>Base Rate Increase</i>		
Total Revenue Deficiency	\$772M	22.9%
Test Year Adjustor Revenue Transfers	(\$108M)	(3.2%)
Base Rate Increase Net of Adjustors	\$664M	19.7%
<i>Net Rate Increase</i>		
Day-One Power Supply Adjustment (PSA) and Renewable Energy Adjustment Charge (REAC) Changes	(\$204M)	(6.1%)
Day-One Net Rate Impact	\$460M	13.6%

Q. PLEASE EXPLAIN OTHER SIGNIFICANT ASPECTS OF APS'S REQUEST.

A. APS is proposing to update the base fuel and purchased power rate from 3.1451 ¢/kWh (authorized by the Commission in Decision No. 78317) to 3.8321 ¢/kWh. As shown in Figure 3 above, this proposal includes an equal and concurrent offset in costs recovered through the Power Supply Adjustment (PSA) at the time rates determined in this proceeding become effective. APS witness Justin Joiner will discuss recent impacts of price and other factors to the Company's fuel and purchased power expense requiring this base fuel increase in more detail in his testimony, and APS witness Jessica Hobbick will discuss the impact of the PSA offset in her testimony.

APS is proposing to continue our focus on Commission directed efforts to provide customer education focused on rate selection and is therefore recommending

² Numbers in the figure have been rounded for ease of presentation.

1 minimal changes to rate design. As further described by APS witness Monica
2 Whiting and Ms. Hobbick, APS is proposing to remove payment fees for all
3 customers in addition to providing our limited income customers with an enhanced,
4 energy burden-based Energy Support Program.

5
6 To build upon the success of the Company's Commission-approved economic
7 development program (Service Schedule 9), which is currently fully subscribed,
8 APS is also proposing an increase in program size to allocate exclusively to rural-
9 based businesses as discussed in Ms. Hobbick's testimony.

10
11 Additionally, APS is proposing modifications to its AG-X program to include
12 additional resource adequacy requirements to ensure the program can continue
13 reliable operations and allow broader customer participation. These changes are
14 further described by Mr. Joiner and Ms. Hobbick.

15 IV. COMMITMENT TO CUSTOMER EXPERIENCE

16 **Q. PLEASE SUMMARIZE APS'S VISION AND IMPROVEMENTS TO THE**
17 **CUSTOMER EXPERIENCE.**

18 A. APS is most successful when customers are satisfied with the reliable service and
19 customer experience they receive. In her direct testimony, Ms. Whiting details
20 customer experience improvements we have made along with our plans to continue
21 improving. This includes enhancing our current limited income discount program,
22 removing payment transaction fees for all customers, adding additional off-peak
23 holidays for customers on time-of-use plans, and providing customers with greater
24 access to information and support. These proposals aim to achieve one of our most
25 important goals: acting on feedback from customers, stakeholders, and the
26 Commission to improve the customer experience over the next several years.

1 Importantly, APS is committed to listening to its customers. We have established
2 a customer advisory board and a customer stakeholder group. We regularly survey
3 customers and have established customer experience driver teams within our
4 Company to focus on implementing feedback from customers across all areas of
5 our business.

6
7 To that end, APS is also committed to ensuring a culture exists in which every APS
8 employee is empowered to do the right thing for our customers. All of APS's nearly
9 6,000 employees are encouraged to advocate for our customers. And, our
10 leadership team is committed to continuous collaboration with stakeholders.

11 **Q. WHAT IMPROVEMENTS HAVE YOU MADE IN MEETING THE NEEDS**
12 **OF CUSTOMERS SINCE THE LAST RATE CASE?**

13 A. Based on APS's proposals adopted by the Commission in the last rate case, the
14 Company rolled out a series of customer-oriented initiatives this past December.
15 For example, customers now have the option of three simplified rate plans, an
16 extended time to pay their bill each month, the addition of two off-peak holidays,
17 and more funding for low-income customers who need assistance to pay their bills.
18 APS also made enhancements to the APS website, our interactive outage map, and
19 our alerts by text and email to improve customers' digital experience and increase
20 engagement.

21
22 In addition, we have improved our process for estimating restoration times during
23 outages for customers and have improved our call center service levels for calls
24 being answered in 30 seconds or less. The Company has also enhanced
25 communications to help customers understand their pricing options.

1 These efforts are paying off as reflected by our improving J.D. Power residential
2 and business customer satisfaction survey scores. APS made quartile gains in every
3 single driver of residential customer satisfaction through the first three quarters of
4 2022, propelling the Company to the second quartile for overall residential
5 customer satisfaction when compared to its large investor-owned peers. APS's
6 strongest performing driver in the latest J.D. Power survey was Customer Care,
7 phone and digital, which leaped to the first quartile and performed well above the
8 large investor-owned peer set averages. Additionally, through the first two quarters
9 of the year, J.D. Power overall satisfaction for business customers has risen to first
10 quartile. Ms. Whiting further discusses our improvements for customers in her
11 testimony.

12 V. ENSURING POWER RELIABILITY AND GRID RESILIENCY

13 Q. **HOW DOES APS ENSURE RELIABLE AND AFFORDABLE POWER**
14 **AND A RESILIENT ENERGY GRID FOR CUSTOMERS?**

15 A. Customers count on APS to power their lives and businesses. Our commitment is
16 to continue to deliver the reliable service Arizonans have come to expect while
17 continuously improving grid resiliency and security. This rate request supports
18 investments in our energy infrastructure to ensure that all customers, wherever they
19 live in our service territory, continue to receive reliable electric service under all
20 weather conditions. As maintenance expenses rise and the grid continues to
21 expand, we are committed to balancing the need for affordability with the critical
22 importance of investing for the reliability and resilience customers expect.

23
24 As I have previously mentioned, APS is one of the most reliable electric providers
25 in the country based on national indices comparing utilities across the country. We
26 have maintained stable EEI top-quartile reliability as a result of the infrequency in
27 which our customers experience an outage nine out of the past ten years, and eight
28

1 out of the past ten years for the average outage duration customers experience,
2 which is exceptional in our industry. This is the result of constant vigilance and
3 prudent planning. Maintaining a reliable and resilient energy grid requires constant
4 vigilance and investment to anticipate and respond to changing weather, usage
5 habits, and economic development in the region .

6
7 Our ability to deliver reliable service, at this time, when the desert Southwest is
8 experiencing resource constraints and other utilities are declaring energy
9 emergencies, is the result of prudent planning and significant investments over
10 time. We have installed and maintained equipment and technology capable of
11 managing an increasingly complex energy grid. Our investments help build
12 resilience, integrate clean energy, and support the continued growth of Arizona, all
13 with the goal of keeping costs affordable for customers.

14
15 For example, we invest in core equipment and critical infrastructure, like network
16 protectors, which provide backup power feeds to community-essential businesses
17 like hospitals. In addition, APS continually monitors the health of its equipment,
18 like aging poles, conductor, and cables, to identify indications of failure and replace
19 the equipment, when appropriate, to reduce the potential for failure. We also plan
20 for increased energy needs and invest in new substations in areas with projected
21 growth. To reduce the potential for and impact of outages for customers, we deploy
22 Advanced Grid Technology (AGT) to provide automatic response to frequency and
23 voltage irregularities. Mr. Tetlow discusses these programs and investments in
24 further detail in his testimony.

1 We know customers are counting on us more than ever before. We are committed
2 to supporting them with modernized infrastructure capable of delivering the energy
3 they need when they need it.

4 **Q. WHAT STEPS IS APS TAKING TO KEEP UP WITH CUSTOMER**
5 **GROWTH?**

6 A. Arizona continues to experience high net migration into the state. Compared to the
7 rest of the United States in 2021, Arizona was the third fastest growing state,
8 Phoenix was the second fastest growing Metro area, and Maricopa County was the
9 fastest growing county according to the United States Census Bureau. The record
10 housing permits in Maricopa County demonstrate that residential growth is the
11 highest since before the Great Recession. All this while customers are becoming
12 more dependent than ever before on reliable electricity to power their lives.

13 Commercial and industrial growth is also significant as Arizona has become a data
14 center, manufacturing, and semiconductor hub. This commercial growth brings
15 significant new jobs to the state in addition to significant energy load requirements
16 and infrastructure investment from our Company. When neighborhoods expand,
17 new residential developments are built, and when businesses relocate to Arizona
18 or want to expand, our job is to make sure that the electric grid has the capacity to
19 respond.

20
21 We plan years in advance to meet the needs of customers. Unlike commodities or
22 other services, the service we provide requires instant availability to customers at
23 the time they need it. Therefore, it is critical to make substantial capital investments
24 and to seek reasonable and timely recovery of those investments such as we are
25 doing in this rate case. One of our most important responsibilities is planning for
26 future energy demand. We carefully forecast customer growth, and energy growth,
27
28

1 and systematically adjust our plans for grid investments to ensure we can serve
2 customers reliably during extreme conditions.

3 **Q. WHAT CHALLENGES DOES GROWTH POSE FOR APS?**

4 A. Growth helps keeps rates low because it allows us to spread existing fixed costs
5 over a larger number of customers, thus putting downward pressure on rates.
6 However, the rapid growth that we are facing in our service territory requires APS
7 to invest significant amounts of capital into the grid to ensure reliability and
8 resiliency. Funding these investments at reasonable terms presents a formidable
9 challenge for the Company. APS does not believe that under existing rates we have
10 an opportunity to recover our costs and earn a reasonable return on investment.
11 Securing the relief requested in this rate case in a timely manner is critical to being
12 able to obtain needed financing at reasonable terms.

13 **Q. EVEN WITHOUT GROWTH, WOULD APS STILL NEED TO INVEST IN**
14 **NEW ENERGY INFRASTRUCTURE?**

15 A. Yes. Growth is one driver for our infrastructure investment needs, but we also
16 continuously assess the health of our aging infrastructure and replace or upgrade
17 this equipment to ensure energy security and resiliency during extreme
18 temperatures. For example, we maintain a host of maintenance programs to predict
19 equipment failure and proactively replace aging equipment before it disrupts
20 service for customers. Likewise, we invest in modernizing the grid to help detect
21 and restore outages remotely to minimize the outage duration and frequency for
22 customers. We also invest in modernizing our power plants to create greater
23 efficiency in the output and preserve the functional life of the assets. All of this is
24 described in more detail in Mr. Tetlow's testimony highlighting our reliability and
25 PTYP investments.

1 **Q. WHAT IS ENERGY RESILIENCY AND HOW DOES APS ENSURE A**
2 **RESILIENT GRID?**

3 A. As customers increase their dependency on electricity to power their homes and
4 businesses, APS designs and builds the grid to meet the changing customer usage.
5 For example, customers are now adopting electric vehicles at a faster rate than ever
6 before which requires us to ensure our customers can charge their vehicles without
7 impacting reliability. Our customers also continue adopting rooftop solar systems
8 at record levels. These systems use the grid every minute they operate, often with
9 two-direction power flow, and therefore need an electric grid that is capable of
10 accommodating this fluctuating voltage, current, and frequency.

11
12 We're also experiencing more extreme weather conditions than previous years,
13 which requires greater investment to maintain reliable service by hardening the
14 system against weather impacts and repairing equipment damaged during events.
15 For example, in 2020 we had the hottest summer on record, adding stress to the
16 grid beyond typical planning criteria. In 2022, we experienced more severe
17 monsoon storms than prior years which required more repairs to infrastructure than
18 normal. Specifically, the summer storm season of 2022 required more than 800
19 pole replacements, compared to an average of roughly 250 poles replaced over each
20 of the prior five summers. In order to continue serving customers reliably, we must
21 design and build the grid to meet our customers' needs during these extreme
22 conditions while also ensuring we can accommodate the changing electrification
23 needs of our customers.

1 VI. SECURING A CLEAN, BALANCED ENERGY SUPPLY FOR ARIZONA

2 Q. ARE THERE RESOURCE CONSTRAINTS IN ARIZONA AND WITHIN
3 THE WESTERN GRID?

4 A. Yes. Customer demand has increased faster than new resources have been built,
5 and the existing supply of generation capacity in the west has been fully committed.
6 Additionally, extreme heat during the past three summers has contributed to an
7 even more challenging energy market throughout the Southwest. The lack of
8 available capacity and resulting declarations of energy emergencies by other
9 balancing area authorities across the west has provided a reminder of the
10 importance of long-term resource portfolio planning, vigilance over day-to-day
11 energy supply, and responsible energy policy.

12 Q. WHAT IS APS DOING TO ENSURE ENERGY SECURITY AS THE
13 RESOURCE CONSTRAINTS IN THE WEST CONTINUE?

14 A. APS has been able to avoid energy emergencies during these extreme heat events
15 because of careful long-term planning, prudent investments in resource adequacy,
16 and flexibility stemming from a balanced and diverse resource portfolio. As
17 described in Mr. Joiner's testimony, APS plans to acquire more than 2,300 MW of
18 on-peak resource capacity by 2026 to ensure customers continue to experience
19 reliable and affordable electric service. These investments will increase Arizona's
20 energy security, reduce dependence on market purchases when other entities are
21 experiencing energy emergencies, and protect customers from fuel-related price
22 volatility. The requests in this rate case provide the revenue needed to continue this
23 operational excellence and high-quality service for our customers.

1 **Q. HOW IS APS INCORPORATING CLEAN ENERGY INTO ITS**
2 **RESOURCE SUPPLY WITHOUT SACRIFICING AFFORDABILITY AND**
3 **RELIABILITY?**

4 A. APS is proactively seeking to obtain and integrate clean energy into our system in
5 a way that will focus on affordability and reliability by balancing investments that
6 optimize existing resources with investments in Arizona.

7
8 Because there is a scarcity of generation capacity in the desert Southwest needed
9 to meet increasing demand, it is even more important for APS to use a range of
10 strategies to meet customer needs. As we seek to meet these needs, investments in
11 utility-scale clean resources are affordable and reliable, and provide the greatest
12 value over their lifetime.

13
14 The decisions we make to invest in clean energy are made through a competitive
15 procurement process. Clean resources are among the lowest cost options available
16 today. Over the long term, these investments also provide the greatest value as a
17 result of many factors.

18
19 For example, over the long-term, clean energy resources have a lower cost to own
20 and operate than other resources. They are less dependent on operating and labor
21 costs, water resources, and imports or transportation of fuel – all of which are
22 ongoing, and sometimes have unpredictable costs. Clean energy investments are
23 also uniquely positioned to take advantage of government benefits, including tax
24 credits. These benefits reduce the overall costs of investing in additional capacity.
25 Investments in clean energy also benefit from a lower cost of capital than other
26 resources, as investors, credit rating agencies, and major lenders continue to use
27 environmental, social, and governance criteria (ESG) in their decision-making
28

1 processes. All these financial benefits result in lower costs to customers. Mr.
2 Cooper discusses this further in his direct testimony.

3
4 Beyond cost savings and avoidance, investments in clean energy also create greater
5 stability and predictability in near-term costs for customers by reducing
6 dependency on fuel and variable expenses that can fluctuate – often dramatically –
7 over time.

8
9 Likewise, investing in clean energy supports a balanced and diverse energy
10 portfolio which improves reliability and affordability by limiting the risk of any
11 single source of energy and stabilizing costs during periods of volatility. Our
12 existing resources, such as our natural gas generators, and Palo Verde Generating
13 Station (the nation’s largest producer of clean energy), complement these
14 investments through continued support of customers’ peak energy needs and are
15 key to a diverse portfolio. As such, maintaining and expanding dispatchable
16 resources in our generation fleet will continue to be a critical piece of our strategy
17 to maintain affordability and reliability through a responsible and gradual transition
18 to a clean energy future.

19 **VII. THE IMPORTANCE OF ADJUSTMENT MECHANISMS**

20 **Q. WHAT IS AN ADJUSTMENT MECHANISM?**

21 A. Adjustment mechanisms are a critical part of meeting the needs of customers and
22 achieving our commitments to them. An adjustment mechanism is a regulatory-
23 approved recovery plan specifically designed to address certain types of costs
24 incurred by the electric company to serve its customers. APS’s adjustment
25 mechanisms recover costs that fluctuate between general rate cases and, with
26 Commission approval, are addressed outside of our rate cases. They are
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instrumental in achieving timely cost recovery, less frequent rate cases, and rate gradualism.

As the Commission has recognized, adjustment mechanisms provide substantial benefits to APS customers. These mechanisms fund important energy efficiency, demand response, and renewable energy programs. They provide customers with more timely return of savings when costs are reduced and when cost savings initiatives are implemented. They also help protect customers by facilitating more timely recovery of increased costs, including those related to necessary infrastructure investment, thereby keeping utility rates reasonable over time, and smoothing out the impacts of inflation and rising costs in addition to reducing credit risk, which lowers the cost of capital.

Adjustment mechanisms are widely accepted and utilized throughout the country and are considered to be sound regulatory policy. They are indicative of a positive regulatory environment, and help lessen APS's cost of financing, which in turn lowers costs to customers.

Q. PLEASE DESCRIBE APS'S CURRENT ADJUSTMENT MECHANISMS.

A. APS currently has seven Commission-approved adjustment mechanisms as described in Figure 4 below.

Figure 4. Current Adjustment Mechanisms at APS

EIS	The Environmental Improvement Surcharge (EIS) provides for the recovery of the capital carrying costs associated with qualified environmental improvement investments made by APS and not already recovered in base rates. These are projects at APS' generation facilities designed to comply with environmental standards mandated by federal, state, tribal, or local laws and regulations.
LFCR	The Lost Fixed Cost Recovery (LFCR) adjustor recovers the approved fixed cost of providing service to customers (power poles, wires, and other delivery infrastructure) that is not recovered between rate cases due to mandated energy efficiency and distributed generation programs.
TCA	The Transmission Cost Adjustment (TCA) provides a mechanism to recover transmission costs associated with serving retail customers at the level approved by the Federal Energy Regulatory Commission (FERC) and at the same time as new transmission rates become effective for APS wholesale customers.
DSMAC	The Demand Side Management Adjustment Charge (DSMAC) recovers costs for customer-focused energy efficiency and demand response programs that allow customers to reduce energy use and lower bills. Programs are approved by the Commission and comply with Arizona's Electric Energy Efficiency Standard.
REAC	The Renewable Energy Adjustment Charge (REAC) recovers the cost of Commission-approved renewable resources and customer programs to comply with Arizona's Renewable Energy Standard.
PSA	The Power Supply Adjustment (PSA) allows the Company to pass through to customers fluctuations in fuel, purchased power, storage product costs, off-system sales, and chemical costs.
TEAM	The Tax Expense Adjustment Mechanism (TEAM) allows the Company to pass through to customers income tax effects resulting from federal or state income tax legislation.

The TEAM is currently inactive and set at zero in accordance with Decision No. 78317.

1 APS's adjustment mechanisms were each created either in a rate case or by
2 Commission rule and are governed by a Commission-approved Plan of
3 Administration that requires annual or other periodic reporting for review by the
4 Commission.

5 **Q. WHY IS APS PROPOSING CHANGES TO ITS ADJUSTMENT**
6 **MECHANISMS?**

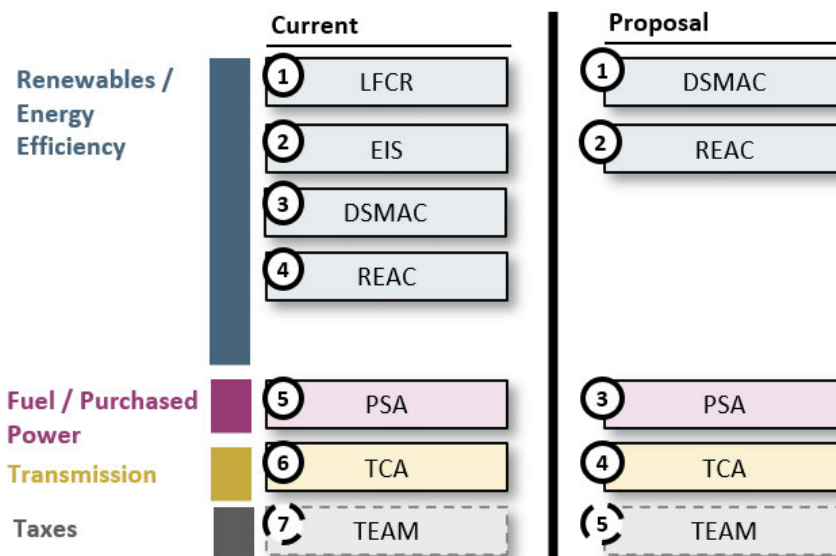
7 A. APS proposes a number of changes to its adjustment mechanisms, partially in
8 response to the Commission's comments regarding the number of adjustment
9 mechanisms employed by utilities and the impact of annual adjustor rate changes
10 on customers. In the Company's last rate case, APS was ordered to meet with the
11 Residential Utility Consumer Office (RUCO), Commission Staff, and interested
12 stakeholders to develop a joint proposal or multiple proposals for modification,
13 elimination, and/or consolidation of APS's adjustment mechanisms.

14
15 APS held collaborative meetings with stakeholders in April and May of 2022 to
16 discuss potential modifications to APS's adjustment mechanisms. While
17 unanimous agreement was not reached prior to this filing, APS is committed to
18 engaging in collaborative stakeholder efforts throughout the course of this rate
19 case.

20 **Q. PLEASE PROVIDE AN OVERVIEW OF APS'S ADJUSTMENT**
21 **MECHANISM PROPOSAL.**

22 A. APS is proposing to reduce its current seven adjustment mechanisms to four active
23 and one inactive adjustment mechanisms. Figure 5 below shows the current
24 mechanisms and the Company's proposal, after which is a summary of the
25 proposal.

Figure 5. APS's Adjustment Mechanism Proposal



First, APS proposes to eliminate the EIS adjustment mechanism entirely. In the future, costs currently eligible for recovery through the EIS will be handled through the traditional rate case process. Second, APS proposes to eliminate the LFCR mechanism. The costs eligible for recovery through the LFCR are proposed to be recovered partially in base rates and between rate cases in a revised DSMAC mechanism. Third, APS proposes to modify the REAC to include recovery of the capital carrying costs of future in-service APS-owned clean energy and energy storage resources (excluding nuclear energy). No structural changes are proposed for the TEAM, which is currently inactive and set at zero, or the TCA adjustment mechanisms.

The detailed impact of each of these proposals to APS's requested revenue requirement is discussed by Ms. Hobbick. Ms. Hobbick also calculates the impact of these proposals to APS customers and includes revised Plans of Administration for each of the modified adjustment mechanisms as attachments to her testimony.

1 **Q. IS APS PROPOSING ANY ADDITIONAL CHANGES RELATED TO ITS**
2 **ADJUSTMENT MECHANISMS?**

3 A. Yes. In conjunction with the proposed move from seven to four active and one
4 inactive adjustment mechanisms, APS also reviewed the filing and effective dates
5 of the remaining four active adjustor rates with the goal of reducing and
6 consolidating the number of times per year that customers experience adjustor
7 resets. APS proposes to file its required RES and DSM plans in November of each
8 year and requests that the annual resets for these adjustors occur the following
9 October. The October effective date for DSMAC-1 and REAC-1 provides ample
10 time for Commission Staff, interested parties, and the Commission to review
11 implementation plans, and ensures that any customer bill impacts related to
12 approved adjustor rate changes would be implemented outside of high energy use
13 months. APS does not propose any changes to the filing and effective dates for the
14 PSA and the TCA adjustor rates.

15 **Q. HOW WILL APS'S ADJUSTMENT MECHANISM PROPOSAL BENEFIT**
16 **CUSTOMERS?**

17 A. Customers will benefit from the Company's proposed adjustment mechanism
18 modifications in several ways. First, customers will benefit from fewer adjustment
19 mechanisms on their bill, which will make it easier to understand their charges each
20 month with minimal overall impact to their bill. Second, customers will benefit
21 from a reduced number of times that their rates change throughout the year by
22 changing the effective dates for certain adjustors. Third, customers benefit from
23 rate gradualism, which helps spread the cost of investment over time versus a
24 higher increase as part of a rate case and reduces the frequency of rate case requests.
25 Customers will also receive the benefits of tax credits matched with concurrent
26 resource recovery, thus providing more timely benefit to customers. Finally, the
27
28

1 proposals help to reduce the Company's credit risk, which makes access to low-
2 cost capital more readily attainable, which helps control costs for customers.

3 **Q. WHAT ARE THE CUSTOMER BENEFITS FROM INCLUDING**
4 **RECOVERY OF APS'S CLEAN ENERGY INVESTMENTS IN THE**
5 **REAC?**

6 A. APS is proposing that capital carrying costs on its renewable energy and storage
7 investments be recovered through the REAC. Similar costs associated with
8 Purchase Power Agreements (PPAs) are already being recovered through the
9 Company's PSA and REAC mechanisms. APS's proposal will simply put cost
10 recovery of Company-owned clean energy and storage investments on equal
11 footing with the recovery of those PPA associated costs.

12
13 As technologies develop and procurement opportunities expand for clean energy
14 and storage resources, it is in our customers' best interest that there not be any
15 artificial barriers to choosing between utility-owned investments or third-party
16 PPAs. The current disparity in cost and investment recovery between utility-owned
17 and third-party PPAs is one such barrier that could cause unintended consequences.

18
19 For example, and as explained in more detail by Mr. Cooper, the 2022 Inflation
20 Reduction Act (IRA) will provide additional customer benefits including
21 Production Tax Credits (PTC) for solar investments. Including the PTC as part of
22 the carrying costs recoverable through the REAC would better match the tax
23 benefits with asset recovery, thereby enabling our customers to realize these
24 benefits sooner.

1 This need for recovery and optionality parity is significant. Today we anticipate a
2 baseline need for almost 2,300 MW of additional on-peak resource capacity by
3 2026, a significant portion of which would be investments in clean resources.

4
5 APS is further proposing guardrails to protect customers and ensure the prudence
6 of projects that would be recovered in the REAC. These guardrails include an
7 annual earnings test and a requirement that the included resources must be acquired
8 through an All-Source request for proposal (RFP) and be consistent with the
9 Company's IRP Action Plan. Clean investments are capital-intensive up front, but
10 feature substantially reduced lifetime operations and maintenance costs as well as
11 no fuel expenses. APS's REAC recovery proposal will allow for its clean energy
12 and storage investments to be more gradually included in rates, which will benefit
13 our customers. Mr. Joiner will describe APS's evaluation process for PPAs and
14 APS owned resources.

15 **Q. ARE INFRASTRUCTURE-RELATED ADJUSTMENT MECHANISMS IN**
16 **USE TODAY?**

17 A. Yes. Infrastructure-related adjustment mechanisms, such as APS's proposed
18 modification to the REAC, effectively allow defined assets to be included in a
19 utility's rate base between rate cases and are increasingly being utilized. These
20 mechanisms contribute to predictable and timely cash flows, thereby supporting
21 credit quality and reducing regulatory risk and costs to customers.

22
23 As shown in S&P Global, Regulatory Focus Topical Special Report, *Adjustment*
24 *Clauses: A State by State Overview*, Attachment TNG-01DR, 13% of jurisdictions
25 employ regulatory adjustment mechanisms that recover traditional generation
26 costs, while 23% employ a regulatory adjustment mechanism that allows recovery
27 of renewable and other non-traditional resource costs.

1 In a historical Test Year jurisdiction like Arizona, capital investment is
2 increasingly hard to keep recovery from fundamentally lagging. A capital cost
3 recovery mechanism for renewable generation supports cash flows needed for
4 these investments while also providing more timely matching of the fuel savings
5 customers receive through renewable investment.

6 **Q. ARE ADJUSTMENT MECHANISMS VIEWED FAVORABLY BY THE**
7 **INVESTMENT COMMUNITY AND WOULD INVESTORS VIEW THE**
8 **APPROVAL OF APS'S PROPOSED MODIFICATIONS AS A POSITIVE**
9 **REGULATORY OUTCOME?**

10 A. Yes, investors view adjustment mechanisms favorably and would view the
11 approval of APS's proposal as a positive outcome.

12
13 Investors recognize the benefits of adjustment mechanisms and are aware that the
14 use of adjustment mechanisms is very common in the utility industry. Investors
15 also understand that APS's adjustment mechanisms are consistent with similar
16 mechanisms across the industry.

17
18 Rating agencies have noted that regulatory jurisdictions which recognize the
19 positive impact of timely investment recovery to both customers and utilities in
20 their decision making are those that will appeal to investors. Approval of
21 infrastructure-related adjustment mechanisms encourages investment in clean
22 energy generation. Regulatory and cost recovery predictability leads to decreased
23 financial risk and strengthened investor confidence and would enhance APS's
24 ability to access lower-cost debt and longer-term debt on behalf of customers.
25 Ultimately, creditors, and investors view adjustment mechanisms positively, which
26 can lead them to discount our debt, making investments recovered through this
27 process more affordable for customers.

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VIII. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Regulatory Focus Topical Special Report

Topical Report

July 18, 2022

Adjustment clauses: A state by state overview

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Contributors: Jim Davis, Lillian Federico, Lisa Fontanella, Jason Lehmann and Dan Lowrey

This report covers the key adjustment clauses used by the largest electric and gas utilities in the 53 jurisdictions covered by Regulatory Research Associates, a group within S&P Global Commodity Insights.

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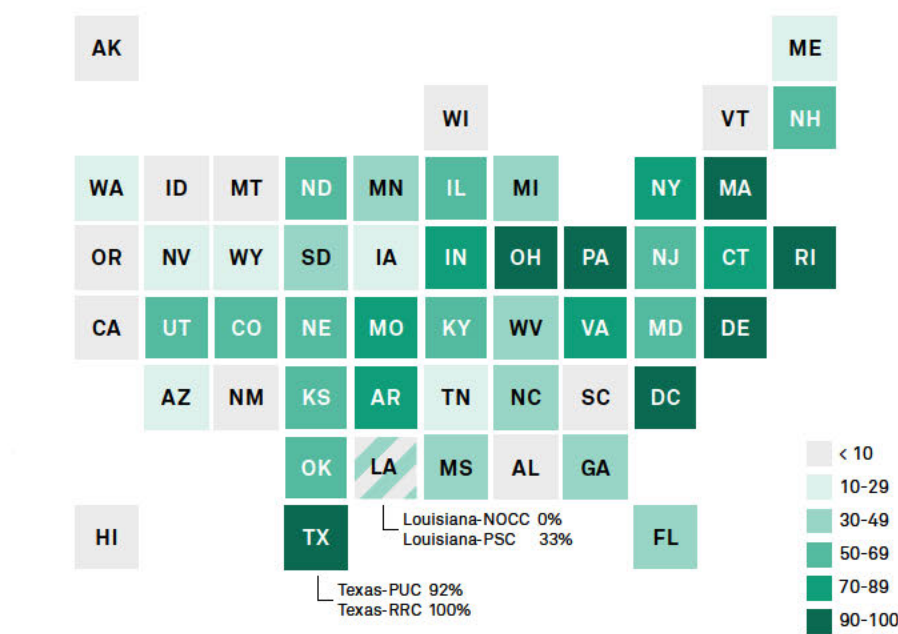
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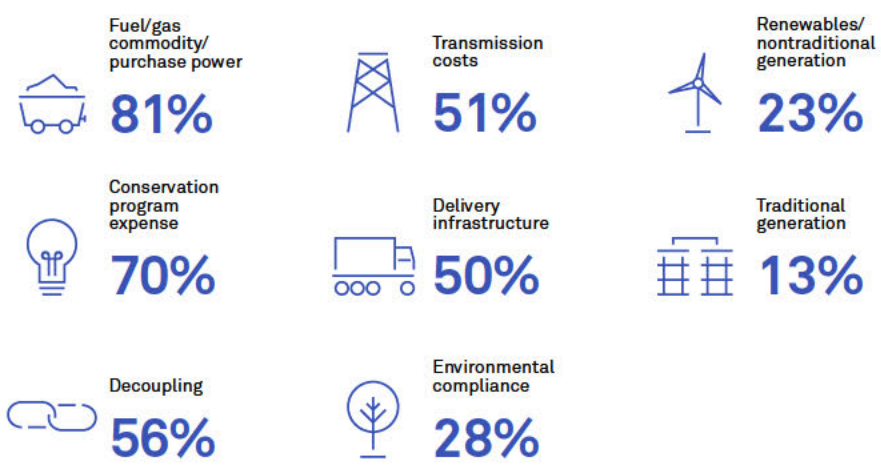
More recently and with greater frequency, commissions have approved mechanisms that permit the costs associated with the construction of new generation or delivery infrastructure to be used, effectively including these items in rate base without the need for a full rate case. In some instances, these mechanisms may even provide the utilities a cash return on construction work in progress.

As shown in the following infographic, certain types of adjustment clauses are more prevalent than others. For example, those that address electric fuel and gas commodity charges are in place in all jurisdictions. Also, about two-thirds of all utilities have riders in place to recover costs related to energy efficiency programs, and roughly half of the utilities have some type of decoupling mechanism in place.

Utilities with adjustment clauses
for delivery infrastructure (%)



Adjustment clauses in use (%)



Data as of June 2022.
Source: Regulatory Research Associates, a group within S&P Global Commodity Insights