



80 Years of Powering Strong Communities

June 17, 2022

Submitted electronically via <https://www.sec.gov/rules/submitcomments.htm>

Vanessa A. Countryman, Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-1090

Re: File Number S7-10-22

Dear Ms. Countryman:

The American Public Power Association (“APPA”) appreciates the opportunity to submit comments on the Securities and Exchange Commission’s proposed rule entitled “The Enhancement and Standardization of Climate-Related Disclosures for Investors,” which was published in the Federal Register on April 11, 2022. The members of APPA understand the importance of investors in publicly traded companies needing to be able to obtain the information regarding climate change that is material to their decision making. APPA believes, however, that the Commission has not considered the effects that the proposed rule will have on third-party entities such as public power that are not publicly traded companies and that are not under the jurisdiction of the Securities and Exchange Commission. As detailed in our comments, there are alternatives available that will provide material information to investors that do not pose the same burdens on public power.

APPA welcomes the opportunity to work with the Commission to alleviate these unintended consequences. Should you have any questions regarding these comments, please contact Mr. John Godfrey ([REDACTED]) or me ([REDACTED]). We can both be reached by telephone at [REDACTED].

Sincerely,

A handwritten signature in cursive script that reads "Carolyn Slaughter".

Carolyn Slaughter
Director, Environmental Policy

Comments of the American Public Power Association
on the
Securities and Exchange Commission's Proposed Rule on
The Enhancement and Standardization of Climate-Related
Disclosures for Investors

87 Fed. Reg. 21,334 (Apr. 11, 2022)

SEC File No. S7-10-22

June 17, 2022

I. Introduction

The American Public Power Association (“APPA”) appreciates the opportunity to comment on the Securities and Exchange Commission’s (“SEC” or “the Commission”) proposed rule entitled “The Enhancement and Standardization of Climate-Related Disclosures for Investors,” which was published in the Federal Register on April 11, 2022 (“Proposed Rule”).¹ APPA is the national service organization representing the interests of more than 2,000 not-for-profit community- and state-owned electric utilities that together provide electricity to approximately 49 million Americans and more than three million businesses, and employ approximately 93,000 people. The Association advocates and advises on electricity policy, technology, trends, training, and operations. Association members strengthen their communities by providing superior service, engaging citizens, and instilling pride in community-owned power.

APPA participates on behalf of its members collectively in various rulemakings and proceedings that affect public power utilities. As discussed in these comments, the Proposed Rule will have an adverse effect on APPA’s members – even though those members, as not-for-profit providers of electric power, are not publicly traded or directly subject to the Proposed Rule. Because of this adverse effect, APPA has a clear interest in this proposed rulemaking and respectfully asks the SEC to adopt the suggestions set forth in Section IV to minimize the unintended consequences that the Proposed Rule will have on public power utilities and their customers.

¹ 87 Fed. Reg. 21,334 (Apr. 11, 2002).

II. Background on Public Power

In more than 2,000 cities and towns in the United States, approximately 49 million Americans, and more than three million businesses get their electricity from a public power utility.² While there is a great deal of diversity in how a public power utility can be organized, generally it operates like any other division of local government. As such, it is owned by the community and, generally, run by boards of local officials accountable to the citizens. Public power utilities serve some of the nation's largest cities (including Los Angeles, California, Seattle, Washington, and Austin, Texas) but most serve smaller communities. Approximately 1,300 of the nation's 2,000 or so public power utilities have 10 or fewer employees and serve towns, villages, or counties with fewer than 10,000 people, and all but 144 of the nation's public power utilities would be considered a "small governmental jurisdiction" under the Regulatory Flexibility Act.³ Public power utilities operate in 49 states (all but Hawaii) and in 5 U.S. territories (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

All public power utilities share a common characteristic: providing customers in the community with not-for-profit, cost-based electricity. Public power utilities may generate their own electricity, or they may purchase power from other electric power generators, including from other large public power utilities called joint action agencies (JAAs) formed to collectively serve smaller communities. Public power utilities are transparent because they are subject to sunshine laws and their boards are accountable to the community's citizens. Public power utilities by their nature involve citizens in their decision-making.

² American Public Power Association, *Public Power for Your Community* (2016) (Attachment A to these comments). More information on public power utilities can be found at APPA's website: <https://www.publicpower.org>.

³ 5 U.S.C. § 601(5).

III. The Proposed Rule Will Have a Significant Impact and Be Burdensome on Public Power Utilities.

A. Scope 2 Emissions Reporting

More than three million businesses receive their power from a publicly owned electric utility.⁴ In some instances, these businesses are publicly traded companies that would be required to comply with the Proposed Rule if finalized – including the proposed requirement that all publicly traded companies disclose their Scope 2 emissions⁵ (*i.e.*, the amount of greenhouse gas emissions attributed to the company’s purchase of electricity⁶). As a result, if finalized, the Proposed Rule will have a significant adverse effect on public power utilities through increased costs to provide information to public power utility customers for their SEC filings. These increased costs will not be borne by shareholders or investors, but by the citizens of the communities that own the public power utilities. As discussed in Section III.C below, the Proposed Rule will impose significant additional costs on public power utilities that go well beyond what is currently required to assist customers with their voluntary reporting of greenhouse gas emissions.

B. Scope 3 Emissions Reporting

The requirement in the Proposed Rule that certain publicly traded companies report their Scope 3 emissions will have a cascading, extremely costly effect on public power. Scope 3 emissions are those indirect emissions (other than emissions associated with purchased power) that:

[O]ccur in the upstream and downstream activities of a registrant’s value chain. Upstream emissions include emissions attributable to

⁴ American Public Power Association, *What Is Public Power* (Attachment B to these comments).

⁵ 87 Fed. Reg. at 21,434 (“The proposed rules would require all registrants to disclose Scope 1 and Scope 2 GHG emissions.”).

⁶ *Id.* at 21,344 (“Scope 2 emissions are those emissions primarily resulting from the generation of electricity purchased and consumed by the company.”).

goods and services that the registrant acquires, the transportation of goods (for example, to the registrant), and employee business travel and commuting. Downstream emissions include the use of the registrant's products, transportation of products (for example, to the registrant's customers), end of life treatment of sold products, and investments made by the registrant.⁷

Registrants are required to report their Scope 3 emissions if those emissions are material or if the registrant has set an emissions goal or target that includes Scope 3 emissions.⁸ The SEC believes “many” registrants will need to report Scope 3 emissions because those emissions are material.⁹ The requirement for certain registrants to report their Scope 3 emissions means that public power utilities will also need to report data to their customers that are *not* publicly traded companies because those customers are going to need to provide data to *their* customers or suppliers that are publicly traded and need to report Scope 3 emissions.

An example might help illustrate the cascading and increasingly burdensome effect of Scope 3 emissions reporting on public power utilities. Assume Manufacturing Customer is a privately-owned company that manufactures parts that are used in computers. The facility where Manufacturing Customer makes these computer parts receives its electric power from a public power utility. As a privately-owned company, Manufacturing Customer is not directly subject to the Proposed Rule. Manufacturing Customer sells its parts to Computer Company, which is a publicly-traded company that is required under the Proposed Rule to disclose its Scope 3 emissions because Computer Company has set a goal to reduce its Scope 3 emissions. Even though Computer Company does not receive its power from a public utility, public power will nonetheless be affected because Computer Company will need to obtain information from Manufacturing

⁷ *Id.* at 21,374.

⁸ *Id.*

⁹ *Id.* at 21,378.

Company, which does receive its power from a public utility, regarding the greenhouse gas emissions associated with the manufacture of the parts that Manufacturing Company provides to Computer Company. To be able to provide this information to the Computer Company, Manufacturing Company will need to obtain information from its public power provider. Computer Company will also need to estimate the greenhouse gas emissions associated with the use of its computers – which could also implicate public power providers insofar as they supply power to customers downstream of Computer Company. Computer Company will also need to reach out to its own utility to calculate its Scope 2 emissions. The burdens to assist Computer Company with its SEC obligations affect everyone up and down its value chain, regardless of whether they are a publicly traded company or not.

The succession of companies that are associated with one company's Scope 3 emissions is practically endless. Because the calculation of Scope 3 emissions pulls so many different entities from a value chain into the calculation – whether publicly traded or not – and because the emissions profile associated with electricity provided at each step of the value chain will be relevant to the calculation of Scope 3 emissions, public power utilities will be needing to provide information to their customers at an unprecedented rate.

C. The Burdens Associated with the Proposed Rule Far Outweigh What Is Required Now Under Voluntary Reporting Programs.

Electric utilities, including public power utilities, can obtain electric power for service to their customers through several possible sources. These sources include electric power generated at facilities they own and operate; electric power purchased from a third party from a specific facility (or facilities); and electric power purchased on the wholesale market from a non-specific source. Calculating emissions from an owned and operated facility is a relatively straightforward task because the utility knows what resource is being used and for how long. Calculating emissions

from power purchased from a specific facility (or facilities) could also be relatively straightforward, but not necessarily so. For example, some bilateral contracts provide that if a facility is unavailable to provide power, the owner will make good on the contract by acquiring power from an alternative resource. Finally, it would be almost impossible to know from which specific resource power came when purchased wholesale from the market. As a result, it would also be almost impossible to know the specific amount of emissions from such purchased power. For the most part, utilities avoid this conflict by accurately reporting what is accurately reportable. Again, though, the Proposed Rule would require customers to obtain information that may be highly uncertain or ultimately unknowable with accuracy.

The World Resource Institute's GHG Protocol Scope 2 Guidance does provide that one can roughly estimate the emissions from such purchased power by using regional averages or, where regional averages are unavailable, national averages.¹⁰ It is unclear, however, whether using averages would be permissible under the Proposed Rule or whether that might be considered false and misleading. Moreover, even if it is permissible, this approach seems haphazard given the amount of time and energy otherwise required to provide information under the Proposed Rule.

In addition to the questionable benefit of gathering and reporting uncertain or inaccurate information, there are also concerns about the increased costs of substantially expanding the scope and scale of emissions that must be reported. First, the sheer number of companies that will be required to report will vastly exceed what is being done voluntarily now.

Second, as shown above with the example of Scope 3 reporting, there will be a huge number of companies that are not subject to the Proposed Rule that will be required to provide

¹⁰ World Resources Institute, GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard (Jan. 20, 2015), <https://www.wri.org/research/ghg-protocol-scope-2-guidance>.

information to their customers and suppliers, and this will exponentially increase the number of entities that need information.

Third, the stakes for customers' reporting are much higher under the Proposed Rule than they are for the voluntary programs. Under the Proposed Rule, accelerated filers and large accelerated filers must provide "reasonable assurance" (after a short transition period) that the emissions calculation that they provide is accurate.¹¹ Failure of a reporting company to meet this standard has serious liability ramifications. There is a big difference between providing information to public power customers to assist them with estimating their Scope 2 emissions for a voluntary program and providing information to those customers to aid them in complying with an SEC-mandated program for which there are grave consequences for making a mistake.

These additional burdens that are associated with the Proposed Rule will have an adverse effect on public power. For some public power providers, the effect may be relatively minimal – simply involving the additional cost of ensuring that current practices comport with the new demands for information from customers. For others, however, the costs will be substantial, requiring the hiring of additional staff to manage customer requests and outside consultants to ensure responses to these requests meet regulatory requirements. For example, one larger public power utility estimates that they would need an additional two to three full-time employees on staff to work through all the calculations of hourly replacement power under contractual agreements with one major supplier and other purchase power agreement counterparties. These staff would also be required to obtain information on the hourly energy mix of the wholesale market to calculate Off-System Purchase and Imbalance Energy emissions.

¹¹ 87 Fed. Reg. at 21,346. There is a transition period of one fiscal year for existing accelerated filers and large accelerated filers to provide limited assurance and then two additional fiscal years before those filers must provide reasonable assurance. *Id.*

These costs may also be multiplied: for example, two separate customers may choose two different methodologies for calculating Scope 2 and 3 emissions, putting the onus on the utility to prepare multiple calculations.

D. Environmental Justice Concerns

Critically, public power utilities do not have shareholders or investors onto whom to pass additional costs of complying with the Proposed Rule. Rather, because public power is not-for-profit and community-owned, these costs will be passed directly to their residential and business customers. Public power works hard to provide electricity at a lower cost. In 2021, the rates provided to residential customers by public power utilities were 11% less than those of residential customers served by investor-owned utilities.¹² Businesses that get electricity from public power utilities also pay less than businesses that get electricity from private utilities.¹³

Some of the areas served by public power utilities are economically disadvantaged communities and households. In addition to being served by public power utilities, many economically disadvantaged areas – particularly rural areas – are served by electric cooperatives.¹⁴ Like public power utilities, electric cooperatives are not-for-profit, and the additional costs of compliance with the Proposed Rule will again be borne by their customers and not by shareholders.¹⁵ Together, public power utilities and electric cooperatives provide electricity to

¹² American Public Power Association, *2021 Statistical Report: A supplement of Public Power Magazine* at 18-19 (Attachment C to these comments).

¹³ American Public Power Association, Public Power, <http://www.publicpower.org/public-power>.

¹⁴ Electric cooperatives serve 92% of persistent poverty counties. National Rural Electric Cooperative Association, *Electric Co-Op Facts & Figures* (Apr. 28, 2022), <http://www.electric.coop/electric-cooperative-fact-sheet>.

¹⁵ See Energy Cooperatives, <http://www.co-oplaw.org/knowledge-base/energy-cooperatives>.

approximately 28 percent of the United States.¹⁶ Most of these utilities serve small, rural towns, villages, and counties. As noted above, of the nation’s 2,000 public power utilities, roughly 1,300 serve communities with 10,000 or fewer people. There is also evidence to suggest that areas served by public power utilities and electric cooperatives have a higher poverty rate than areas served by investor-owned utilities.¹⁷ For example, in 2012, 18.8 percent of public power utility customers in the Southeast United States were below the poverty line, which was 12 percent greater than the amount of economically disadvantaged customers served by investor-owned utilities.¹⁸ The fact that poor customers in these economically disadvantaged areas are going to have increased costs associated with the Proposed Rule – costs that they will have to bear and that cannot be passed on to investors – raises serious environmental justice concerns.

In sum, even though the Proposed Rule is not directed at public power utilities, it will nonetheless present a significant burden to these non-profit electric providers. Again, all but 144 of the nation’s 2,000 public power utilities would be considered to be a “small governmental jurisdiction” under the Regulatory Flexibility Act. This burden will be costly and require additional man hours and employees to enable public power to provide the information that its registrants – or, in the case of Scope 3 emissions, suppliers and customers of registrants – need to comply with

¹⁶ U.S Energy Information Administration, *Investor-owned utilities served 72% of U.S. electricity customers in 2017* (Aug. 15, 2019), <http://www.eia.gov/todayinenergy/detail.php?id=40913>.

¹⁷ R. McIlmoil, Energy Policy Director, Appalachian Voices, *Poverty and the Burden of Electricity Costs in the Southeast: The Case for Utility Home Energy Efficiency Loan and Tariff Programs* at 2 (Feb. 27, 2014), https://appvoices.org/resources/reports/Poverty_and_Electricity_Costs_in_Southeast_2014.pdf.

¹⁸ *Id.* at 4. Similarly, 17.9 percent of rural electric cooperative customers in the Southeast United States were below the poverty line, which was 7 percent greater than the amount served by investor-owned utilities. *Id.*

the Proposed Rule. These additional costs are substantial and will be borne directly by the customers of public power utilities – not by investors and shareholders.

IV. The SEC Can and Should Minimize the Burdens on Public Power.

A. The Existing Voluntary Disclosure Frameworks Provide Investors and Shareholders with the Information They Need to Make Informed Decisions and Do Not Pose the Same Burdens on Public Power.

In 2010, the SEC released guidance regarding the types of disclosures that publicly traded companies must report in their SEC filings.¹⁹ Under the 2010 Guidance, registrants already provide information to investors on climate-related risks that are material. In addition, there are a variety of voluntary disclosure frameworks and platforms that companies use to provide information beyond the materiality threshold if they choose to do so (or if they have been requested to do so by their shareholders and investors). These disclosures – both those mandated under the 2010 Guidance and those that are voluntarily given – provide investors with sufficient information of a company’s known climate risks and opportunities. Importantly, these disclosures do not overburden or overtax public power utilities.

To the extent that the SEC believes that there are gaps in what is being reported to investors, APPA suggests that the Commission instead update the 2010 Guidance or provide additional interpretive guidance regarding those gaps. This approach would be much more targeted and streamlined than the Proposed Rule and would have the advantage of adhering to the SEC’s longstanding principle that only information that is material to investors need be disclosed by registrants in their SEC filings.²⁰

¹⁹ SEC, Commission Guidance Regarding Disclosure Related to Climate Change, Release No. 33-9106 (Feb. 2, 2010), 75 Fed. Reg. 6290 (Feb. 8, 2010) (“2010 Guidance”).

²⁰ See, e.g., *TSC Indus., Inc. v. Northway, Inc.*, 426 U.S. 438 (1976).

Finally, to the extent that shareholders or investors may want additional information, shareholder proposals have become a particularly effective tool for investors to gain the information that they want.²¹ As a result, if a company is not reporting their emissions voluntarily or if the company is not providing the information that shareholders want, shareholders have the power to compel them to do so through a shareholder proposal. Shareholders can also use shareholder proposals to dictate which of the many voluntary reporting programs they believe a company should use if the shareholders feel that some reporting programs provide better information than others.

B. By Making the Reporting of Scope 3 Emissions Voluntary, the Burdens on Public Power Would Be Eased.

Under the Proposed Rule, a registrant must disclose their Scope 3 emissions if those emissions are “material,” or if the registrant has set a greenhouse gas emissions target or emissions reduction goal that includes Scope 3 emissions.²² APPA suggests that the SEC consider making any requirement to disclose Scope 3 emissions voluntary. This could result in a reduction in the burden and costs put on public power utilities. Conversely, while this would result in a reduction of the volume of information provided to investors, if that information is duplicative or unreliable,

²¹ See, e.g., J. Smith, EY Americas Center for Board Matters, *What investors expect from the 2022 proxy season*, https://ey.com/en_us/board-matters/what-investors-expect-from-the-2022-proxy-season.

²² Proposed 17 C.F.R. § 229.1504(c)(1). SEC regulations and the Supreme Court define something as being “material” if there is “a substantial likelihood that a reasonable investor would consider [them] important when determining whether to buy or sell securities or how to vote.” 87 Fed. Reg. at 21,351 (citing 17 C.F.R. § 240-12b-2; *Basic Inc. v. Levinson*, 485 U.S. 224, 231, 232, 240 (1988)).

as discussed above, it would not result in a reduction of information on which investors and shareholders could confidently rely.

To date, there is no firmly established framework for calculating Scope 3 emissions, and the methods by which this can be done are evolving and under development. By its very nature, the calculation of Scope 3 emissions is difficult (because of the reliance on third parties for data) and requires numerous assumptions to be made (which will result in unreliable figures). Presenting this information in SEC filings – even with all of the appropriate caveats – may make investors believe that this information is more reliable than it truly is. For these reasons, the SEC should make the reporting of Scope 3 emissions voluntary at most for registrants.

C. Allowing Registrants to “Furnish” Rather than “File” Information and Expanding the Safe Harbor Would Lessen the Impact on Public Power.

As discussed in Section III.C above, an increased burden on public power utilities exists to provide emissions information to their customer to assist with the calculation of Scope 2 emissions because of the increased liability that public power customers are facing under the Proposed Rule. The Proposed Rule would require that any climate-related disclosures – including emissions information – be “filed.”²³ This presents increased liability risk to registrants and thus increases the burden on the third parties presenting them with information, including public power utilities. There is no reason why Scope 2 emissions need to be subject to the strict legal liability that accompanies filings with the SEC for any material misstatement or omission. Instead, the Commission should allow the documents to be furnished to the SEC rather than filed. This would reduce the registrant’s potential liability to where it could be found liable only for a materially misleading statement. Reducing liability in this way would reduce the burden on public power

²³ 87 Fed. Reg. at 21,411.

utilities and other third parties who are providing information to registrants to assist with their SEC filings.

V. Conclusion

APPA appreciates the opportunity to comment on the SEC's Proposed Rule. We respectfully request that the Commission consider the consequences of the Proposed Rule on non-profit public power utilities and take the steps suggested in these comments to minimize those impacts. Please contact Ms. Carolyn Slaughter ([REDACTED]) or Mr. John Godfrey ([REDACTED]) if you have any questions regarding these comments.

Attachment A

Public Power for Your Community

Local control. Local priorities. A stronger local economy.





Public Power for Your Community

Local control. Local priorities. A stronger local economy.



The American Public Power Association represents not-for-profit, community-owned electric utilities that power homes, businesses and streets in more than 2,000 towns and cities, serving 48 million Americans. With no divided loyalties, these utilities are focused on a single mission—providing reliable electricity at a reasonable price, while protecting the environment. These public power utilities generate, or buy, electricity from diverse sources.

More at PublicPower.org

Public Power for Your Community

Local Control. Local priorities. A stronger local economy.

Prepared by the American Public Power Association

MORE INFORMATION

For additional information or resources on forming a public power utility, contact:

Ursula Schryver, [REDACTED]
[REDACTED]; or

LeAnne Sinclair, [REDACTED]
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Summary

For more than 100 years, public power utilities have remained true to their fundamental obligation to their citizen-customers—the obligation to serve. Public power utilities offer local control and commitment, public accountability, low rates, and responsive customer service to the communities they serve.

The electric industry is constantly changing, facing challenges from evolving customer preferences, new technologies, increased government regulation, and utility workforce issues. These broad challenges affect the priority issues impacting utilities across the country, including investment in utility infrastructure, power supply options and the use of renewable resources, energy efficiency, demand response, distributed generation, and environmental protection decisions. Electric utilities also have growing obligations to ensure the reliability and security of the transmission grid and other electric infrastructure. As they face these challenges, public power utilities' special relationship with their customers helps them set a course that best serves their customers' interests and the long-term needs of their communities.

The public power option is not new. Since the earliest days of electric utility service, in the 1880s, local communities have exercised their right to own and operate a public power utility. Communities without public power may grant a franchise to a private investor-owned utility or citizens may form a rural electric cooperative. This freedom of choice in how electric service is provided is a local rights issue and a cornerstone of consumer protection and

competition. When city officials investigate alternatives to their electric supplier, they learn more about the value of the franchise. Whether or not they ultimately decide to form a public power utility, going through the evaluation process can yield great benefits to local consumers and taxpayers.

Incumbent utilities generally oppose the formation of new public power utilities because, for them, it means the loss of customers and profits. New public power utilities also provide high-profile examples of what communities can do for themselves, and this may encourage other cities to form public power utilities.

For these reasons, incumbent utilities often employ an array of tactics to fight the formation of new public power utilities. The most common tactic is to try to discredit public power and create doubt and fear about forming a new utility. But their arguments do not hold up to scrutiny. In fact, public power has been so successful at its focused mission that it has earned the praise of industry analysts, the financial community and, most importantly, electric customers.

This document explains public power and how it benefits communities. It outlines the steps in forming a new public power utility and how the incumbent utility will likely respond. It also addresses many false charges commonly leveled against public power and gives examples of successful public power campaigns.



What is Public Power?

More than 2,000 cities and towns in the United States light up their homes, businesses and streets with “public power—electricity that comes from a community-owned and -operated utility.

Public power utilities are like our public schools and libraries: a division of local government, owned by the community, run by boards of local officials accountable to the citizens. Most public power utilities are owned by cities and towns, but many are owned by counties, public utility districts, and even states.

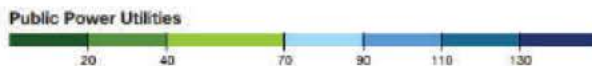
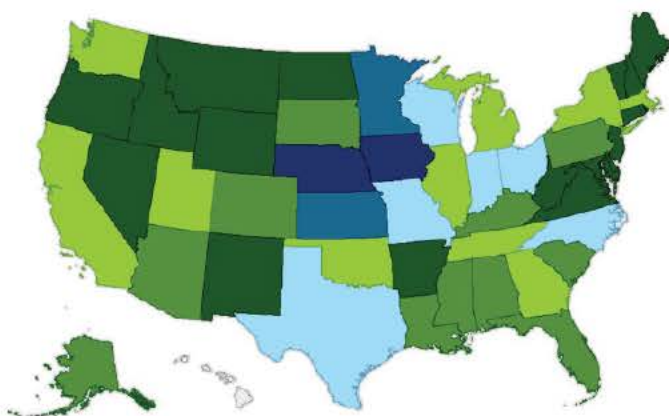
While each public power utility is different, reflecting its hometown characteristics and values, all have a common purpose: providing customers in the community with safe, reliable, not-for-profit electricity at a reasonable price while protecting the environment.

Public power today is an important contemporary American institution. From small towns to big cities, wherever public power exists, it is an expression of the American ideal of local people working together to meet local needs. It is a manifestation of local control.



A public power utility:

- Brings **electricity** to homes and businesses
- May **generate** and/or **buy** power
- Is a **not-for-profit** entity
- Is owned by the **community**
- Is usually a division of **local government**
- Is **transparent** (subject to sunshine laws)
- Involves **citizens** in decision-making



Who does public power serve?

- More than 2,000 community-owned electric utilities serve more than 48 million people.¹
- Public power utilities serve small communities as well as large cities, including Los Angeles, San Antonio, Nashville, Orlando and Seattle.
- Public power serves customers in 49 states—all but Hawaii—and five U.S. territories.
- Three million businesses receive their power from a publicly owned electric utility.

¹ Based on U.S. Census Bureau statistics of 2.54 people per household/meter.

What are the other utility ownership structures?

There are three types of electric utilities: public power, rural electric cooperatives and investor-owned utilities.

Three types of Electric Utilities

	 PUBLIC POWER UTILITIES	 RURAL ELECTRIC COOPERATIVES	 INVESTOR-OWNED UTILITIES
BUSINESS MODEL	✓ Not for profit, community-owned	✓ Not for profit, member-owned	✓ For profit, share-holder owned
REGULATED BY STATE PUBLIC UTILITY COMMISSION	✓ Very limited instances	✓ Some	✓ All
GOVERNED BY	✓ Elected/appointed boards—mayors, city council members, citizens	✓ Member-elected boards	✓ Private boards
FINANCIAL CONTRIBUTION TO LOCAL GOVERNMENT	✓ Exempt from most taxes; instead make payments in lieu of taxes or transfers to the general fund	✓ May neither pay taxes nor other contributions to local government	✓ Pay taxes to local government

Public power utilities are entities of local or state government. The public power business model is based on public ownership and local control, a not-for-profit motive, and focus on its customers. Because they are public entities, public power utilities do not pay federal income taxes or most state taxes, but they support the local government through payments in lieu of taxes or transfers to the general fund.

Electric cooperatives are private, not-for-profit businesses. They are owned by their consumer-members, who elect governing board members and are required to return any excess revenue (above what is needed for operating costs) to their members. The local government and

broader community generally have no involvement in the governance of the utility. Most electric cooperatives are exempt from federal income tax, and may pay neither taxes nor payments-in-lieu-of-taxes to support the local government.

Investor-owned utilities are private, for-profit enterprises. They are owned by investors or shareholders, who generally are not customers of the utility or members of the community, and their primary motivation is to increase the value to shareholders. As private businesses, investor-owned utilities do pay taxes to local governments, but customers have no voice in the operation of the utility.



1 IN **7** ELECTRICITY CUSTOMERS IN THE U.S. ARE SERVED BY **PUBLIC POWER**

What is the Public Power Business Model?

While each community-owned utility is unique, all public power utilities share five basic tenets that comprise the public power business model:

Public Ownership

Public power utilities are owned by and operated for the citizens they serve and therefore are accountable to their local owners.

Local Control

Local, independent regulation and governance gives utility policymakers greater agility in decision-making and protects the long-term viability of the utility, while permitting customer involvement in the process. This ensures decisions reflect the values of the community.

Nonprofit Operations

Community-owned electric utilities serve only the interest of their customers, avoiding conflicts between the interests of shareholders and customers because they are one and the same. Excess revenues stay in the local community and are invested in system improvements and utility reserves, shared with the local government, or returned to the customer in the form of lower rates. They are not distributed among outside shareholders, as they are in the case of for-profit utilities.

Low-Cost Structure

Public power utilities have access to lower cost tax-exempt financing and generally have stronger credit ratings than privately owned utilities. Publicly owned utilities may have more efficient operations and access to less expensive federal hydro power.

Customer Focused

Community-owned electric utilities are dedicated to the singular mission of delivering the highest level of service and value to their customer-owners for the long term. Public power utilities focus on the specific needs of customers, including high reliability and lower rates, as well as local priorities, which may include new technologies, environmental concerns or advanced communications.

5 ELEMENTS OF PUBLIC POWER BUSINESS MODEL



PUBLIC OWNERSHIP



LOCAL CONTROL



NONPROFIT OPERATIONS



LOW-COST STRUCTURE



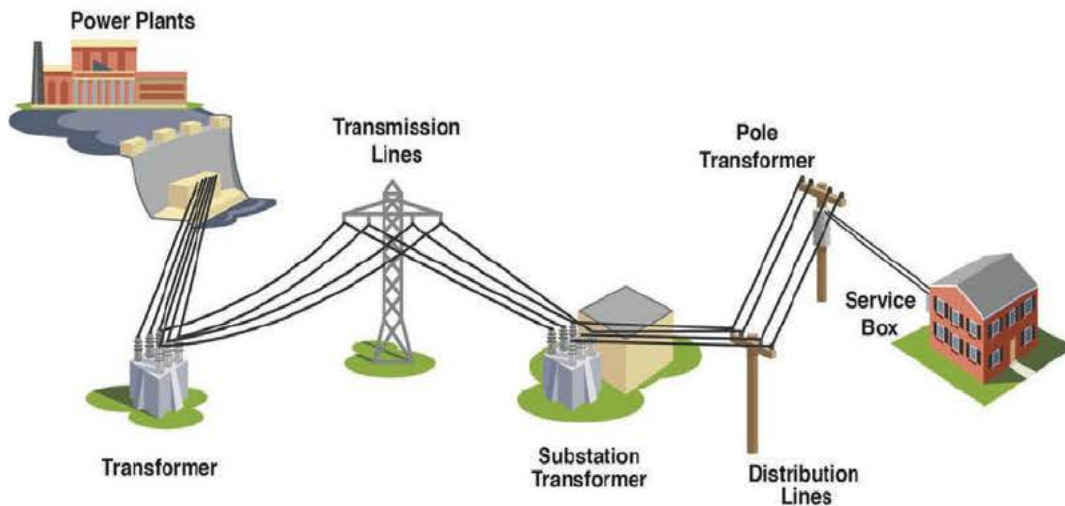
CUSTOMER FOCUSED

Who is in charge of public power utilities?

Public power utilities are owned and accountable to the people they serve. Citizens have a direct and powerful voice in utility decisions and policies, both at the ballot box and in open meetings where business is conducted.

The governance structure for each utility varies. Some are governed by the city council; others are controlled by an independent utility board whose members may be elected or appointed by the mayor and city council.

Where does the power come from?



Electric utilities have three core functions:

- Generation of electricity;
- Transmission of electricity; and
- Distribution of electricity to customers.

Most public power utilities are distribution-only, meaning they do not own and operate their own power plants and bulk transmission. Instead, these utilities purchase power and transmission services at wholesale to distribute to their customers. Many distribution-only utilities purchase power and transmission from joint action agencies.

Together, public power utilities and joint action agencies generate two-thirds of the electricity they distribute to their customers. The rest of the electricity they distribute is purchased from investor-owned and cooperative utilities, independent generators and federal power agencies.

Overall, public power utilities and joint action agencies own 10 percent of electricity generation and transmission in the United States, and 16 percent of all electricity distribution.

Public Power's Share of the U.S. Electricity Market



10%

OF GENERATION



10%

OF TRANSMISSION



16%

OF DISTRIBUTION



What is a Joint Action Agency?

Joint action agencies are membership organizations formed by groups of local community-owned utilities. These agencies, often authorized by state legislation, are governed by boards comprised of member representatives. The agencies buy or generate power and provide other services for their constituent utilities. With the combined leverage and purchasing power they get from representing multiple utilities, these agencies give their members the advantage of economies of scale and allow public power utilities to exercise strength in numbers.

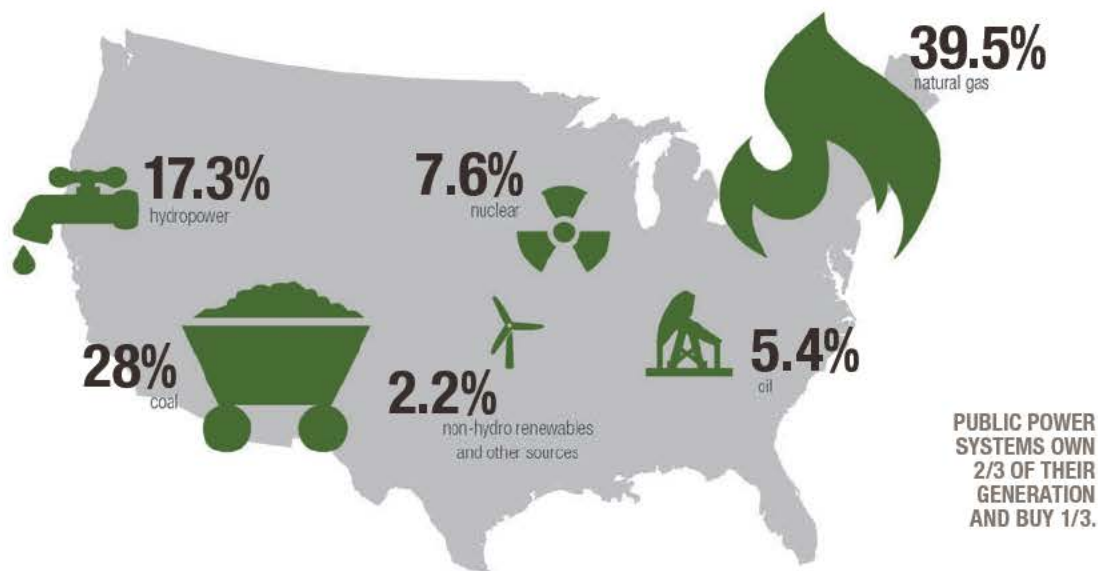
Energy Resources

Electricity is created from the conversion of a fuel or other source of energy into electrons. This process occurs on a large scale in a power plant, or on a smaller scale through distributed energy resources (e.g., solar panels on your roof).

The primary electricity generating technologies used in the United States are coal, natural gas, nuclear and hydro power. A small but growing portion of the generation portfolio comes from renewable resources, such as solar, wind, landfill methane gas, and geothermal power. Public power utilities around the country rely on all of these energy resources to varying degrees.

Each of the various generating technologies has its advantages and disadvantages, which is why having a diversified portfolio of fuels—particularly generation sources that can be relied on most of the time—is a priority for electric utilities.

Electricity used by public power is generated from²



² Energy Information Administration Form EIA-860, 2015 (2013 data).



Benefits of Public Power

Public power utilities are community-owned, locally controlled and operated on a not-for-profit basis. Each utility is a little different, depending on population, geography, structure, and the community's values and goals. This ability to tailor operations and services to the local community is the foundation of public power's success.

A public power utility provides long-term value to its community and citizens. The benefits are manifold, including (to name a few) rate stability, support for jobs, policies that are in line with community priorities, and financial support for local government functions. To examine these benefits, it is helpful to consider them in broad categories: local control, reliable customer service, affordable rates, and economic development.

Local Control

Public power is distinctly different from the investor-owned utility sector and even rural electric cooperatives because it is fully accountable to its customers. Public power is about serving the local community. Local control affords public power communities five distinct advantages: accountability and transparency in governance; financial support for the local government; more efficient municipal operations; the ability to tailor utility policies, programs and practices to serve the priorities of the local community; and the value of ownership.

Accountability and Transparency

Public power utilities are governed and regulated by the city council or county commissioners, or an independent utility board whose members may be elected or appointed by local officials. This means customers have more say in the policies and practices of the electric utility.

Citizens participate in the governance of the utility at the ballot box, and through participating in city council and utility board meetings, public hearings, citizen advisory committees, and other public forums. Utility business is conducted in the open, subject to open meetings, public records laws, and local scrutiny. Citizens have access to planning alternatives, cost estimates, performance and

other reports. Customers know how and why decisions are made.

When citizens have concerns, they can call their elected officials; in many public power towns, customers can simply speak directly to the general manager of the utility. If a citizen disapproves of the way the utility is being run, he can vote the elected officials out of office—or she can run for office herself to take on a more direct role in the future of the utility.

In contrast, customers of a private utility have little, if any, influence over or access to the company's CEO or other top officers or board members. The typical investor-owned utility has a large service territory and will likely have its headquarters located far away; board meetings are conducted in private, and decisions are made behind closed doors. While the boards of rural electric cooperatives are elected by their member-owners, turnout for electric cooperative board elections is low (even compared to off-year and municipal elections), suggesting cooperative members may feel disengaged from their utility or do not understand their rights and responsibilities in its governance.

Public power utilities also face a special kind of accountability, unparalleled in almost any other business: their friends and neighbors. In an era of globalization, public power utilities stand out in that every employee is a member of the community. From the lineworkers to the



"But it surely also helps that Norwich Public Utilities' general manager, 12 linemen and five commissioners live in the community, drive the local roads, see the overhanging branches and bump into their customers at the Norwichtown Mall. That's a rare kind of accountability."

*"The Troubling Connecticut Power Failure,"
The New York Times, November 3, 2011.*

general manager, all utility employees take pride in their work because they know their customers are their family, friends and neighbors.

Supporting Local Government

Public power utilities provide a direct benefit to their communities in the form of payments and contributions to state and local government. The total value of the contributions made by the publicly owned utilities often comes in many forms and is not always easily recognized. In addition to payments that resemble property taxes, payments in lieu of taxes, and transfers to the general fund, many utilities make in-kind contributions in the form of free or reduced-cost services provided to states and cities.

The level of support and how these benefits are returned to the community is a local decision—another advantage of local control. For example, some public power utilities make transfers to the city’s general fund in an amount equal to the property taxes that would have been paid by an investor-owned utility. Others set the amount as a percentage of electric revenue or as a charge per kilowatt-hour of electricity sold. Some cities take advantage of synergies between municipal departments and use electric employees to install temporary lighting, perform electrical repairs or tree trimming services for other departments, or provide technical expertise.

Quantifying Public Power’s Financial Support

Public power utilities make greater financial contributions to state and local governments than investor-owned utilities.

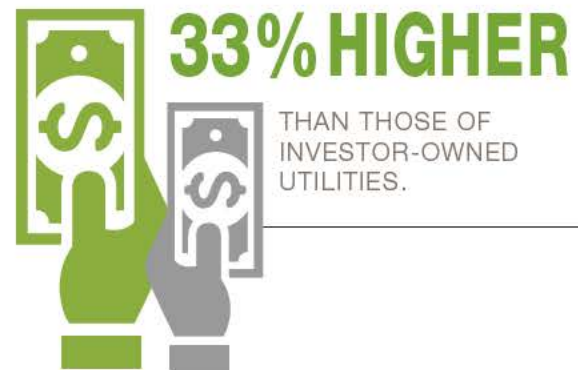
The American Public Power Association regularly analyzes payments and contributions to state and local government based on surveys of public power utilities and

data submitted by investor-owned utilities to the federal government. The results consistently show that, on average, the payments and contributions made by public power utilities are greater.

In the most recent year for which data are available, the median amount contributed by public power utilities was **5.6 percent of electric operating revenues**. Over the same period, investor-owned utilities paid a median of 4.2 percent of electric operating revenues in taxes and fees to state and local governments.

When all taxes, tax equivalents and other contributions to state and local government are considered, public power’s contributions, as a percent of electric operating revenues, were **33 percent higher** than those of investor-owned utilities.³

PUBLIC POWER’S CONTRIBUTIONS TO STATE AND LOCAL GOVERNMENTS ARE



³ American Public Power Association, “Public Power Pays Back: Payments and Contributions by Public Power Utilities to State and Local Governments in 2014,” March 2016.



“In the 1970s, when Massena residents sought to break away from Niagara Mohawk, the power company tossed out a trio of regular arguments against the plan. If the town stopped buying electricity from Niagara Mohawk, it would lose substantial tax revenues, electric rates would skyrocket and reliability would go “in the tank”...

None of that happened in the utility’s first quarter-century of existence... The municipally owned electric utility makes annual payments in lieu of taxes and the town lost no revenue. Electric rates have gone down and reliability is up.”

“New York Anniversaries,” *Public Power* magazine, November-December 2006. The article describes Massena’s 25-year anniversary as a public power utility.

In-Kind Contributions

Beyond direct financial contributions, public power utilities may support their local government and community in many ways. Here are a few ways public power utilities are helping out:

- Free or discounted electricity or other services to the local government, including streetlights, municipal buildings, water or sewer treatment facilities, and traffic signals
- Installing temporary lighting for special events
- Maintaining streetlights, traffic signals, or stadium lights
- Electric repair or maintenance for other city departments
- Rewiring municipal buildings
- Tree trimming for other departments
- Reading water meters
- Putting up city signs or banners
- Providing technical expertise (e.g., engineering studies)
- Providing free building space
- Hanging banners and holiday lights
- Sharing electric department vehicles and equipment with other municipal departments

What about franchise fees?



Private utilities may pay a franchise fees to the local government in exchange for the right to operate exclusively in the community. However, these franchise fees are almost always passed on directly to the customers:

“Many years ago investor-owned utilities began to add the annual franchise fee they were required to pay the city to the rates they charged their customers in the community. Instead of treating the franchise fee as a legitimate expense, a cost of doing business in the community, the investor-owned utility simply incorporated its franchise fee into its rates and passed the costs along to ratepayers. Consumers ended up paying the investor-owned utility’s franchise fee instead of sharing in its profits. This practice of including the franchise fee in rates continues to this day in most communities.”⁴

⁴“Renegotiating a Municipal Franchise,” Paul Hughes, Environmental Services Inc., July 2002.

Efficient Operations

Public power utilities keep costs down through local scrutiny of operations. They use strategic partnerships and joint action with other public power agencies to obtain the advantages of size in wholesale supply matters without taking on the disadvantages of merging into larger, more bureaucratic institutions.

Electricity distribution, as opposed to large-scale generation and high-voltage transmission, is local, and public power utilities find that their smaller size can be an advantage in electricity distribution. A public power utility’s headquarters and operations are located near the utility’s customers. Distribution lineworkers are very familiar with the utility’s service territory—and thus likely to be more responsive to outages. Utility managers and customer service representatives are fellow citizens. Oversight is provided by a local governing body, which keeps the utility focused on reliability, price and service.

Municipal utilities can also create new efficiencies in local government. Some utility operations may overlap with other services the municipality is already providing; when these can be combined, the result is a leaner, more efficient operation that benefits everyone. For example, a city providing multiple utility services (electric, water, wastewater, natural gas, and telecommunications services) may combine billing and metering operations and share a 24-hour emergency call center. Other examples of efficiencies that may be achieved include:

- Integration of municipal operations (e.g., shared office space for multiple city services)
- Shared personnel (e.g., human resources department that serves the city and utility)
- Lower per-person administrative costs for municipal employee benefits
- Town may avoid short-term borrowing costs due to cash flow from electric revenues

Local Priorities

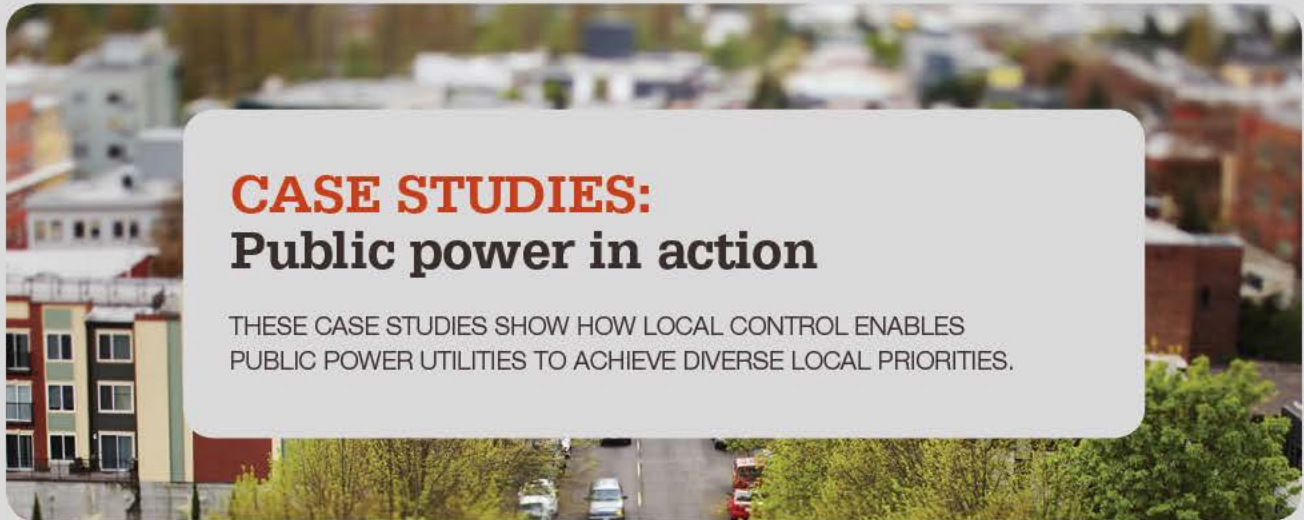
When the community owns the utility, the community controls the utility’s priorities. Decisions about pricing electricity, building power plants, purchasing wholesale power and service policies are made locally and reflect the values and choices of the community.

By participating in the utility governance process, citizens exercise their voice on big questions the utility may face, including:

- investments in local infrastructure—system maintenance and upgrades

- energy conservation and energy efficiency
- energy resources—renewable energy, coal, natural gas, or other sources
- environmental stewardship—pollution prevention, investing in cleaner technologies
- customer service policies—assistance to low-income customers, service extension policies
- system aesthetics and design—choosing whether to underground electric lines for community beautification or enhanced reliability
- utility finances—setting electric rates, level of financial support for the local government

Public power utilities emphasize long-term community goals and can direct utility resources accordingly, by implementing programs and timetables to achieve goals. Without local utility ownership, the community is disenfranchised, with no input on these decisions.



Emerald People’s Utility District, Oregon, (20,800 customers) began its life as a public power utility in 1983, after separating from a private utility that offered poor customer service and poor reliability. The new utility created payment

assistance programs to help its customers, conservation and energy savings programs, and community outreach programs including participating in local festivals and outreach to schools. The utility has won local, state and national awards for its outstanding customer service and has been featured in two best-selling management books for excellence in customer service.



Greensburg, Kansas, (555 customers) experienced an EF-5 tornado in 2007 that destroyed 95 percent of the town. Residents decided to start over, remaking Greensburg as a sustainable, energy-efficient, “green” community. The town

of 1,400 launched the “Green in Greensburg” campaign. Citizens rebuilt the community-owned electric utility and used it to achieve the town’s goal of meeting all energy needs with renewable resources. Today, Greensburg relies on wind power, the very force of nature that once devastated the town—to power its future. It is also home to the most LEED (Leadership in Energy and Environmental Design) buildings per capita in the United States and was the first city in the nation to install all LED streetlights.



Waverly, Iowa, (5,000 customers) citizens vowed that when an accident caused 20 gallons of transformer oil to leak into the ground, it would make sure it never happened again. The utility researched and developed a brand-new,

soy-based, biodegradable transformer oil. The new oil is environmentally friendly and is an effective replacement for mineral-based oil. After patenting the invention, Waverly sold it to Cargill, Inc. Today, the environmentally friendly transformer oil developed in a small Iowa town is marketed internationally.



Los Angeles, California, (1.4 million customers) needed new employees to support its renewable energy initiatives. The utility partnered with a local technical college, a job training center, and a local union to develop an intense,

two- to four-year training program. The partners now offer more than 50 training courses open to all local residents, offering classroom, computer-based and on-the-job training. Program graduates enter a “green jobs” pipeline, getting a job at the utility, and advancement opportunities as they progress in their careers.



Seattle, Washington, (415,000 customers) recognized a growing number of its citizens were interested in electric vehicles, but knew people were not buying EVs due to a lack of infrastructure to support them. The utility is working with

the city to install 80 charging stations on public property, and another 200 charging stations on private property.



Murfreesboro, Tennessee, (55,000 customers) wanted to revitalize its historic downtown, so the Murfreesboro Electric Department undertook a major initiative to move electric wiring underground.

Beyond the aesthetic improvements, the project facilitated repair of broken and impassable sidewalks, and restoration of crosswalks, lamp posts, and storefronts, reestablishing the downtown as the charming heart of the community.



Chattanooga, Tennessee, (174,000 customers) wanted to improve reliability and laid fiber optic cables throughout the service territory to take advantage of emerging smart grid technology. When city officials realized they could also use

the fiber to offer TV, telephone and internet service to their customers, it was like striking oil. Now the city operates one of the largest and most powerful fiber-to-the-home networks in the United States, offering the first gigabit internet speeds in the country.

Ownership

Public power communities receive another benefit: ownership itself. Ownership of the utility means local management and control over decisions involving investments, operations, maintenance, power supply choices and customer programs.

More than that, though, there are some options and choices available only to an owner—including asset leverage, equity borrowing, ratemaking authority, and control over future streams of income for the utility and the community.



“It has everything to do with the philosophy of whether the city wants to be sharecroppers or landowners. Do you want to own your home or rent?”

Ken Cotton, City Attorney, Wagner, South Dakota,
“Wagner OKs Municipal Power,” Press & Dakotan,
December 5, 2007.

Reliable Customer Service

Public power utilities are highly responsive to customers’ needs and concerns, typically getting high marks for customer satisfaction because their first and only purpose is to provide efficient, reliable service to the customers in their communities. Reliable customer service takes three forms for public power utilities: a focus on overall system reliability; quick restoration of power after an outage; and making excellent customer service a priority.

Reliability

Public power utilities have a strong record of focusing on core electric operations and delivering a reliable power supply. Because of their connection to customers, public power utilities are motivated to maintain the community’s assets to keep their local electric system operating continuously and efficiently. Maintaining the highest caliber of electric service is one of the core facets of a public power utility’s business model.

Reliability, from a systems engineering perspective, is the ability of an electric system to perform its functions under normal and extreme circumstances. In the United States, a typical customer expects to have power at all times. In reality, every utility experiences some power outages—not only due

to severe weather and major events, but also due to wildlife, vegetation, equipment failures, or even a car crashing into a utility pole. Realistically, a utility is able to make power available between 99.9 and 99.999 percent of the time.

There are many ways that electric utilities measure their reliability. One of the most common is the System Average Interruptible Duration Index (SAIDI), which measures the average length of time, in minutes, that each customer of a utility was without power during a year.

Recent data show that public power utilities demonstrate higher reliability than the national average.

SAIDI		
Outage duration	Public Power ⁵	National average ⁶
Average	58.49 minutes	143.1 minutes
Median	40.40 minutes	125.6 minutes
Maximum	552.84 minutes	1,015.1 minutes

The data show that, without including “major events” (such as hurricanes or winter ice storms), the average electric customer in the United States is without power for just over 2 hours and 20 minutes each year. Public power customers, on average, experienced less than one hour without power.

PUBLIC POWER CUSTOMERS ON AVERAGE EXPERIENCE LESS THAN ONE HOUR WITHOUT POWER PER YEAR...



LESS THAN HALF OF THE NATIONAL AVERAGE.

Accountability promotes reliability

Public power utilities make business decisions every day that result in reliable electric service. The elected officials who oversee public power utilities are accountable to voters, who are also the utilities’ ratepayers. In contrast, board members of an investor-owned utility are accountable to shareholders; they are judged not on their ability to provide low-cost, reliable power or excellent service, but on their ability to maximize profits for the investor-owned utility or its holding company and to pay a quarterly dividend to shareholders.

In pursuit of short-term profits, investor-owned utilities may implement cost-cutting measures that ultimately affect reliability. For example, extensive reductions in the number of employees, maintenance expenses, or tree-trimming programs can result in longer and more frequent outages. This issue was highlighted in 2011 when Connecticut Light & Power experienced extensive outages after two storms. In an article about the outages, The New York Times reported that the utility had cut its maintenance spending by 26 percent between 2008 and 2010.⁷

Outage Restoration

Many public power utilities have outage prevention programs, the most common of which are tree-trimming services. Other outage prevention programs include wildlife management (animal/squirrel guards); routine inspection and maintenance of distribution lines; other vegetation maintenance; thermographic circuit inspections; lightning arresters; reviewing poor-performing circuits; and converting overhead wires to underground.

When an outage occurs, public power utilities restore power quickly because they are located in the community. Repair crews live in the community and have a vested interest in getting service restored quickly. They are not only accountable to local officials, but to their friends, neighbors and families.

Living in the community also means they can get to the site of the outage faster; they do not have to drive long distances to start repairing damage.

⁵ Public power numbers from 2012 calendar year. “Major events” are not excluded. Source: “Evaluation of Data Submitted in APPA’s 2013 Distribution System Reliability & Operations Survey,” American Public Power Association, March 2014.

⁶ The “National average” includes the 13-year average for more than 100 electric utilities; the most recent data year included was 2012. This data does not include outages that would be considered “major events.” The sample set included in the study comprised 145 investor-owned utilities (75% of all IOUs), 30 public power utilities (<1% of all public power), and 16 rural electric cooperatives (3% of all cooperatives). Source: “Assessing Changes in the Reliability of the U.S. Electric Power System,” Lawrence Berkeley National Laboratory, August 2015.

⁷ “The Troubling Connecticut Power Failure,” Rob Cox, *The New York Times*, November 3, 2011.

Local crews are intimately familiar with the local electric distribution system, and can identify and correct problems quickly. If they know a storm is coming, they can step up preventative measures, such as removing overhanging or loose branches and checking known problem spots.

As an entity of the local government, public power utilities also benefit by coordinating responses with other local emergency services.

“One big bonus of a city-owned system, Knight said, is that it can focus all its resources – police, emergency teams, tree trimmers and line crews – on making repairs in the city without waiting for a big power company to coordinate all their repair efforts. ‘It was like clockwork during the last hurricane.’”

Randy Knight, Assistant City Manager, Winter Park, Fla., discussing the drop in outages after the city formed its own electric utility. *Energy Central Professional*, December 2006.



Mutual aid

Just as firefighters, police officers, and other emergency responders combine forces to help rebuild cities devastated by natural disasters, lineworkers and other electric utility personnel come together in an emergency to turn the lights back on.

In the event of a major outage, public power utilities coordinate with each other for assistance through a broad network of mutual aid programs. Public power crews have responded to calls for assistance in response to all sorts of disasters: hurricanes, tornados, ice storms, severe thunderstorms and high winds.

Public power mutual aid examples include:

- In October 2012, Superstorm Sandy brought hurricane-force winds, heavy rains, snow and flooding that knocked out power in 21 states from North Carolina to Maine, and as far west as Illinois. After the storm, more than 160 public power utilities responded. More than 1,000 electric crews—with 3-4 helpers on each crew—came from

as far away as California to help rebuild the electric system in the mid-Atlantic area. Utility workers from the Midwest and South drove to storm-ravaged areas in their bucket trucks, while those from the West flew by military transport aircraft and charter planes. Helpers from 20 states spent weeks working long hours—and often sleeping in their trucks—to help rebuild devastated communities.⁸

- Crews from Naperville, Peru, and Springfield, Illinois, helped the Winnetka public power utility after severe thunderstorms knocked down utility poles and trees in 2011. Winnetka’s service was restored in 12 hours, while nearby communities went without power for as long as four days.⁹
- The Iowa Association of Municipal Utilities helped coordinate the response to the tornado destruction of electric and gas services in Mapleton, Iowa. By mid-day on the day after the tornado hit, nearly 30 electric and gas operators were helping out in Mapleton. Additional crews arrived the next day, and service was fully restored within 48 hours.¹⁰

The mutual aid network among public power utilities is strong. Public power’s commitment to serving communities extends beyond its own community, and utilities take pride in helping one another.

“Sometimes I think [municipal utilities] are worried that because of their size, the investor-owned utilities will suck up all the lineworkers and munis will be in trouble, but we haven’t found that to be the case,” said Mike Hyland, senior vice president of engineering for the American Public Power Association. After Katrina, there were so many municipal utility crews volunteering to head down to Louisiana that some had to be turned away. “It’s a really strong network, and I think there’s loyalty there and a kind of brotherhood,” he said.¹¹

And, mutual aid is provided not only to fellow public power utilities. The Indiana Municipal Electric Association (IMEA) responded to a call for assistance from the investor-owned utility, Baltimore Gas & Electric (BG&E), after Hurricane Irene caused widespread outages in the utility’s service territory. IMEA sent 31 crews from eight separate public power utilities to aid BG&E in its recovery efforts. The crews worked with BG&E to restore power for a full week.¹²

⁸ Public power utilities prepare to handle outages as hurricane season approaches,” Michael Hyland, *Public Power Chat*, May 28, 2014.

⁹ “Power to the people: How Winnetka beat its neighbors to restore electricity,” *Winnetka/Northfield TribLocal*, June 29, 2011.”

¹⁰ “Mapleton help: ‘Great testament’ to IAMU mutual aid” *Informex*, Iowa Association of Municipal Utilities, April 26, 2011.

¹¹ “Mutual Aid Before the Storm,” *Public Power*, March-April 2007.

¹² Correspondence with Leona Draper, Executive Director, Indiana Municipal Electric Association.



“Wellesley and other towns in the electric power business were beacons of light during the outages that left thousands of homes across the western suburbs in the dark last week. While Natick, Sudbury, Framingham, and other communities struggled with power failures that dragged on through the week, all the lights were back on in a matter of hours in Wellesley, Belmont, and Concord. The three towns run their own municipal electrical utilities, complete with crews ready to make repairs at a moment’s notice, in contrast to the majority of communities in the western suburbs, whose power is provided by the utility companies NStar and National Grid.”

“Municipal utilities shine in storm,” Boston Globe, on boston.com, September 4, 2011.

Customer Service

Since a public power utility’s customers are its owners, there is no conflict between the needs of customers and the needs of shareholders. The utility’s local accountability ensures it delivers excellent customer service, or unsatisfied customers can make their displeasure known at utility board or city council meetings.

Public power utilities receive high scores in residential and business customer satisfaction in the J.D. Power and Associates annual surveys for electric utilities. In 2015, Salt River Project in Phoenix, Arizona, ranked the highest in the large utility segment in its region for the 14th consecutive year, and Clark Public Utilities in Vancouver, Washington, ranked the highest in the midsize utility segment in its region for an eighth consecutive year. Other top finishers in their respective categories included the Sacramento Municipal Utility District, Colorado Springs Utilities, Seattle City Light, and Tacoma Power.¹³

Public power utilities also took home top honors for business customer satisfaction in four of the eight categories, with honors going to Omaha Public Power District in Nebraska, JEA in Jacksonville, Florida; Salt River Project and Sacramento Municipal Utility District.¹⁴

Customers in the driver’s seat

In a public power community, customers drive customer service; the utility can tailor its programs and services to the needs and desires of its customers, instead of looking only to make a profit.

For example, most public power utilities have a customer service center located in town, where customers can pay their

bills in person, discuss any questions, and learn about other utility programs. Many investor-owned utilities have eliminated their walk-in customer service centers as a strictly cost-saving measure, but when customer service, not making a profit, is the goal, service centers stay open.

Energy-efficiency programs are another example where public power’s not-for-profit, customer-focused business model shines. A for-profit utility is in the business of selling electricity to make money; spending utility money to run an energy efficiency program to help customers use less electricity does not make sense when you are answering to investors and stockholders. But because public power utilities share their community’s values and are accountable to customers, the calculation looks different: why wouldn’t you want to help your friends and neighbors save money on their monthly utility bill?

Poor service by profit-seeking companies is one of the primary drivers behind a community’s decision to consider public power. Hermiston, Oregon, formed a municipal utility in 2001 following a four-year effort that began because the incumbent investor-owned utility closed its local customer service office and citizens recognized that the company’s service levels were declining. The new public power utility, Hermiston Energy Services, offers lower rates and customers can now pay bills and address service concerns in person at the local office.

Quite simply, local control and public power’s not-for-profit business model promote outstanding customer service. A public power utility and its governing body are part of the community and can easily maintain a close relationship with utility customers. As a result, the utility can tailor its services to meet the needs of its customers and the community.

¹³ J.D. Power and Associates, 2015 Electric Utility Residential Customer Satisfaction Study, as described in J.D. Power and Associates press release, July 15, 2015.

¹⁴ J.D. Power and Associates, 2016 Electric Utility Business Customer Satisfaction Study, as described in J.D. Power and Associates press release, January 13, 2016.



"Here at MED, we often talk about being your hometown power provider. We live here with you, and of course we want to provide the most reliable service possible because we benefit from that as much as anyone else.

But hometown power means more than that to us. It also means we are always actively working in our community to improve the lives of the people around us and contribute to the traditions that make Murfreesboro such a great place to live."

Steve Sax, general manager, Murfreesboro Electric Department,
"My Hometown Power" newsletter, November 2015.

Affordable Prices

Across the country, publicly owned electric utilities continue to lead the way in providing customers with low-cost energy for homes and businesses. The most recent data from the U.S. Department of Energy show that public power customers pay less, on average, than do customers of investor-owned utilities or electric cooperatives, as they have year after year since the federal government began keeping electricity rate statistics more than 70 years ago. Public power's historically lower rates are the result of the low-cost structure central to its business model, supported by its not-for-profit status, access to tax-exempt financing, higher credit ratings, and its ability to contract for low-cost power supplies.

Lower Rates

On a national basis, average electricity rates for all investor-owned utility customers in all customer classes are **6.9 percent higher** than average rates paid by public power customers. Average electricity rates for all cooperative utility customers are **3 percent higher** than those paid by public power customers.

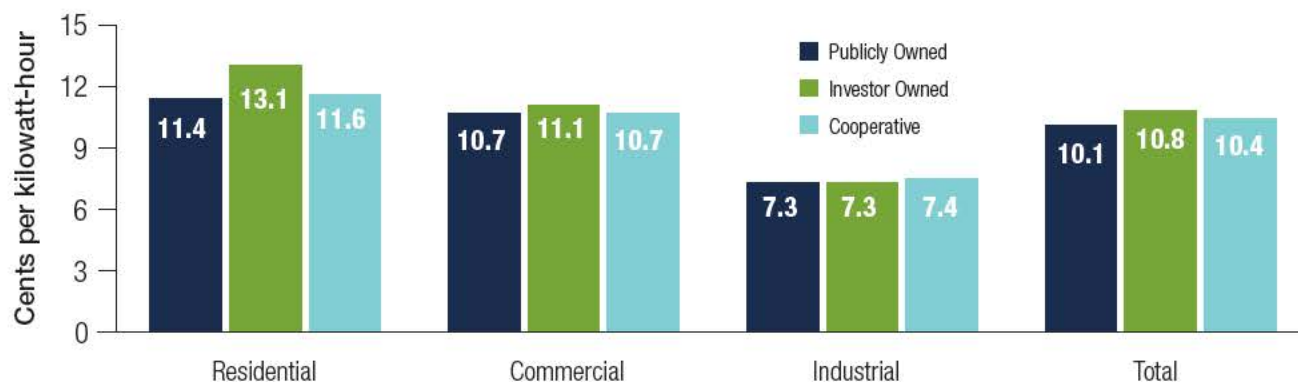
This distinction is more pronounced when looking at rates paid by residential customers. Public power residential customers paid an average of 11.4 cents per kilowatt-hour; cooperative utility customers paid an average of 11.6 cents per kilowatt-hour, and investor-owned utility customers paid an average of 13 cents per kilowatt-hour.

That difference means residential customers in cooperative utility service territories paid average rates that were 1.75 percent higher than their public power neighbors, and residential customers in investor-owned utility service territories paid average rates that were **14 percent higher** than those paid by public power customers.¹⁵

In recent years, average rates for investor-owned utility industrial customers have been lower than those of public power utilities. However, industrial customers vary greatly in size, and on average, investor-owned utilities serve significantly larger industrial customers than do public power utilities. The difference in customer size could account for the investor-owned utility's lower price for industrial customers.

¹⁵ "Public Power Costs Less," American Public Power Association 2016. Data from Energy Information Administration, Form EIA-861, "Annual Electric Utility Report" for 2014. Rates reflect both full-service (bundled) and retail choice (unbundled) sales in utilities' service territories.

Average Retail Electric Rates by Customer Class, 2014



Local regulation

Public power utilities are under more intense scrutiny than investor-owned or cooperative utilities because they are governed and regulated by their customer-owners through locally elected and appointed officials. Governance and regulation happens at city council and utility board meetings, public hearings, citizen advisory committees and other public forums; accountability is ensured at the ballot box. Business is conducted in the open and is subject to local scrutiny.

Public participation in the utility's governance, including decisions on rates, budgets, facility siting, power supply reliability, and customer service, is a core attribute of public power. If citizens feel their rates are unreasonable, they can attend public meetings held in their own town to express their discontent. In a few states, public power utilities' rates are also regulated by the state public service commission.

While public power utilities generally are regulated by a local governing body accountable to its citizens, investor-owned utilities are regulated by state and federal authorities. Investor-owned utility customers have the right to place complaints with the state public service commission, but because these customers are not owners of the utility, they have no direct relationship to utility management and cannot participate in board meetings.

Regulation for rural electric cooperatives varies across the country; they are subject to oversight from state regulatory commissions in some, but not all, states. Where they are not regulated, cooperative utility customers may find that making their voice heard is more difficult because the utility is not subject to the same sunshine laws that govern public power utilities.

Compared to customers of investor-owned utilities and even rural electric cooperatives, public power customers have more influence on rates, service and policies.

Low-Cost Structure

The biggest determinant in public power's lower rates is its not-for-profit status. Public power works for Main Street, not Wall Street.

In his comprehensive study of factors affecting performance in the U.S. electric industry, Professor John Kwoka concluded that public ownership confers both cost and price benefits. He found that the most likely reason for public power's advantages over their privately owned counterparts "appears to be that retail distribution—of electricity and perhaps other goods and services—may be performed better by enterprises closely rooted to the customer community. Such proximity may yield greater knowledge of local customer needs and a greater sense of responsibility for addressing those needs."¹⁶

Public power utilities can offer lower rates because:

- The utility does not pay dividends to often-distant shareholders.
- They are accountable to the customer-owners they serve.
- Local cost-consciousness and public scrutiny over expenditures keep the utility's budget in check.
- Administrative costs are lower, due to improved efficiencies through sharing personnel, equipment and supplies with the local government.
- Rates are set locally by citizen-controlled boards or city councils that operate publicly.
- There is no economic bias toward high-cost, capital-intensive technologies.
- They are eligible to borrow money for capital expenses using tax-exempt bonds, holding borrowing costs down.
- They consistently earn higher credit ratings from the three major credit rating companies.
- In certain parts of the country, they may have access to lower cost hydroelectric power marketed at wholesale by federal and state agencies.
- Joint action agencies give smaller utilities access to economies of scale in generating and purchasing power and other services.

Several of these topics are covered in more depth under the benefits of Local Control.

Municipal Bonds

For more than 200 years, state and local governments and governmental entities, including public power utilities, have relied on municipal bonds as a means of financing.

¹⁶ John E. Kwoka, Jr., George Washington University, "Power Structure: Ownership, Integration, and Competition in the U.S. Electricity Industry," Kluwer Academic Publishers, 1996, p. 143.

Nearly three-quarters of all core infrastructure built in the United States is financed with municipal bonds. Interest paid on these bonds has been exempt from federal tax since the inception of the federal income tax in 1913, just as federal bonds, bills, and notes are exempt from state and local taxes.

State and local governmental entities—including public power utilities—have limited means to raise funds for their communities' capital needs. The municipal bond market gives towns, counties, cities, and publicly owned utilities access to investors. Municipal bonds are ideally suited to finance capital-intensive and long-lived public infrastructure, such as the assets of a public power utility.

While the median corporate bond issue is \$210 million, the vast majority of municipal bonds, including those for public power investments, are far smaller: the median municipal bond issuance is \$7 million. Only about 5 percent of all municipal bond issuances are for \$200 million or more.

The federal tax exclusion of bond interest means municipal issuers can finance their investments affordably. Over the past 20 years, the average yield of Standard & Poor's Corporate Bond (Aaa) Index has been 130 basis points higher than that of Moody's High-Grade Municipal Bond Index. Adjusting for the cost of call provisions common in municipal bonds (but rare in corporate taxable bonds), the spread is closer to 180 basis points. The difference can save municipal bond issuers **25 percent** over the 30-year life of a project. These savings result in more critical investments in infrastructure and essential services by state and local governments and lower costs for the services they provide.

A safe investment

Investors purchase municipal bonds in part because of tax considerations, accepting a lower rate of return because the interest is exempt from federal income tax. Municipal bonds are also valued for their ability to generate a steady stream of revenue for fixed-income households. Individual households are the investors in more than 70 percent of municipal bonds. Nearly 60 percent of this household tax-exempt interest is earned by taxpayers older than 65 years. In 2012, 48 percent of all municipal bond interest paid to individuals went to households with incomes of less than \$250,000.¹⁷

Recent market performance and the "flight to quality" underscore that municipal bonds are also valued as stable

financial investments. The U.S. municipal bond market is well-established, with a robust and comprehensive federal legislative and regulatory system that protects investors. Likewise, municipal bonds are secure investment vehicles: the default rate for investment grade municipal bonds is far less than 0.1 percent, a fraction of the default rate for comparably rated corporate bonds.

Today, there are \$3.7 trillion in municipal bonds outstanding, with more than \$200 billion funding new projects every year. Close to 5 percent of those issuances (as much as \$11 billion every year) finance new investments in power generation, distribution, reliability, demand control, efficiency and emissions control: all needed to deliver safe, affordable and reliable electricity.

In addition to infrastructure for public power utilities, these bonds finance roads, bridges, sewers, hospitals, libraries, schools, town halls, police stations, and other public-purpose investments by state and local governments.



The city of Vineland, New Jersey, has operated its own electric generating plant for more than 100 years. Excess power supply produced is bid on the market, bringing in \$167 per megawatt-day at auction, while the cost has run about \$100 MW-day.

"That's the benefit to our customer and it's because we can finance cheaper using instruments available to us and we don't have to pay profit to our shareholders... At the present time we have the lowest rates in New Jersey."

Joe Isabella, director of the electric utility,
Vineland, New Jersey, January 2015.

Credit Ratings

The three largest credit rating companies acknowledge the advantages of public power's business model and assign much higher ratings, on average, to public power than to investor-owned utilities.

Public power utilities share several fundamental, structural characteristics that contribute to these higher ratings:

- Local, autonomous ratemaking authority
- Electricity is an essential service

¹⁷ Internal Revenue Service, "Statistics of Income—2010: Individual Income Tax Returns" (2012).

- Defined service area, with near monopolistic characteristics
- Residential and commercial customer base is highly concentrated
- Public power utilities have a relative cost advantage over investor-owned utilities
- Local regulation is generally faster and more responsive to changing conditions than the lengthy process that investor-owned utilities experience before state commissions
- Customers/ratepayers are the ultimate stakeholders¹⁸

Fitch Ratings' 2016 Outlook for the public power sector assessed public power's strengths in face of challenges confronting the electric utility industry: "Municipal power utilities... are well positioned to cope with near-term challenges including recently enacted carbon regulations, persistent rate pressures and long-term threats."¹⁹

"The rationale behind these municipal acquisitions includes the economic benefits available to the acquiring city by reinvesting free cash flow back into the local system, greater local control over rates, improved reliability and benefits associated with the use of tax-exempt debt for future capital improvement compared with the existing corporate utilities' higher cost of capital."

Fitch Ratings, "Public Power Municipalization," May 25, 2005.



Access to Federal Hydro Power

Hydro power accounts for nearly 7 percent of the nation's electricity supply and is the most abundant source of renewable energy. Because the fuel (water) that turns the turbines to make electricity in a hydroelectric plant is free, the cost of operating a hydro power facility is low compared to other sources.

The federal power marketing administrations (PMAs) sell federally generated hydro power with a statutory right of first refusal granted to not-for-profit entities, including public power utilities and rural electric

cooperatives (called "preference customers"). This hydro power is sold at cost. The hydroelectric power is produced at federal dams operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation.

As one of the few providers of cost-based wholesale power, the PMAs assist in keeping power rates low for millions of electricity customers.

Joint Action Agencies

Being small and focused on local customers is one of the strengths of public power—but survival often hinges on being big. Joint action agencies are the convergence of small and big for public power utilities, banding utilities together to achieve economies of scale.

Joint action agencies are typically formed under an act of the state legislature to provide wholesale power supply and services to their public power members. Like the utilities they serve, these agencies are also not-for-profit organizations.

Joint action agencies have traditionally served as vehicles to consolidate power generation or purchasing, rate negotiation, and facilities construction of many smaller utilities into a larger unit, thereby leveraging their combined size to gain added market advantage. This helps keep power rates competitive and provide an avenue for offering advanced services through the economies of joint purchasing.

The beginning of joint action

Some of the earliest joint action ventures were undertaken to battle high wholesale rates. In Florida, an investor-owned utility was selling bulk power to 10 municipal utility customers at a higher rate than it did to rural electric cooperatives, ostensibly because the co-op loads were larger. When the cities tried to negotiate a better rate, the company pursued a "divide and conquer" strategy, trying to negotiate separate power sales agreements with each of the 10 cities. But the cities stood firm as a group and negotiated rates that satisfied all. The resultant aggregate savings of \$500,000 for the 10 cities were huge at the time—it was the 1960s.

"We have learned what can be accomplished through a united effort," wrote Wallace Sturgis, the city attorney for Ocala, Fla., in 1968. "But this is just the beginning. We

¹⁸ "Rating Agency Outlook for Public Power," Fitch Ratings, webinar, March 16, 2016.

¹⁹ "2016 Outlook: U.S. Public Power and Electric Cooperative Sector," Fitch Ratings, in a press release, December 9, 2015.

must think big and from such thinking, big results will come.” Individually, municipal utilities are small, he said, “but collectively, we are large and growing larger, despite all obstacles.”²⁰

Joint action today

While power supply and the opportunity to capture the benefits of economies of scale drove creation of many joint action agencies, the agencies have evolved to provide a wide range of shared services to help public power utilities keep costs down while providing the highest level of service to their customers.

Today, many joint action agencies plan and implement energy efficiency and demand-side management programs for their members. Some agencies hire “circuit riders,” individuals who work on-site for member utilities one or two days a week, then spend another part of the week at other member utilities. For example: WPPI Energy in Sun Prairie, Wisconsin, hires energy services specialists who fulfill this role. American Municipal Power in Columbus, Ohio, has tree-trimming crews that support member needs. The arrangement enables the agency and its members to recruit and hire highly qualified personnel whom cities individually may not be able to afford.

In places where significant state-level regulation of publicly owned electric utilities remains in effect, joint action agencies like Vermont Public Power Supply Authority offer significant regulatory and legislative services to support member utilities.

Among other services, many agencies support their members in economic development, rate design, fuel purchasing, training, telecommunications, lobbying, information technology, engineering, project management, finance and equipment testing. Local public power utilities pool their resources, working together to achieve substantial savings for their communities.

Joint action agencies allow public power utilities to join forces to take advantage of economies of scale and shared services to boost efficiency. They are a lifeline for public power utilities that want to retain the benefits of owning and operating their own electric utility while not losing out on the economic advantages of a larger organization. The agencies facilitate the best of both worlds—small and large—for their members and their customers.

²⁰ “The Evolution of Joint Action,” *Public Power*, January 2014.

Local Economic Development

Public power utilities are an integral part of the economic development of their communities, working closely with new and existing businesses to provide the highest levels of reliability, customer service and development assistance. Public power utilities are local and are invested in the success of the customers and communities they serve.

A public power utility spurs development in the local economy as a local employer operating in the community, and through the benefits that the utility affords the community. In some public power communities, the utility may also directly support the town’s economic development efforts.

Hometown Jobs and Business

Public power utilities benefit their communities by providing employment opportunities for local residents. The local utility is headquartered in town and creates local jobs for customer service representatives, lineworkers, engineers, mechanics and administrators. Kids growing up in public power communities can find a career right in their hometown. Each dollar of a public power employee’s paycheck circulates through the local economy an estimated four to five times.

More than just being a local employer, public power utilities also support the local economy as a business operating in the community. Utilities may implement policies to “buy local” and support local businesses whenever practical, including purchasing materials and services from local companies and using local financial institutions for their business operations.



EVERY DOLLAR PAID TO A PUBLIC POWER EMPLOYEE CIRCULATES THROUGH THE LOCAL ECONOMY **4 TO 5 TIMES.**



Supporting the local economy with energy efficiency

Energy efficiency programs help customers save money on their electric bill. With rebate programs that pay customers for investing in energy efficient appliances (or for recycling older, less efficient models), utility energy efficiency programs go further in putting money back in customers pockets.

The public power utility in Waverly, Iowa, offers just such energy efficiency programs and rebates, with a twist: customers who receive energy efficiency rebates for air conditioners, heat pumps, LED light bulbs and appliance recycling are paid in Waverly Dollars – gift certificates issued by the Chamber of Commerce that can be used like cash anywhere in Waverly. Citizens can spend their Waverly Dollars when they shop, dine out, fuel up, or even to pay their utility bill.

“The energy efficiency programs are good for the local economy,” said Chris Schmidt, former chair of the utility’s board of trustees. “The majority of new appliances are purchased and installed by local dealers... Home improvements are also completed mainly through local contractors. The money stays in the community, making it a win-win situation.”

Stimulating the Economy

Public power utilities are good for the local economy. Lower electricity prices allow consumers to spend more money on other goods and services, in addition to attracting business and industry to the community. Local dollars stay at home in public power communities. They are not sent to companies and shareholders out of the city, state, or in some cases, country.

Investments made in the utility and its infrastructure also support the local economy. By meeting the interrelated needs of residential, business and industrial customers, a public power utility makes the community a more pleasant place to live and allows it to compete more successfully in attracting business and employment. For instance, utility investments to improve power quality and service reliability make the community more attractive to businesses that may locate or expand there.

The contributions utilities make to the local government, whether in the form of payments in lieu of taxes, transfers to the general fund, or other in-kind contributions to the local government, also help the community economically. Because public power utilities typically make greater financial contributions to the local government than investor-owned or cooperative utilities, these benefits may be felt more strongly in a public power town.

Direct financial contributions provide real, tangible benefits to the community, helping to pay for police officers and firefighters, teachers and schools, the municipal library and parks, road repairs, and other city services. In-kind contributions—free or discounted services provided to the local government and other operational efficiencies—save money for the local government.

The financial contributions made by public power utilities give the community a choice: to collect less in local tax revenue to support its services; or to increase the number (or improve the quality) of services it provides. The community and local economy benefit either way: from more money staying in citizens’ pockets, or from the enhanced municipal services.

Technological Leadership

Many public power utilities have taken a leadership role in preparing their communities for the future by pursuing new technologies as an integral part of community growth. They serve as information sources in a variety of technology fields such as environmental stewardship, high-speed internet capability, safety and community technology development.

Some public power communities offer telecommunications services because private companies may not offer them to smaller towns at competitive prices. Access to high-speed broadband encourages economic development.

Economic Development Programs

Public power utilities are logical partners in economic development. A locally controlled utility is part of a public service community team that cooperates on public works projects, downtown renovations, extension policies, business development, industrial parks, and energy-efficiency programs. The utility has an inherent interest in promoting the well-being and prosperity of the community.

A 2015 survey indicated that the most important thing an electric utility can do to attract business to the community is offer high reliability and competitive prices.²¹ While public power excels in both these areas, many public power utilities go beyond, working with city officials to promote economic development.

Tools that may be offered by public power utilities with their communities include:

- special economic development rates for the first few years of operation
- special connection fees or line extension rates to make extending electric service to a new business site more affordable for new businesses
- key accounts programs for large commercial, industrial and institutional customers
- additional service redundancy to enhance electric reliability
- backup generation
- rebates
- discounts and fee waivers
- tax credits/abatements
- zoning assistance
- grants
- low- or no-interest loans

Other economic development initiatives include technical consulting, infrastructure improvements, enterprise zones and tax increment finance districts, energy-efficiency programs, and account management services.

Many utilities also take advantage of strategic priorities to promote the community to businesses with similar interests. For example, a utility that invests in green energy technology can make the community more attractive to businesses that value sustainability.

Working to bring new businesses to the community is only the first step. Public power utilities work with their larger customers, offering them power quality, demand-response programs, alternative pricing structures, special communications during outages, and other customer-defined and customer-focused programs. Businesses enjoy the streamlined one-stop shopping customer service that public power towns offer through key accounts and other large customer programs.

Greenville, North Carolina, exemplifies how a public power utility can promote economic development for its hometown. The Greenville Utilities Commission has a robust program to help business customers looking to expand and to attract new businesses to Greenville. The utility meets with companies seeking to relocate to discuss their power needs (reliability, power quality and capacity), and offers innovative rate options to help startup companies. When an existing customer wanted to add a new warehouse, utility engineers showed company personnel how they could meet their electrical needs at the new warehouse without purchasing expensive new equipment.



"The big reason for doing this is local control of our destiny...Number 2, we keep all of the revenue generated from the sale of electricity locally, and 34 municipalities in South Dakota can attest to that. And No. 3, it's a lot better economic-development tool. You can offer incentives (on electric rates) to businesses. With NorthWestern, we can't do that."

Ken Cotton, City Attorney, Wagner, S.D.,
"Wagner voters to decide municipal power proposal Tuesday," *Energy Central Professional*, December 2, 2007.

²¹ "Building Community: Economic Development Best Practices," Greenville Utilities Commission and East Carolina University, 2016. Data from APPA Economic Development National Survey, 2015.



Forming a Public Power Utility

Public power has survived and thrived in America for well over a century. Citizen-owned public power utilities first appeared more than 130 years ago when communities created electric utilities to provide light and power to their citizens. The number of public power utilities has grown from fewer than a dozen in 1890 to more than 2,000 today.

The path to forming a new utility takes grit and determination. The process can be long, complicated and costly, and fraught with legal challenges. But the benefits of public ownership and local control are many, so communities around the country continue to investigate the public power option.

Before launching a campaign to form a new public power utility, it is useful to understand the community's rights and responsibilities in choosing its electric service provider; the steps involved in the process; and how the incumbent utility may respond.

Rights and Responsibilities

It has long been an established principle that communities have the right to form a new public power utility if they are not satisfied with the service they are receiving from a private utility. Nineteen new public power utilities have begun operation so far in the 21st century. Several more communities are waging high-profile campaigns to bring public power to their citizens.

In most states, citizens have the right to determine whether to own and operate their own public power utility or to grant an electric franchise to a private utility. This is a local rights issue. A community is within its rights to determine which public services it will provide to its citizens, whether those services include electric, water, wastewater, gas, sewer, cable or internet services.

It is the responsibility of city officials to examine the performance of the utility providing electric service to the community. An expiring franchise is a prime opportunity for the municipality to evaluate viable electric service options to promote the community's priorities, interests and economic health.



"I therefore lay down the following principle: That where a community—a city or county or district—is not satisfied with the service rendered or the rates charged by the private utility, it has the undeniable basic right, as one of its functions of government, one of its functions of home rule, to set up, after a fair referendum to its voters has been had, its own governmentally owned and operated service."

Franklin D. Roosevelt, September 21, 1932.

Steps in Forming a New Utility

Forming a new public power utility is not a quick and easy process. It takes time and money, and requires the commitment of the community and its elected officials. It requires a long-term view of solving problems, and a commitment to see it through. The process can take several years. But most communities that have gone through the process and have taken control of their electric utility agree it is worth it: they are reaping the benefits of public power every day.

There are many steps in forming a new public power utility; the number of steps and their order vary based on each community's situation, the relationship with the incumbent

private utility, state and local law, and the public's interest in the issue. Several of these steps—like the feasibility and legal analysis—are likely to proceed concurrently. Meanwhile, educating the community is likely to be an ongoing process, starting early and continuing to evolve throughout the process.

The incumbent utility serving the community is likely to feel threatened by any discussion of or attempt at creating a public power utility, and will likely invest substantial resources in a campaign to discredit public power and discourage the community from establishing a public power utility.

1. Start with a Leader

Most campaigns to form a new public power utility start with a leader—an individual or group to spearhead the effort. The leader's first step will be to start building support within the community, since the entire process will be a community-driven effort.

The person or group leading the effort should communicate the benefits of public power, and the reasons why the community should consider public power. Often, this discussion will start by focusing on the reasons the community is dissatisfied with the incumbent utility, as well as how forming a public power utility could improve the situation.

Those leading the public power initiative in your community should also be prepared to fight the misinformation about public power: the incumbent utility may attack the concept of public ownership even before the city begins the feasibility study.

2. Feasibility Study

One of the first steps in forming a new public power utility is to determine if the new utility is likely to be economically viable and has community support. Feasibility studies are designed to answer the initial question: is forming a public power utility economically feasible?

Typically, a city council (or other municipal governing body) will approve funding to hire a qualified firm to conduct the feasibility study. The study will examine the capital and operating costs for the new utility, and will factor in various alternatives for power supply. The study should also identify a range of expected savings, benefits, risks, and recommended next steps.

Often a community may conduct a preliminary feasibility study; if it shows savings, a more detailed study will follow. The second phase may also estimate property value, determine the general condition of the facilities to be acquired, and the costs of separating the new system's facilities from the remaining parts of the incumbent's system. It may also identify legal requirements to be fulfilled, and methods for valuing the utility property to be acquired.

3. Legal Analysis

Early on, there should be a review of state statutes pertaining to the formation of a public power utility to ensure there are no insurmountable legal impediments, such as a statutory ban on municipal buyouts.

State laws may vary broadly on the issue of whether and how municipalities can come to acquire, own and operate an electric utility. For example, Alaska has passed laws making the process known as municipalization easier through the quick condemnation of certain private property; while there is a legal moratorium on condemnation of an electric plant in other states, such as Oklahoma.²² There may also be a requirement to hold a citizen referendum or petition the state public service commission on establishing a public power utility.

State laws may also determine the price that a municipality must pay to acquire an electric plant. Some states have legislated what constitutes "just compensation;" others leave it to the courts, and still others let the local public utilities commission make the determination.

There should also be a review of the city or county's franchise with the incumbent utility, if one exists, to determine if an exclusive long-term franchise agreement exists (legal, valid and enforceable) that may preclude the municipality from forming a new utility, or any specific language pertaining to the acquisition of distribution facilities that serve the community.

4. Valuation

A study must be conducted to estimate the value of the electric distribution system. This valuation may already be included in a thorough feasibility study; if not, a separate follow-up study should be conducted. Any valuation should incorporate legal input as to applicable valuation methods.

As with any type of appraisal, several methodologies may be used to determine the value of the electric distribution

²² "Survey of State Municipalization Laws," Duncan & Allen, May 2012.

system facilities and property that would be acquired. The main approaches to valuing a system are:

- **Original cost less depreciation (OCLD) or “Book value”**—Value of the system is equal to the original cost of building the current system, less the accumulated depreciation of those assets. This is the valuation method used in utility ratemaking.
- **Reproduction cost less depreciation (RCLD)**—Value of the system if it were built today, using the same specifications as when it was originally constructed. Uses the original cost of the system as a base, adjusted up based on increases in the cost of utility facilities, less the accumulated depreciation of those assets. Reproduction costs include both the actual costs of building the infrastructure, as well as related essential costs including legal and engineering fees, executive and management costs and overhead.
- **Replacement cost new less depreciation (RCNLD)**—Similar to RCLD, but this approach assumes that the system were built today, it may be a better, or more efficient, system.
- **Going concern**—This income-based approach attempts to value the electric system based on estimated future earnings that would be lost if the utility were sold. “Going concern” may also be used to refer to assets of a business, such as property records, customer information records, operating records, etc. This approach may be used instead of or in addition to the other valuation methods.²³

A qualified consulting firm performing a valuation study will include a legal assessment to assess the suitability of each method and determine which is most appropriate for your community.

The valuation study will help identify the most economical option for creating a new public power utility: whether to buy or build. The city has the option of purchasing the existing electric distribution system (through voluntary agreement or condemnation), or to construct a new system. The final report should provide a range of values for the system to be acquired.

An incumbent utility will argue for the valuation method that results in the highest possible estimate, which may include not only the value of the system, but also going concern, goodwill and lost future profits (including a share

of its most expensive generating plant). This cost may be higher than the cost of building a new electric system, which is why building duplicate facilities is sometimes considered.

5. Community Education

It is vital to keep citizens informed about the proposed utility, and the benefits of public power, throughout the process. This will help you gauge the support of citizens, local officials and business leaders, and counter strong opposition from the incumbent utility.

The individual or group spearheading the effort should disseminate information about the process of forming the utility, and the benefits the community will realize if the effort is successful. Any misinformation that may be spread by the incumbent utility should not be allowed to go unchallenged.

Local officials should keep citizens involved in the process. Some communities appoint a “blue ribbon” committee of prominent citizens to guide the public power evaluation. This can be very helpful in the process as long as the task force remains public and unbiased. The committee—or any group representing or leading the initiative to form a new utility—should remain mindful of citizen needs and bring their concerns and recommendations back to the local officials.

Because the local business community plays an important role in the success or failure of a municipalization effort, involving businesses early in the process can help build support and avoid misunderstandings.

Similarly, local media should be kept informed of the issues, decisions and the process because of their important role in educating citizens.

Expect public scrutiny of the effort to increase after feasibility and other studies are completed and the campaign begins to gain traction.

6. Referendum

A referendum may be required by law to authorize the establishment of a public power utility.

If there is a preference to establish an independent board to govern the utility instead of the city council (or other local government entity), the ballot issue may be “double-barreled,” asking:

²³ “Legal Issues in Forming a Municipal System: Condemnation, Valuation, and Ouster of Existing System,” Clint Vince, Esq., and Cathy Fogel, Esq., Sullivan & Worcester, LLP, 1993.

1. Should the city (county) be authorized to establish a municipal utility?
2. Should the utility be governed by an independent utility board?

Leading up to the referendum, local officials will present findings and facts on the issue of forming a public power utility. A volunteer community group may be organized to push for the approval of the ballot issue separately.

Depending on the local issues and timing, the city council or county commission may choose to take the initiative to the ballot even if it is not required by law. The council may follow the will of the people, as expressed in the vote, in deciding whether or not to pursue forming a public power utility.

If the community votes favorably to establish a public power utility, it may enhance the marketability and value of revenue bonds.

Some communities may set an early election, after a preliminary study, to test the level of public support based on estimates of costs and benefits, before the community incurs the costs associated with completing a full feasibility study and other studies. If the early referendum passes, the city is not obligated to proceed if the completed study does not warrant it.

7. Price Negotiation and Condemnation

After the feasibility, legal and valuation studies are conducted, and after any referendum is held, the city or county should develop a negotiating strategy to make a purchase offer to the incumbent utility for the relevant parts of its facilities.

The incumbent utility will often demand an exorbitant price for its facilities, far in excess of the consultant's valuation, and will typically criticize the consultant's study as faulty, overly optimistic or biased. To counter these arguments, some cities hire two independent consulting firms to value the facilities and then compare their results.

For example, in the early 1990s, the city of Las Cruces, New Mexico, commissioned two independent valuation studies when it looked at purchasing its local electric system. The incumbent investor-owned utility was demanding \$176 to \$250 million for the system. Las Cruces commissioned two independent studies; both consulting firms told the city the system was worth about \$38 million.

If the private utility is willing to negotiate, it may be possible to get a more reasonable purchase price, and save the time and expense of a protracted legal fight. In another example, through a negotiation process in the early 1980s, an incumbent investor-owned utility agreed to sell its facilities for \$26 million to the newly formed Emerald People's Utility District. Five years earlier a feasibility study had estimated the value of the system at \$23 million.

If the incumbent refuses to sell, or insists on an unduly inflated price, the city may consider condemnation action under the municipality's right of eminent domain.

8. Public Service Commission Proceedings

In some states, the state public service commission has the authority to determine if the formation of the public power utility is in the public interest, and the price that is to be paid for the incumbent's facilities and for reintegrating the remaining system.

9. Evaluation of Financing Alternatives

As an investment, a new public power utility has tremendous payback potential, but it does take the commitment of considerable funds to acquire or establish the system and begin operations.

Local governments typically issue electric revenue bonds when they buy an electric distribution system. Bonds are repaid from future electric utility revenues over a long period (e.g., 30 years). The bonds are evaluated by a bond rating service, based on the projected net revenues of the electric system.

Unlike general obligation bonds, revenue bonds are not backed by the city or local government's ability to impose property taxes. The new electric revenue bonds should have no impact on other municipal projects and borrowing.

Municipalities are prohibited by federal tax law from using tax-exempt financing to purchase the output facilities of investor-owned utilities, unless they obtain a portion of their state's volume cap for such financing.

However, there is no such limitation on the use of tax-exempt financing for the building of a new system or for improvements to the distribution facilities once they are purchased from the private utility. The public power utility is likely to have a strong credit rating, and new capital

²² "Survey of State Municipalization Laws," Duncan & Allen, May 2012.

expenditures may be funded at a much lower cost of capital than if the system were privately owned.

The debt required for the acquisition of utility assets can be substantial, but that does not mean it is not a good investment, especially considering the benefits the utility will provide the community for many decades to come.

10. Prepare to Begin Operations

The final steps in forming a public power utility include issuing bonds for the purchase and/or construction of facilities; completing power supply and transmission arrangements; planning for the severance of the system from the incumbent utility; developing an organizational plan; setting up the new governing body and recruiting a utility manager; planning for materials, equipment, and supplies; and commencing operations.

The city may decide to contract out some of these functions to a firm experienced in electric utility operations to do the job in the short-run until the new utility is ready to run independently. The contracted electricity provider is accountable to city officials for its performance.

Incumbent Utility Responses

A for-profit electric utility will take extreme measures to stop the formation of a new public power utility, even in very small communities. The incumbent utility fears a domino effect—if one community establishes a public power utility, others may follow. This means a loss of electric load and revenue for the incumbent utility.

When you begin the process of evaluating the public power option for your community, the incumbent utility may offer deals to make the discussion go away quickly. The further you travel down the road toward public power, though, the more you can expect the incumbent utility to spread myths and misinformation, and engage in other anti-municipalization strategies.

Concessions

Faced with the possible loss of the municipal district from their customer base, the incumbent utility often responds to the competitive pressure and offers valuable concessions to the community. These may include lower rates, improved service, performance standards for reliability, investment in the community or a settlement fee.

In many cases, the concessions offered by the incumbent utility are sufficient to persuade the community to abandon efforts to form a public power utility.

Sponsored Studies

Private utilities may offer to pay for the community's feasibility study, or to conduct the study themselves.

The community should be very skeptical if the incumbent private utility offers to provide or conduct a study at little or no cost to the city. Studies sponsored by the private utility will not produce objective results; in fact, their primary purpose is to dissuade a city from forming a new public utility.

When the city, county or municipal district pays for the study, the study will be fair. Unlike the incumbent, the city does not have a vested interest in the study findings. The community is served only by learning the truth, whether or not the study shows that forming a public power utility is economically feasible. Only an unbiased study will determine what is truly in the community's best interest.

Lawsuits

You should expect the incumbent utility to take the city to court. There will be a cost in time, money and perhaps political will.

When a private utility talks about a costly legal challenge to forming a public power utility, it is really part of a public relations battle to stop the initiative. The incumbent's goal is not necessarily to win, but to exhaust city funds or intimidate city officials and civic leaders into abandoning the idea of municipalization.

If the feasibility study has been thorough and actions have been based on legal authority, the city will probably prevail. Cities often win the lawsuits, either because there is no merit to the incumbent's claim or because the utility decides to settle at the last minute rather than risk a result that sets an undesirable precedent.

Political Challenges

Once a community begins to evaluate the public power option, politics almost certainly will play a role. The pros and cons of municipalization may become the focus of political campaigns.

The incumbent utility may thrust the issue into elections by putting up candidates to run against local policymakers who support evaluating or pursuing the public power option.

Private utilities may also try to thwart the democratic process by lobbying for state or local laws or sponsoring ballot initiatives designed to stop the formation of a new public power utility.

For example, Pacific Gas & Electric Co. (PG&E) sponsored a California ballot initiative in 2010 that would have required a two-thirds majority vote before a local government could establish or expand electric delivery service or establish a Community Choice Aggregation program. The *Los Angeles Times* endorsed a “no” vote on the initiative:

“The so-called Taxpayers Right to Vote Act is really a ploy by [PG&E] to block ratepayers from forming cooperatives to purchase and distribute electricity at reduced rates. PG&E is spending its customers’ money to tell those same customers that they have to protect themselves against an imaginary power grab by local government. It is PG&E, in fact, that is trying to protect its market share by requiring a two-thirds vote to establish a new local power system.”²⁴

The initiative was defeated, with the largest percentage of “no” votes occurring in areas served by PG&E.

Public Relations Attacks

The incumbent utility will wage a major public relations battle to stop the community from forming a public power utility. The utility will use its considerable economic and political clout to sway public opinion against the formation of the new public power utility.

The incumbent may use mailers, bill stuffers, newspaper editorials, television, radio, internet ads and videos, and presentations by company officials filled with messages aimed at confusing the issues, creating fear, and spreading misinformation. They may hire a professional PR firm and give it a large budget. Incumbent utilities will strive to create doubt about the formation of a public power utility—whether it can be done and how successful it will be.

Responding to attacks

To respond effectively to these tactics, local officials, citizens, and business leaders who support public power need a well-coordinated public education campaign to set the record straight.

Local officials are most successful when they pay attention to citizens’ concerns, document the legal and economic feasibility, and explain the advantages clearly and succinctly.

The educational campaign is strengthened by encouraging support from community groups, speaking at community events, and keeping the local media well informed.

Citizen education is vital throughout the process of establishing a public power utility. Local leaders should start early and explain why the city is considering public power in a way that has meaning for local residents and businesses.

Although there will be times when it is necessary to respond to the incumbent’s attacks on the public power proposal, it is best to stay with positive messages about the formation of the new utility. In other words, do not let the private utility take the fight to its hill. Stay on message.

City officials, rather than outside hired guns, have more credibility with citizens because they have the community’s best interest at heart. Local elected and appointed officials, as well as local business leaders, should be prepared to respond to false charges against public power.

Citizen support groups can help, particularly if the city is prohibited from doing more than presenting findings and facts. Local citizens may form a committee to actively promote a ballot initiative and help educate the community on the benefits of public power. Citizen groups like “Pull the Plug” in Las Cruces, New Mexico, “CLUB” (Coalition for Lower Utility Bills) in San Francisco and “Citizens for Power Options,” in Casselberry, Florida, made sure fellow citizens were well informed about the public power option.

Keep the media informed on your goals and the process. Sit down with editorial boards of local newspapers to explain what you are trying to do and answer questions. The private utility is likely to step up its advertising in the local newspaper. If allowed by state and local law, the city should counter by placing educational ads in local newspapers. Social media can also be a powerful tool for countering attacks by well-heeled investor-owned utility seeking to derail an effort to form a public power utility.



“PG&E [Pacific Gas & Electric] spent more than \$10 million to defeat the ballot initiative [to allow the Sacramento Municipal Utility District to serve customers in Yolo County]. The utility had estimated that it could lose about \$43 million annually in gross profit margin if the measure succeeded.”

“Voters Nix SMUD Takeover of Yolo County Customers,”
Dow Jones Newswires, November 8, 2006.

²⁴ “On June 8,” Editorial, *Los Angeles Times*, June 6, 2010.



Myths and Misinformation

An incumbent investor-owned or cooperative utility will fight the formation of a new utility by trying to discredit public power, creating doubt and fear, minimizing the benefits, and highlighting risks. But their arguments do not hold up to scrutiny. In fact, public power has been so successful at its focused mission of providing communities with safe, reliable, and affordable electricity that it has earned the praise of industry analysts, the financial community, and most importantly, electric customers.

This section will examine myths, misinformation, and other false charges you may hear about public power and help you separate fact from fiction.

Myths About Public Power

As you consider forming a new utility, you may hear myths or misinformation about public power in general and the benefits it offers. Nine common myths are addressed briefly here; see the “Benefits of Public Power” for more detailed information.

1. Local governments should not be in the business of running an electric utility.
2. Public power means more bureaucracy and less protection for consumers.
3. Public power utilities can't operate as efficiently as larger utilities.
4. Public power utilities do not have the resources to provide reliable power in the event of a major storm or outage.
5. Public power utilities are not large or sophisticated enough to deliver excellent service.
6. Blanket statements that public power costs less are simply not true.

7. Public power utilities aren't regulated, so they can raise rates with impunity.
8. Public power utilities don't support local government because they do not pay taxes or franchise fees.
9. Public power would hurt economic development.

Myth #1

Local governments should not be in the business of running an electric utility.



Fact:

Communities across the country serve their citizens by offering essential services such as water, gas, sewer and electricity. The ability of a community to provide these services embodies the very meaning of “local control.”

In the earliest decades of the electric utility industry, communities formed utilities for the most practical of reasons: citizens wanted the benefits of electric lighting and the quickest way of getting it was to do the job themselves. Today, towns don't have to worry about getting access to electricity, but they are still forming municipal utilities to focus on the community's specific needs—whether it be customer service centers, options for renewable energy, underground wires, faster responses to outages, or lower rates. Public power utilities are a reasoned, pragmatic solution to a civic need.

Public power has an excellent record of performance, not just in the last few years, but throughout the industry's more than 130-year history. More than 700 of the 2,000 public power utilities in the United States have been operating for 100 years or more. Their very existence provides a yardstick against which the rates and service of private utilities can be compared.

Myth #2

Public power means more bureaucracy and less protection for consumers.



Fact:

With the increase in mergers and consolidations among private utilities, public power utilities actually provide more protection to consumers.

Public power utilities are much smaller, leaner and more efficient than large investor-owned electric utilities. Citizens direct the activities of the public power utility through the utility's governing board, which is made up of elected or appointed officials. In addition, many public power utilities appoint citizen panels to advise them on services, reliability, rates and other issues. Questions are answered and decisions are made publicly. Citizens have access to all meetings and records and, if they disapprove, they can vote the elected officials out of office.

Myth #3

Public power utilities can't operate as efficiently as larger utilities.



Fact:

Electricity distribution, as opposed to large-scale generation and high-voltage transmission, is local. Public power utilities keep costs down

through local scrutiny of operations. With their local presence, they are more responsive to customers' needs. They use strategic partnerships and joint action with other public power agencies to obtain the advantages of size in power supply activities without taking on the disadvantages of merging into larger, remote, bureaucratic institutions. Municipal utilities can also create efficiencies for their communities in billing, metering, 24-hour emergency call centers, and other operations when they provide more than just electric service to homes and businesses.

Myth #4

Public power utilities do not have the resources to provide reliable power in the event of a major storm or outage.



Fact:

Public power utilities have a strong reliability record because they focus on core operations and take care of their assets. Public power utilities can respond quickly to emergencies because local crews live in the community, are accountable to local officials and have intimate, expert knowledge of the electric distribution system. In the event of a major outage, public power utilities can get help from crews from other utilities through mutual aid programs.

Myth #5

Public power utilities are not large or sophisticated enough to deliver excellent service.



Fact:

Public power utilities get high marks for customer satisfaction because their focus is always on service to the customer, rather than profits. Service quality is not compromised by mandates from a company headquartered hundreds of miles away, which may result in staff reductions, closed service centers, deferred maintenance, or delayed tree trimming. Public power utilities match local service needs with local resources.

Myth #6

Blanket statements that public power costs less are simply not true.



Fact:

Public power's rates, on average, really are lower. Year after year, for more than 50 years, data from the U.S. Department of Energy show that investor-owned utilities and rural electric cooperatives charge more, on average, for electricity than public power utilities. In 2014, residential customers of investor-owned utilities paid average rates that were 14 percent higher than those paid by customers of public power utilities.

RESIDENTIAL CUSTOMERS PAY 14% LESS

than customers with privately owned utilities.



COMMERCIAL CUSTOMERS PAY 10.7 CENTS PER KWH
vs. 11.4 cents per kWh with privately owned utilities

Myth #8

Public power utilities don't support local government because they do not pay taxes or franchise fees.



Fact:

Public power utilities make as large or larger financial contributions to state and local governments, on average, than do investor-owned utilities. Public power utilities contribute to local governments through payments in lieu of taxes, transfers to the general fund, and free or reduced-cost services to the local government. The level of support and how the dividend is returned to the community is a local decision and another advantage of the local control of public power.

Public power pays 33% MORE back to the community THAN PRIVATE UTILITIES



Myth #7

Public power utilities are not regulated by state public service commissions, so they can raise rates with impunity.



Fact:

Public power utilities are under more intense scrutiny than private utilities because they are governed and regulated by local officials directly accountable to the utility's customer-owners. Governance takes place at the ballot box and in public forums. Investor-owned utility customers have no direct relationship to utility management and cannot participate in board meetings, and cooperative utilities may not be subject to the same sunshine laws that govern public power utilities. Public power governing boards' local accountability gives their customers more protection than other utility models.

Myth #9

Public power would hurt economic development.



Fact:

Local control allows a community and its utility to work together to achieve common economic goals. Lower rates and a core focus on service reliability are good for businesses. Many public power utilities have taken a leadership role in preparing their communities for the future by pursuing new technologies as an integral part of community growth. A public power utility offers opportunities for efficiency gains through integration of electric operations with the operations of other city services. Public power utilities also work with their larger customers, offering them power quality, demand response programs, and other customer-defined and customer-focused programs.

Misinformation About Forming a New Utility

An incumbent utility will try to crush an attempt to form a new public power utility by spreading misinformation about the process and how it will impact the community. Not surprisingly, opponents focus on the risks but overlook the significant revenues and improved service the new utility could provide. Their goal is to scare the citizens of the community into believing that the risks and costs are so high that they are not worth the effort. But new public power communities continue to prove that public power can provide substantial net benefits to the community.

Be prepared to rebut these 15 common misrepresentations, distortions and flat-out falsehoods about forming a new public power utility:

1. Municipalization is a slippery slope to government running other businesses.
2. Forming a public power system amounts to a government takeover.
3. Conducting a feasibility study would be prohibitively expensive.
4. Municipalization will be much more expensive than the city anticipates.
5. Forming a new utility is too expensive for customers in the community.
6. The city would have to purchase the electric system at today's market prices.
7. The city would have to pay large stranded costs if they formed a new utility.
8. Forming a public power utility risks taxpayer money.
9. The city can't guarantee rates will be lower by forming a public power utility.
10. Public power utilities cannot buy or produce power cheaper than larger utilities.
11. Public power rates are lower only because of tax-exempt financing and access to federal hydro power.
12. The city would lack the money and expertise to operate a successful utility.
13. Forming a public power utility may take 10 years.
14. If the incumbent opposes selling the system, the initiative will fail.
15. More electric systems turn private than public.

Myth #1

Municipalization is a slippery slope to government running other businesses.



Fact:

Provision of electricity is an essential service that has characteristics of a monopoly, more like a water or wastewater utility than a commercial or industrial enterprise. It is a long accepted principle that government entities may provide such essential services to serve the public welfare.

Because of its monopolistic nature, electric distribution service is regulated. Private utilities are not simply businesses that charge whatever they choose. Their rates are regulated by state public utility commissions that determine which costs can be recovered from ratepayers and that set the allowed rates of return.

Public power utilities' rates are also regulated, in some states by the state commission, but generally through oversight of the local governing bodies or boards. Their rates are designed to cover the cost of service.

Public power utilities are also not in business to make a profit—they provide an essential service on a not-for-profit basis, which in turn means lower rates. In contrast, investor-owned utilities charge rates that include a profit factor, that is, the cost to provide their shareholders with a return on equity.

MYTH

"If Corona believes it can run private businesses better than our business community can, then why stop at utilities? Maybe the city should provide all its residents free health care and take over all hospitals and doctors' offices. Or perhaps Corona could take over all retail stores. Surely the city could earn a profit doing that!"

Carol Evans, Vice President, California Taxpayers' Association, December 2002.



"The private corporation, whatever its public duties, is organized for private ends and may be presumed to intend to make whatever profits the business will allow. The municipal corporation is allowed to go into the business only on the theory that thereby the public welfare will be subserved. So far as gain is an object, it is a gain to a public body and must be used for public ends."

U.S. Supreme Court decision affirming the right of municipal governments to sell electricity to private consumers, without regulation by state public utilities commissions. *Springfield Gas & Elec. Co. v. Springfield*, 257 U.S. 66 (1921).

Myth #2

Forming a public power system amounts to a government takeover.



Fact:

The government does not “take over” electric systems. Municipalization of electric service occurs because local citizens, through the democratic process, decide that public power will provide important benefits to their community.

Public power is as old as the electric industry system itself: almost 300 publicly owned utilities were serving customers prior to 1900. The right of communities to form public power utilities is enshrined in the laws of most states and has been upheld by the U.S. Supreme Court. Public power utilities represent the desire and action by local citizens to have direct control over an essential service: electric power.

Many campaigns to form a public power utility begin when the private utility’s franchise agreement with the city expires. Many franchise agreements explicitly grant the city the authority to purchase the electric distribution system. A “right to purchase” clause is a critical tool to ensure the private utility provides satisfactory rates, service and reliability to the citizens of the community.

“The municipal system option has long been regarded as a cornerstone of consumer leverage because it is commonly included in franchise contracts and places competitive pressure on the private utility to perform,” wrote Scott Ridley, an energy policy strategist. “It is important that this authority not be diminished or swept aside by blind pressures to ‘clear market barriers.’ Otherwise, consumers could become literally ‘disenfranchised,’ reduced to responding to marketers without the full ability to determine the competitive terms and standards under which they would be served.”²⁵

Even if the right to purchase is not explicitly stated in the franchise agreement, the city has no obligation to renew it. “An expiring franchise is analogous to an expiring contract. A utility should have no more expectation of obtaining renewal of a franchise than of obtaining renewal of a wholesale contract. This is particularly true where a municipality (or wholesale customer) has been publicly searching for an alternative.”²⁶ Several courts have held that no unlawful “taking” of property rights results when a municipality ousts a utility that lacks a valid franchise.

Finally, when a municipality takes control of an electric distribution system, the incumbent utility is fairly compensated for any assets, by mutually agreeing upon a purchase price; or if the system is acquired through condemnation, the courts or state statutes will determine just compensation.

Local public ownership of utility service is not a revolutionary or a radical idea. It is a mainstream idea, and can be summed up in the phrase: accountability to the community. In a public power community, the electric utility belongs to the people it serves, and the economic benefits are retained locally.

MYTH

“Vote no on Prop 1. Stop a government takeover of Jefferson County’s power system!”

Sign posted by Citizens Against Proposition 1, a group opposing the ballot measure that would allow Jefferson County, Washington, Public Utility District to provide electric service in the county.



“The records reviewed by the *Orlando Sentinel*... provide a glimpse at how a big company mixes persuasion and political muscle to keep a grip on business. The documents cover everything from broad policy positions to the way buyout attempts should be described—‘bureaucratic boondoggle’ and ‘government takeover’ are the recommended terms.”

“Power play,” *Orlando Sentinel* article on Progress Energy’s opposition to municipalization efforts in Winter Park, Florida, August 31, 2003.

²⁵ “Local Government: The Sleeping Giant in Electricity Industry Restructuring,” *The Electricity Journal*, November 1997.

²⁶ Clinton A. Vince and J. Cathy Fogel, “Franchise Competition in the Electric Utility Industry,” *The Electricity Journal*, May 1995.

Myth #3

Conducting a feasibility study would be prohibitively expensive.



Fact:

Feasibility studies usually cost significantly less than private utilities may imply when they are trying to dissuade the community from this course of action. The cost of a preliminary or full feasibility study depends largely on the scope of work. Costs vary with the size of the community, the type and condition of resources needed to serve the community, the consultant's expenses, and the length, scope and formality of the final report presentation.

A preliminary study can be completed for as little as \$25,000, and a more detailed feasibility study can be completed for \$200,000 to \$500,000. A few recent examples:

- A medium-size city (population 56,000) paid \$25,000 to look at options for providing municipal electric and gas service.
- A community with a population of 70,000 paid \$70,000 for a preliminary feasibility study in 2015.
- A community with a population of 21,000 paid \$90,000 for a second phase feasibility study in 2013.

- A community with a population of 66,000 paid \$600,000 for a second, more detailed feasibility study in 2014.
- A community with a population of 23,000 estimates a detailed feasibility study to be conducted this year, including economics, engineering, and legal issues, will cost \$200,000 - \$250,000.

When a study shows that significant savings are possible with public power, the incumbent utility is likely to dismiss the study as "flawed." This simply means the private utility does not like the results. Feasibility studies by qualified engineering firms have had an excellent track record of estimating savings and other benefits of forming a public power utility because the reputation of the consulting firm and its future business depend on their objectivity and accuracy.

MYTH

"A preliminary feasibility study, typically costing more than \$100,000, and a detailed feasibility study—required in order to determine the precise details of the utility property and equipment to be purchased—will need to be completed. A detailed feasibility study can cost \$1 million or more."

Michael McGrath, Edison Electric Institute, "The Siren Call for New Public Power Warrants a Closer Look," Public Management, August 2003.

Myth #4

Municipalization will be much more expensive than the city anticipates.



Fact:

Private utilities are disingenuous in warning cities of the risk and expenses involved in establishing a public power utility. The incumbent utility is likely to demand an outrageous price for its electric distribution system, with inflated estimates on the value of the physical assets, plus going concern, stranded costs, excessive separation costs, and more. These high estimates may have little basis in fact; the incumbent's intent is to create doubt and scare local officials and citizens into abandoning the effort.

A thorough feasibility study, performed by a qualified and experienced firm, will help you get a much more realistic estimate of what the acquisition price of the utility will be. Much of the risk and uncertainty is in fact due to the incumbent utility's activities against municipalization.

Private power companies generally spend enormous resources to block formation of a new public power utility, and may use intimidation and threats of long, expensive legal battles to achieve their goals (particularly when their goal is only to dissuade the community from continuing the municipalization initiative, and not necessarily to win the lawsuits).

MYTH

"Boulder needs to acquire the electric system – the poles, wires, substation, equipment and other infrastructure. Two matters (condemnation and stranded costs) would be decided in court..."

This legal process will potentially cost millions in consulting and legal fees and take five or more years to complete. Further, we believe the city's plan does not represent the full cost of a takeover. An unbudgeted expense of more than \$112 million puts its break-even point in jeopardy."

Xcel Energy, "The challenges of municipalization," 2011.

Myth #5

Forming a new public power utility is too expensive for customers in the community.



Fact:

All utilities regularly issue debt to undertake capital projects, and the funds for repayment of the debt are collected from utility customers via utility bills over many years. There is a major difference though: public power customers are assured that the projects are for the benefit of their own community, while investor-owned utility or cooperative customers may be paying for projects that primarily benefit customers in another part of the state or region.

Local governments typically issue electric revenue bonds when they buy or build an electric distribution system. The debt is not paid back by customers in a single year. Rather, it is paid back from future electricity revenues—from customer payments over 30 years, for example.

Moreover, because the debt is repaid through future electric revenues, it is repaid by all electric customers—residential, commercial and industrial—over time, in proportion to the amount of electricity they use. Large commercial and industrial customers may contribute a higher percentage

of the total cost over time due to their higher relative electric bills.

The credit rating companies give public power utilities high marks for their management of their financial obligations, including payments on municipal bonds. This is reflected in public power's record of sound credit ratings.

The debt required for the acquisition of utility assets can be substantial, but that does not mean it is not a good investment, especially if the asset will provide net benefits for many decades.

"A hostile takeover of PG&E's electricity distribution system is an expensive proposition—potentially costing well over \$100 million in bond debt. That's \$5,000 out of the pocket of each electric customer in the district."

Pacific Gas & Electric mailing sent to customers in the South San Joaquin Irrigation District.

MYTH

"I find the study to be deeply flawed in that it does not look out over the 10 or 20 or 30 years. It only looks at one year.."

Spokesman for Citizens for Local Power, critiquing an investor-owned utility-sponsored feasibility study on Jefferson County, Washington's, proposed takeover of Puget Sound Energy's electric service. Peninsula Daily News, July 30, 2008.



Myth #6

The city would have to purchase the electric system at today's market prices.



Fact:

While private utilities may assert that a community must pay "market prices" for electric facilities, the most common valuation methods are original cost less depreciation and replacement cost less depreciation. The city may also have to pay costs associated with severing the distribution system in the city from the incumbent's remaining system (reintegration costs, for example). In some cases, courts have allowed additional costs in recognition that the city is acquiring a going concern. This generally depends on the incumbent utility's right to serve, with little or no "going concern" value awarded in cases where the utility's franchise is nonexclusive, revocable at will, or expired.²⁷

Some franchises expressly allow the city to acquire the incumbent utility's distribution assets upon expiration of the franchise term. The franchise agreement itself

may specify the method—or the process (for example, via an arbitration panel)—for establishing the value of the distribution facilities. State law may also set forth the method or process to be used for valuation.

If the incumbent utility refuses to sell or insists on an unduly inflated price, the city may consider condemnation action under a municipality's right of eminent domain. State laws differ on eminent domain authority, with some states granting municipalities non-specific authority and others granting specific authority to condemn utility property. In Ohio, for example, the state constitution allows any municipality to acquire a public utility by "condemnation or otherwise."²⁸

"Those communities that seek to take over distribution systems would have to purchase entire systems at today's market prices."

Edison Electric Institute, sample campaign message.

MYTH

²⁷ Vince and Fogel 1995.

²⁸ Article 18.04 of the Ohio Constitution.

Myth #7

The city would have to pay large stranded costs if they formed a new utility.



Fact:

The Federal Energy Regulatory Commission (FERC) does not automatically review the sale of a private utility's assets to a municipality.

A 1996 FERC order on wholesale transmission access does allow for stranded cost recovery from new municipal utilities (called "retail-turned-wholesale" customers in the order), but only under specific circumstances. The order provides for stranded cost recovery if the new municipal utility uses FERC-mandated transmission service to reach a new power supplier.

In some cases, a new municipal utility chooses to sign a power supply contract with the utility that formerly served the city. FERC's stranded cost provisions do not apply in these cases because the private utility is not providing transmission access to another supplier; rather it is still supplying power to the new municipal utility. The private utility no longer owns the distribution assets in the city, but it is still using its generation resources to provide power to the city's customers at the wholesale level. Thus, FERC's requirements for open access transmission service do not "strand" the costs of the private utility's generating assets in such cases.

In South Daytona, the city chose FPL's wholesale power supply proposal, but FPL refused to negotiate the final terms of the contract until the parties came to an agreement on stranded costs. South Daytona then petitioned FERC for a declaratory order that "the commission's stranded cost regulations do not apply to a retail-turned-wholesale municipal utility that intends to continue receiving its power supply from its former retail supplier."²⁹ FERC promptly decided the case, denying FPL's arguments and granting the declaratory order. In its analysis, the commission said that its order on transmission access limits stranded cost recovery in the case of new municipal utilities "to those cases in which the new wholesale entity uses commission-mandated transmission access to obtain new power supply on behalf of retail customers that were formerly supplied power by the utility providing the transmission service."³⁰

States may award an incumbent utility stranded cost recovery or an exit fee as part of the valuation process. Typically, these decisions focus on the loss of generation load, and are often based on a determination of whether the incumbent utility had invested in power supply resources under the expectation of continuing to serve the city's customers.

In Florida, two of three circuit court decisions on stranded costs ruled that the cities (Casselberry and South Daytona) owed no stranded costs, while the third decision assessed Winter Park stranded costs of \$10 million. In the Casselberry case, the judge ruled that the investor-owned utility did not prove that there would be any stranded costs, primarily because the city's load was small relative to the investor-owned utility's total forecasted load. In the South Daytona case, the judge ruled that since the city's 1978 franchise agreement gave the city the right to purchase the utility at the end of 30 years and set the valuation method for the purchase, there could be no stranded costs.

In regard to how the private utility's other customers are affected, the incumbent will recover the costs of the city's distribution assets as part of the purchase price of the system. Therefore the private utility should remove the distribution assets from its rate base in order to ensure that customers remaining in their service territory do not pay for assets for which the utility has already been reimbursed.

MYTH

"Stranded costs are not a part of the price of purchasing FPL's [Florida Power & Light] assets and could be added to the overall value of buying out the system after the Federal Energy Regulatory Commission reviews the sale."

"South Daytona moves forward with power takeover, FPL will fight purchase price,"
Hometown News, August 12, 2011.

²⁹ Federal Energy Regulatory Commission, "Order Granting Petition for Declaratory Order and Dismissing Rate Filing Without Prejudice," Docket Nos. EL12-1-000 and ER 12-46-000, P 1.

³⁰ *Ibid.* at P 29, citing Order No. 888-A, FERC Stats. & Regs. ¶ 31,048 at p. 30,404.

Myth #8

Forming a public power utility risks taxpayer money.



Fact:

Taxpayer money is not at risk. In almost all cases, public power utilities issue revenue bonds to purchase the electric distribution system, and these bonds are repaid from electric utility revenues. Revenue bonds, unlike general obligation bonds, are not backed by the city or by the city's ability to impose taxes; rather they are backed by the revenues of the utility. The new electric revenue bonds would have no impact on other city projects and borrowings.

Every day more than 2,000 public power utilities provide reliable electric service to their customers, setting their priorities based on the priorities of the citizens. If the citizens do not like the direction the utility is taking, they can express their views to the governing board or city council as ratepayers and voters. Moreover, a municipal utility's costs are scrutinized line by line, locally and publicly. Unlike with investor-owned utilities, costs do not include dividends or profits paid to stockholders.

In contrast, there are risks associated with being customers of an investor-owned utility. Most investor-owned utilities are part of a larger holding company structure that can invest in risky, unrelated, and unregulated ventures. Diversification into non-core businesses potentially has a negative effect on the regulated utility's credit rating. The added risk can raise the cost of the utility's business (through a higher cost of capital) and in some cases, result in the utility providing financial support to affiliates or the parent company itself.

Investor-owned utilities continue to merge, forming larger and larger holding companies. The local investor-owned utility can be bought by another utility holding company or other business or by a consortium of private investors. The new owners may be headquartered across the country or the world. The enormous salaries, costly stock options, and golden parachutes awarded the CEOs of private utilities (unheard of in public power communities) also become a factor when mergers take place. Customers of investor-owned utilities have virtually no say in these management decisions.

MYTH

"What we're talking about is a city participating with venture capitalists in a risky venture capital move... If Edison, as a public company, does that, the shareholders take the risk. But with a city utility, you're risking taxpayer money."

Charley Wilson, Southern California Edison.



"In our view, another key strength of public power is its focus on providing low-cost power to customers. We think this tends to make municipal utilities more risk-averse and less likely to put capital in danger through diversification into unregulated business ventures such as telecommunications or merchant generation plants."

Standard & Poor's, "Regulatory Uncertainty and a Tepid Recovery Could Weaken the U.S. Public Power Sector's Credit Quality," February 16, 2011.

Myth #9

The city can't guarantee rates will be lower by forming a public power utility.



Fact:

No utility can guarantee the future, but public power utilities have a long record of keeping rates as low as possible. And experience shows that communities that have formed new public power utilities have been able to offer lower rates, among other benefits, to local residents and businesses. For some, the savings have been substantial.

A feasibility study by a qualified consultant can help determine reasonable estimates of how much an individual community could save on electric rates by forming a public power utility. The consultant examines the factors (wholesale power costs, system acquisition costs, etc.) that help determine the short- and long-term savings that are possible with public ownership. These savings can be passed on to customers in the form of lower rates.

Many communities find it worthwhile to make the change because they determine that public power can deliver responsive, reliable electric service at the most reasonable rates. Customers pay for the cost of utility operations through their electric bills; this is true whether service is provided by a public power utility or by an investor-owned

or cooperative utility. In either case, the utility sets rates to cover its costs. But through public ownership of the utility, the customer-owners have greater control over costs, prices and service. In addition, since a public power utility is directly accountable to the people it serves rather than to stockholders, a public power utility's cost of operation does not include paying profits to stockholders.

When a new public power utility forms and puts a premium on keeping rates affordable, the benefits are not just short-term savings. For example, after forming their community-owned utilities 15 and 35 years ago, Hermiston, Oregon, and Massena, New York, have kept rates significantly lower than the investor-owned utilities that formerly served their towns.

Hermiston Energy Services (HES) in Oregon began operations in 2001 after acquiring its electric distribution system from PacifiCorp. HES reduced customers' rates in its first year of operation, and the utility's average rates remain below the average rates that PacifiCorp charges its customers in Oregon. U.S. Energy Information Administration data show that in 2014 PacifiCorp's average revenue per kilowatt-hour (kWh) from its residential customers in Oregon was 59 percent higher than the HES average residential rate (11.09 cents per kWh compared to 6.97 cents per kWh). Similarly, PacifiCorp's average rate charged to commercial customers was 40 percent higher than the HES average commercial rate (9.08 cents per kWh compared to 6.49 cents per kWh).

The Massena Electric Department, formed in New York in 1981, immediately reduced electricity rates by more than 20 percent below those charged by Niagara Mohawk, the investor-owned utility that had previously served Massena customers. Massena has kept its rates low while Niagara Mohawk's [now National Grid, since 2000] rates have increased dramatically. While we expect rates to increase over time due to inflation and increased power supply costs, Massena's rates have increased much less than those charged by the city's former utility.

Since 1990, Massena's residential rates have risen from 4.6 cents per kWh to 6.85 cents per kWh, while Niagara Mohawk/National Grid's average residential rates increased from 8.9 cents per kWh to 15.85 cents per kWh—a 78 percent increase. Average rate comparisons for the two utilities' commercial and industrial customer classes are similar. (Massena's average rates in 2014 were 7.74 cents per kWh for commercial customers and 5.8 cents per kWh for industrial customers, while National Grid's average rates were 13.33 cents for commercial customers and 8.65 cents per kWh for industrial customers).³¹

“There's no way to know what the city would do with rates, and they would no longer be under review by an oversight authority such as the PUC. There is no evidence rates would drop with the implementation of the municipal utility district.”

Millersburg [Oregon] Residents for a Responsible Government, 2015.

MYTH

Myth #10

Public power utilities cannot buy or produce power cheaper than larger utilities.



Fact:

There is no reason to believe that new public power utilities would not have access to economically priced sources of power. More than 2,000 public power utilities across the country take care of the power supply needs of their customers every day. When the community owns and operates an electric utility, it has options and choices in power supply as in other areas of operations.

Public power utilities that do not own power plants purchase wholesale electricity and transmission services through contracts with other utilities, power marketers, or merchant generator companies.

Hundreds of public power utilities participate in joint action power supply agencies to gain economies of scale in wholesale supply that small municipal utilities might otherwise find unattainable. Joint action agencies obtain power supply for their member public power utilities through agency ownership of power plants or by purchasing power on the wholesale market.

Joint action is an option for most new public power utilities. For example, in 2004 the town of Huron, Ohio, established a public power utility to serve new developments. Huron

³¹ Energy Information Administration 2016, Forms EIA-861 schedules 4A & 4D, and EIA-861S, “Annual Electric Utility Report” 2014 data.

became a member of American Municipal Power, a joint action agency that provides power and other services to public power utilities in Ohio and surrounding states.

Some public power utilities build generating facilities to serve their load. Corona Municipal Electric Utility in California began operations in 2001, serving direct access customers under California's retail choice law and serving customers in newly developed areas of the city. In 2005, Corona completed construction of a 32-megawatt gas-fired power plant. The city benefits by having its own source of power supply, and it also uses excess heat from the plant to solidify bio-waste at the city's wastewater facility, thereby reducing the cost of transporting the waste.

A strategy mixing both plant ownership and wholesale purchases allows many cities to hedge risks and benchmark one source against another to achieve cost, reliability, and social and environmental benefits.

Another way to hedge risks is to diversify power supply, for example, by building a diverse portfolio of energy sources, counterparties to contracts, and length of contracts. These are the same strategies used by private utilities, which face the same fluctuations in the cost of energy.



"Fluctuations in the cost of energy will leave Santa Maria ratepayers at the mercy of the market. And that would quickly translate into higher energy costs."

"Municipalization Hurts Taxpayers," Santa Barbara County Taxpayers Association, March 5, 2005.

Myth #11

Public power rates are only lower because of tax-exempt financing and access to federal hydro power.



Fact:

Investor-owned utilities often falsely charge that public power rates are only lower due to tax-exempt financing and preferential access to federal hydro power. However these factors explain only part of public power's rate advantage. Other important factors are public power's not-for-profit status and its local presence and local control.

While there are restrictions on local government's use of tax-exempt financing to buy privately owned assets, feasibility studies take these financing costs into account. In addition, with today's low interest rates, the difference between tax-exempt and taxable financing rates is relatively small. In most cases, forming a public power utility still makes economic sense, even with the use of taxable bonds. Going forward, the new public power utility will be able to use tax-exempt bonds for new investments in infrastructure and other long-term capital expenses.

Some new public power utilities may be eligible to receive hydro power allocations. For example, the Jefferson County Public Utility District in Washington has been providing low-cost hydro power to county residents since it began operating in 2013, thanks to an allocation from the federal Bonneville Power Administration.

While a federal hydro power allocation can be beneficial, it is not essential in order for new municipally owned utilities to be cost-effective. Again, a thorough study by a qualified consultant can examine these issues and provide the needed economic analysis.



"People confuse the fact that existing municipal utilities have a cost advantage because they don't pay taxes and they have access to cheap federal power," [Pacific Gas & Electric vice president] Richard continued... "Well, guess what, you cannot use tax-exempt financing to condemn property, and there's no more cheap federal power because it's all been sopped up."

"Cities charting paths to energy independence," *Greenwire*, May 2005.

Myth #12

The city would lack the money and expertise to operate a successful utility.



Fact:

Public power utilities obtain the revenues needed to pay for the utility's operating expenses through their electric rates, just as private utilities do. They purchase trucks and equipment from the same suppliers as other utilities, and they recruit managers and other employees from the same pool of qualified electricity industry professionals as investor-owned utilities. In fact, many public power CEOs and other management employees began their careers working in the distribution or power supply departments of investor-owned and cooperative utilities.

Some cities outsource the operation of their new public power utility in the early years of operation. They contract with an experienced electricity provider to operate and manage the utility. The electricity provider is accountable to city officials for its performance. Although this is a viable option for the city to consider, outsourcing is not essential.

Many cities already have experience owning and maintaining a water, sewer or natural gas utility. A new municipal electric utility can combine billing, meter reading, call centers, and other functions with those already offered by the city for other services.

Cities have only to look at the existing public power utilities—more than 2,000 of them nationwide—to learn how they manage their operations.

MYTH

"It is doubtful the city will have the money and the expertise to hire and manage skilled line crews, buy and maintain a fleet of special trucks, dispatch enough employees to rapidly repair downed lines after a major storm, provide a call center and billing service, along with a control center and meter readers. It's a big, tough job."

Alliant Energy.



"There's even a near-perfect model of how Connecticut Light & Power could have done the job better. Norwich, Conn., a city of 40,000, has owned its own electric utility, as well as those for sewage, gas and water, for 107 years. Norwich Public Utilities' customers pay, on average, a bit less than Connecticut Light & Power's. Yet, after this past weekend's snow dump, power was out for only about 450 of its 22,000 customers—and for no more than an hour. As of Thursday morning, nearly half a million Connecticut Light & Power customers were still waiting for the lights to go on."

"The Troubling Connecticut Power Failure,"
The New York Times, November 3, 2011.

Myth #13

Forming a public power utility can take 10 years.



Fact:

Ten years is an exaggeration—the average is four to six years. Some public power utilities have been formed in a year or two, and in some of these cases the price was negotiated amicably. A few of the most hard-fought municipalization campaigns took eight to 10 years to complete.

Of course, because communities that establish public power utilities sometimes have a long history of dissatisfaction with the incumbent utility's rates or service, they may have already spent many years fighting for electric service that meets their needs. For dozens of communities across the country, local control and ownership is the goal—and the

benefits are worth a considerable investment of time and money.

When it does take years, it is because the private utility continually wages a fierce fight. Las Cruces, New Mexico, and Massena, New York, each spent about seven years battling legal hurdles erected by the incumbent utilities. Massena saved its customers \$25 million in the first 10 years of operation and millions more since. Las Cruces did not form a city-owned electric utility, but it did win important concessions with a short-term franchise, a substantial settlement payment, and the option to purchase electric distribution facilities in the future.

When forming a public power utility, an initial feasibility study identifies projected costs and retail rates if the city were to remain with its current supplier and power supply alternatives for the community. As the process unfolds over several years, it may be appropriate to update cost estimates as wholesale power and other costs or situations change.

MYTH

“The takeover process typically takes years. By the time all studies are completed, legislation is passed, voter approval is obtained and outstanding lawsuits are settled, as many as 10 years may have passed. During this period, circumstances change and the original impetus for the takeover may no longer be a factor.”

Edison Electric Institute.

a new public power utility that provides real benefits to consumers.

For example, South San Joaquin Irrigation District has persevered in its effort to acquire Pacific Gas & Electric’s distribution system, despite disapproval of its initial application to the San Joaquin Local Agency Formation Commission (LAFCo), an adverse court decision, and opposition from PG&E. More recently, the news has been good. The district’s board voted to proceed with the plan and the expert study required by the LAFCo concluded that SSJID’s plan to acquire the electric distribution system and reduce rates by 15 percent was feasible and financially viable.

Myth #14

If the incumbent opposes the formation of a new utility, the initiative will fail.



Fact:

There have been many successful initiatives to form new public power utilities, including 20 new utilities formed in the last 15 years, and 50 in the last 30 years. The end result is often a community that has achieved substantial benefits, including lower rates and better service.

Many more communities are studying the public power option and actively working toward creating a public power utility.

Many public power ballot initiatives have passed by wide margins. For example, residents of Winter Park, Florida, voted overwhelmingly (69 to 31 percent) authorizing the city to issue bonds to buy the local distribution facilities of the incumbent investor-owned utility in 2003. In 2008, citizens of Jefferson County, Washington, voted to authorize the county’s public utility district to provide electric service in the county. And in 2011, citizens in Boulder, Colorado, voted to authorize creation of a municipal electric utility if customer rates would be the same as the investor-owned utility’s rates at the startup of the municipal utility.

In other cases, the city’s governing body has approved the purchase of the local distribution facilities. In 2009, the board of the South San Joaquin Irrigation District (SSJID) in California unanimously voted to proceed with a plan to provide retail electricity service in the district.

While opposition from the incumbent utility can increase the costs of a municipalization effort—in terms of time, money or political capital—it is still possible to establish

Several new public power utilities have avoided court battles by establishing municipal electric utilities that serve only new developments or industrial parks. Other cities have begun by establishing a municipal utility to take on various money-saving endeavors. These include community energy conservation projects, acquiring and operating the streetlighting system and, where state law allows, serving as an aggregator of customer accounts. Several states, including Ohio, Illinois, Massachusetts and California, allow municipal governments to aggregate residential and business electric utility customers, subject to approval by referendum. In Ohio, 324 cities, counties and townships have chosen electric aggregation since the state enacted legislation allowing it in 2001.³²

In cases where municipalization initiatives do not result in the formation of a new public power utility, those initiatives should not be considered “failures.” Often, the process of evaluating and considering the public power option will incentivize the incumbent utility to offer favorable concessions to the community, leading the community to choose to end the initiative. These concessions would not be achieved without the competitive pressure that the public power option brings, meaning these so-called “failed” initiatives are actually successful in their primary purpose of achieving electric utility service that meets the community’s needs.

MYTH

“In the last several decades, nearly all attempts at forming an electric municipal system have failed when the takeover was contested by the incumbent utility. The causes of failure run from financial difficulties to lack of popular support.”

UtiliPoint International Inc., “Feasibility Considerations for the Potential Public Utility District’s Takeover of Puget Sound Energy’s Electric Utility Business within Skagit County,” June 2008.

³²Public Utilities Commission of Ohio, Regulated company list for Electric – Government aggregators, as of March 2016.

Myth #15

More electric systems turn private than public



Fact:

Changes in electric utility ownership are relatively rare. Over the last 15 years, 20 new public power utilities were formed. Seventeen communities sold their public power utilities (mostly to neighboring rural electric cooperatives, which are also owned by their consumers).

With more than 3,000 electric utilities operating nationwide, there is no statistical trend toward municipalization or privatization.

While industry ownership and sector shares are relatively stable, communities across the country continue to show interest in public power. The local officials spearheading these efforts know it will take considerable time, money and effort, but they are aware of the long-lasting benefits of public power in communities that succeed.

MYTH

“No Colorado city or town has municipalized its electric system for nearly 40 years. It is an extremely rare event. The same is true nationwide. In fact, most transfers occur when a city sells its electric utility to the surrounding private company.”

UtiliPoint rebuttal to Boulder's Feasibility Study, August 2011.



Successful Public Power Campaigns

Despite all the hurdles, many initiatives to form a new public power utility succeed. When a community decides to take control of its energy future and examines public power, it can deliver long-term benefits to its citizens.

Learn from the experiences of other communities that have gone through the process, and the elements that are necessary to lead a successful public power campaign.

Keys to Success

While every municipalization campaign is different, initiatives that result in formation of a new public power utility generally share these elements:

- The city has the legal basis to form the public power system;
- An economic feasibility study shows there would be sufficient savings from the public power operation when compared with continued service from the incumbent utility;
- The community has the political will to see the project through;
- Policymakers and citizens are well informed and understand the benefits of public power;
- The business community or several of its most influential leaders support the effort;
- The city can put together the financial resources for each phase in the process of starting the utility, possibly with the backing of an interested party such as a local industry or a potential attractive wholesale power supplier; and

- The cooperation of the incumbent utility, or failing that, the community resolve to do what it takes to establish the public power utility.

Keeping all key players informed throughout the process is vital. Make citizen education a priority. Involve local businesses and influential members of the community in the conversation. Start early to explain why your community should consider the public power option and do so in a way that resonates with local residents and businesses. Be transparent, and keep the media informed of your goals and process.

Rocking the Boat

You do not have to be completely sold on forming a new public power utility before starting a conversation. Conducting a feasibility study with a qualified, experienced firm will help answer any questions or doubts you may have. Sometimes just going through the evaluation process can improve your community's situation. Public power initiatives often bear fruit even when they do not result in the creation of new utilities, so do not be afraid to rock the boat.

Many communities drop efforts to form a public power utility because the incumbent utility responds to the competitive threat and offers valuable concessions. These may include lower rates, improved service, and higher standards for reliability. Importantly, citizens see that they have negotiating power and alternatives to the incumbent utility.

There are many examples of public power initiatives that did not result in the formation of a new utility, but

nonetheless brought important benefits to the community. Here are a few:



Casselberry wins “favored” status

After two years of failing to negotiate a renewal of its franchise agreement with Progress Energy, the City Council of Casselberry, Florida, voted to begin buyout proceedings in April 2013. The investor-owned utility finally was motivated to make a better deal. In August 2013, the city accepted a new agreement that included a 6 percent franchise fee (the highest in the state); reimbursement of \$1.75 million in expenses incurred while the franchise agreement was in dispute; and a “favored nation” clause entitling the city to a better deal if the utility gives a better one to any other municipality. Casselberry also secured a mandate for a reliability study every five years to evaluate the utility’s service. Progress Energy is required to rectify any identified reliability problems.



Wichita gets rate relief

Faced with rate hikes on top of already high electric rates, Wichita, Kansas, began looking at the public power option. In February 2001, the city released a municipalization feasibility study showing it could save as much as \$654 million in electricity costs over the next 20 years. The feasibility study gave Wichita the leverage it needed: six months later, \$28 million in electric rate relief was headed for Wichita. The rate cut ordered by the Kansas Corporation Commission gave electric utility customers in the city about 85 percent of the rate relief that a consultant’s study said the city could achieve if it were to take over the power system.



Minneapolis scores two clean energy partners

Minneapolis wanted the two investor-owned utilities serving the city, Xcel and CenterPoint, to support the city’s clean energy goals. With both franchise agreements due to expire at the end of 2014, community leaders recognized that to get the investor-owned utilities on board, “the city [was] going to need some leverage and some real power,” according to John Farrell, leader of the group Minneapolis Energy Options. “We [did not] think [the city was] going to have any real power unless they start talking about municipalization.”³³ The strategy worked.

With the leverage provided by evaluating its public power option, Minneapolis forged a strategic partnership with its two incumbent utilities to reduce greenhouse gas emissions 30 percent by 2025, and 80 percent by 2050.

Successful Public Power Initiatives

A total of 50 public power utilities were formed in the last 30 years. Here is a brief summary of how five of these utilities were formed.

JEFFERSON COUNTY, WASHINGTON (2013)	18,000 customers
WINTER PARK, FLORIDA (2005)	13,750 customers
HERMISTON, OREGON (2001)	4,900 customers
LONG ISLAND POWER AUTHORITY (1998)	1,035,000 customers
CLYDE, OHIO, LIGHT AND POWER (1989)	2,600 customers



Jefferson County negotiates a purchase of the electric system

In November 2008, Jefferson County, Washington, voted 54-46 percent in favor of authorizing the public utility district to become an electric utility. Under state law, public utility districts have the right to use eminent domain to acquire private electric utilities, but Jefferson County’s PUD commissioners were determined to try to negotiate a purchase first, even though Puget Sound Energy was opposed to selling the system.

The first meeting after the vote brought together Puget Sound President and CEO Steve Reynolds and PUD Commissioner Wayne King. When Reynolds started to discuss the cost of a potential condemnation suit, King responded “We had hoped we could sit down and talk about this over a cup of coffee.”

This initial conversation set the tone for the negotiations; a year later, the two sides agreed to a purchase price of \$103 million for the electric system in east Jefferson County. The commission felt the negotiated terms would provide customers a smoother, more efficient and potentially lower transfer cost than if they pursued condemnation.

³³ “Leverage: How a municipalization threat created a unique energy partnership in Minneapolis,” Utility Dive, October 23, 2014.

The new public power utility is bringing more jobs to the county. The PUD already employed eight people to operate its water and sewer systems; operating the electric utility requires another 20-30 full-time employees, including lineworkers, engineers, and office staff. The PUD is committed to running the new utility strictly with its own employees.

Commissioner Barney Burke said, “One thing almost everyone in Jefferson County can agree on is the need for more family-wage jobs.” The new utility jobs boost the local economy by adding such jobs. This economic advantage is boosted by the PUD’s commitment to purchase supplies locally whenever possible. Local hiring also means faster response times in case of an outage, as lineworkers will no longer be based in another county.³⁴



Winter Park chooses to focus on reliability

Winter Park, Florida, formed a public power utility in 2005 after a six-year struggle to take over the electric distribution system. Winter Park’s effort was sparked by persistent problems with Florida Power Corp. City leaders were barraged with complaints about outages. The private utility’s franchise was nearing expiration. The franchise agreement included a clause allowing the city to buy the distribution system at the end of that period. In 2003, residents turned out in droves and voted overwhelmingly—by 69 percent—in favor of the city’s plan to form a municipal electric utility.

The utility began operations in 2005. The city contracted with ENCO Utility Services Inc. of California to operate the utility under a 12-year contract and committed to use all of the revenues from its electricity sales—except for a contribution it has agreed to make to the city’s general fund—for capital improvements. The city committed to undertake a strong program to improve the reliability of electric service, in part by putting a significant portion of the power lines underground.



Hermiston takes control to improve rates, customer service

Hermiston, Oregon, formed a municipal utility in 2001 following a four-year effort that began after the investor-owned utility closed its local customer service

office and citizens experienced a decline in service. Citizens approved a plan to take over the electric distribution system. The investor-owned utility fought Hermiston’s condemnation proceeding, but a court ruled in favor of the city. Subsequently, the utility agreed to sell the system to the city for \$8 million, about twice book value.

The switchover on October 1, 2001, went smoothly for customers and the local newspaper, East Oregonian, which had opposed the formation of the city-owned utility, reversed its stance after the new utility started operations.

Hermiston Energy Services reduced customers’ rates in its first year of operation and the utility’s average rates for both residential and commercial customers remain well below the average rates that its former investor-owned utility charges its customers in Oregon.



Long Island forms one of the largest public power utilities

Long Island Power Authority (LIPA) replaced the investor-owned Long Island Lighting Co. in Nassau and Suffolk counties in New York and now serves well over a million customers. In May 1998, after LIPA purchased the investor-owned utility’s transmission and distribution system, it reduced electric rates across the board by an average of 20 percent.

In addition, LIPA put special attention on the distribution system’s safety and reliability. Employee morale improved dramatically with LIPA’s fresh start due to its nonprofit, public-service outlook and its new emphasis on safety.

LIPA has a special relationship with its business and industrial customers, taking an active role in business and civic organizations. LIPA provides qualified businesses with the opportunity to obtain rate incentives and energy efficiency audits. More than 300 companies have taken advantage of LIPA’s economic development program, creating nearly 50,000 jobs.



Clyde constructs its own distribution system

When Clyde, Ohio, decided to pursue formation of a municipal utility, the initiative was entirely supported by Whirlpool, the town’s largest employer. Citizens of the town of 6,000 voted “yes” in a

³⁴ “Jefferson PUD Electric Service Backgrounder,” May 3, 2010; and “Jefferson PUD Frequently Asked Questions,” January 16, 2012.

referendum and the town borrowed \$11 million to install its own poles, wires, transformers and electric meters to compete head-on with the incumbent utility, Toledo Edison.

Five years after the municipal utility began operations, its electric rates were 30 percent lower than those of the investor-owned utility, and most people in town (except Toledo Edison's employees) had switched to public power. The town succeeded in doing exactly what Toledo Edison said it never could: it created a fully functioning public power utility with significantly lower rates.

Clyde's success has also benefited its neighboring communities that are still served by Toledo Edison. Losing Clyde's customer base motivated the investor-owned utility to do some belt-tightening to ensure it retained its other customers. As cited in 1994 comments to the Federal Energy Regulatory Commission:

"Since losing Clyde [Ohio] retail load, Toledo Edison has entered into dozens of new incentive 'contract' arrangements with many of its industrial, commercial, schools and other governmental customers, providing rate discounts to retain load and encourage new load growth. Since losing Clyde, Toledo Edison has also cut its dividend, cut its internal costs, frozen executive salaries, foregone pre-approved retail rate increases, frozen base rates, implemented new marketing programs, reduced debt, written down or off assets, and announced a general creed that it would do whatever possible to avoid ever again losing a customer due to high rates. These are the appropriate ways to respond to competition..."³⁵

³⁵ FERC Docket RM 94-7-000



2451 Crystal Drive
Suite 1000
Arlington, VA 22202-4804
PublicPower.org

Attachment B



What is Public Power?

More than 2,000 cities and towns in the United States light up their homes, businesses and streets with “public power—electricity that comes from a community-owned and -operated utility.

Public power utilities are like our public schools and libraries: a division of local government, owned by the community, run by boards of local officials accountable to the citizens. Most public power utilities are owned by cities and towns, but many are owned by counties, public utility districts, and even states.

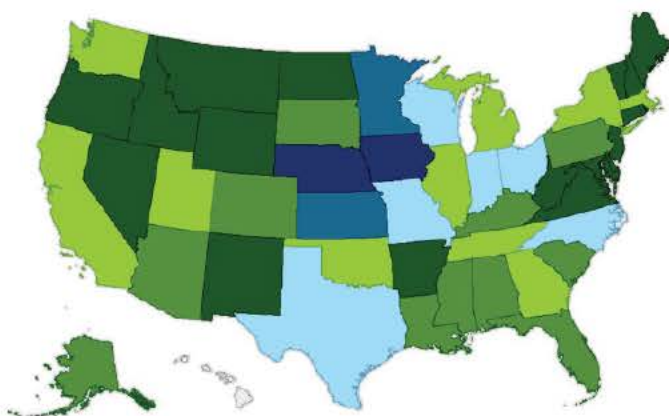
While each public power utility is different, reflecting its hometown characteristics and values, all have a common purpose: providing customers in the community with safe, reliable, not-for-profit electricity at a reasonable price while protecting the environment.

Public power today is an important contemporary American institution. From small towns to big cities, wherever public power exists, it is an expression of the American ideal of local people working together to meet local needs. It is a manifestation of local control.



A public power utility:

- Brings **electricity** to homes and businesses
- May **generate** and/or **buy** power
- Is a **not-for-profit** entity
- Is owned by the **community**
- Is usually a division of **local government**
- Is **transparent** (subject to sunshine laws)
- Involves **citizens** in decision-making



Public Power Utilities



Who does public power serve?

- More than 2,000 community-owned electric utilities serve more than 48 million people.¹
- Public power utilities serve small communities as well as large cities, including Los Angeles, San Antonio, Nashville, Orlando and Seattle.
- Public power serves customers in 49 states—all but Hawaii—and five U.S. territories.
- Three million businesses receive their power from a publicly owned electric utility.

¹ Based on U.S. Census Bureau statistics of 2.54 people per household/meter.

What are the other utility ownership structures?

There are three types of electric utilities: public power, rural electric cooperatives and investor-owned utilities.

Three types of Electric Utilities

	 PUBLIC POWER UTILITIES	 RURAL ELECTRIC COOPERATIVES	 INVESTOR-OWNED UTILITIES
BUSINESS MODEL	✓ Not for profit, community-owned	✓ Not for profit, member-owned	✓ For profit, share-holder owned
REGULATED BY STATE PUBLIC UTILITY COMMISSION	✓ Very limited instances	✓ Some	✓ All
GOVERNED BY	✓ Elected/appointed boards—mayors, city council members, citizens	✓ Member-elected boards	✓ Private boards
FINANCIAL CONTRIBUTION TO LOCAL GOVERNMENT	✓ Exempt from most taxes; instead make payments in lieu of taxes or transfers to the general fund	✓ May neither pay taxes nor other contributions to local government	✓ Pay taxes to local government

Public power utilities are entities of local or state government. The public power business model is based on public ownership and local control, a not-for-profit motive, and focus on its customers. Because they are public entities, public power utilities do not pay federal income taxes or most state taxes, but they support the local government through payments in lieu of taxes or transfers to the general fund.

Electric cooperatives are private, not-for-profit businesses. They are owned by their consumer-members, who elect governing board members and are required to return any excess revenue (above what is needed for operating costs) to their members. The local government and

broader community generally have no involvement in the governance of the utility. Most electric cooperatives are exempt from federal income tax, and may pay neither taxes nor payments-in-lieu-of-taxes to support the local government.

Investor-owned utilities are private, for-profit enterprises. They are owned by investors or shareholders, who generally are not customers of the utility or members of the community, and their primary motivation is to increase the value to shareholders. As private businesses, investor-owned utilities do pay taxes to local governments, but customers have no voice in the operation of the utility.



1 IN **7** ELECTRICITY CUSTOMERS IN THE U.S. ARE SERVED BY **PUBLIC POWER**

What is the Public Power Business Model?

While each community-owned utility is unique, all public power utilities share five basic tenets that comprise the public power business model:

Public Ownership

Public power utilities are owned by and operated for the citizens they serve and therefore are accountable to their local owners.

Local Control

Local, independent regulation and governance gives utility policymakers greater agility in decision-making and protects the long-term viability of the utility, while permitting customer involvement in the process. This ensures decisions reflect the values of the community.

Nonprofit Operations

Community-owned electric utilities serve only the interest of their customers, avoiding conflicts between the interests of shareholders and customers because they are one and the same. Excess revenues stay in the local community and are invested in system improvements and utility reserves, shared with the local government, or returned to the customer in the form of lower rates. They are not distributed among outside shareholders, as they are in the case of for-profit utilities.

Low-Cost Structure

Public power utilities have access to lower cost tax-exempt financing and generally have stronger credit ratings than privately owned utilities. Publicly owned utilities may have more efficient operations and access to less expensive federal hydro power.

Customer Focused

Community-owned electric utilities are dedicated to the singular mission of delivering the highest level of service and value to their customer-owners for the long term. Public power utilities focus on the specific needs of customers, including high reliability and lower rates, as well as local priorities, which may include new technologies, environmental concerns or advanced communications.

5 ELEMENTS OF PUBLIC POWER BUSINESS MODEL



PUBLIC OWNERSHIP



LOCAL CONTROL



NONPROFIT OPERATIONS



LOW-COST STRUCTURE



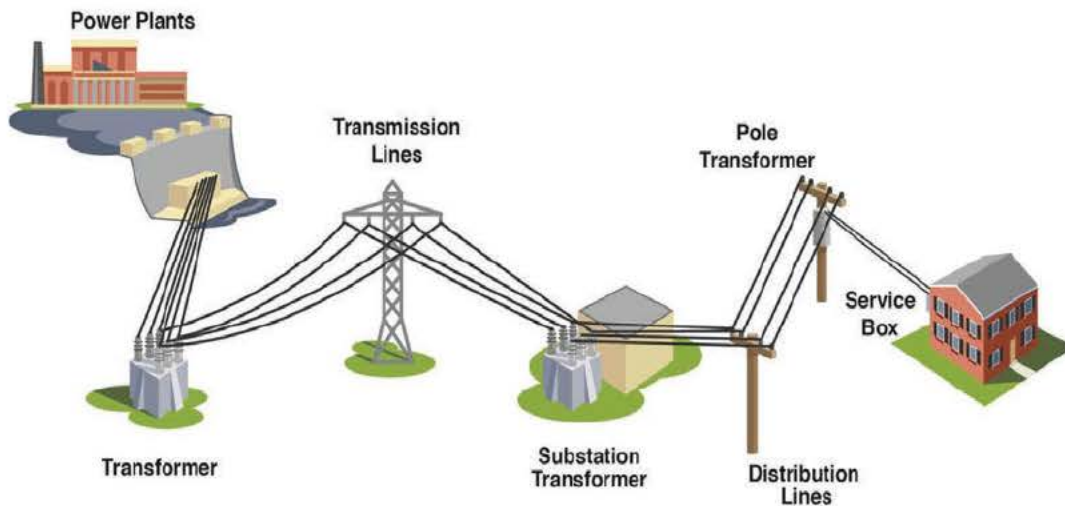
CUSTOMER FOCUSED

Who is in charge of public power utilities?

Public power utilities are owned and accountable to the people they serve. Citizens have a direct and powerful voice in utility decisions and policies, both at the ballot box and in open meetings where business is conducted.

The governance structure for each utility varies. Some are governed by the city council; others are controlled by an independent utility board whose members may be elected or appointed by the mayor and city council.

Where does the power come from?



Electric utilities have three core functions:

- Generation of electricity;
- Transmission of electricity; and
- Distribution of electricity to customers.

Most public power utilities are distribution-only, meaning they do not own and operate their own power plants and bulk transmission. Instead, these utilities purchase power and transmission services at wholesale to distribute to their customers. Many distribution-only utilities purchase power and transmission from joint action agencies.

Together, public power utilities and joint action agencies generate two-thirds of the electricity they distribute to their customers. The rest of the electricity they distribute is purchased from investor-owned and cooperative utilities, independent generators and federal power agencies.

Overall, public power utilities and joint action agencies own 10 percent of electricity generation and transmission in the United States, and 16 percent of all electricity distribution.

Public Power's Share of the U.S. Electricity Market



10%

OF GENERATION



10%

OF TRANSMISSION



16%

OF DISTRIBUTION



What is a Joint Action Agency?

Joint action agencies are membership organizations formed by groups of local community-owned utilities. These agencies, often authorized by state legislation, are governed by boards comprised of member representatives. The agencies buy or generate power and provide other services for their constituent utilities. With the combined leverage and purchasing power they get from representing multiple utilities, these agencies give their members the advantage of economies of scale and allow public power utilities to exercise strength in numbers.

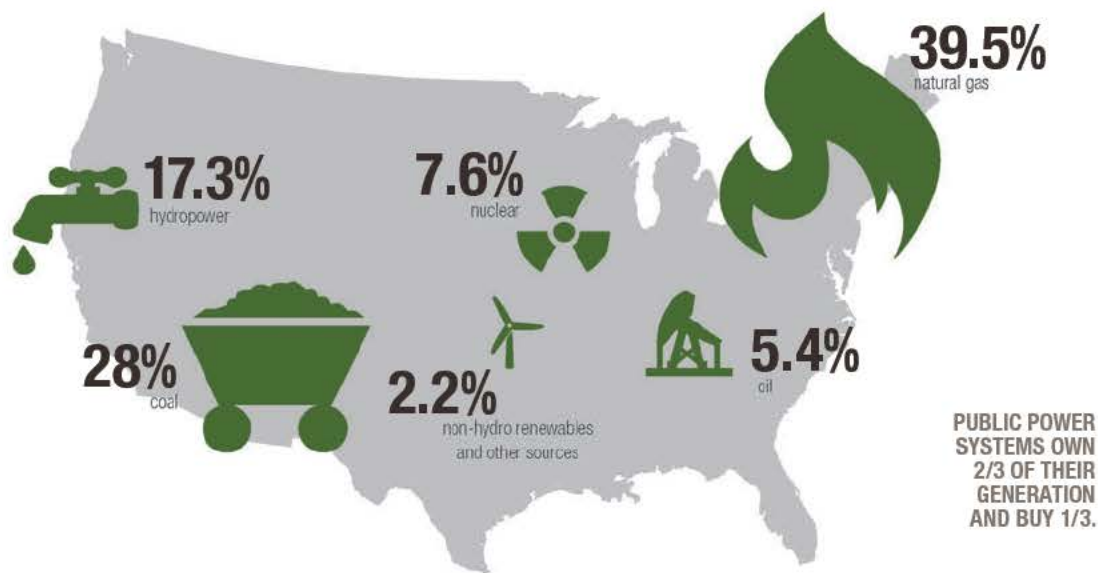
Energy Resources

Electricity is created from the conversion of a fuel or other source of energy into electrons. This process occurs on a large scale in a power plant, or on a smaller scale through distributed energy resources (e.g., solar panels on your roof).

The primary electricity generating technologies used in the United States are coal, natural gas, nuclear and hydro power. A small but growing portion of the generation portfolio comes from renewable resources, such as solar, wind, landfill methane gas, and geothermal power. Public power utilities around the country rely on all of these energy resources to varying degrees.

Each of the various generating technologies has its advantages and disadvantages, which is why having a diversified portfolio of fuels—particularly generation sources that can be relied on most of the time—is a priority for electric utilities.

Electricity used by public power is generated from²



² Energy Information Administration Form EIA-860, 2015 (2013 data).

Attachment C



2021 Statistical Report

A supplement of Public Power magazine

Rates • Generation • Sales • Capacity

PUBLIC POWER DATA SOURCE

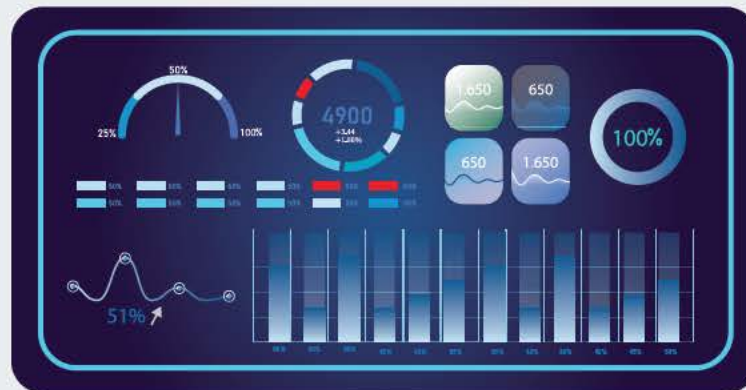
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What to Do with Utility Industry Data

Electric utilities are awash with data. Within their own operations, there's data on customer usage, costs, system reliability, system efficiency, and worker safety. Broadly across the industry, there are many metrics on electricity generation, capacity, sales, usage, reliability, and workforce characteristics.

For public power utilities, the question is rarely about if there is data, but rather how to make use of all the valuable data at their fingertips. The Public Power Statistical Report focuses on the key graphs, tables, and data visualizations that American Public Power Association members regularly draw from to inform their benchmarking or marketing efforts. Some ways that APPA and our members use the data from this report (and other reports) include to:

- Quantify and define public power's advantages.
- Benchmark rates.
- Compare a utility's generation mix with others in the region or nationally.
- Rank a utility's size and share of assets.
- Present trends and analysis to governing boards or advisory groups.

Analyzing and sharing data in these ways (and others) is a necessary and constant effort to help utilities continually improve operations, educate key stakeholders, and set meaningful targets. APPA has published this report for more than 50 years so that each of our members can more easily play a role in understanding and communicating the key aspects of how public power is distinguished from – or similar to – the rest of the electric utility industry.

While this report contains a variety of top-level data about our industry, there are many additional sources to turn to for a deeper dive. Additional detailed charts, reports, and data, such as reliability and safety measures, are available on our website and through our programs and services.

Our "Stats and Facts" webpage highlights key industry information and comparisons and links to statistical reports and documents, including the Average Revenue per Kilowatt-Hour report on every electric utility in the country.

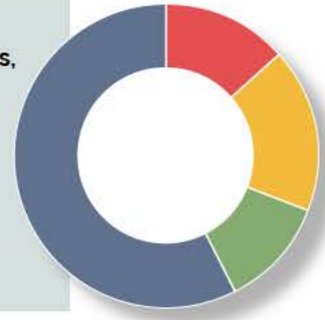
www.PublicPower.org/Public-Power/Stats-and-Facts



Our Product Store also links to other statistical reports available to members, including our report on salaries and hourly pay in publicly owned utilities, the report on financial and operating ratios of public power utilities, and subscriptions to the eReliability Tracker and eSafety Tracker services, which allow public power utilities to benchmark reliability and safety on a regional or national scale. <https://ebiz.publicpower.org/APPAEbiz/productcatalog/productdefault.aspx>

If you ever have any questions about any industry data, where to find it, and how to use it, don't hesitate to reach out to us at Statistics@PublicPower.org.

For infographics, fact sheets, and other materials with statistics you can share for public education, go to PublicPower.org and look under Members and Communication Templates



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~ Carole Hilton

Customer Service Administrator
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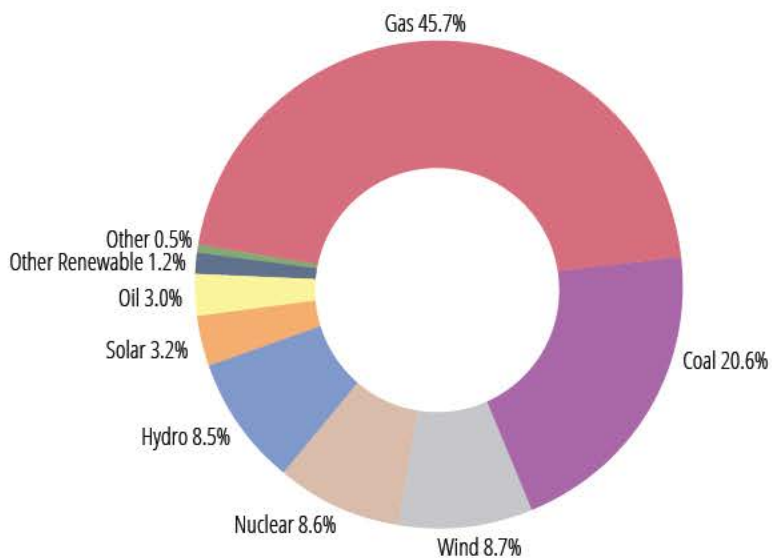
Generation

U.S. Electric Generating Capacity by Fuel Type, 2019

National

Nameplate capacity in megawatts

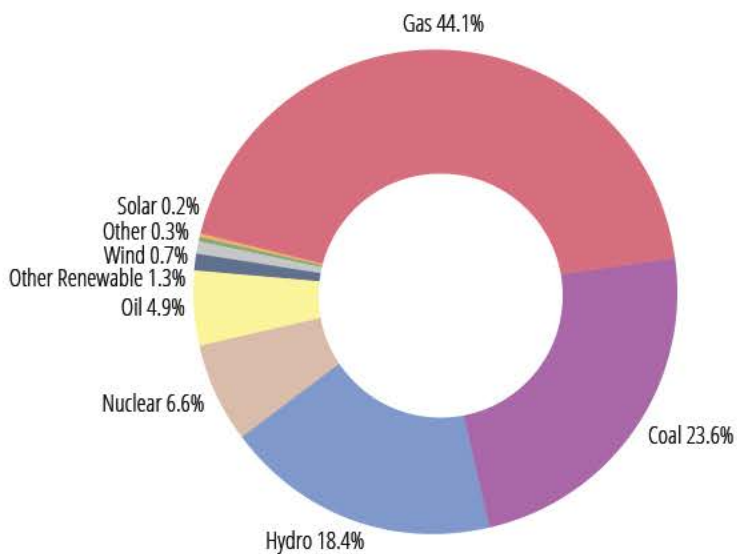
	MW	Percent of Total
Gas	547,583	45.7%
Coal	247,289	20.6%
Wind	104,334	8.7%
Nuclear	102,877	8.6%
Hydro	101,661	8.5%
Solar	37,790	3.2%
Oil	35,988	3.0%
Other Renewable	14,904	1.2%
Other	5,635	0.5%



Public Power

Nameplate capacity in megawatts. Data reflect joint ownership.

	MW	Percent of Total
Gas	53,330	44.1%
Coal	28,499	23.6%
Hydro	22,235	18.4%
Nuclear	8,027	6.6%
Oil	5,969	4.9%
Other Renewable	1,594	1.3%
Wind	809	0.7%
Other	308	0.3%
Solar	211	0.2%



Source: Energy Information Administration Form EIA-860 as of 10/31/20.

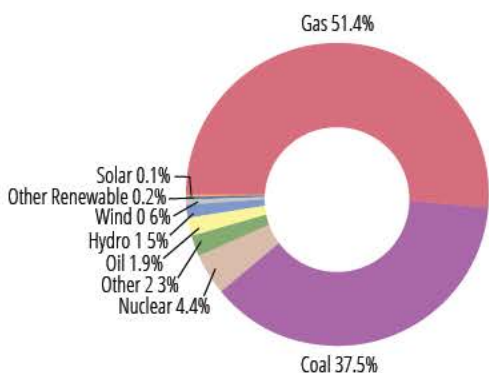
Generation

U.S. Electric Generating Capacity by Utility Type and Fuel Type, 2019

Nameplate capacity in megawatts. Data reflect joint ownership.

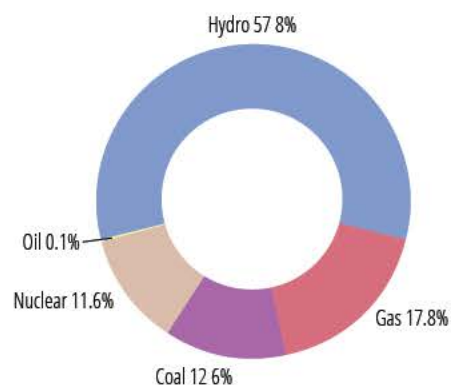
Cooperative

	MW	Percent of Total
Gas	34,566	51.4%
Coal	25,252	37.5%
Nuclear	2,929	4.4%
Other	1,555	2.3%
Oil	1,254	1.9%
Hydro	1,035	1.5%
Wind	433	0.6%
Other Renewable	165	0.2%
Solar	93	0.1%



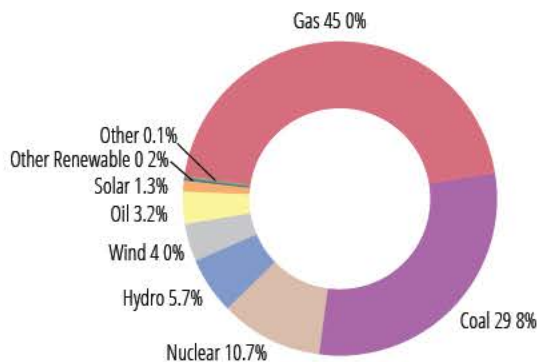
Federal

	MW	Percent of Total
Hydro	42,321	57.8%
Gas	13,015	17.8%
Coal	9,255	12.6%
Nuclear	8,475	11.6%
Oil	66	0.1%
Wind	25	0.0%
Other Renewable	23	0.0%
Solar	7	0.0%
Other	5	0.0%



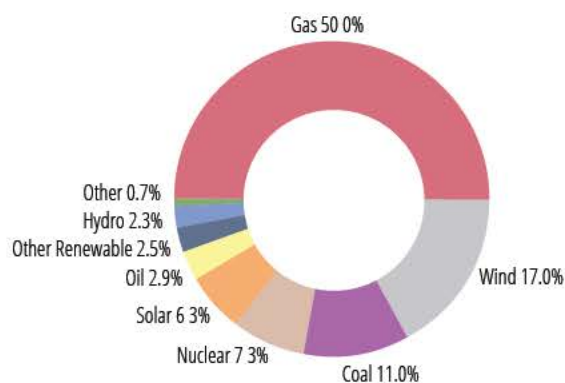
Investor-Owned

	MW	Percent of Total
Gas	194,011	45.0%
Coal	128,686	29.8%
Nuclear	46,327	10.7%
Hydro	24,558	5.7%
Wind	17,133	4.0%
Oil	13,883	3.2%
Solar	5,731	1.3%
Other Renewable	669	0.2%
Other	285	0.1%



Non-Utility Generators

	MW	Percent of Total
Gas	252,661	50.0%
Wind	85,933	17.0%
Coal	55,597	11.0%
Nuclear	37,120	7.3%
Solar	31,749	6.3%
Oil	14,817	2.9%
Other Renewable	12,452	2.5%
Hydro	11,513	2.3%
Other	3,482	0.7%



Source: Energy Information Administration Form EIA-860 as of 10/31/20.

Generation

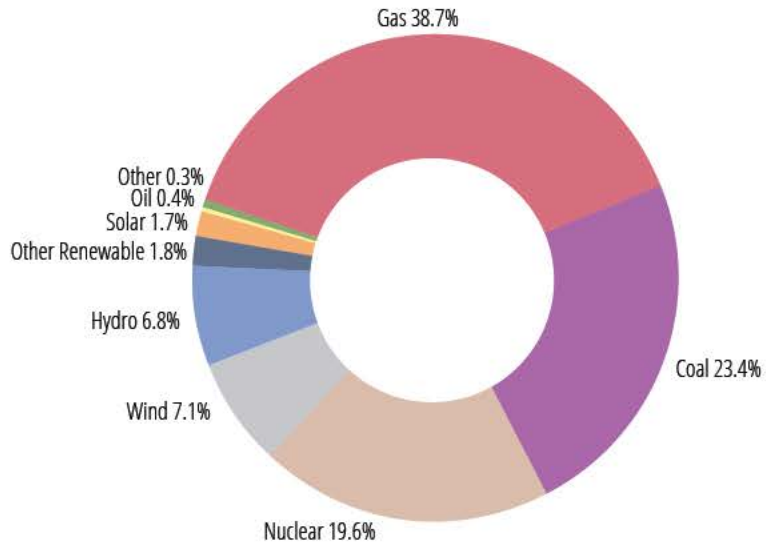
U.S. Electric Generation by Fuel Type, 2019

National

In thousands of megawatt-hours

	MWh	Percent of Total
Gas	1,598,308	38.7%
Coal	964,957	23.4%
Nuclear	809,409	19.6%
Wind	294,906	7.1%
Hydro	282,613	6.8%
Other Renewable	72,980	1.8%
Solar	71,937	1.7%
Oil	18,438	0.4%
Other	13,334	0.3%

Source: Energy Information Administration Form EIA-912, 2018 data.

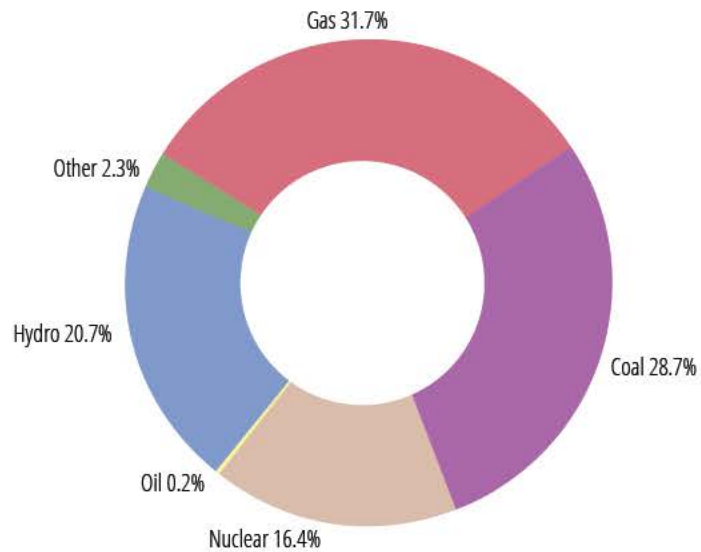


Public Power

In megawatt-hours

	MWh	Percent of Total
Gas	120,502,527	31.7%
Coal	109,169,368	28.7%
Hydro	78,612,912	20.7%
Nuclear	62,345,330	16.4%
Oil	597,534	0.2%
Other	8,875,282	2.3%

Source: Ventyx Velocity Suite, October 2020



Generation

2019 Generation by Public Power Utilities

Source: Ventyx Velocity Suite, October 2020

Census Region	Generation, in MWhs						Total
	Coal	Oil	Gas	Nuclear	Hydro	Other	
New England - Mid Atlantic	-	76,274	3,654,394	3,666,758	25,039,841	1,103,854	33,541,121
South Atlantic	19,421,449	55,166	46,573,320	21,255,400	933,303	2,772,844	91,011,482
East South Central - West South Central	24,287,127	23,582	22,462,672	12,316,246	3,381,217	29,526	62,500,370
East North Central - West North Central	35,722,214	199,898	7,652,511	6,951,600	1,344,695	1,543,300	53,414,218
Mountain	29,738,578	70,029	19,480,997	9,288,827	1,305,721	349,113	60,233,265
Pacific	-	172,585	20,678,633	8,866,499	46,608,135	3,076,645	79,402,497
Total	109,169,368	597,534	120,502,527	62,345,330	78,612,912	8,875,282	380,102,953

Census Region	States
New England	CT, MA, ME, NH, RI, VT
Mid-Atlantic	NJ, NY, PA
South Atlantic	DC, DE, FL, GA, MD, NC, SC, VA, WV
East South Central	AL, KY, MS, TN
West South Central	AR, LA, OK, TX

Census Region	States
East North Central	IL, IN, MI, OH, WI
West North Central	IA, KS, MN, MO, ND, NE, SD
Mountain	AZ, CO, ID, MT, NM, NV, UT, WY
Pacific	AK, CA, HI, OR, WA

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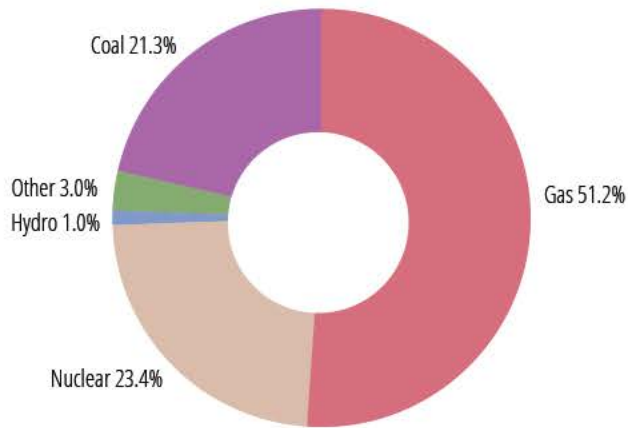
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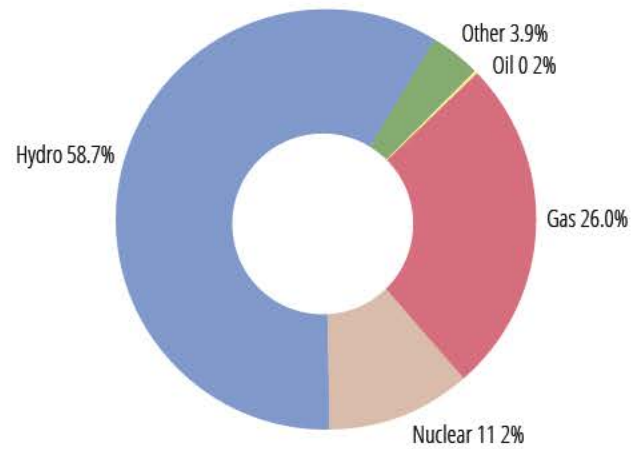
Generation

2019 Generation by Public Power Utilities, by Region

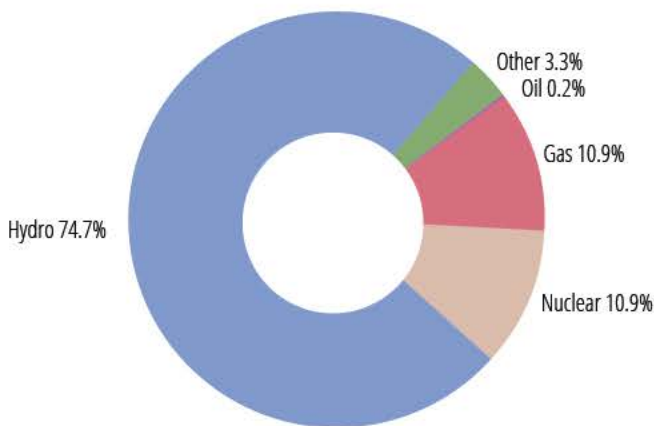
South Atlantic Region



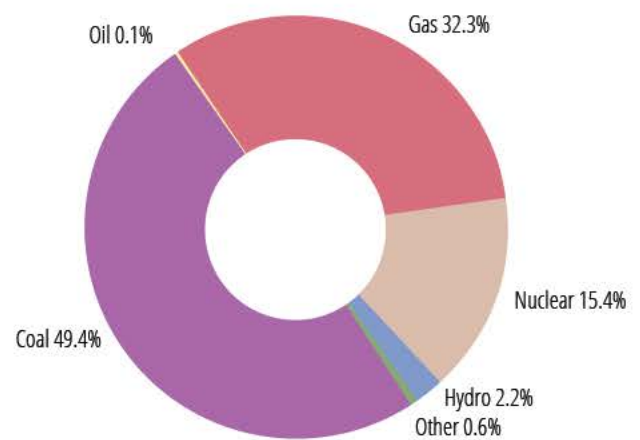
Pacific Region



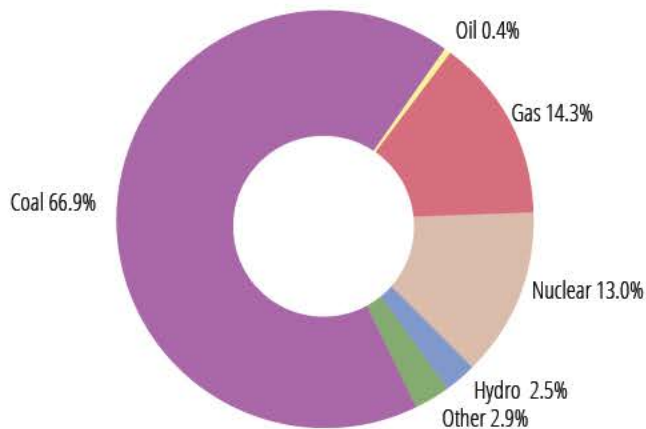
New England-Middle Atlantic Region



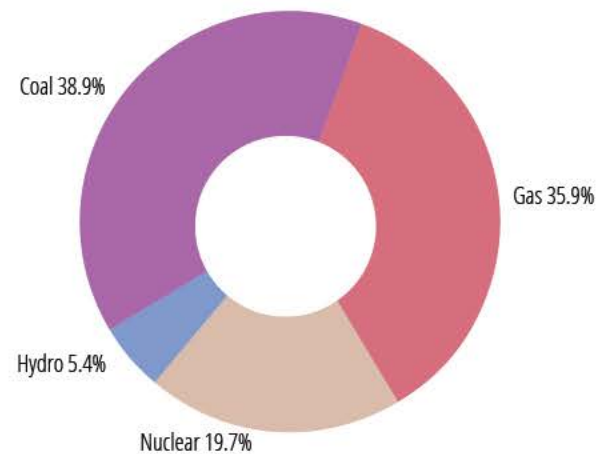
Mountain Region



East North Central- West North Central Region



East South Central-West South Central Region



Generation

Renewable Capacity by Owner Type

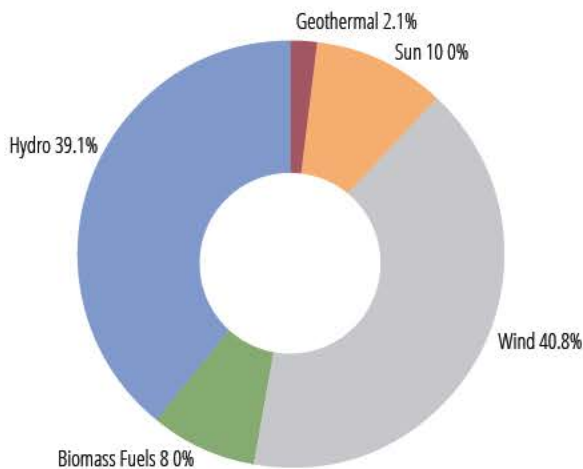
Nameplate capacity, in megawatts

	Cooperative	Federal	Investor-Owned	Public Power	Non-Utility Generators	Total
Geothermal	3.7		108.7	220.0	3,516.9	3,849.3
Sun (Photovoltaic, Thermal)	92.5	7.0	6,487.0	211.1	31,749.0	38,546.6
Wind	432.8	25.4	17,181.6	842.0	85,933.0	104,414.8
Biomass Fuels						
Agricultural Crop Byproducts					289.8	289.8
Black Liquor				106.4	4,764.2	4,870.6
Landfill Gas	115.4		17.3	316.4	1,663.0	2,112.1
Municipal Solid Waste			138.0	653.2	2,000.0	2,791.2
Other Biomass Gases		1.9		283.2	166.4	451.5
Other Biomass Liquids			50.4	2.0	10.0	62.4
Other Biomass Solids					213.0	213.0
Wood Waste Liquids					64.0	64.0
Wood/Wood Waste Solids	49.9	20.8	504.2	433.1	4,136.5	5,144.5
Hydro	1,034.9	42,320.6	24,557.9	22,234.5	11,513.1	101,661.0
Total Renewable Fuels	1,729.2	42,375.7	49,045.1	25,301.9	146,018.9	264,470.8

Generation from Renewable Energy by Fuel Type, 2019

In thousands of megawatt-hours

	MWh	Percent
Wind	294,906	40.8%
Hydro	282,613	39.1%
Sun	71,937	10.0%
Biomass Fuels	57,507	8.0%
Geothermal	15,473	2.1%
Total	722,436	





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Generation

Generation Capacity Additions by Fuel Type, 2014-2020

Fuel Type	Nameplate Capacity (MW)	Share
Natural Gas	71,758.90	40.31%
Wind	57,651.55	32.39%
Solar	43,222.78	24.28%
Nuclear	1,269.90	0.71%
Hydro	1,238.96	0.70%
Wood/Wood Waste Solids	600.03	0.34%
Distillate Fuel Oil	587.10	0.33%
Geothermal	329.30	0.18%
Landfill Gas	265.60	0.15%
Waste Heat	236.93	0.13%
Biomass Gases	175.17	0.10%
Wood Waste Liquids	148.00	0.08%
Coal	128.70	0.07%
Waste	114.30	0.06%
Other	53.70	0.03%
Liquified Natural Gas	50.63	0.03%
Biomass Liquids	50.00	0.03%
Purchased Steam	45.00	0.03%
Other Gas	25.70	0.01%
Liquified Propane Gas	21.00	0.01%
Refuse	15.40	0.01%
Biomass Solids	11.70	0.01%
Biomass Other	3.34	0.00%
Jet Fuel	2.00	0.00%
Agriculture Byproduct	1.00	0.00%
Total	178,006.68	

Permitted Plants and Plants Under Construction, by Fuel Type

Fuel Type	Nameplate Capacity (MW)	Share
Solar	37,877.75	37.86%
Wind	29,306.19	29.29%
Natural Gas	28,846.77	28.83%
Nuclear	2,560.00	2.56%
Hydro	1,019.93	1.02%
Geothermal	213.00	0.21%
Agriculture Byproduct	49.90	0.05%
Wood/Wood Waste Solids	42.00	0.04%
Biomass Gases	37.05	0.04%
Biomass Solids	36.50	0.04%
Waste Heat	28.60	0.03%
Other	14.80	0.01%
Landfill Gas	6.80	0.01%
Distillate Fuel Oil	5.30	0.01%
Waste	2.27	0.00%
Total	100,046.87	

Ventyx Velocity Suite, accessed January 2021

Industry Statistics

Number of Customers

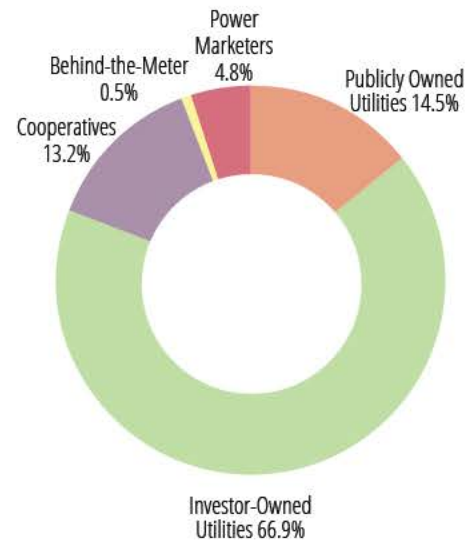
	Full-Service Customers	Delivery-Only Customers	Total	Percent of Total
Publicly Owned Utilities	22,518,603	2,011	22,520,614	14.5%
Investor-Owned Utilities	88,448,927	15,195,612	103,644,539	66.9%
Cooperatives	20,436,207	6,241	20,442,448	13.2%
Federal Power Agencies	38,846		38,846	0.0%
Behind-the-Meter	842,782		842,782	0.5%
Power Marketers	7,408,932		7,408,932	4.8%
TOTAL	139,694,297	15,203,864	154,898,161	

Delivery-only customers represent the number of customers in a utility's service territory that purchase energy from an alternative supplier.

Nearly all of power marketers' full-service customers are in Texas.

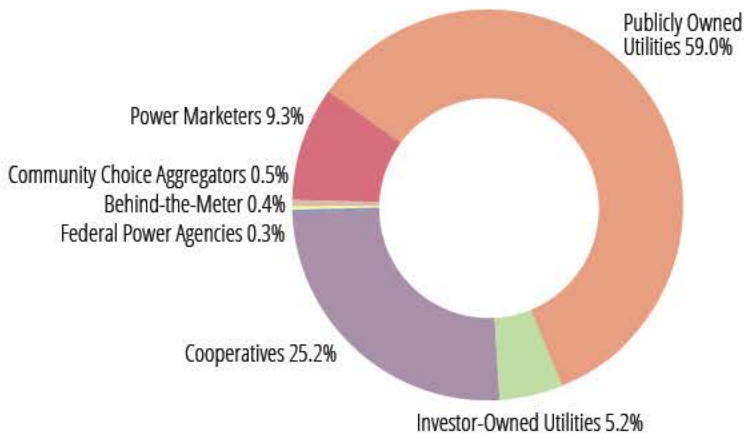
Behind-the-Meter entities install, own, and/or operate systems (usually solar PV), and sell, under a long term power purchase agreement (PPA) or lease, all the production from the system to the homeowner or business with which there is a net metering agreement.

Source: Energy Information Administration Forms EIA-861, 2019. Does not include U.S. territories.



Number of Electricity Providers

		Percent of Total
Publicly Owned Utilities	2,003	59.0%
Investor-Owned Utilities	178	5.2%
Cooperatives	856	25.2%
Federal Power Agencies	9	0.3%
Behind-the-Meter	15	0.4%
Community Choice Aggregators	18	0.5%
Power Marketers	315	9.3%
TOTAL	3,394	



Bridging the Digital Divide

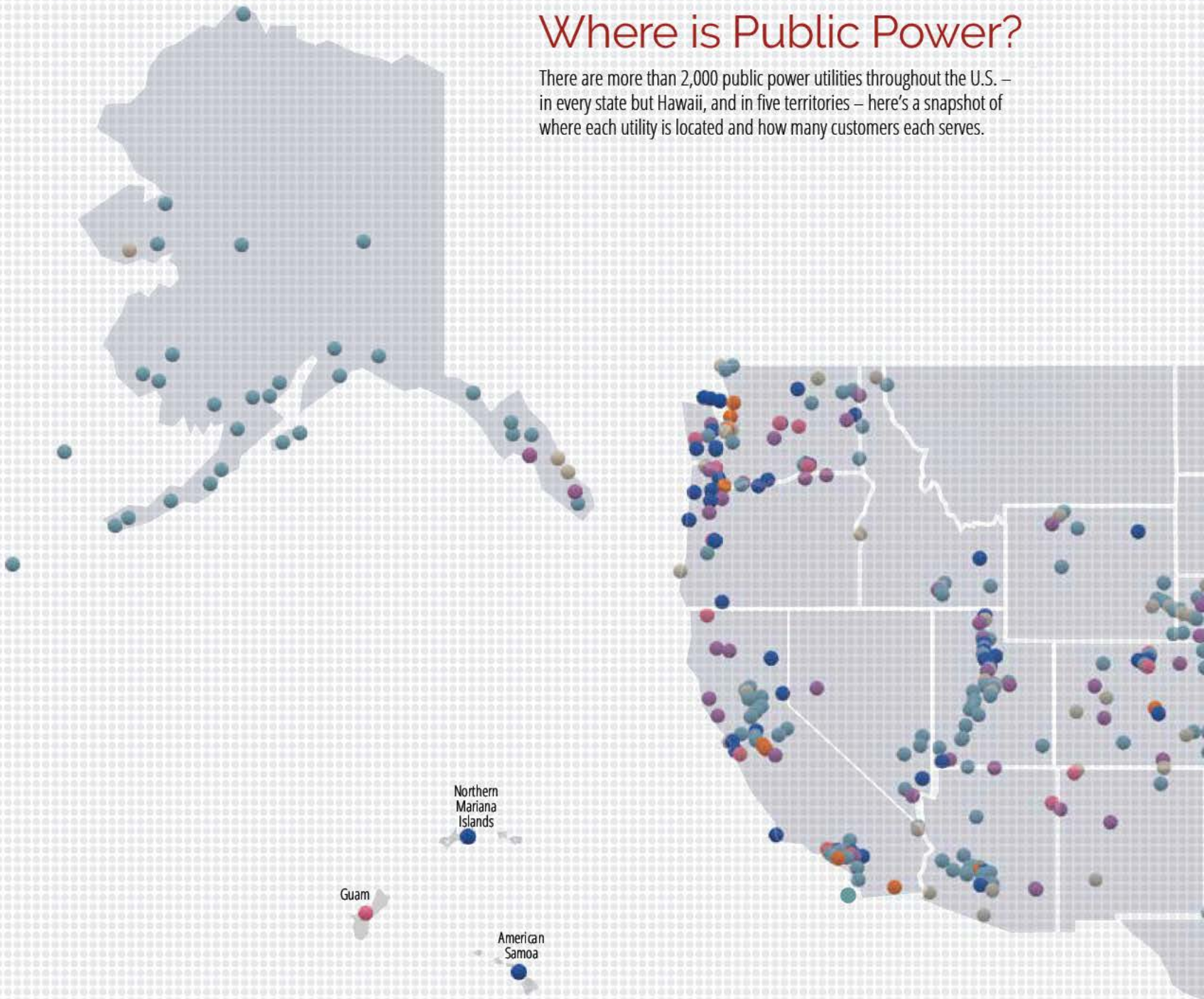
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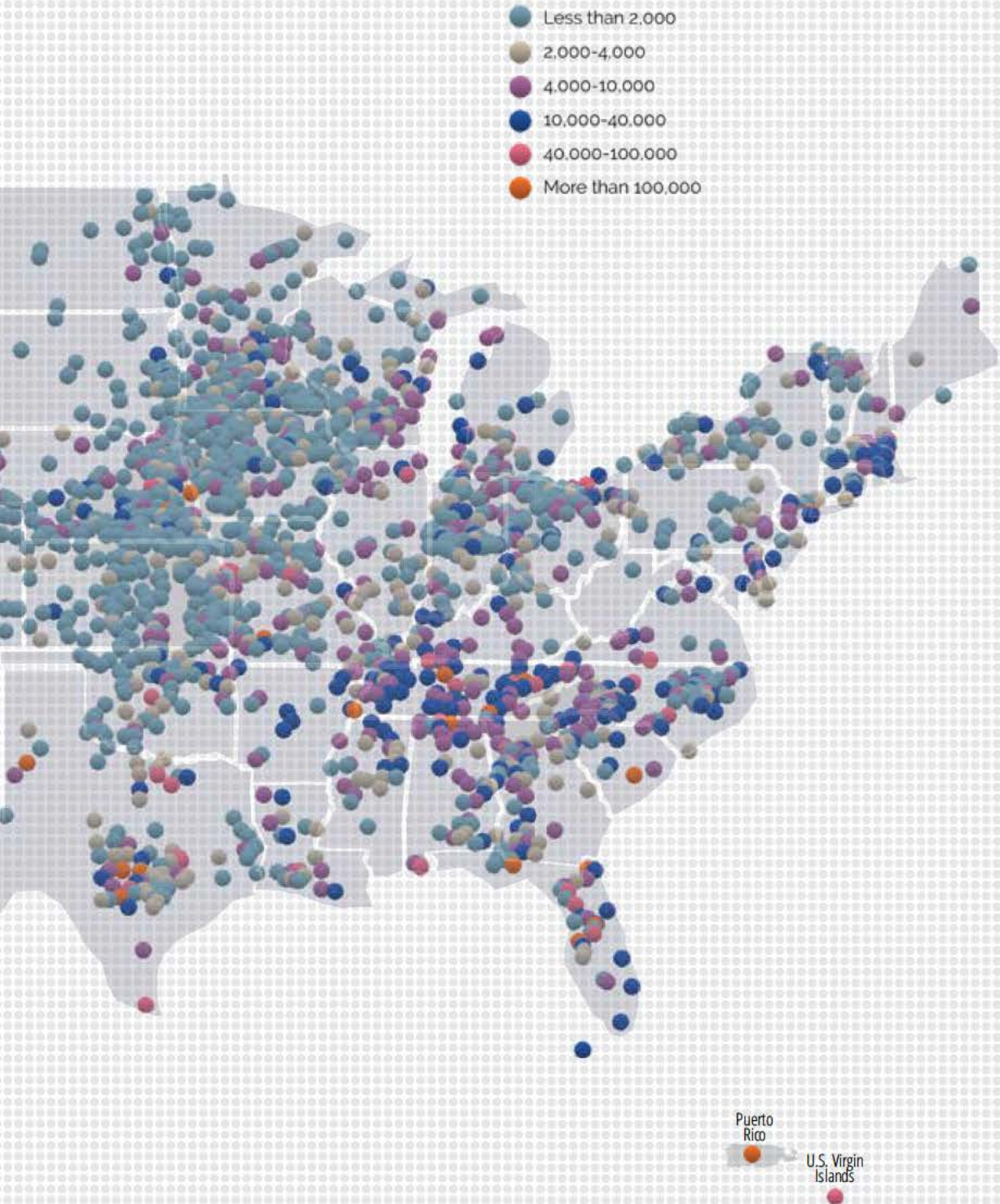
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Where is Public Power?

There are more than 2,000 public power utilities throughout the U.S. – in every state but Hawaii, and in five territories – here's a snapshot of where each utility is located and how many customers each serves.



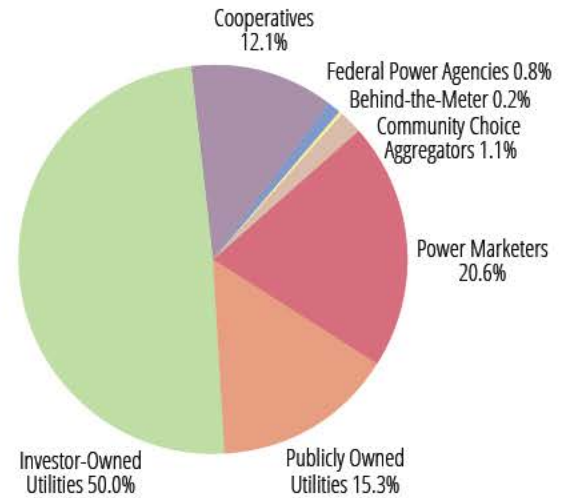


Industry Statistics

Sales to Ultimate Consumers

In thousands of MWhs

	Full-Service Sales	Energy-Only Sales	Total	Percent of Total
Publicly Owned Utilities	563,893	18,042	581,935	15.3%
Investor-Owned Utilities	1,904,138	33	1,904,171	50.0%
Cooperatives	458,300	1,303	459,603	12.1%
Federal Power Agencies	29,679	-	29,679	0.8%
Behind-the-Meter	8,045	-	8,045	0.2%
Community Choice Aggregators	-	42,377	42,377	1.1%
Power Marketers	263,665	521,676	785,341	20.6%
TOTAL	3,227,719	583,431	3,811,150	



Energy-only sales represent a utility's sales of energy outside of its own service territory.

The Energy Information Administration collects data on both the energy portion and delivery portion of unbundled (retail choice) sales. Delivery-only sales are not shown here as it would result in double counting. Total sales show how much energy, via either full service or energy-only sales, each sector sells to ultimate customers.

Electric Revenues from Sales to Ultimate Customers

In millions of dollars

	Full-Service Sales	Energy-Only Sales	Delivery-Only Sales	Total	Percent of Total
Publicly Owned Utilities	\$59,250	\$956	\$58	\$60,264	15.0%
Investor-Owned Utilities	\$204,517	\$3	\$27,538	\$232,057	57.8%
Cooperatives	\$47,964	\$68	\$14	\$48,046	12.0%
Federal Power Agencies	\$1,042	\$0	\$0	\$1,042	0.3%
Behind the Meter	\$1,234	\$0	\$0	\$1,234	0.3%
Community Choice Aggregator	\$0	\$3,280	\$0	\$3,280	0.8%
Power Marketers	\$22,869	\$32,945	\$0	\$55,815	13.9%
TOTAL	\$336,876	\$37,253	\$27,610	\$401,738	

Energy-only revenue represents revenue from a utility's sales of energy outside of its own service territory. Delivery-only revenue represents revenue the utility receives from the delivery portion of unbundled (retail choice) sales made to customers in the utility's service territory. Total revenue shows the amount of revenue each sector receives from both bundled (full-service) and unbundled (retail choice) sales to ultimate customers.

More than 99% of power marketers' full-service sales and revenues occur in Texas.

Source: Energy Information Administration Forms EIA-861, 2019. Does not include U.S. territories.

Sales and Revenue

100 Largest Public Power Utilities by Electric Customers Served, 2019

Ultimate customers served

1	Puerto Rico Electric Power Authority	PR	1,466,923	51	Roseville Electric	CA	61,657
2	Los Angeles Department of Water & Power	CA	1,447,371	52	Bryan Texas Utilities	TX	60,942
3	Long Island Power Authority	NY	1,135,478	53	Naperville Department of Public Utilities	IL	60,668
4	Salt River Project	AZ	1,076,347	54	Independence Power & Light	MO	59,290
5	CPS Energy	TX	850,161	55	Silicon Valley Power	CA	56,903
6	Sacramento Municipal Utility District	CA	633,683	56	Virgin Islands Water & Power Authority	VI	56,133
7	Austin Energy	TX	499,542	57	Denton Municipal Electric	TX	56,091
8	JEA	FL	481,750	58	Rochester Public Utilities	MN	55,919
9	Seattle City Light	WA	470,380	59	Sevier County Electric System	TN	55,865
10	Memphis Light, Gas and Water Division	TN	415,429	60	Benton PUD	WA	54,581
11	Nashville Electric Service	TN	409,190	61	Ocala Utility Services, City of	FL	54,183
12	Omaha Public Power District	NE	384,501	62	Burbank Water and Power	CA	53,298
13	Snohomish County, Public Utility District No. 1 of	WA	354,978	63	Guam Power Authority	GU	51,743
14	Orlando Utilities Commission	FL	247,443	64	Grant County, Public Utility District No. 2 of	WA	51,635
15	Colorado Springs Utilities	CO	235,098	65	Chelan County Public Utility District No. 1	WA	51,508
16	Clark Public Utilities	WA	213,948	66	Cowlitz County, Public Utility District No. 1 of	WA	50,870
17	Knoxville Utilities Board	TN	205,454	67	Columbia Water & Light	MO	50,676
18	Santee Cooper (South Carolina Public Service Authority)	SC	189,205	68	Brownsville Public Utilities Board	TX	50,413
19	Huntsville Utilities	AL	188,149	69	Florence Utilities	AL	50,006
20	Tacoma Public Utilities	WA	182,234	70	Riviera Utilities	AL	49,557
21	EPB - Chattanooga Electric Power Board	TN	176,336	71	Athens, City of	AL	48,185
22	IID Energy	CA	156,715	72	Danville Department of Utilities	VA	47,822
23	Lincoln Electric System	NE	141,650	73	Farmington, City of	NM	44,877
24	Lakeland Electric	FL	132,218	74	New Braunfels Utilities	TX	44,382
25	Modesto Irrigation District	CA	129,642	75	Redding, City of	CA	43,879
26	Anaheim Public Utilities	CA	120,279	76	Grays Harbor County, Public Utility District No. 1 of	WA	43,296
27	Tallahassee Electric Utility, City of	FL	119,197	77	High Point, City of	NC	43,251
28	Springfield, City Utilities of	MO	116,844	78	College Station, City of	TX	42,633
29	Riverside Public Utilities, City of	CA	110,439	79	Marietta Board of Lights & Water	GA	41,840
30	Lubbock Power & Light	TX	106,789	80	Longmont Power & Communications	CO	41,337
31	Turlock Irrigation District	CA	103,264	81	Edmond, City of	OK	41,098
32	Gainesville Regional Utilities	FL	98,324	82	Central Lincoln People's Utility District	OR	39,901
33	Lansing Board of Water & Light	MI	98,268	83	Rock Hill, City of	SC	39,471
34	Eugene Water & Electric Board	OR	94,751	84	North Little Rock, City of	AR	39,057
35	Nebraska Public Power District	NE	90,352	85	Taunton Municipal Lighting Plant	MA	39,056
36	Glendale Water & Power	CA	89,564	86	Greenville Light & Power System	TN	38,492
37	Fayetteville Public Works Commission	NC	85,342	87	Jonesboro City Water & Light	AR	37,925
38	BrightRidge	TN	79,118	88	Loveland Water & Power	CO	37,444
39	Kissimmee Utility Authority	FL	76,897	89	Provo City Power	UT	37,291
40	Fort Collins Utilities	CO	75,656	90	Albany Water, Gas & Light Commission	GA	37,083
41	Cleveland Public Power	OH	73,600	91	Jackson Energy Authority	TN	36,306
42	CDE Lightband	TN	71,681	92	Dickson Electric System	TN	35,594
43	Garland, City of	TX	71,647	93	Beaches Energy Services	FL	35,594
44	Springfield City Water, Light & Power	IL	71,383	94	Wilson Energy	NC	34,908
45	Greenville Utilities Commission	NC	68,815	95	Anderson Municipal Light & Power	IN	34,351
46	Lafayette Utilities System	LA	68,495	96	Mason County Public Utility District No. 3	WA	34,214
47	Lenoir City Utilities Board	TN	67,406	97	Bristol Tennessee Essential Services	TN	33,732
48	Murfreesboro Electric Department	TN	66,393	98	Alameda Municipal Power	CA	33,631
49	Kansas City Board of Public Utilities	KS	65,953	99	Lewis County, Public Utility District No. 1 of	WA	32,771
50	Pasadena Water and Power Department	CA	64,882	100	Springfield Utility Board	OR	32,379

Sales and Revenue

100 Largest Public Power Utilities by Megawatt-hour Sales, 2019

Sales to ultimate customers and sales for resale.

1	New York Power Authority	NY	37,890,149	51	Silicon Valley Power	CA	3,571,590
2	Salt River Project	AZ	36,641,113	52	IID Energy	CA	3,351,783
3	CPS Energy	TX	28,844,357	53	Turlock Irrigation District	CA	3,318,679
4	Santee Cooper (South Carolina Public Service Authority)	SC	23,219,498	54	Utah Associated Municipal Power Systems	UT	3,272,878
5	Los Angeles Department of Water & Power	CA	22,150,780	55	Douglas County, Public Utility District No. 1 of	WA	3,207,695
6	Nebraska Public Power District	NE	20,609,031	56	Alabama Municipal Electric Authority	AL	3,202,141
7	Long Island Power Authority	NY	17,761,733	57	Lafayette Utilities System	LA	3,136,791
8	Puerto Rico Electric Power Authority	PR	16,077,273	58	Lakeland Electric	FL	3,123,962
9	Omaha Public Power District	NE	15,347,271	59	Minnesota Municipal Power Agency	MN	3,117,960
10	American Municipal Power	OH	14,694,993	60	Massachusetts Municipal Wholesale Electric Co.	MA	3,089,694
11	Austin Energy	TX	14,460,547	61	Michigan Public Power Agency	MI	3,051,598
12	Lower Colorado River Authority	TX	13,959,342	62	Anaheim Public Utilities	CA	2,955,423
13	MEAG Power	GA	13,502,637	63	Southern Minnesota Municipal Power Agency	MN	2,869,427
14	Memphis Light, Gas and Water Division	TN	13,486,943	64	Oklahoma Municipal Power Authority	OK	2,867,061
15	Chelan County Public Utility District No. 1	WA	12,459,583	65	Tallahassee Electric Utility, City of	FL	2,848,374
16	JEA	FL	12,134,189	66	Kansas City Board of Public Utilities	KS	2,841,258
17	Nashville Electric Service	TN	12,075,656	67	Lubbock Power & Light	TX	2,772,783
18	Sacramento Municipal Utility District	CA	12,018,926	68	Springfield City Water, Light & Power	IL	2,737,975
19	Southern California Public Power Authority	CA	11,279,375	69	Vinton Public Power Authority	LA	2,702,262
20	Seattle City Light	WA	11,206,055	70	Piedmont Municipal Power Agency	SC	2,590,542
21	Energy Northwest	WA	9,121,424	71	Lansing Board of Water & Light	MI	2,227,288
22	Grand River Dam Authority	OK	8,172,196	72	Benton PUD	WA	2,187,768
23	Snohomish County, Public Utility District No. 1 of	WA	7,927,961	73	Sikeston Board of Municipal Utilities	MO	2,177,034
24	Florida Municipal Power Agency	FL	7,800,072	74	Bryan Texas Utilities	TX	2,110,435
25	Grant County, Public Utility District No. 2 of	WA	7,779,840	75	Riverside Public Utilities, City of	CA	2,106,019
26	Orlando Utilities Commission	FL	7,770,392	76	Gainesville Regional Utilities	FL	2,033,132
27	North Carolina Municipal Power Agency No. 1	NC	7,714,331	77	Fayetteville Public Works Commission	NC	2,029,947
28	Intermountain Power Agency	UT	7,561,844	78	NMPP Energy: Municipal Energy Agency of Nebraska	NE	1,936,521
29	North Carolina Eastern Municipal Power Agency	NC	7,551,628	79	Yuba County Water Agency	CA	1,904,477
30	California Department of Water Resources	CA	6,837,208	80	Dalton Utilities	GA	1,902,051
31	Indiana Municipal Power Agency	IN	6,398,483	81	Grays Harbor County, Public Utility District No. 1 of	WA	1,847,293
32	WPPI Energy	WI	6,208,456	82	BrightRidge	TN	1,846,061
33	Tacoma Public Utilities	WA	6,103,956	83	Louisiana Energy and Power Authority	LA	1,834,523
34	EPB - Chattanooga Electric Power Board	TN	5,754,629	84	Murfreesboro Electric Department	TN	1,834,121
35	Missouri Joint Municipal Electric Utility Comm	MO	5,410,892	85	Greenville Utilities Commission	NC	1,776,178
36	Knoxville Utilities Board	TN	5,362,343	86	Owensboro Municipal Utilities	KY	1,760,465
37	Colorado Springs Utilities	CO	5,227,367	87	Brownsville Public Utilities Board	TX	1,752,489
38	Clark Public Utilities	WA	5,213,547	88	Kansas Municipal Energy Agency	KS	1,705,968
39	Huntsville Utilities	AL	5,192,764	89	San Francisco (Hetch Hetchy Water & Power), City of	CA	1,699,039
40	Sam Rayburn Municipal Power Agency	TX	4,936,602	90	Jackson Energy Authority	TN	1,682,800
41	Cowlitz County, Public Utility District No. 1 of	WA	4,609,092	91	New Braunfels Utilities	TX	1,679,325
42	Lincoln Electric System	NE	4,382,994	92	Lenoir City Utilities Board	TN	1,666,591
43	Platte River Power Authority	CO	4,100,300	93	Kissimmee Utility Authority	FL	1,620,433
44	Springfield, City Utilities of	MO	4,070,435	94	Muscatine Power & Water	IA	1,592,847
45	Garland, City of	TX	3,985,072	95	Cleveland Public Power	OH	1,589,110
46	Eugene Water & Electric Board	OR	3,948,345	96	Burbank Water and Power	CA	1,580,151
47	Illinois Municipal Electric Agency	IL	3,879,539	97	Guam Power Authority	GU	1,568,286
48	Northern California Power Agency	CA	3,851,725	98	CDE Lightband	TN	1,565,079
49	Missouri River Energy Services	SD	3,623,531	99	Denton Municipal Electric	TX	1,533,871
50	Modesto Irrigation District	CA	3,574,097	100	Utah Municipal Power Agency	UT	1,521,191

Sales and Revenue

100 Largest Public Power Utilities by Electric Revenues, 2019

Revenues from sales to ultimate customers and sales for resale. Revenues in thousands.

1	Los Angeles Department of Water & Power	CA	\$4,065,395	51	Cowlitz County, Public Utility District No. 1 of	WA	\$274,012
2	Puerto Rico Electric Power Authority	PR	\$3,543,649	52	Tallahassee Electric Utility, City of	FL	\$266,674
3	Long Island Power Authority	NY	\$3,479,705	53	Eugene Water & Electric Board	OR	\$265,607
4	Salt River Project	AZ	\$3,106,370	54	Gainesville Regional Utilities	FL	\$255,158
5	CPS Energy	TX	\$2,425,510	55	Kansas City Board of Public Utilities	KS	\$253,430
6	Santee Cooper (South Carolina Public Service Authority)	SC	\$1,695,055	56	Garland, City of	TX	\$253,052
7	New York Power Authority	NY	\$1,481,121	57	Sam Rayburn Municipal Power Agency	TX	\$247,281
8	Sacramento Municipal Utility District	CA	\$1,435,741	58	Springfield City Water, Light & Power	IL	\$243,895
9	Nashville Electric Service	TN	\$1,313,818	59	California Department of Water Resources	CA	\$232,334
10	Austin Energy	TX	\$1,302,983	60	Fayetteville Public Works Commission	NC	\$231,780
11	Memphis Light, Gas and Water Division	TN	\$1,279,925	61	Lubbock Power & Light	TX	\$231,688
12	JEA	FL	\$1,212,580	62	Massachusetts Municipal Wholesale Electric Co.	MA	\$228,328
13	Omaha Public Power District	NE	\$1,119,422	63	Platte River Power Authority	CO	\$223,471
14	Seattle City Light	WA	\$1,019,803	64	Virgin Islands Water & Power Authority	VI	\$223,243
15	Nebraska Public Power District	NE	\$994,438	65	Southern Minnesota Municipal Power Agency	MN	\$219,454
16	American Municipal Power	OH	\$986,285	66	Alabama Municipal Electric Authority	AL	\$207,470
17	MEAG Power	GA	\$826,577	67	Lafayette Utilities System	LA	\$206,642
18	Southern California Public Power Authority	CA	\$782,386	68	Glendale Water & Power	CA	\$204,780
19	Orlando Utilities Commission	FL	\$706,014	69	Cleveland Public Power	OH	\$204,203
20	Snohomish County, Public Utility District No. 1 of	WA	\$644,672	70	Piedmont Municipal Power Agency	SC	\$203,868
21	Lower Colorado River Authority	TX	\$606,857	71	BrightRidge	TN	\$199,912
22	Florida Municipal Power Agency	FL	\$583,462	72	Pasadena Water and Power Department	CA	\$190,480
23	EPB - Chattanooga Electric Power Board	TN	\$571,242	73	Missouri River Energy Services	SD	\$190,468
24	North Carolina Eastern Municipal Power Agency	NC	\$555,882	74	Burbank Water and Power	CA	\$184,241
25	Knoxville Utilities Board	TN	\$545,218	75	Kissimmee Utility Authority	FL	\$183,891
26	Huntsville Utilities	AL	\$511,645	76	Oklahoma Municipal Power Authority	OK	\$182,767
27	Intermountain Power Agency	UT	\$510,597	77	Bryan Texas Utilities	TX	\$178,470
28	Energy Northwest	WA	\$502,277	78	Murfreesboro Electric Department	TN	\$175,028
29	North Carolina Municipal Power Agency No. 1	NC	\$490,479	79	Greenville Utilities Commission	NC	\$173,619
30	Colorado Springs Utilities	CO	\$459,055	80	Lenoir City Utilities Board	TN	\$171,692
31	Indiana Municipal Power Agency	IN	\$451,858	81	CDE Lightband	TN	\$171,291
32	IID Energy	CA	\$425,235	82	Anchorage Municipal Light & Power	AK	\$169,372
33	WPPI Energy	WI	\$423,190	83	Utah Associated Municipal Power Systems	UT	\$165,945
34	Silicon Valley Power	CA	\$418,174	84	Michigan Public Power Agency	MI	\$161,837
35	Tacoma Public Utilities	WA	\$404,503	85	Vernon, City of	CA	\$161,360
36	Anaheim Public Utilities	CA	\$401,010	86	Roseville Electric	CA	\$161,145
37	Guam Power Authority	GU	\$399,733	87	Sevier County Electric System	TN	\$153,683
38	Grand River Dam Authority	OK	\$387,327	88	San Francisco (Hetch Hetchy Water & Power), City of	CA	\$152,380
39	Clark Public Utilities	WA	\$384,255	89	Marietta Board of Lights & Water	GA	\$151,618
40	Modesto Irrigation District	CA	\$369,697	90	Rochester Public Utilities	MN	\$150,757
41	Turlock Irrigation District	CA	\$338,030	91	Naperville Department of Public Utilities	IL	\$150,613
42	Chelan County Public Utility District No. 1	WA	\$329,142	92	Benton PUD	WA	\$150,341
43	Missouri Joint Municipal Electric Utility Comm	MO	\$313,267	93	Denton Municipal Electric	TX	\$146,493
44	Grant County, Public Utility District No. 2 of	WA	\$309,010	94	Brownsville Public Utilities Board	TX	\$145,078
45	Illinois Municipal Electric Agency	IL	\$306,441	95	Jackson Energy Authority	TN	\$143,158
46	Riverside Public Utilities, City of	CA	\$303,012	96	Minnesota Municipal Power Agency	MN	\$139,287
47	Lincoln Electric System	NE	\$300,979	97	Palo Alto, City of	CA	\$138,009
48	Lakeland Electric	FL	\$300,071	98	Fort Collins Utilities	CO	\$135,131
49	Springfield, City Utilities of	MO	\$285,172	99	Vinton Public Power Authority	LA	\$132,920
50	Lansing Board of Water & Light	MI	\$284,246	100	Independence Power and Light	MO	\$132,840

Generation

100 Largest Public Power Systems by Generation, 2019

Net generation in megawatt-hours

1	Salt River Project	AZ	32,896,105	51	Tacoma Public Utilities	WA	1,582,551
2	New York Power Authority	NY	30,205,993	52	Placer County Water Agency	CA	1,448,710
3	CPS Energy	TX	25,208,143	53	San Francisco (Hetch Hetchy Water & Power), City of	CA	1,407,429
4	Los Angeles Department of Water & Power	CA	21,437,466	54	Lincoln Electric System	NE	1,393,025
5	Santee Cooper (South Carolina Public Service Authority)	SC	17,802,933	55	WPPI Energy	WI	1,371,447
6	Nebraska Public Power District	NE	16,981,613	56	Metropolitan Water District of Southern California	CA	1,340,023
7	Lower Colorado River Authority	TX	13,400,320	57	Brownsville Public Utilities Board	TX	1,336,881
8	MEAG Power	GA	12,721,171	58	Lansing Board of Water & Light	MI	1,280,910
9	Puerto Rico Electric Power Authority	PR	10,788,043	59	IID Energy	CA	1,210,353
10	JEA	FL	9,599,676	60	Anchorage Municipal Light & Power	AK	1,125,455
11	Energy Northwest	WA	9,121,424	61	Kansas City Board of Public Utilities	KS	1,068,341
12	Austin Energy	TX	9,115,458	62	Utah Associated Municipal Power Systems	UT	1,065,980
13	Omaha Public Power District	NE	9,022,252	63	Lafayette Public Power Authority	LA	1,045,878
14	Grant County, Public Utility District No. 2 of	WA	8,277,669	64	Jonesboro City Water & Light	AR	969,594
15	American Municipal Power	OH	8,183,634	65	Holland Board of Public Works	MI	898,067
16	Florida Municipal Power Agency	FL	7,808,921	66	Minnesota Municipal Power Agency	MN	893,936
17	Chelan County Public Utility District No. 1	WA	7,602,399	67	Western Minnesota Municipal Power Agency	MN	777,267
18	Intermountain Power Agency	UT	7,561,844	68	Farmington, City of	NM	775,760
19	North Carolina Municipal Power Agency No. 1	NC	7,236,825	69	Dalton Utilities	GA	767,014
20	Southern California Public Power Authority	CA	7,177,775	70	NMPP Energy: Municipal Energy Agency of Nebraska	NE	726,208
21	Sacramento Municipal Utility District	CA	7,143,944	71	Kings River Conservation District	CA	714,557
22	Orlando Utilities Commission	FL	6,544,144	72	Muscatine Power & Water	IA	697,719
23	Grand River Dam Authority	OK	6,029,148	73	Fremont Department of Utilities	NE	693,924
24	Seattle City Light	WA	5,334,991	74	Modesto Irrigation District	CA	688,288
25	California Department of Water Resources	CA	4,856,868	75	Virgin Islands Water & Power Authority	VI	617,582
26	Colorado Springs Utilities	CO	4,729,941	76	Northern Municipal Power Agency	MN	613,522
27	Douglas County, Public Utility District No. 1 of	WA	3,687,032	77	Utah Municipal Power Agency	UT	589,050
28	Missouri Joint Municipal Electric Utility Comm	MO	3,407,881	78	Louisiana Energy and Power Authority	LA	530,313
29	Indiana Municipal Power Agency	IN	3,304,882	79	Tri-Dam Project	CA	516,856
30	Silicon Valley Power	CA	3,272,393	80	Grand Island, City of	NE	508,586
31	Lakeland Electric	FL	2,946,025	81	Central Nebraska Public Power & Irrigation District	NE	490,768
32	Tallahassee Electric Utility, City of	FL	2,906,451	82	Hastings, City of	NE	484,036
33	Oklahoma Municipal Power Authority	OK	2,894,189	83	South Feather Water and Power Agency	CA	481,244
34	Platte River Power Authority	CO	2,832,236	84	Burbank Water and Power	CA	465,843
35	Northern California Power Agency	CA	2,798,144	85	Pend Oreille County, Public Utility District No. 1 of	WA	463,272
36	Illinois Municipal Electric Agency	IL	2,715,081	86	Heartland Consumers Power District	SD	413,216
37	Piedmont Municipal Power Agency	SC	2,452,684	87	Merced Irrigation District	CA	409,804
38	Springfield City Water, Light & Power	IL	2,377,897	88	Toledo Bend Project	TX	407,127
39	Turlock Irrigation District	CA	2,080,907	89	Snohomish County, Public Utility District No. 1 of	WA	342,529
40	Springfield, City Utilities of	MO	2,034,239	90	Nevada Irrigation District	CA	339,885
41	Long Island Power Authority	NY	2,009,708	91	Independence Power & Light	MO	328,705
42	Yuba County Water Agency	CA	1,904,477	92	Wyoming Municipal Power Agency	WY	325,843
43	Gainesville Regional Utilities	FL	1,897,133	93	Roseville Electric	CA	294,117
44	Southern Minnesota Municipal Power Agency	MN	1,783,399	94	Commonwealth Utility Corporation	MP	299,553
45	Sikeston Board of Municipal Utilities	MO	1,764,844	95	West Memphis, City of	AR	289,089
46	Massachusetts Municipal Wholesale Electric Co.	MA	1,762,207	96	Los Alamos County Utilities	NM	280,090
47	Clark Public Utilities	WA	1,746,284	97	Holyoke Gas & Electric	MA	270,478
48	Guam Power Authority	GU	1,660,824	98	Cedar Falls Utilities	IA	270,161
49	Michigan Public Power Agency	MI	1,592,418	99	Redding, City of	CA	257,928
50	Owensboro Municipal Utilities	KY	1,588,285	100	Conway Corporation	AR	256,257

Public Power Costs Less

Public power utilities have a long history of being able to offer low electricity rates to customers. Over the past decade, as many costs have come down across the industry, we have continually seen the difference between public power, cooperative, and investor-owned utility residential rates shrink. In 2018, for the first time in a long time, we did not have the lowest average bundled rate for residential customers. Our residential customers' rates are 11% less than those of residential customers served by IOUs, but cooperative residential customers had rates that were 1% less than ours.

Does this mean we're no longer able to claim that we're more affordable? No.

To repeat a longtime industry mantra, "Customers pay bills, not rates." What ultimately determines the bill is how much electricity our customers use.

Public power customers use about 20% less electricity than co-op customers in an average month. If extrapolated over an entire year, the average cooperative residential customer pays about \$324 more for electricity than the average public power residential customer.

There are a few reasons why residential customers of public power utilities use less electricity than those of rural electric cooperatives. Public power utilities emphasize energy efficiency more than cooperatives, according to

data from the Energy Information Administration. On the flip side, cooperative customers often have more electrified end uses, in part because they live in more remote areas of the country.

As more public power utilities promote electrification, this average usage could change, again shifting our relative cost. Overall, public power can continue to help our customers save by guiding them on how they can use energy more efficiently and get the best value from their utility.

	Investor-Owned Utility	Cooperative	Public Power
Average rate per kilowatt-hour	\$0.1347	\$0.1181	\$0.1195
Average kWh/month	855	1,175	933
Average monthly customer bill* (extrapolated)	\$115	\$139	\$112

* Does not include fixed customer charges

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Data By State

Utility Sector Rate Comparison by State, 2019

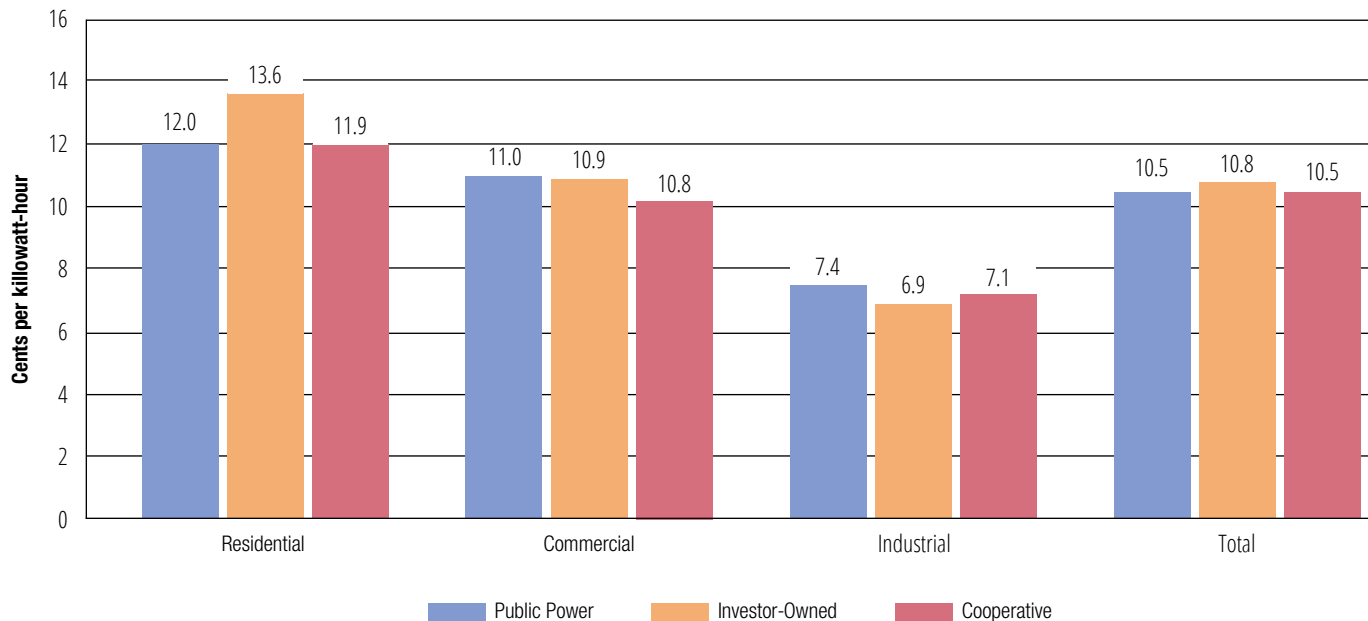
In cents per kilowatt-hour. Table reflects full-service (bundled) sales only.

	Residential			Commercial			Industrial			Total		
	Public	IOU	Co-op	Public	IOU	Co-op	Public	IOU	Co-op	Public	IOU	Co-op
Alabama	10.5	13.4	12.3	10.5	12.1	11.6	6.3	6.3	6.7	9.6	10.2	11.2
Alaska	19.2	17.7	24.1	17.0	18.7	21.5	19.4	12.1	16.9	17.6	17.3	21.2
Arizona	11.6	13.1	13.1	9.2	11.1	11.2	6.1	6.5	8.8	9.7	11.1	12.0
Arkansas	8.6	9.6	10.5	8.4	8.6	9.8	6.4	6.4	5.5	7.8	8.2	8.5
California	17.2	19.4	16.6	16.0	17.4	15.7	12.4	16.8	9.7	15.7	18.1	14.9
Colorado	11.9	11.4	13.6	9.4	9.7	11.4	7.5	6.5	8.4	9.6	9.6	11.1
Connecticut	16.3	21.9	-	13.4	18.0	-	9.3	17.3	-	12.9	20.8	-
Delaware	13.4	12.4	12.0	12.0	11.6	11.5	9.6	8.3	-	11.4	12.2	11.9
District of Columbia	-	12.2	-	-	12.8	-	-	-	-	-	12.4	-
Florida	11.5	11.7	11.8	9.6	9.2	10.1	7.6	7.5	8.2	10.2	10.4	11.1
Georgia	11.8	12.1	11.4	10.9	9.6	10.9	6.2	5.9	7.4	9.6	9.4	10.8
Hawaii	-	32.4	-	-	29.7	-	-	25.5	-	-	28.8	-
Idaho	8.0	10.0	10.0	6.8	7.7	8.1	5.4	6.1	5.6	7.1	7.9	8.6
Illinois	12.6	12.4	14.4	12.2	9.4	11.9	9.5	5.8	9.5	11.7	11.1	12.8
Indiana	10.8	12.6	13.2	10.2	11.1	11.0	8.2	7.3	7.0	9.5	9.8	10.9
Iowa	11.1	12.7	12.4	9.2	10.2	9.5	7.4	6.4	7.6	9.1	8.9	10.2
Kansas	12.4	12.5	13.9	10.6	9.9	11.4	6.9	7.5	7.6	9.6	10.3	10.8
Kentucky	11.4	10.6	11.0	10.6	10.0	10.7	8.5	6.5	4.6	10.2	9.2	8.0
Louisiana	9.4	9.8	9.9	8.5	8.9	10.1	5.1	5.1	7.4	7.4	7.5	9.5
Maine	13.2	17.7	18.8	12.7	14.2	16.7	11.4	12.9	13.2	12.7	16.5	17.5
Maryland	9.0	12.7	13.0	9.2	11.6	11.1	7.6	9.6	9.5	8.9	12.5	12.2
Massachusetts	14.6	23.2	-	14.5	18.8	-	13.1	18.9	-	14.1	21.7	-
Michigan	13.6	15.9	15.2	12.2	11.8	12.1	8.6	7.2	8.6	11.2	12.1	13.2
Minnesota	12.4	13.2	13.0	10.9	10.3	10.3	8.8	7.2	8.3	10.5	9.8	11.7
Mississippi	10.6	10.9	11.7	10.4	9.9	11.7	6.1	6.4	7.6	9.7	9.1	10.9
Missouri	11.1	11.1	11.3	9.5	8.9	10.4	8.3	7.0	6.4	9.9	9.5	10.3
Montana	7.1	11.9	10.7	6.4	11.5	9.1	9.2	7.9	8.3	6.9	11.2	9.7
Nebraska	10.6	-	12.1	8.8	-	11.7	7.4	-	14.2	8.9	-	13.2
Nevada	10.2	12.1	11.7	7.6	9.1	9.3	4.0	6.9	5.5	6.7	9.6	7.7
New Hampshire	13.9	19.6	21.0	16.2	16.2	19.4	13.6	11.8	14.0	14.4	18.5	20.2
New Jersey	16.6	15.7	12.5	16.9	12.6	12.0	12.2	7.9	12.0	15.8	14.4	12.4
New Mexico	12.2	12.0	14.6	11.2	9.4	12.1	5.8	4.6	7.3	9.3	8.6	10.3
New York	18.0	17.2	13.4	17.0	15.1	9.6	4.4	6.1	6.5	16.6	16.2	12.0
North Carolina	11.9	11.0	12.4	10.6	8.3	10.6	7.2	6.1	6.7	10.3	8.9	11.5
North Dakota	9.0	10.1	10.5	6.1	8.8	9.7	9.9	7.1	8.0	7.8	9.1	8.9
Ohio	12.8	11.8	13.3	12.3	10.7	12.3	9.4	7.7	8.6	11.2	11.4	11.8
Oklahoma	11.4	9.6	11.2	9.7	7.3	10.8	5.0	4.7	6.2	8.0	7.3	9.6
Oregon	9.3	11.6	10.1	8.2	9.2	8.2	5.4	6.8	5.0	7.4	9.8	7.4
Pennsylvania	14.2	13.0	13.6	13.2	10.3	11.3	10.4	6.2	7.8	13.0	12.2	12.2
Rhode Island	14.3	21.5	39.8	18.0	17.1	41.0	15.0	19.3	-	14.8	20.1	40.7
South Carolina	11.9	13.0	13.4	10.3	10.4	12.0	5.5	6.1	6.8	8.8	9.8	11.5
South Dakota	10.4	11.7	11.7	9.5	10.0	10.6	7.8	7.1	8.4	9.3	10.1	10.6
Tennessee	10.9	9.0	11.0	10.6	9.7	11.3	6.2	6.2	5.9	10.0	7.9	10.3
Texas	10.7	10.4	10.6	9.1	7.6	9.2	6.7	4.5	6.8	9.5	7.1	9.3
Utah	10.0	10.7	8.6	9.1	8.1	7.9	6.4	5.9	7.6	8.9	8.1	8.1
Vermont	15.8	17.7	20.0	14.6	16.3	15.8	13.6	10.7	10.9	14.8	15.2	17.0
Virginia	12.0	11.9	13.0	9.6	8.0	10.9	8.0	6.5	7.6	10.4	9.3	11.0
Washington	9.3	10.3	9.4	8.2	9.7	8.1	5.3	7.7	6.6	7.8	9.8	8.5
West Virginia	11.1	11.2	17.8	11.8	9.1	13.5	8.0	6.0	-	11.5	8.5	16.4
Wisconsin	11.1	14.4	14.7	9.8	10.8	11.3	7.3	7.3	8.0	9.1	10.7	12.8
Wyoming	12.0	11.7	10.3	9.5	9.9	9.3	11.2	6.3	8.0	10.7	7.7	8.9

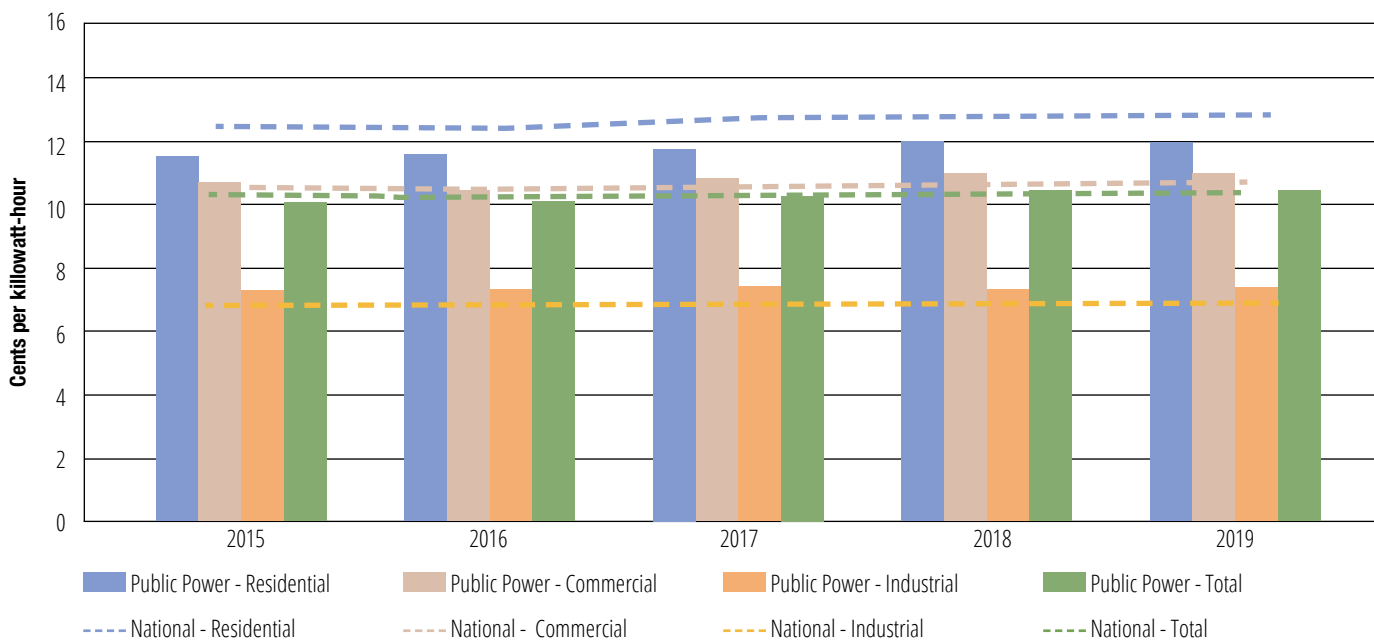
Source: Department of Energy, Energy Information Administration, Form EIA-861, 2019.

Sales and Revenue

Average Retail Electric Rates by Customer Class, 2019

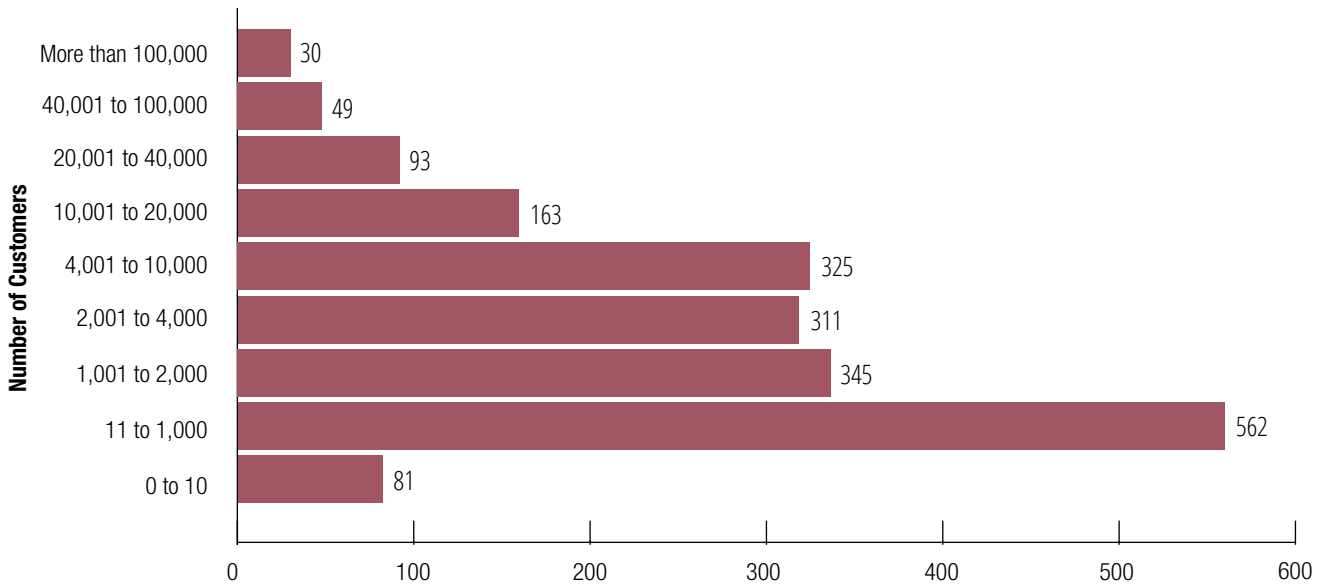


Trends in Average Retail Electric Rates by Customer Class, 2015-2019



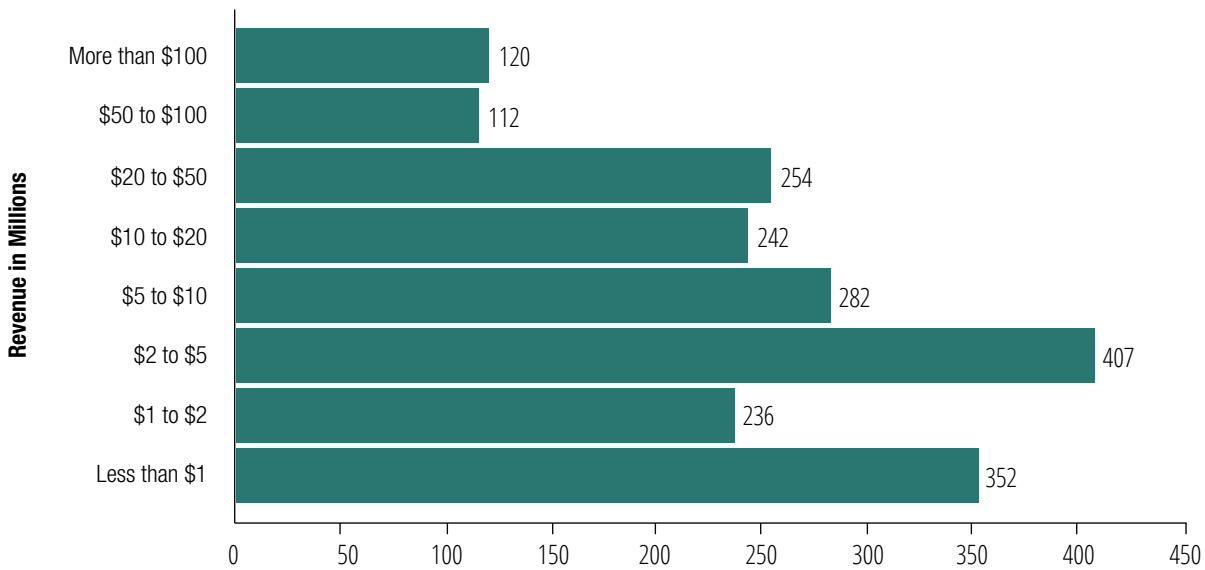
Industry Statistics

Distribution of Public Power Utilities by Customer Count



Note: Utilities with less than 10 customers include joint action agencies and other wholesale entities.

Distribution of Public Power Utilities by Revenue Class



Where to Find More Industry Statistics

There are many resources for energy and electric industry data. Below is a rundown of some of the most comprehensive sources of energy-related statistics that we commonly use when compiling reports, fact sheets, and other content – including for this report.

A primary source for data is the **Energy Information Administration**. www.eia.gov

- Form EIA-861 is a mandatory survey for all electric utilities on sales, revenue, generation, reliability, net metered customers, energy efficiency and demand response programs, and other basic operational data.
- Other key surveys include Form EIA-860 on generating capacity, Form EIA-923 on generation, and Form EIA-930 on balancing authorities.
- Annual and monthly reports, including long- and short-term energy outlooks, summarize some of these projections.
- EIA's website also has an interactive tool to dig deeper into energy statistics.

The **Federal Energy Regulatory Commission** collects data related to wholesale power markets. www.ferc.gov/docs-filing/forms.asp

- FERC Form 1 collects financial data on all investor-owned utilities, including operations and maintenance costs, salaries of major employees, and other financial information.
- The Electric Quarterly Report details cost-based sales, market-based rates, and other transactional information for large wholesale electricity sellers.

The **Census Bureau** provides detailed data and trend reports on communities in the U.S. Utilities can find information on their service area by searching by city or zip code. www.census.gov

The **National Laboratories** provide information on energy trends and different aspects of incorporating and testing new energy technologies.

- Lawrence Berkeley National Laboratory produces reports on its energy research. www.lbl.gov
- The National Renewable Energy Laboratory's Utility Rate Database (https://openei.org/wiki/Utility_Rate_Database) is an open source repository for the rate structures of each electric utility in the country. This database can be used to interface with NREL's System Advisor Model, a tool designed for people involved in the renewable energy industry, including project managers and engineers. [https://openei.org/wiki/System_Advisor_Model_\(SAM\)](https://openei.org/wiki/System_Advisor_Model_(SAM))

- Lawrence Livermore National Laboratory produces flow charts on energy use and carbon dioxide emissions. <https://flowcharts.llnl.gov/>

The **Smart Electric Power Alliance** has information on utility-scale solar installations, including community solar. <https://sepapower.org/>

The **North Carolina Clean Energy Center** maintains a database of state policies and incentives related to energy efficiency, net metering, and renewable energy. www.dsireusa.org

The **Electric Power Research Institute** publishes technical results of R&D projects in the areas of power delivery and utilization, energy innovation, and generation. www.EPRI.com

The **Rocky Mountain Institute** offers reports on decarbonization and transportation electrification, among other topics. www.rmi.org

If you have any questions about where to go for industry data, what information is publicly available, and how you can use this data, don't hesitate to reach out to us at Statistics@PublicPower.org.



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Public Power Data By State & Territory, 2019

	Ultimate Customers	Sales to Ultimate Customers (MWh)	Revenue from Sales to Ultimate Customers (thousands of dollars)	Generation (MWh)
Alabama	566,447	16,868,426	1,623,299.8	57,565
Alaska	56,391	1,418,329	249,708.9	1,649,073
American Samoa	12,216	147,693	50,154.6	170,108
Arizona	1,184,464	32,132,180	3,127,231.9	32,899,346
Arkansas	204,663	6,160,107	481,467.3	1,606,163
California	3,309,161	60,156,752	9,368,180.4	60,675,000
Colorado	471,814	9,036,274	868,253.0	7,603,509
Connecticut	75,120	1,825,576	235,745.1	10,905
Delaware	71,493	2,026,092	230,323.1	23,390
Florida	1,484,515	36,291,156	3,696,126.6	31,720,114
Georgia	341,247	12,527,892	1,207,003.0	13,529,529
Guam	51,743	1,568,286	399,732.8	1,660,824
Idaho	47,711	1,148,942	81,311.3	251,577
Illinois	276,146	6,627,059	777,259.5	5,180,633
Indiana	258,283	7,779,762	735,277.0	3,310,890
Iowa	218,326	5,408,696	494,575.8	1,511,435
Kansas	237,556	7,112,178	682,288.5	1,415,868
Kentucky	211,890	6,223,195	632,764.5	1,628,052
Louisiana	168,806	7,208,774	531,540.3	1,775,065
Maine	16,660	330,982	28,408.7	209
Maryland	34,796	709,186	62,905.5	3,666
Massachusetts	419,581	7,323,328	1,034,415.1	2,234,015
Michigan	312,261	7,323,657	821,823.5	4,162,017
Minnesota	385,939	9,631,619	1,011,834.4	4,259,687
Mississippi	132,667	3,809,000	368,718.3	249
Missouri	436,627	10,700,470	1,056,324.4	7,772,958
Montana	1,034	16,770	1,157.0	-
Nebraska	1,047,035	29,626,905	2,674,931.6	30,403,995
Nevada	32,406	1,584,152	93,346.8	232
New Hampshire	12,429	180,644	25,969.5	-
New Jersey	57,249	1,071,239	169,199.7	159,254
New Mexico	86,514	2,004,929	187,050.6	1,058,076
New York	1,299,920	40,627,053	4,668,400.4	32,414,896
North Carolina	624,973	16,567,859	1,712,479.8	7,359,349
North Dakota	10,910	313,838	24,377.5	17
Northern Mariana Islands	15,508	257,216	74,844.2	299,553
Ohio	382,696	10,058,138	1,122,184.5	8,282,669
Oklahoma	201,797	6,678,603	532,781.2	8,931,293
Oregon	311,738	9,768,355	709,005.6	288,862
Pennsylvania	86,265	1,400,171	181,933.0	8,882
Puerto Rico	1,466,923	16,077,273	3,543,649.0	10,788,043
Rhode Island	4,875	54,299	8,037.0	110
South Carolina	379,737	12,527,759	1,106,056.0	20,264,182
South Dakota	62,123	1,574,272	146,432.2	413,263
Tennessee	2,330,949	67,907,851	6,772,989.0	-
Texas	2,036,934	54,091,368	5,131,371.7	50,265,771
Utah	264,335	5,171,736	460,401.7	9,456,763
Vermont	56,828	757,653	112,261.6	263,277
Virgin Islands	56,133	561,316	233,242.9	617,582
Virginia	168,878	4,303,820	445,720.4	80,982
Washington	1,806,042	49,067,026	3,802,363.3	38,321,422
West Virginia	3,588	65,804	7,573.0	-
Wisconsin	293,893	7,606,921	691,320.0	1,709,912
Wyoming	37,104	655,652	69,905.9	538,333
Total	22,522,816	583,462,449	60,264,035	393,502,455

Source: Energy Information Administration Form EIA-861, 2019 data. Customer, sales, and revenue data reflect full-service and delivery-only sales.

Public Power Customers as % of Total Residential Customers in State



Number of Public Power Utilities, 2019

Alabama	37
Alaska	35
American Samoa	1
Arizona	29
Arkansas	15
California	56
Colorado	31
Connecticut	9
Delaware	9
Florida	33
Georgia	53
Guam	1
Idaho	11
Illinois	42
Indiana	73
Iowa	136
Kansas	117
Kentucky	29
Louisiana	24
Maine	5
Maryland	5
Massachusetts	42
Michigan	42
Minnesota	129
Mississippi	24
Missouri	87
Montana	1
Nebraska	149
Nevada	8
New Hampshire	5
New Jersey	9
New Mexico	7
New York	51
North Carolina	74
North Dakota	12
Northern Mariana Islands	1
Ohio	86
Oklahoma	63
Oregon	18
Pennsylvania	35
Puerto Rico	1
Rhode Island	2
South Carolina	23
South Dakota	36
Tennessee	61
Texas	75
Utah	42
Vermont	15
Virgin Islands	1
Virginia	17
Washington	42
West Virginia	2
Wisconsin	83
Wyoming	14
Total	2,008

(Source: Department of Energy, Energy Information Administration, Forms EIA-861 and 861S, 2019. Includes U.S. Territories.)

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