



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.

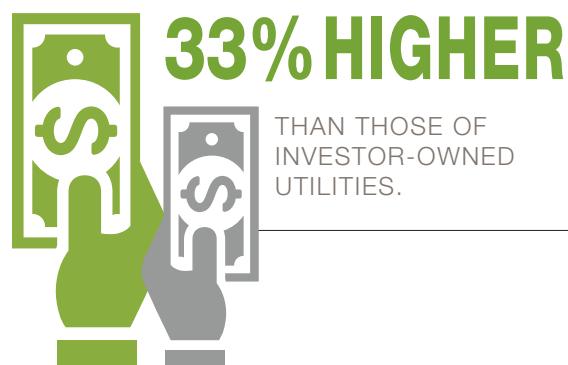
The American Public Power Association regularly analyzes payments and contributions to state and local government based on surveys of public power utilities and

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 fee 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

⁸Public 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" *Informer*, 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.

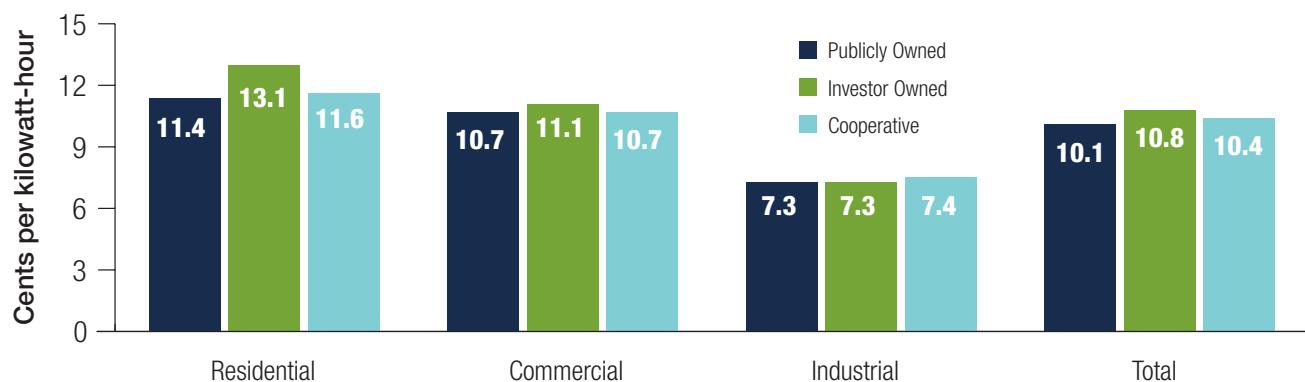
This distinction is more pronounced when looking at rates paid by residential customers. Public power residential customers paid an average of 11.4 cents per kilowatt-hour; cooperative utility customers paid an average of 11.6 cents per kilowatt-hour, and investor-owned utility customers paid an average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

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.

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



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.