



# The People Element: Positioning PUCs for 21st-Century Success

PUC Modernization Issue Brief Series:  
Purpose, People, and Process





## **About RMI**

RMI is an independent nonprofit founded in 1982 that transforms global energy systems through market-driven solutions to align with a 1.5°C future and secure a clean, prosperous, zero-carbon future for all. We work in the world's most critical geographies and engage businesses, policymakers, communities, and NGOs to identify and scale energy system interventions that will cut greenhouse gas emissions at least 50 percent by 2030. RMI has offices in Basalt and Boulder, Colorado; New York City; Oakland, California; Washington, D.C.; and Beijing.

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# Introduction

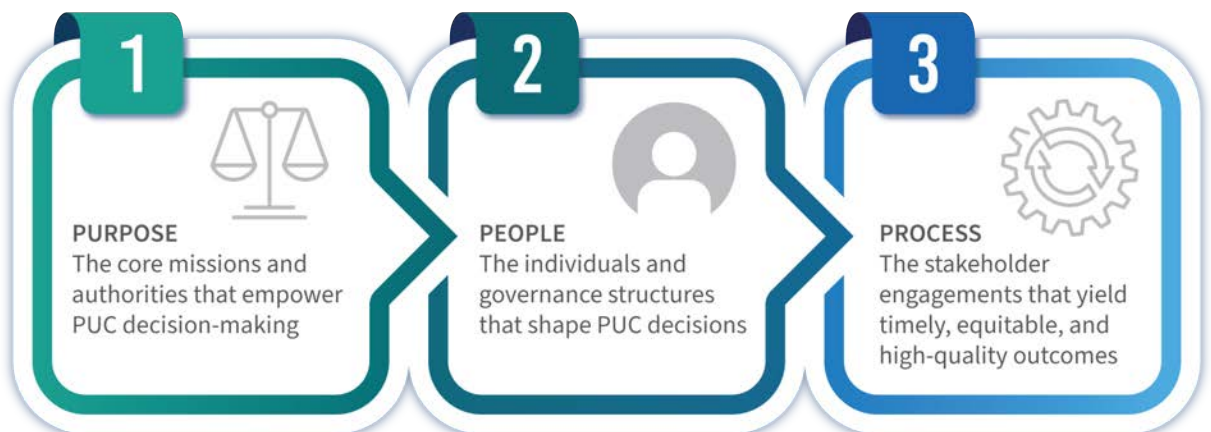
With decision-making authority over utilities serving roughly 72% of US electricity customers, state public utilities commissions (PUCs) are uniquely positioned to orchestrate the transition to a zero-carbon grid.<sup>1</sup> Across the United States, however, PUC modernization has not kept pace with the transition to a decarbonized, more distributed, and flexible energy system.<sup>1</sup>

Policymakers and the public are increasingly asking PUCs to consider a broader range of objectives than safety, affordability, and reliability in their decision-making, including greenhouse gas (GHG) emissions reductions, resilience, and equity. Yet organizational challenges pose barriers to innovation and informed regulatory decision-making. These challenges include outdated mandates; staff constraints; gaps in technical expertise; information asymmetry between utilities and regulators; procedure-heavy, quasi-judicial processes that require PUCs to consider evidence presented in specific ways; and a culture of risk aversion. Barriers such as these risk delaying or impeding decisions needed for achieving state objectives.

In response to these considerations, states like Colorado, Oregon, New York, and New Mexico have launched efforts to ensure regulatory decision-making remains transparent, independent, and/or consistent with state policy.<sup>2</sup> Although individual state budgets, governance structures, and political dynamics are unique, these efforts are a window of opportunity for transforming PUCs into the regulatory institutions we need.

To assist policymakers, advocates, and regulators in their zero-carbon efforts, this series of RMI issue briefs focuses on PUC modernization in the context of GHG emissions reductions. Each brief in the series draws from independent RMI analysis and more than a dozen interviews with industry experts.

## This series explores three dimensions of PUC modernization



<sup>i</sup> States use different terms to refer to state regulatory commissions: Public Service Commission (PSC), Department of Public Utilities (DPU), and State Corporation Commission, to name just a few. For consistency, where not referring to a specific state, the authors use the generic term “PUC” throughout this series.

This second brief explores the modernization of the PUC internal organization to match evolving industry needs. Drawing on expert interviews and RMI research, we identify challenges that PUC commissioners and staff face in effectively regulating a rapidly changing energy system, including those related to commission leadership, staff organization and internal collaboration, and the need for new skill sets as energy policy evolves (e.g., analytical methods, skills for stakeholder engagement, and PUC organizational management).

For each identified focus area below, we provide a set of suggested priority actions that regulators, legislators, and/or other key actors can take to modernize PUCs (see Exhibit 1). In particular, we find that commissions can be more effective when commissioner roles and authorities are clear; staff competencies, functions, and levels are aligned with regulatory priorities; commissions can effectively collaborate in making sound decisions; and commissions have ready access to external educational materials and consultants.

**Exhibit 1**  
**Priority**  
**Actions**  
**to Optimize**  
**PUC**  
**Resources**  
**for Emerging**  
**Industry**  
**Needs**

Focus Areas and Priority Actions	Venue(s)
<b>Position Commissioners to Lead</b>	
Develop internal guidance and bylaws that outline the roles and authorities of different commission employees.	Legislatures, Commissioners, Commission Staff
Revisit the commissioner selection process to ensure it results in commissioners with strong professional qualifications and representative experiences.	Governors, Legislatures
Explicitly direct PUCs to incorporate expanded policy goals and authorities into their decision-making in all rulemakings and regulations.	Legislatures
Articulate how expanded state policy goals will be integrated into rulemakings, policy statements, and other decisions.	Commissioners
<b>Harmonize Staff Priorities and Functions</b>	
Provide commissioners with access to technical staff to support research and ongoing or forthcoming dockets.	Commissions
Ensure that staff attention is appropriately balanced between traditional and emerging topics, and between short- and long-term priorities, including by facilitating training on emerging issues, creating work streams with clear staff support, and establishing dedicated in-house research units.	Commissions
<b>Encourage Internal Collaboration</b>	
Policymakers should revisit open meeting laws and ex parte rules, with a focus on providing greater clarity and flexibility while ensuring appropriate safeguards for transparency and protections against undue influence.	Legislatures
<b>Expand PUC Technical Expertise</b>	
Authorize additional funding for full-time employees consistent with the expected workload of new policy directives.	Legislatures, US Department of Energy
Secure additional technical capabilities for meeting specialized needs related to finance, system and financial modeling, equity, climate, and community engagement, including via broad or case-by-case authorization of consultant services for specific activities outside of existing PUC areas of expertise and expanded staff access to cutting-edge local or virtual training offerings.	Legislatures, Commissions, National Labs

# Position Commissioners to Lead

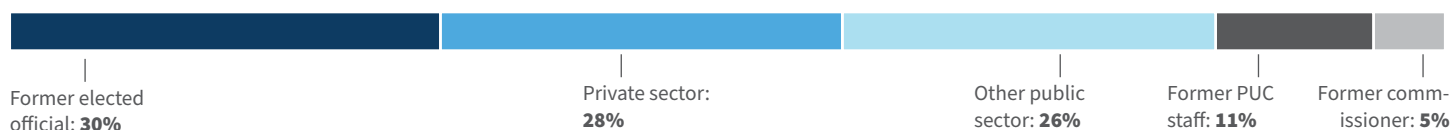
As states across the United States enact new energy policy mandates and PUCs grapple with their expanding roles in the energy transition, commissioner roles are evolving.<sup>3</sup> Policymakers in many states are asking commissioners to consider a broader range of outcomes than affordability, reliability, and safety in their deliberations—including such critical issues as decarbonization and energy justice. To do so effectively, commissioners and senior staff must increasingly establish clear regulatory priorities, create appropriate staff work streams, and proactively develop solutions to anticipated challenges.

In many states, however, commissioner roles are not specifically defined in statute or PUC bylaws.<sup>ii</sup> This lack of clarity creates uncertainty about commissioners’ ability to lead on emerging issues. It also makes commissioners hesitant to exert their authority to its limits while addressing the key issues of the day, for fear their decisions will be challenged in courts. Without clear expectations for their role in the energy transition, some commissioners tend toward *passive* forms of regulation (e.g., accepting parties’ requests without up-front instructions or independent analysis) rather than a more *active* approach (e.g., clearly defining proceeding scope up front, sequencing proceedings when the content or decisions overlap, etc.).<sup>iii</sup> Across the energy industry, observers have identified opportunities for regulators to take on a more active role.<sup>4</sup>

Additionally, commissioners may lack the legal or industry-specific expertise that enables them to hit the ground running on day one of the job (see Exhibit 2). In some states, this is because commissioner candidates are not required to demonstrate this experience prior to being selected. Approximately 40% of states have commissioner qualifications that include specific backgrounds in a related industry or subject matter.<sup>iv</sup> Data from the Institute for Public Utilities at Michigan State University also suggests that most commissioners are

## Exhibit 2 PUC Commissioner Diversity and Demographics

### Background Prior to Current Commission Position



### Commissioner Education Level

Doctorate	6%	Master's	19%
Attorney	45%	Bachelor's	30%

### State Requires Industry-Specific Commissioner Background

Requirement	39%	No requirement	61%
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### Commissioner Gender

Male	66%
Female	34%

Sources: RMI analysis of PUC enabling statute and RMI analysis of IPU MSU data. Institute of Public Utilities at Michigan State University, *IPU-MSU annual demographics of U.S. public utility commissioners (2020)*, 2020, <https://ipu.msu.edu/wp-content/uploads/2020/02/IPU-MSU-Annual-Commissioner-Demographics-Feb.-2020-1.pdf>.

<sup>ii</sup> PUC statute and bylaws can include any legislation or code of law in a state that details PUC authority, including state constitutions.

<sup>iii</sup> Scott Hempling has offered a helpful framework for understanding types of regulators, which we borrow from here. He outlines three regulator archetypes: the *passive* regulator, who accepts parties’ requests without thinking independently; the *reactive* regulator, who answers parties’ questions but fails to ask their own; and the *active* regulator, who systematically directs parties to its own questions according to a logical sequence. Scott Hempling, *Preside or Lead: The Attributes and Actions of Effective Regulators*, Scott Hempling Attorney at Law LLC, Second Edition, 2013, page 15.

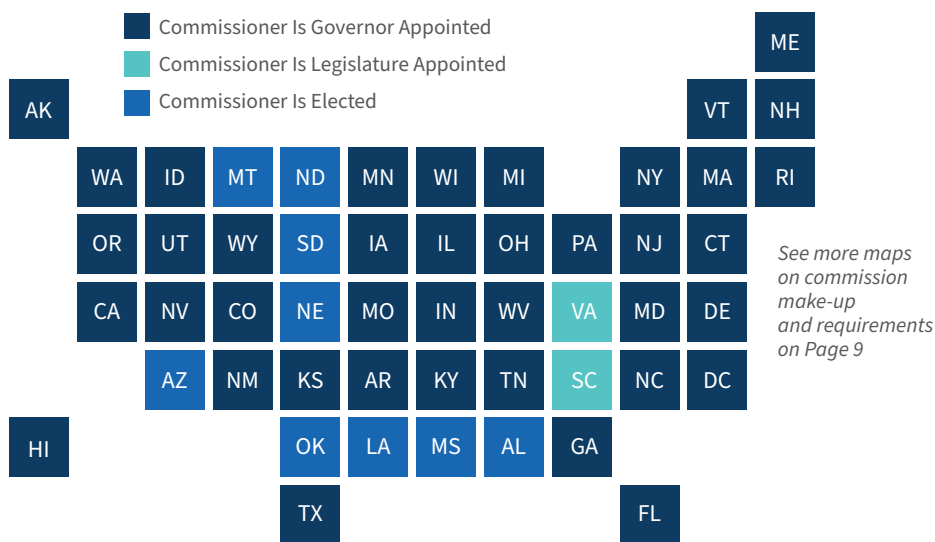
outside hires, rather than being selected from staff, which means they rarely have direct experience with the day-to-day operations and requirements of running the commission as an agency.<sup>5</sup>

While qualifications such as these are not the only desirable qualities in commissioners, commissioners without these experiences may face steep learning curves that make it more challenging for them to lead on timely regulatory issues. For example, a commissioner’s familiarity with the economics of clean energy—including storage and demand-side solutions—has increasingly become core to their ability to make informed decisions about future utility investments. Fluency with alternative business models to cost-of-service regulation has become important to help tie investments to a broader range of desired policy outcomes. Where commissioners lack relevant expertise themselves, more influence may shift to staff, highlighting the need for expanded staff expertise as well (see *Expand PUC Technical Expertise*).

Commissioners with a diverse range of experiences may also address risks related to regulatory capture in which the regulator elevates one stakeholder’s interests (e.g., the utility) over the public interest. Among other things, regulatory capture at PUCs can result in the approval of uneconomic actions or decisions that disadvantage low-carbon technologies.

To be sure, commissioners bring a range of experiences and skills to their positions.<sup>v</sup> But commissioners are not necessarily representative of the populations they serve. For example, like the energy industry itself, the commissioner community is heavily male dominated. Only nine states have commissions with more women commissioners than men. Increasingly, the public will need commissioners that have a broader diversity of experience, knowledge, and backgrounds to adequately bring heterogeneous perspectives and experiences to bear on critical issues of the day.<sup>vi</sup>

### Exhibit 3 State Commissioner Selection Methods



Transitioning from elected to appointed commissioners is one way that states have sought to ensure that commissioners have the needed expertise and experience to lead. These selection methods involve trade-offs. On one hand, thoughtfully appointed commissioners may be more likely to be chosen on the basis of their qualifications rather than their ability to run a successful political campaign, and be better insulated from direct political influence in decision-making than elected commissioners. While governors have wide discretion to appoint commissioners based on their own priorities and relationships, those

**iv** The authors reviewed commissioner qualifications outlined in statute for each state, plus Washington, D.C.

**v** Notably, the authors were unable to find some forms of demographic data, such as race, on current US state commissioners.

**vi** In July 2021, Georgia Governor Brian Kemp announced that Fitz Johnson would be his choice to replace Commission Chair Chuck Eaton, who is departing the commission for a judgeship in the Atlanta Judicial Circuit. Johnson would be the second African-American to serve on the Georgia PSC since at-large elections started in 1906. This appointment comes amid a lawsuit claim that the voting process misrepresents the Black community and, therefore, their ability to express their voice in power sector decisions.





## Commissioner Qualification Landscape

Qualification	Description	Number of States + Washington, D.C., with the Qualification
<b>Bipartisan Requirement</b>	State statute requires that either no more than a certain percentage of commissioners be from a certain party, or no more than a certain percentage of commissioners be from the same party as the governor.	22
<b>Age, Residency, or Voter Qualifications</b>	State statute requires commissioners to be a certain age, and/or reside within the state, and/or have resided within the state for a certain period, and/or be a registered voter in the state.	25
<b>Conflict of Interest Requirements</b>	State statute requires that commissioners do not have fiduciary, pecuniary, or employment interests in a regulated industry or company within the state.	45
<b>Educational or Industry Requirements</b>	State statute requires that at least one active commissioner have a certain higher education degree (usually a JD), and/or commissioners have experience in at least one of a certain list of fields of study, and/or commissioners have experience in one of a certain list of industries.	20

candidates are typically subject to senate confirmation.

On the other hand, in certain contexts, elected commissions may be more responsive to voter (and by proxy, ratepayer) interests and less focused on achieving the policy priorities of the appointing body. The implications of elected commissions are nontrivial; the public elects commissioners in nine states (see Exhibit 3), and the utilities they oversee are responsible for 17% of energy-related emissions in the United States, according to US Energy Information Administration data.<sup>6</sup>

Four states—Florida, Indiana, Ohio, and Vermont—take a slightly modified approach to governor-appointed commissioners. They each utilize nominating committees, which consist of appointed members who review candidates for the commissioner role. These members are generally either appointed by the governor and the speakers and minority leaders of the state house and senate, or designated by statute. The nominating committee selects a small pool of qualified candidates—based on statute-determined qualifications—to recommend to the governor. The governor ultimately chooses from the nominating committee’s recommendations. While this process does not inherently improve commissioner appointments, it does offer a way for a greater diversity of voices to be a part of the selection process.

Together, the challenges outlined above telegraph the need for greater focus on the roles, authorities, and core competencies for commissioners and staff.<sup>viii</sup>

<sup>viii</sup> Connecticut takes an interesting approach to PURA commissioner qualifications, for example. As a group, commissioners must satisfy a set of criteria to ensure diversity of experience and expertise: (a) at least three years of experience in a specific list of fields, (b) at least three of the fields must be represented on the PUC by individual commissioners at all times, (c) at least one of the commissioners must have experience in utility customer advocacy, and (d) no more than three of the five commissioners can be members of the same political party. Notably, all states require their commissioners to have certain qualifications, which can be found in the PUC’s enabling statute. However, the degree of prescription varies. Generally, states have requirements for age; state residency; pecuniary, fiduciary, or employment conflicts of interest with regulated companies; and political party.

## State Examples: PUCs Taking an Active Approach to Their Roles

The following examples highlight where commissioners are operating at the edge of their authority and lawmakers are empowering them to do so. As states issue energy policy that increasingly broadens commissioners' regulatory priorities, it is critically important for lawmakers to position commissioners to lead on emerging issues. But positioning commissioners to lead through statute is not enough: commissioners must use their authority to take action. Internal guidance and bylaws that outline the roles and authorities of different commission employees are a critical way for commissioners to enable action. They can also use exploratory dockets to propose regulatory strategy or communicate expectations to utilities and stakeholders. If currently unclear, commission guidelines should specify the conditions under which the chair and commissioners may initiate exploratory or rulemaking dockets on their own.

### PUCS IN PRACTICE

#### Oregon Commissioners Delegate Authorities



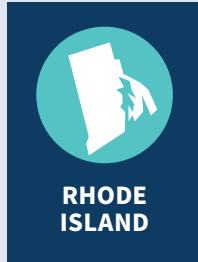
Oregon state law allows the PUC, with some exceptions, to “designate by order or rule any commissioner or any named employee or category of employees who shall have authority to exercise any of the duties and powers imposed upon the commission by law.”<sup>7</sup> In practice, this means that anyone within the PUC can propose a change to delegated authorities, and that commissioners are responsible for reviewing and approving any proposed changes.

Currently, the Oregon PUC's commission chair, executive director, director of the utility program, chief operating officer, chief administrative law judge, human resources director, and agency rules coordinator have specific authorities delegated to them.<sup>8</sup> Examples of these delegated authorities include:

- **The commission chair** has the authority to consider the advice of any commissioner, agency employee, or assistant attorney general who has subject matter knowledge on a topic of interest.
- **The executive director** has the authority to oversee agency governance.
- **The director of the utility program** has the authority to take action on behalf of the commission to approve certain budgets.

Oregon's enabling order is an essential prerequisite for enabling commissioners to lead. This order, paired with the PUC's decision to create a ledger of designated authorities approved by commissioners, demonstrates a best practice that other legislatures and commissions could use to bolster commissioner and staff leadership and improve agency coordination.

## Rhode Island Commissioner Anthony Leads the Development of Performance Incentive Mechanisms



From 2017 to 2019, the Rhode Island PUC received an increasing number of utility- and stakeholder-proposed performance incentive mechanisms (PIMs). The commission initially rejected many of these proposals.

In 2019, Commissioner Abigail Anthony developed a draft set of PIM principles to provide guidance for stakeholders, address misalignment between utility proposals and PUC expectations, and develop a more systematic approach to PIM development. Commissioner Anthony had two staff and an independent consultant assisting her with this work over approximately four months.

Commissioner Anthony pursued this effort of her own volition, signaling that the state’s PUC was taking a more active approach to performance incentive regulation.<sup>ix</sup> She indicated that she undertook this task to provide critical transparency to stakeholders regarding the commission’s parameters for performance incentives. As she noted, the PUC’s PIM design guidance in various orders, the least cost procurement standards, and the system reliability procurement standards needed “to be consolidated in a single place and presented as independent from any specific program.”

After Commissioner Anthony released the draft principles in a March 2019 open meeting,<sup>9</sup> parties were invited to provide comments in a docketed proceeding. The PUC was positioned to issue further guidance to clarify the principles, address stakeholder comments, and provide next steps for refinement of PIMs over a period of nine months. In its guidance, the commission articulated its thoughts and solicited input on several key questions, such as how PIMs could address the capital expenditure bias and the role of PIMs in supporting utility innovation. Based on a staff memorandum summarizing comments and providing recommendations to the commissioners, the PUC published and adopted its *Guidance on Principles for the Development and Review of Performance Incentive Mechanisms* on May 8, 2020.<sup>10</sup>

RMI’s 2020 report *PIMs for Progress* provides additional detail on the PIM principles.<sup>11</sup>

**ix** Commissioner Abigail Anthony drafted a memorandum with draft PIM principles and, in accordance with the Rhode Island Open Meetings Act, R.I.G.L. 42-46-6 (b), held an open meeting to address the memorandum. The Rhode Island PUC then initiated Docket 4893 to solicit comments regarding the memorandum from Commissioner Anthony regarding principles to guide the development and review of performance incentive mechanisms.

## New York Commissioners Apply Climate Law to Rate Cases



New York’s 2020 Climate Leadership and Community Protection Act (CLCPA) directs state agencies to consider the state’s zero-carbon by 2040 electricity and equity goals when they are “considering and issuing permits, licenses, and other administrative approvals and decisions, including but not limited to the execution of grants, loans, and contracts.”<sup>12</sup>

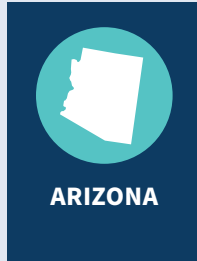
In a recent decision, the New York State Public Service Commission (PSC) acknowledged that while there is “some ambiguity” in the provision’s language, it should be applied to utility rate cases. In the decision, the PSC determined that the law is applicable to utility rate cases because they constitute “administrative approvals.” Notwithstanding staff’s arguments to the contrary, the commission emphasized that “absent Commission approval of that rate recovery, such projects [resulting from the approval] would likely not be pursued by the utility.”<sup>x</sup> This finding is important: it signals that the commission has acknowledged an expanded responsibility for implementing the policies in the CLCPA in addition to its traditional mandate. It also provides guidance to the utility and other stakeholders about how the PSC will evaluate utility rate cases going forward.

To be sure, the actual impact of the CLCPA mandates being considered in commission ratemaking decisions remains to be seen. The PSC emphasized in its order that the CLCPA does not include guidance on how state agencies should address potential tensions between the CLCPA’s mandated emissions reductions and the PSC’s core mandate to ensure safe, adequate, and reliable service and the obligation to provide service where feasible. Accordingly, while the commission established that the CLCPA applies to rate cases, it also preserved significant leeway to approve proposed infrastructure projects that are *inconsistent* with the CLCPA: “...to the extent that certain capital projects authorized under the Joint Proposal may be considered inconsistent with the CLCPA’s greenhouse gas emissions limits, those projects would be justified based on the need to ensure safe and reliable service...”<sup>13</sup>

As New York’s experience illustrates, commissioners can lead by making findings regarding their role in the face of ambiguity. By adopting the CLCPA’s directives into utility rate cases, the commission established new decision criteria for approval of utility proposals going forward and raised questions about whether these criteria will be applied to other types of utility proceedings. New York’s experience also hints at the challenges PUCs across the nation are likely to face as states instruct them to consider expanded policy goals. Policymakers can position commissioners to lead by ensuring that their core mission and authorities are consistent with new policy goals, and by providing guidance regarding how different policy goals should be prioritized in different types of commission decisions.

**x** In a post-hearing brief addressing the CLCPA’s applicability to rate cases, PSC staff argued “that the Commission’s adoption of the Joint Proposal authorizes rate recovery and does not constitute issuance of any permits or approval of construction.” See <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={92536BAF-3557-46A9-89E1-A8304E61C239}>.

## Arizona Corporation Commission Can Propose State Regulations



The Arizona constitution endows the Arizona Corporation Commission (ACC) with more expansive policymaking powers than PUCs have in most other states. For example, the ACC is tasked with incorporating businesses and organizations into the state, overseeing securities regulations, enforcing railroad and pipeline safety, and more.<sup>14</sup> It also maintains the duties traditionally allocated to commissions such as implementing rules and regulations and acting in a quasi-judicial manner in regulatory proceedings.

Informally, the ACC is often referred to as the “fourth branch of government.” This arrangement has pros and cons. On the one hand, it allowed the ACC to launch a rulemaking of its own volition to consider Commissioner Andy Tobin’s 2018 Arizona Energy Modernization Plan proposal, which targeted 80% clean energy by 2050.<sup>15</sup> This structure also allowed the ACC to impose a moratorium on the acquisition or construction of new natural gas generation larger than 150 MW in March 2018, in response to utility integrated resource plans it deemed too gas intensive.<sup>16</sup>

On the other hand, the ACC’s expansive authority has, at times, resulted in particularly fraught political dynamics. For instance, in response to the ACC’s approval of new clean energy rules targeting 100% zero-carbon energy by 2050 in the Arizona Energy Modernization Plan docket, the Arizona legislature took up a bill in 2021 that would constrain the commission’s ability to “adopt or enforce a policy, decision or rule that directly or indirectly regulates the types of critical electric generation resources” that utilities in the state use or acquire.<sup>17</sup> Although the bill did not pass during the 2021 session, its early traction illustrates the challenge some commissions may face in setting a policy vision where the legislature has different priorities.

State PUC approaches to active regulation and leadership necessarily differ according to political context. As the Rhode Island and New York examples highlight, commissioners themselves should be proactive in providing needed guidance and direction to stakeholders. Among other things, guidance can be used to test innovative ideas and approaches or solicit feedback on regulatory priorities. Policymakers can help by revisiting selection of commissioners and clarifying their roles and authorities as key orchestrators of equitable, cost-effective utility sector decarbonization. Other avenues for clarifying commissioner roles can come from internal guidance documents, which may consider regulatory strategy, priorities, and organizational management. This internal guidance can better position PUCs for success in the face of increasing complexity.

The New York and Arizona examples raise questions regarding the role legislatures play in positioning—or allowing—commissioners to lead. They show that absent direct legislative instructions for how commissions should weigh new versus traditional mandates, commissioners may not feel empowered to make interpretations that fully align with new policy goals. For this reason, legislatures should be as explicit as possible in their guidance for how they expect commissioners to balance emerging and traditional regulatory priorities. RMI's first issue brief in this series, *Purpose: Aligning PUC Mandates with Clean Energy Goals*, provides additional details on how state legislatures can update and clarify the mission and regulatory authority of state PUCs.

## Priority Actions:

- Commissioners and staff should develop internal guidance and bylaws that outline the roles and authorities of different commission employees. If currently unclear, these guidelines should specify the conditions under which the chair and commissioners may initiate exploratory and rulemaking dockets of their own volition. State legislators can support more active regulators by articulating their view of the PUC's role when passing energy policy. To be sure, commissioners then need to follow through on utilizing any clarified authorities to further their regulatory agenda.
- State lawmakers and governors should revisit the commissioner selection process to ensure that it supports the selection of candidates with strong professional qualifications and representative experiences. To avoid creating unnecessary barriers, policymakers should focus on developing guidance about desired competencies rather than binding qualifications.
- State lawmakers should explicitly direct PUCs to incorporate expanded policy goals and authorities into their decision-making in all rulemakings and regulations. Commissioners should articulate how they will optimize for these expanded goals through rulemakings, policy statements, and other decisions.

# Harmonize Staff Priorities and Functions

Many commissioners, both appointed and elected, assume their role without having deep utility sector experience. Even commissioners who do have industry experience may find themselves ill-equipped to immediately tackle the many and fast-changing issues of the industry—particularly those that relate to new and emerging policy priorities. This knowledge gap means that commissioners are often dependent on advisory staff to help them become educated and informed on a wide range of topics. Commissioners must particularly rely on technical and research staff when making decisions on issues where it would be impractical for an individual to quickly become an expert.

In most commissions, staff norms are not necessarily aligned with commissioner priorities and vision. The average commissioner’s term is five to six years, whereas many staff spend decades employed at a PUC and may be accustomed to a certain way of doing things.<sup>20, xi</sup> New commissioners often need to build trust and set cultural norms with staff before they can begin to influence commission strategy and vision (see *PUC Basics: Commissioner and Staff Roles*, below). Commissioners may also face legacy staff allocations that reflect different priorities, which can exacerbate organizational misalignment between staff and commissioners. Absent strong senior leadership and commissioner engagement, staff members themselves may not feel empowered to act on commissioner priorities.

## PUC BASICS

### Commissioner and Staff Roles

There are approximately 200 state commissioners and 8,000 full-time PUC employees in the United States.<sup>18</sup> Generally speaking, PUC employees fall into four organizational categories: commissioners, advisory staff, advocacy staff, and administrative staff.

#### Commissioners

Commissioners issue decisions related to utilities and industries under their jurisdiction. In most states, a chair provides direction and leads commission activities such as setting agendas for regular meetings. Commissioner numbers and term lengths differ by state. The average state has four commissioners, although the number of seats ranges from three to seven. Commissioner term limits range from four to six years. Commissioners are elected by the public in 9 states, chosen by the state legislature in 2 states, and appointed by the governor in 39 states plus Washington, D.C.

<sup>xi</sup> The term length described here refers to the preset term length rather than the actual years of service, which may differ because commissioners occasionally leave their positions early or can be reappointed or reelected.



## Commissioner and Staff Roles (continued)

### **Executive Director**

Most commissions have an executive role. Executive directors, secretaries, and/or chief operating officers are often responsible for overseeing the day-to-day business of different staff members and allocating staff resources. They provide a helpful layer between staff and commissioners to advise, facilitate internal discussions, or act as a “safe” intermediary. In PUCs without this role, commissioners coordinate staff and take on other executive roles.

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### **Administrative Law Judge**

Administrative law judges report either directly to the commissioners or to the executive director. In most commissions, administrative law judges conduct formal hearings, prepare recommended decisions on the less controversial formal proceedings pending before the commission, and do other related work.

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### **Advisory and Advocacy Staff**

Most PUCs have advisory and advocacy staff within their regulatory division. Depending on the state, staff are allocated as advisory or advocacy either on a long-term or case-by-case basis and may be responsible for expertise in one or multiple regulatory areas. Some PUCs have a firewall between advocacy and advisory staff.

All commissions have advisory staff. These staff provide research, technical analysis, and guidance or recommendations to commissioners regarding potential decisions. The volume and complexity of cases on which commissioners must make decisions means that they rely on advisory staff to support their understanding of the issues and ability to make informed decisions. In most states, commissioners draw from a pool of advisory staff according to proceeding needs, and in some states, commissioners have dedicated advisory staff.

Some commissions have advocacy staff. These staff (called public or trial staff in some states) provide expert testimony and comments in PUC regulatory processes on behalf of the public interest. Their ranks include lawyers as well as technical, economic, finance, and policy experts and analysts. Because advocacy staff participate in PUC proceedings as intervenors or parties, internal or organizational firewalls typically separate them from advisory staff and commissioners to ensure impartiality in PUC decision-making. Not all PUCs have advocacy staff (e.g., Massachusetts), and in some states, advocacy staff are placed in a separate agency outside the PUC (e.g., Minnesota).

## Commissioner and Staff Roles (continued)

### Administrative Staff

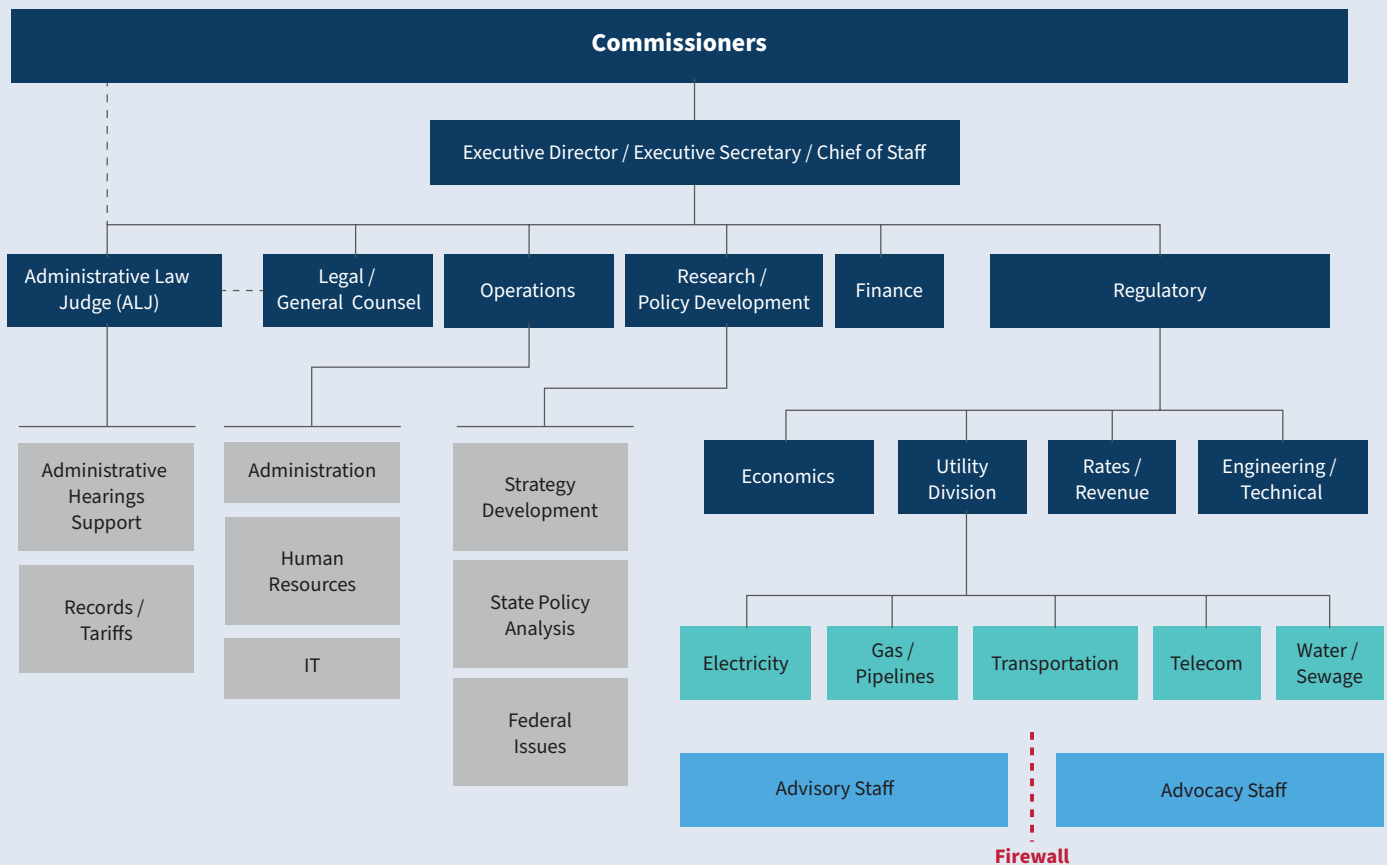
Administrative staff support the day-to-day business of the commission, and they include accountants, assistants, managers, and information technology professionals. Administrative staff also support commission activities such as responding to customer complaints, processing regulatory dockets, and administering hearings or other quasi-judicial processes.<sup>19</sup>

### Legal or General Counsel

In most states, the general counsel is authorized by statute to represent the commission in all legal actions and proceedings arising from regulatory decisions or other legal challenges. Attorneys working for the general counsel can appear in state, federal, or appellate courts on behalf of the commission.

## Exhibit 5 General Illustration of PUC Organizational Structure

*Representative divisions and staff roles within PUCs*



## Structural Staffing Constraints

Commissioners and staff may have different visions regarding the role of the commission, which take time and effort to reconcile. This reconciliation may be difficult to accomplish due to structural constraints. For example, commissioners typically lack technical staff who report directly to them, which can put distance between staff research and commissioner decision-making. Commissioners with staff who directly report to them enjoy a clear benefit, according to current and former commission staff interviewed for this paper. This configuration allows staff to support commissioners with research that can help inform their views on an ongoing basis. It also allows both parties to more work collaboratively toward the commission's vision and strategy.

Another way that states have sought to address structural constraints at commissions is with an executive director. Executive directors at PUCs can help commissioners better allocate staff to projects, act as a conduit between staff and commissioners on strategic decisions, and coordinate the design and execution of regulatory processes. An example of a PUC where commissioners and staff work directly together and which utilizes an executive officer role is Hawaii. At the Hawaii PUC, the executive officer leads the administrative functions of the organization, handling the budget, human resource needs, and clerical needs. This ensures the commission is running smoothly and projects are staffed correctly—and leaves ample space for legal, policy, and research staff to work directly with the commissioners to execute their vision. This was especially important during the Hawaii PUC's performance-based regulation proceeding, where senior staff at the commission worked directly with commissioners and junior staff. Senior leaders communicated the importance of the proceeding, ensured the process followed an appropriate timeline, mapped out and put the process for the docket into action, and leveraged expert consultants with the skills needed for implementation (e.g., facilitation, stakeholder engagement, financial modeling, etc.). This configuration allowed senior leadership to tackle emerging regulatory issues by empowering senior staff with a clear vision, adequate resources, and ongoing access to commissioners.

Whatever the reason, commissioner-staff misalignment poses a challenge to informed and consistent commission decision-making.

## Legacy Staff Skills and Issue Allocation

In addition to structural issues, legacy resource allocation may also create misalignment in the face of changing priorities. Experts interviewed for this paper highlighted how legacy staffing arrangements have not always caught up to newer priorities. For example, some PUCs may have a significant number of staff allocated to traditional teams such as rate review, resource planning, engineering, and siting. Although these roles must continue in a modernized PUC, nascent state energy goals may require commissions to craft teams that combine a diverse set of experiences to adequately handle complex regulatory challenges.

As an example, in late 2019 the Michigan Public Service Commission (MPSC) launched the MI Power Grid initiative in collaboration with Governor Gretchen Whitmer. The initiative seeks to ensure safe, reliable, affordable, and accessible energy resources for the state's clean energy future and to maximize the benefits of the transition to clean, distributed energy resources.<sup>21</sup> In order to support the success of this work, MPSC staff were reallocated from previous roles and specifically assigned to the implementation of this emergent and high-potential initiative.<sup>xii</sup>

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**xii** Staff deemed as reallocated based on RMI analysis of state PUC budgets, expenditures, and full-time employees.

New York's Reforming the Energy Vision (REV) effort offers another example, in which a team within the New York Department of Public Service (DPS) played a significant role.<sup>xiii</sup> Throughout the process, staff published numerous white papers that informed commissioners and other agencies on topics being considered during REV, provided detailed summaries of stakeholder comments in REV proceedings, and included informed policy, program, and rate recommendations to commissioners. The DPS's ability to reallocate staff to REV made a lasting impact on the commission's capacity to implement this effort. REV also highlighted that with adequate collaboration and support from commissioners, staff can feel empowered to develop innovative solutions.<sup>xiv</sup>

The following examples offer an overview of staff organization in commissions across the United States. They highlight that, although there is no one-size-fits-all commission structure, staffing allocation can either help or hinder the efficacy of commission decision-making.

## PUCS IN PRACTICE

### Minnesota PUC Organizational Structure



The Minnesota PUC consists of approximately 50 full-time employees. Half of them are allocated to the regulatory analysis staff, which advises commissioners.<sup>22</sup> Pursuant to Minnesota law, all written briefing materials and recommendations these staff provide to commissioners must simultaneously be made available to all proceeding participants.<sup>23</sup>

Meanwhile, the Minnesota Department of Commerce's (DOC) Division of Energy Resources houses advocacy staff who testify on behalf of the public interest in PUC proceedings. This segregation between the two agencies ensures that advocacy staff are not influenced by advisory staff priorities.

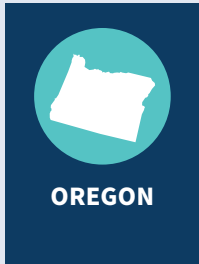
A state-commissioned independent analysis from 2015 found that this structure can safeguard transparent regulatory results and should not be changed to bring the two agencies under the same roof.<sup>24</sup> However, the report recommended that the PUC work with the DOC to clarify its docket system, public comment structure, and open meeting and ex parte requirements. The report asserted that changes in those areas could help the state's regulatory process become more efficient and more accessible to stakeholders.

In 2020, the Minnesota legislature conducted an analysis suggesting that the PUC and DOC had made some improvements to their shared structure. For example, the DOC maintains the docket system on behalf of both agencies, which facilitates joint regulatory proceedings and streamlined public participation—as opposed to needing to follow and intervene in parallel dockets in each agency. But the legislature's report also points to areas for improvement, including better notification of stakeholders about open meetings for linked dockets and more consistent posting of public comments.<sup>25</sup>

**xiii** The Department of Public Service has a broad mandate to ensure access to safe, reliable utility service at just and reasonable rates. The DPS is the staff arm of the New York Public Service Commission.

**xiv** Experts interviewed for this paper outlined the major role that NY DPS staff played in REV, and highlighted that staff were only able to have such an impact because they were reallocated from their original roles to focus on REV. The experts also stated that commissioners empowered staff to propose cutting-edge ideas by backing their efforts when they came under scrutiny from stakeholders.

## Staff Roles at the Oregon PUC

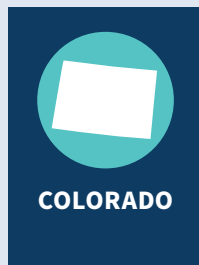


The Oregon PUC allows its technical staff, called utility program staff, to serve dual roles as both independent advocates participating in contested cases and advisors to the PUC. They act as project managers for most rulemaking proceedings, and they initiate the potential need for rulemaking through information gathering and discussions with stakeholders. To ensure an appropriate firewall, staff are subject to strict ex parte rules that

apply to individuals, rather than to the entirety of the staff. This arrangement allows individuals to be assigned with greater flexibility.

To further preserve fair agency decision-making, a commissioner may request a staff member to participate in commissioner deliberations only if the individual is not also acting as a participant—that is, playing an advocacy role—in a complaint proceeding. In these instances, the staff member’s responsibilities are to “serve as a resource and provide guidance on contested case matters to ensure effective, fair, and efficient agency decision-making based on information contained in the evidentiary record” and refrain from advocacy or attempting to persuade commissioners to adopt a particular position.<sup>26</sup>

## Colorado PUC’s Research and Emerging Issues Unit



The Colorado PUC has traditionally allocated four full-time employees to its Research and Emerging Issues Unit. The unit’s mission is to “advance policy discussions and Commission decisions concerning current and emerging issues that impact utilities and service providers regulated by the Colorado PUC and their customers. The team accomplishes this mission by initiating, facilitating, coordinating, and

performing objective and balanced research and sharing the results of this work with the Commissioners and Staff.”<sup>27</sup> After increasing to approximately eight full-time employees in 2009–2010 thanks to the availability of federal stimulus funds, staffing for this unit declined to zero full-time employees at the end of 2019.

In the wake of a 2020 PUC Modernization Plan and recent legislation, the PUC has started to rebuild this unit. Consistent with the plan’s recommendations, the PUC has hired a section chief for the unit, and has begun hiring for several policy analyst positions.<sup>28</sup>

## Priority Actions:

- Commissioners or executive directors should ensure that commissioners have technical staff who directly report to them to support research needs and ongoing or forthcoming dockets. Assigning specific technical staff to support individual commissioners or commissioner-led work streams are some of the ways that states have sought to ensure their commissioners are empowered to make informed decisions.
- Commissions should provide executive directors or senior policy staff with the tools and endorsement needed to lead effectively on project and process management.
- Commissions should take steps to ensure that staff attention and staff resources are appropriately balanced between traditional and emerging topics, and between short- and long-term priorities. Training on emerging issues, work streams with clear staff support, and dedicated in-house research units are emerging best practices for managing these competing considerations.

# Encourage Internal Collaboration

Open meeting laws and ex parte rules aim to prevent bias, ensure transparency, and protect against regulatory capture in commission decision-making (see *PUC Basics: Open Meeting Laws and Ex Parte Rules*, below). However, by removing commissioners' ability to confer among themselves outside of public scrutiny, these restrictions can limit opportunities for collaboration, coordination, and iteration among commissioners and staff and can reduce the commission's overall efficiency. Increased collaboration is particularly important as commissioners work through strategic issues related to refocusing their regulatory visions and adapting to changing statutory authorities (as discussed in the first of RMI's PUC Modernization Issue Briefs, *Purpose: Aligning PUC Mandates with a Clean Energy Future*).

Some experts interviewed for this research asserted that ex parte rules prevent commissioners from engaging in forward-thinking conversations with stakeholders out of fear of unintentionally violating these rules and "contaminating" an ongoing proceeding. They noted that ex parte rules can also make it difficult for commissioners to engage with key staff and utility executives, which can be essential given the frequency with which the commission is engaged in proceedings with utilities. With respect to open meeting law restrictions, some interviewees noted that commissioners may not even know their fellow commissioners' positions on key issues ahead of public deliberations on rulemaking or ratemaking decisions.

## PUC BASICS

### Open Meeting Laws and Ex Parte Rules

Procedural rules such as open meeting laws and ex parte rules dictate interactions between commissioners, staff, and non-PUC stakeholders.<sup>29</sup> They play a significant role in shaping how PUCs conduct their day-to-day, strategic, and long-term business. All PUCs in the United States are subject to some form of open meeting law and ex parte communication requirements.

**Open meeting laws** require that government agencies, including regulatory agencies, conduct meetings in public and maintain public decisions and records. In many states, such as Rhode Island, this means that commissioners at PUCs may discuss business regarding an ongoing case only during public meetings, which are held at scheduled times with sufficient public notice. Open meeting laws are important for maintaining transparency in commission decision-making but can also prevent commissioners from proactively collaborating among themselves on emerging topics or regulatory vision.

**Ex parte rules** govern communications among parties related to ongoing commission proceedings. In many cases, commissioners may not engage in communications with one party in a proceeding without other parties being present, and all parties must be included in any communications relevant to the case. Although these rules are designed to ensure fairness and transparency during PUC processes, they can create communication barriers between commissioners and advocacy staff who are a party in cases before the commission. Where ex parte rules are applied strictly, they can restrict the ability of commissioners to collaborate with staff on strategic issues such as policy implementation.

While open meeting laws and ex parte rules remain foundational to transparent and unbiased regulation, fostering an environment where commissioners can confer directly with each other on high-level strategy and staff have opportunities to work directly with commissioners is increasingly important to informed PUC decision-making on complex policy issues. By creating a culture of innovation that is able to dynamically respond to today's energy needs, commissioners can position staff to explore nascent topics and encourage informed regulatory decision-making.

Multiple states, including Hawaii and Michigan, allow exemptions to open meeting laws and/or ex parte rules under certain conditions. In Hawaii, certain ex parte communications between commissioners and staff are explicitly authorized in the commission's Rules of Practice and Procedure. Hawaii's administrative rules authorize four types of ex parte communications: (1) communications between the commission and staff, (2) communication relating solely to matters that a commissioner or hearings officer is authorized to dispose of on an ex parte basis, (3) communication with counsel or staff for the commission relating solely to matters of practice and procedure, and (4) communication after adequate notice and opportunity for all parties to participate.

In addition, a number of other state regulatory agencies allow staff to communicate with each other and then with their respective commissioners so long as they do not receive ex parte communications from parties.<sup>30</sup> Some federal regulatory agencies also employ and allow exemptions to ex parte rules. For example, the Federal Energy Regulatory Commission allows commissioners to meet so long as they do not constitute a quorum.

Though many states would benefit from loosening these restrictions, care should be taken to balance the need for sufficient communication between commissioners and staff with the need for sufficient transparency to the public. California's SB 215, for example, requires the California PUC to clarify ex parte definitions and practices to ensure that inappropriate communications are properly identified and avoided.<sup>31</sup> The reforms, in place since 2017, update the commission's rules to clarify ex parte definitions and practices, require transparency of ex parte communications via reporting, and revise penalties, fines, and other punishment for ex parte rule violations, among other things.<sup>32</sup>

## Priority Actions:

- Policymakers should revisit open meeting laws and ex parte rules, with a focus on providing greater clarity and flexibility while ensuring appropriate safeguards for transparency and protections against undue influence.

# Expand PUC Technical Expertise

New legislative mandates are stretching staff capacity in many states. Many experts interviewed for this brief emphasized that PUC workloads are increasing due to new state policy requirements and an expanding scope of priority topics to consider.<sup>xv</sup> Commissioners and staff must balance the demands of these new requirements against the commission's routine business. Frequent rate case and other resource-intensive proceedings can prevent staff from engaging on issues such as state decarbonization policy or long-term strategy. Because of the need to allocate staff to proceedings with statutory deadlines, which limits the ability to allocate staff to more emergent topics, regulators often revert to passive or reactive modes of regulation.<sup>33</sup>

More staff overall can enhance a PUC's ability to explore or take positions on a wide range of issues. For example, the California PUC, which is the largest PUC in absolute terms and per capita in the United States, utilizes staff to periodically release white papers and reports on salient topics such as retail choice, resilience, and grid modernization. However, few states currently allocate as many resources to PUC staffing as California (see *PUC Basics: Budgets and Staff Capacity*). Moreover, legal restrictions due to open cases can preclude staff from meaningfully exploring topics related to those cases. For example, staff may be prevented from publicly discussing their view on a topic that is currently being addressed in a rate case or planning proceeding.<sup>34</sup>

PUCs working on the energy transition not only need more staff, they also need staff with different skills. PUC staff need to be able to evaluate complex utility models, convene effective and inclusive stakeholder processes, and understand new technologies and regulatory mechanisms. Advisory staff also need different competencies to provide informed analysis, alternative courses of action, and recommendations to commissioners. Advocacy staff, for their part, must be able to provide effective expert testimony during hearings, independently assess utility models (e.g., distribution system plans), and robustly question utility inputs and assumptions.

While existing staff capabilities reflect historical needs, new challenges require new staff competencies in areas such as climate (e.g., carbon accounting), energy system modeling, load and resource forecasting, innovative business models (e.g., software-as-a-service), finance (e.g., securitization), environmental justice and equity, and cybersecurity.<sup>xvi</sup> Few government agencies can retain all of these competencies internally. Some states allow PUCs to fill gaps in expertise or conduct independent investigations by hiring external consultants for policy or rulemaking dockets. However, most state budgets for consultants are fairly limited. What's more, even where commissions have external consulting budgets, they may be inadequate for timely PUC achievement of state goals. For example, until the enactment of new legislation in 2021, the Colorado PUC's external consultant budget was just 0.15% of its \$16 million budget.<sup>35</sup>

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**xv** This dynamic is showing up in different ways for different states, but the core challenge appears to be the same. For example, citing increased workloads and the need for additional industry expertise, New York regulators recently requested (and received) gubernatorial approval to increase the number of commissioners at the PSC from five to seven.

**xvi** Increased commission workloads can limit staff's ability to invest in new skills. As a result, commissioners are often searching for educational opportunities and access to specialists to close the in-house expertise gap. Easy access to adequate, up-to-date external training and education remains critical to modernizing the state regulatory workforce. Some states, such as Colorado, Massachusetts, Maine, and Michigan, have required their PUCs to consider the equity impacts of their decisions.



## Budgets and Staff Capacity

Nationwide, PUCs in aggregate spend approximately \$1.4 billion each year and employ ~8,000 full-time employees.<sup>xvii</sup> To put this in perspective, US investor-owned utilities generated \$230 billion in revenues in 2019.<sup>36</sup> Most PUCs are “fee-funded” agencies paid for by an assessment on the utilities they regulate. This can make increasing PUC staff a highly political issue.

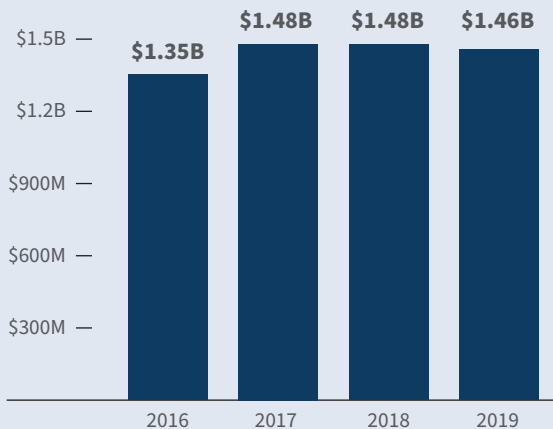
**Budgets:** At the state level, PUC spending varies significantly depending on factors including the number and types of industries regulated. Budgets range from approximately \$4 million in Montana to almost \$400 million in California. The average and median four-year expenditures for US PUCs between FY2016 and FY2019 were approximately \$30 million and \$15 million, respectively. A significant share of PUC spending is dedicated to salaries and benefits for PUC employees.

**Staff capacity:** PUC staffing levels also vary widely, from ~0.5 full-time employees per 1 million residents in Utah to ~32 full-time employees per 1 million residents in California. The average PUC employs approximately 200 full-time employees. The state median is significantly lower, at 98 full-time employees. Notably, five states account for 43% of total state PUC funding in the United States (and ~37% of total full-time employees) but represent only 21% of US electricity consumption.<sup>xviii</sup> This may indicate that more robust staffing enables commissions to address issues of the day—such as energy efficiency and conservation, demand response, and increased access to renewable generation—with greater impact.

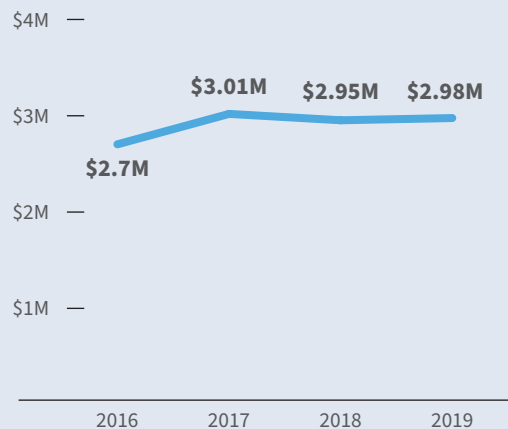
### Exhibit 6

#### Average PUC Spending Rose at an Annual Rate of ~2% Between 2016 and 2019

Total US PUC Spending



Average PUC Spending

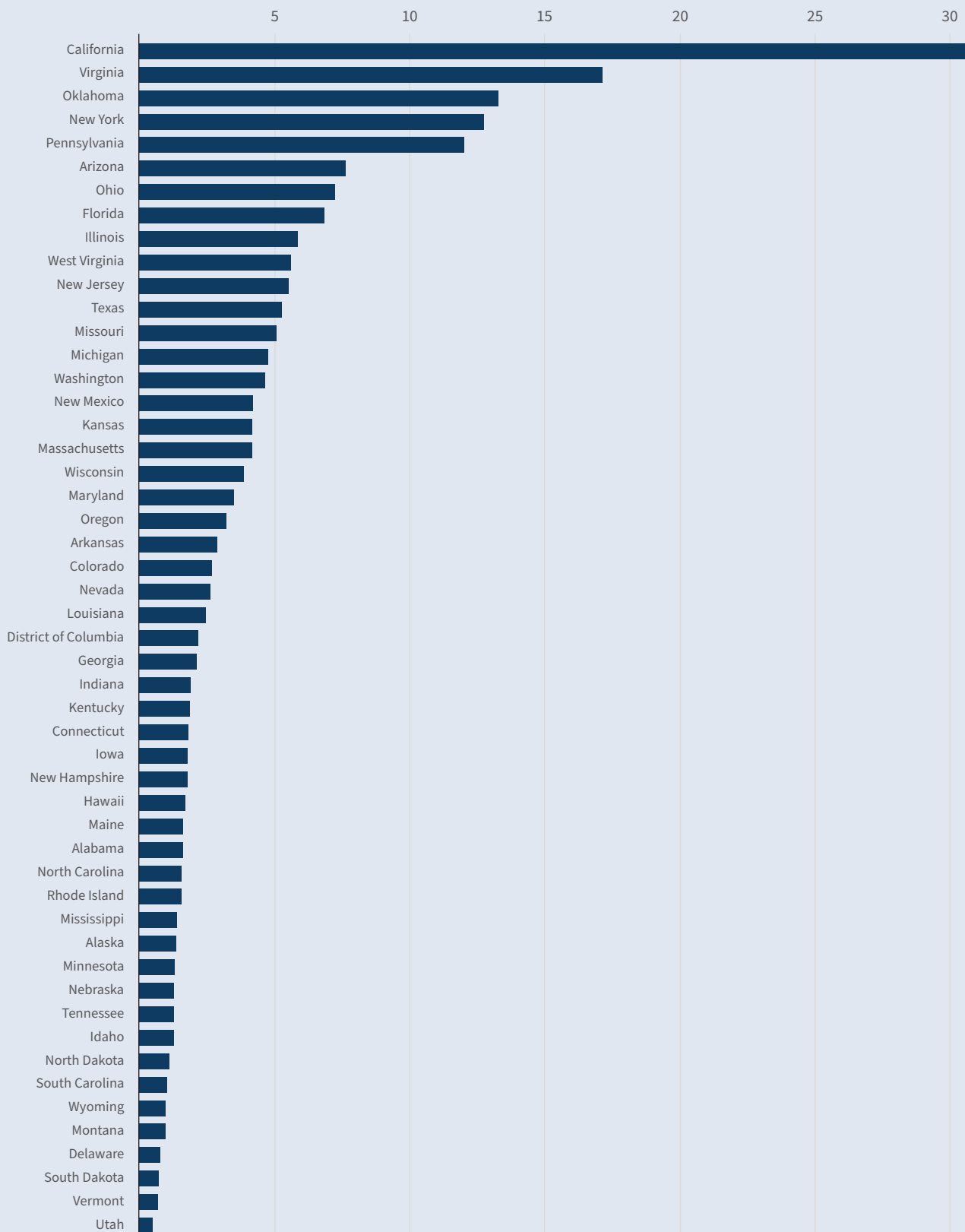


Source: RMI analysis of US public utility commission budgets

<sup>xvii</sup> As a point of reference, the Federal Energy Regulatory Commission, another fee-funded agency, spent ~\$369 million in FY2019 and employs approximately 1,500 full-time employees: <https://www.ferc.gov/sites/default/files/2020-04/FY-2018-FY-2022-strat-plan.pdf>.

<sup>xviii</sup> The five states are California, Virginia, New York, Pennsylvania, and Illinois.

## Exhibit 7 US PUCs by Number of Full-Time Employees per Million Residents



## Priority Actions:

- Policymakers should authorize additional funding for full-time employees consistent with the expected workload of new policy directives.<sup>37</sup> In Colorado, for example, SB 19-236 authorized an additional 7.5 full-time employees to help the PUC implement the law’s multiple policy directives. In New Mexico, lawmakers funded an additional nine full-time employees to support implementation of the Energy Transition Act in FY2020.<sup>38</sup>

The federal government may also be able to help address staff bandwidth issues and technical gaps by expanding the pipeline for the state regulatory workforce. For example, the Biden administration could build on existing programs such as the US Department of Energy’s Solar Energy Innovators Program. This program places fellows into approved host institutions, including PUCs, for two-year terms to conduct “practical research on innovative solutions to the challenges faced by electric utilities and... electric public utility commissions,” in light of growing solar and distributed energy resources on the grid. The Oakridge Institute for Science and Education formally employs the program fellows for their appointment term.

Scaling this PUC fellowship placement effort could have outsize impact on the trajectory of the nation’s electric grid. A strong complement to this effort could include federal or other external funding that supports state PUC consultant needs. These efforts can also ensure that the United States attracts and retains leading-edge regulatory expertise, and potentially provide needed employment opportunities in an environment of tight state budgets.

Additionally, policymakers should consider increased funding for consumer advocates. While not the primary focus of this paper, interviewees noted that consumer

advocates face the same growing complexity with proportionally fewer resources than PUCs.

- Policymakers and commissions should consider approaches to secure additional technical capabilities—particularly for meeting specialized needs related to finance, modeling, equity, climate, and community engagement. This may include ensuring that staff have access to cutting-edge external training offerings, particularly those that can be delivered locally or virtually. This could take the form of a budget carve-out, an annual training target, or requests for updated course offerings from universities, neutral nonprofits, and federal and state agencies. For example, the Public Utilities Commission of Nevada (PUCN) 2020 Strategic Plan targets enrolling “50% of attorneys, policy advisers, and other PUCN-professionals in industry-specific training on an annual basis.”<sup>39</sup> Similarly, the Hawaii PUC’s 2020–2022 Strategic Plan states that “by 2022, the PUC will create a work environment that fosters organizational success” by developing standardized and section-specific training for all new employees to ensure a holistic onboarding process.<sup>xix</sup>

Additionally, broad or case-by-case authorization of consultant services for specific activities outside of existing PUC areas of expertise remains an important tool for policymakers. For example, Colorado’s SB 19-236 funded an external consultant to assist with expertise on securitization.<sup>40</sup> In California, the commission regularly hires consultants to address case-specific needs and meet routine analytical demands.<sup>41</sup> The New Hampshire PUC also regularly issues requests for proposals for consultants to perform a variety of tasks, including analyses of utility rate designs and distributed energy resource valuations.<sup>42, xx</sup>

**xix** Many educational resources exist for regulators and their staff (the Smart Electric Power Alliance offers an in-depth look at 17 of them, for example). However, more dynamic and regularly updated educational resources are needed to modernize the PUC workforce. A Smart Electric Power Alliance task force from 2019–2020 found that technology change and new business models are “advancing faster than currently structured regulatory education programs and processes can accommodate.” As a result, regulatory treatment of new technologies is often poorly represented in existing education programs for regulators (and other stakeholders). Among other things, the task force recommended that entities offering educational programs and courses for commissioners and staff incorporate new technologies as part of their basic curriculum, update their content frequently, and expand their delivery channels (e.g., via off-site and virtual on-demand courses or trainings). See <https://sepapower.org/resource/innovating-regulatory-education-for-a-clean-modern-energy-future/> for more.

**xx** Requests for proposals for topics addressing greenhouse gas emissions, energy efficiency, building energy goals, and energy conservation are supported by the greenhouse gas emissions reduction fund, which is funded by New Hampshire’s participation in the Regional Greenhouse Gas Initiative: <https://www.puc.nh.gov/Regulatory/Rules/PUC2600.pdf>.

# Conclusion

PUCs are uniquely positioned to be champions of implementing clean energy and climate policy. But they need the right resources to do the job effectively. Staffing capacity constraints, gaps in technical expertise, and a culture of risk aversion present barriers to active regulatory decision-making that accounts for systemic challenges such as climate change.

States seeking PUC modernization will need to find a balance between different dimensions that may occasionally be in tension: ambition and timely execution, transparency and collaboration, and economic constraints and resource needs, to name a few. The need for modernization is an urgent one; the decisions that PUCs across the United States make today will shape the nation's generation, transmission, and distribution assets over the next decade and beyond.

The next brief in this series explores PUC processes. Increased caseloads, growing stakeholder diversity in regulatory dockets, ambitious policy implementation timelines, and growing information asymmetries between regulators and utilities suggest that policymakers should be paying renewed attention to formal and informal PUC procedures. Updated processes can address these challenges, enhance regulatory flexibility, and generate richer, more equitable solutions.

# Appendix

## Commissioner Statutory Requirements by State

State	Statutory Requirements				Source
	BIPARTISAN	AGE / RESIDENT / VOTER	CONFLICT OF INTEREST	INDUSTRY OR EDUCATION	
Alabama			✓		Alabama Code §37-1
Alaska			✓	✓	Alaska Statute §42.04.020
Arizona			✓		Arizona Rev. Statute §40-101
Arkansas		✓	✓	✓	Arkansas Code §23-2-101
California			✓		California Public Utilities Code §2-303
Colorado	✓	✓	✓		CRS §40-1
Connecticut	✓		✓	✓	Connecticut General Statute §16-2
Delaware	✓	✓	✓		26 Delaware Code §103
Washington, D.C.		✓	✓		DC Code §34-801
Florida			✓		Florida Statute §350
Georgia		✓	✓		Georgia Statute §46-2
Hawaii			✓	✓	Hawaii Rev. Statute §269-2
Idaho	✓	✓	✓		Idaho Code §61-2
Illinois	✓		✓		220 IL Comp. Statute 5/Art. II
Indiana	✓		✓	✓	Indiana Code §8-1-1
Iowa	✓		✓		Iowa Code §474
Kansas	✓	✓	✓		Kansas Statute §74
Kentucky		✓	✓	✓	Kentucky Statute §278.060
Louisiana					Louisiana Statute §4
Maine					Maine Statutes §35-A
Maryland		✓	✓	✓	Maryland Code §2-102
Massachusetts	✓		✓	✓	Massachusetts General Laws §25
Michigan	✓	✓	✓		Michigan Comp. Laws §406-1
Minnesota	✓	✓	✓	✓	Minnesota Statutes §216A.03
Mississippi		✓	✓		Mississippi Codes §77-1-1
Missouri		✓	✓		Missouri Revised Statute §386

## Commissioner Statutory Requirements by State (continued)

State	Statutory Requirements				Source
	BIPARTISAN	AGE / RESIDENT / VOTER	CONFLICT OF INTEREST	INDUSTRY OR EDUCATION	
Montana		✓			Utility Commissions: State Regulatory Structures in the West, pages 2–3
Nebraska	✓		✓	✓	Nebraska Statutes §70-1003
Nevada	✓		✓	✓	Nevada Revised Statute §703
New Hampshire			✓	✓	New Hampshire Rev. Statute §363
New Jersey	✓				New Jersey Code §48.2
New Mexico		✓		✓	New Mexico Codes §8-8
New York	✓		✓		New York Public Service Law Article 1
North Carolina			✓		North Carolina Statutes §62
North Dakota		✓			North Dakota Constitution, Article 5
Ohio	✓		✓	✓	Ohio Rev. Code §4901
Oklahoma		✓	✓		Oklahoma Constitution, Article 9 §16
Oregon	✓		✓		Oregon Statutes Chapter 756
Pennsylvania	✓	✓	✓		66 Pa. Cons. Stat. §301
Rhode Island				✓	Rhode Island General Laws §39-1
South Carolina		✓	✓	✓	South Carolina Code of Laws §58-3
South Dakota		✓	✓		South Dakota Codified Laws §49-1-3
Tennessee				✓	Tennessee Code §65-1-101
Texas		✓	✓	✓	Texas Statutes §12.053
Utah	✓	✓	✓		Utah Code §54-1-1.5
Vermont			✓		30 V.S.A. § 4
Virginia		✓	✓	✓	Code of Virginia Chapter 2
Washington	✓	✓	✓		Washington Rev. Code §80.01
West Virginia	✓	✓	✓	✓	West Virginia Code §24-1
Wisconsin			✓		Wisconsin Statutes §15.06
Wyoming	✓		✓		Wyoming Statute §37-2

# Endnotes

- 1 David Darling and Sara Hoff, “Investor-Owned Utilities Served 72% of US Electricity Customers in 2017,” US Energy Information Administration, 2019, <https://www.eia.gov/todayinenergy/detail.php?id=40913>.
- 2 PUC Modernization Plan, Colorado Public Utilities Commission, 2020, <https://puc.colorado.gov/puc-modernization-plan>; Report on Executive Order 20-04, Oregon Public Utility Commission, 2020, <https://www.oregon.gov/puc/utilities/Documents/EO20-04PUC-Report.docx.pdf>; “New York State Public Service Commission Session,” recorded February 11, 2021, <https://www.youtube.com/watch?v=WCJyTDJBXy0>; and Summary of and Arguments for & Against the Constitutional Amendments Proposed by the Legislature in 2019 and 2020, New Mexico Legislative Council Service, 2020, [https://www.nmlegis.gov/Publications/New\\_Mexico\\_State\\_Government/Constitutional\\_Amendment/Constitutional\\_Amendments\\_2020.pdf](https://www.nmlegis.gov/Publications/New_Mexico_State_Government/Constitutional_Amendment/Constitutional_Amendments_2020.pdf).
- 3 Advanced Energy Economy, “Top 10 Utility Regulation Trends of 2020,” 2020, <https://blog.aee.net/top-10-utility-regulation-trends-of-2020>.
- 4 Lawrence Berkeley National Lab, “Expanding the Scope of Commercial Opportunities for Investor-Owned Electric Utilities,” 2021, [https://eta-publications.lbl.gov/sites/default/files/utility\\_commpops\\_typology\\_reg\\_issues\\_final\\_20210210.pdf](https://eta-publications.lbl.gov/sites/default/files/utility_commpops_typology_reg_issues_final_20210210.pdf).
- 5 RMI analysis of: Institute of Public Utilities at Michigan State University, “IPU-MSU annual demographics of US public utility commissioners (2020),” 2020, <https://ipu.msu.edu/wp-content/uploads/2020/02/IPU-MSU-Annual-Commissioner-Demographics-Feb.-2020-1.pdf>.
- 6 RMI analysis of: EIA, “2017 State-Level Emissions Data,” 2017, <https://www.eia.gov/environment/emissions/state/>.
- 7 Delegation of Authority, ORS 756.055, Oregon State Legislature, [https://www.oregonlegislature.gov/bills\\_laws/ors/ors756.html](https://www.oregonlegislature.gov/bills_laws/ors/ors756.html).
- 8 Public Utility Commission of Oregon, “The Delegation of Certain Duties and Powers of the Public Utility Commission of Oregon,” 2021, <https://apps.puc.state.or.us/orders/2021ords/21-213.pdf>.
- 9 Rhode Island Public Utility Commission, “Principles for Performance Incentive Mechanisms,” 2019, <http://www.ripuc.ri.gov/eventsactions/docket/Open%20Meeting%20Notice%203-18-19.pdf>.
- 10 Rhode Island Public Utility Commission, “Public Utilities Commission’s Guidance on Principles for the Development and Review of Performance Incentive Mechanisms,” 2019, [http://www.ripuc.ri.gov/eventsactions/docket/4943-PIMs\\_Guidance\\_Document\\_Approved.pdf](http://www.ripuc.ri.gov/eventsactions/docket/4943-PIMs_Guidance_Document_Approved.pdf).
- 11 Cara Goldenberg, Dan Cross-Call, Sherri Billimoria, and Oliver Tully, *PIMs for Progress: Using Performance Incentive Mechanisms to Accelerate Progress on Energy Policy Goals*, RMI, 2020, <https://rmi.org/insight/pims-for-progress/>.
- 12 New York Public Service Commission, Order Approving Joint Proposal, With Modification, and Imposing Additional Requirements, 2021, <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={CC550437-3EC4-4F79-8F83-CFA85C572020}>.
- 13 Ibid.
- 14 Arizona Corporation Commission, “ACC Mission and Background,” <https://azcc.gov/divisions>.
- 15 Andy Tobin, Arizona Corporation Commissioner, “Arizona Energy Modernization Plan,” 2018, <https://static.sustainability.asu.edu/giosMS-uploads/sites/22/2010/09/20122203/31518-Arizona-Energy-Modernization-by-Commissioner-Andy-Tobin.pdf>.

## Endnotes continued

- 16 ASU Energy Policy Innovation Council, “Extended Natural Gas Moratorium,” 2019, <https://sustainability-innovation.asu.edu/energy-policy/wp-content/uploads/sites/37/2019/04/NG-Moratorium-Extension-Brief-FINAL.pdf>.
- 17 Corporation Commission; Electric Generation Resources, AZ SB1175, <https://legiscan.com/AZ/text/SB1175/id/2242362>.
- 18 RMI analysis of state PUC budgets and state expenditures.
- 19 NARUC CPI for National Council on Electricity Policy, “Engagement between Public Utility Commissions and State Legislatures,” [https://www.ncsl.org/Portals/1/Documents/energy/NCSL\\_NARUC\\_Engage\\_Leg\\_PUCs\\_34251.pdf](https://www.ncsl.org/Portals/1/Documents/energy/NCSL_NARUC_Engage_Leg_PUCs_34251.pdf).
- 20 RMI analysis and analysis of: Institute of Public Utilities at Michigan State University, “IPU-MSU annual demographics of US public utility commissioners (2020),” 2020, <https://ipu.msu.edu/wp-content/uploads/2020/02/IPU-MSU-Annual-Commissioner-Demographics-Feb.-2020-1.pdf>.
- 21 MI Power Grid, “Status Report,” 2020, <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t000000EjZLEAAV>.
- 22 Office of the Legislative Auditor State of Minnesota, “Public Utilities Commission’s Public Participation Processes,” 2020, <https://www.auditor.leg.state.mn.us/ped/pedrep/puc2020.pdf>.
- 23 Minnesota Public Utilities Commission, “Overview of the Minnesota Public Utilities Commission Presentation to the Senate Energy and Utilities Finance and Policy Committee,” 2021, [https://www.senate.mn/committees/2021-2022/3092\\_Committee\\_on\\_Energy\\_and\\_Utillities\\_Finance\\_and\\_Policy/Senate%20PUC%20Overview%20Committee%20PowerPoint%20Final%2011921.pdf](https://www.senate.mn/committees/2021-2022/3092_Committee_on_Energy_and_Utillities_Finance_and_Policy/Senate%20PUC%20Overview%20Committee%20PowerPoint%20Final%2011921.pdf).
- 24 Management Analysis & Development, “Public Utilities Commission and Department of Commerce Function Transfer Study,” 2015, <https://www.leg.mn.gov/docs/2015/mandated/151369.pdf>.
- 25 Office of the Legislative Auditor State of Minnesota, “Public Utilities Commission’s Public Participation Processes,” 2020, <https://www.auditor.leg.state.mn.us/ped/pedrep/puc2020.pdf>.
- 26 Oregon Public Utility Commission, “Internal Operating Guidelines,” <https://www.oregon.gov/puc/forms/Forms%20and%20Reports/Internal-Operating-Guidelines.pdf>.
- 27 “Organization,” Colorado Department of Regulatory Agencies, 2021, <https://puc.colorado.gov/pucorganization>.
- 28 Ibid.
- 29 Ballotpedia, “State Open Meeting Laws,” [https://ballotpedia.org/State\\_open\\_meetings\\_laws](https://ballotpedia.org/State_open_meetings_laws).
- 30 D. Behles and S. Weissman, “Ex Parte Requirements at the California Public Utility Commission: A Comparative Analysis and Recommended Changes,” 2015, [https://www.law.berkeley.edu/files/CLEE/Analysis\\_and\\_Recommendations\\_Related\\_to\\_CPUC\\_Ex\\_Parte\\_Practice\\_1.16.15.pdf](https://www.law.berkeley.edu/files/CLEE/Analysis_and_Recommendations_Related_to_CPUC_Ex_Parte_Practice_1.16.15.pdf).
- 31 Public Utilities Commission, CA SB215, California State Legislature, [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160SB215](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB215).
- 32 California Public Utilities Commission Code, Division 1, Part 1, Chapter 9, [https://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=PUC&division=1.&title=&part=1.&chapter=9.&article=1](https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PUC&division=1.&title=&part=1.&chapter=9.&article=1).
- 33 Scott Hempling, *Preside or Lead: The Attributes and Actions of Effective Regulators*, Scott Hempling Attorney at Law LLC, Second Edition, 2013, page 15.
- 34 California Public Utilities Commission, Energy Reports and Whitepapers, [https://www.cpuc.ca.gov/energy\\_reports/](https://www.cpuc.ca.gov/energy_reports/).



## Endnotes continued

- 35 Sunset Public Utilities Commission, SB 19-236, Colorado General Assembly, pg. 53 and 57, [https://leg.colorado.gov/sites/default/files/documents/2019A/bills/2019a\\_236\\_enr.pdf](https://leg.colorado.gov/sites/default/files/documents/2019A/bills/2019a_236_enr.pdf).
- 36 EIA, EIA-861: Annual Electric Power Industry Report, 2019.
- 37 Sunset Public Utilities Commission, SB 19-236, Colorado General Assembly, pg. 53 and 57, [https://leg.colorado.gov/sites/default/files/documents/2019A/bills/2019a\\_236\\_enr.pdf](https://leg.colorado.gov/sites/default/files/documents/2019A/bills/2019a_236_enr.pdf).
- 38 Energy Transition Act, SB 489, New Mexico Legislature, <https://www.nmlegis.gov/Sessions/19%20Regular/bills/senate/SB0489.pdf>.
- 39 Public Utilities Commission of Nevada, *2020 Strategic Plan*, 2020, [http://puc.nv.gov/uploadedFiles/pucnv.gov/Content/About/StrategicPlan\(1\).pdf](http://puc.nv.gov/uploadedFiles/pucnv.gov/Content/About/StrategicPlan(1).pdf).
- 40 Sunset Public Utilities Commission, SB 19-236, Colorado General Assembly, pg. 53 and 57, [https://leg.colorado.gov/sites/default/files/documents/2019A/bills/2019a\\_236\\_enr.pdf](https://leg.colorado.gov/sites/default/files/documents/2019A/bills/2019a_236_enr.pdf).
- 41 “Consultant and Contracting Opportunities,” California Public Utilities Commission, 2021, <https://www.cpuc.ca.gov/about-cpuc/consultant-and-contract-opportunities>.
- 42 “Request for Proposals,” New Hampshire Public Utilities Commission, 2021, <https://www.puc.nh.gov/Home/requestforproposal.htm>.

**Jessie Ciulla, Dan Cross-Call, Cory Felder, Rachel Gold, and Aaron Schwartz**, *The People Element: Positioning PUCs for 21st-Century Success*, RMI, 2022, <https://rmi.org/insight/puc-modernization-issue-briefs/>.

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