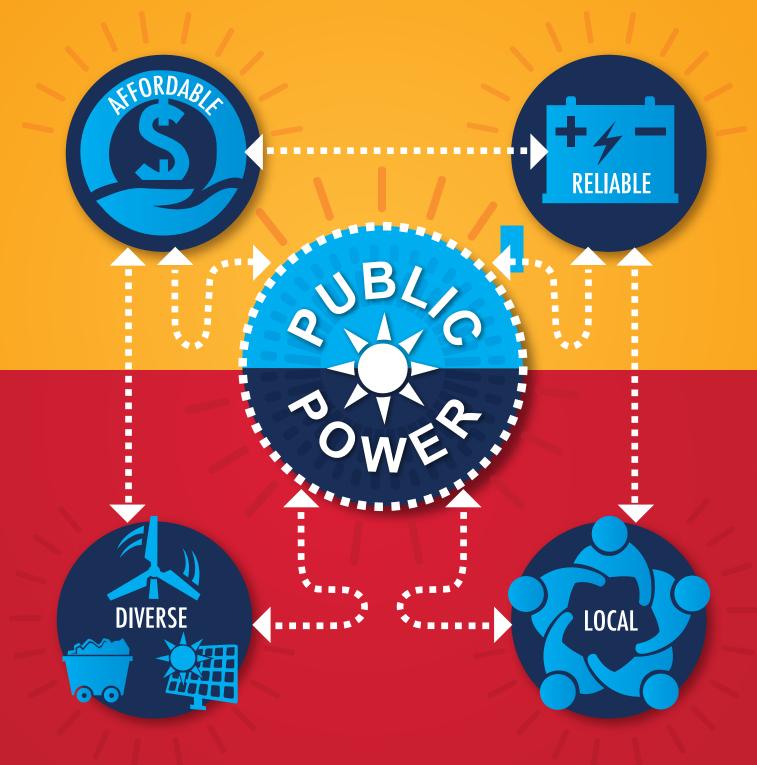


### **2018 STATISTICAL REPORT**

A SUPPLEMENT OF PUBLIC POWER MAGAZINE





Asplundh manages the unexpected and safely helps restore access and services. We're there when you need us most with the resources that make even the worst storms manageable, including:

Logistics Support
 Damage Assessment

Pre-Event Planning

ASPLUNDH.COM • 1-800-248-TREE

**ASPLUNDH** 



You know all too well how dependent your profitability projections are on favorable weather. But no matter how strong your forecasts are, they can't always account for how unpredictable weather conditions can impact your bottom line. That's why we work with you to tailor solutions to protect against the weather threats your business faces. And help safeguard your investment and your projected earnings. That's security for energy and power sector balance sheets. It also means confidence for agriculture, construction, retail, tourism and other industries where weather and profitability go hand in hand. Nobody can guarantee to keep you dry, but we can ensure your business isn't swept away. **We're smarter together.** 

#### corporatesolutions.swissre.com

Swiss Re Corporate Solutions offers the above products through companies that are allowed to operate in the relevant type of financial products in individual jurisdiction including but not limited to insurance, reinsurance, derivatives, and swaps. Availability of products varies by jurisdiction. This communication is not intended as a solicitation to purchase (re) insurance or non-insurance products Swiss Re 2018. All rights reserved.



### Control your future, transform theirs

ABB Ability™ Power Transformer

Digital natives like Kenny are growing up fast. So is the utilities sector. With changing energy sources and usage, reliable power is more important than ever – and this is exactly what the new ABB Ability™ Power Transformer delivers. Digitally enabled right out of the box, optimizing asset performance is simple. Early warning prevents failures and the modular, scalable design provides a future-proof solution. So take control of your future, and transform it for the next generation.

ABB

solutions.abb/abilitypowertransformer

### **Table of Contents**

| Where to Find Industry Data  | 4  |
|--|----|
| Public Power Gives Back  | 6  |
| Table: Net Payments and Contributions to State and Local Government    | 6  |
| Table: Types of Payments and Contributions                             | 7  |
| Generation   | 8  |
| Graph: U.S. Electric Generating Capacity by Fuel Type                  | 8  |
| Graph: U.S. Electric Generating Capacity by Utility Type and Fuel Type | 8  |
| Graph: Percent Generated by Fuel Type                                  | 10 |
| Table: Renewable Capacity by Owner Type                                | 12 |
| Graph: Generation from Renewable Energy by Fuel Type                   | 12 |
| Infographic: The Greening of Our Power                                 | 13 |
| Top 100 Lists  | 14 |
| 100 Largest Public Power Systems Ranked by Generation                  | 14 |
| 100 Largest Public Power Systems Ranked by Electric Revenue            | 15 |
| 100 Largest Public Power Systems Ranked by Megawatt-hour Sales         | 16 |
| 100 Largest Public Power Systems by Electric Customers Served          | 17 |
| Public Power Costs Less  | 18 |
| Sales and Revenue  | 19 |
| Graph: Trends in Average Revenue by Customer Class                     | 19 |
| Graph: Average Retail Rates by Customer Class                          | 20 |
| Infographic: Coast to Coast, Public Power Costs Less                   | 21 |
| Data by State  | 23 |
| Table: Public Power Data by State                                      | 23 |
| Table: Number of Public Power Utilities                                | 24 |

The Online Public Power Directory



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**.

25

# Where to Find Industry Data

or the past 53 years, the Public Power Directory and Statistical Report has been the central source for American Public Power Association members to find statistics from the Association and state and federal agencies that detail key aspects of public power and the electric utility industry.

Starting this year, the directory is no longer a printed reference guide, but a searchable and filterable web database of public power utilities, federal power agencies, joint action agencies, regional associations, and other utility organizations and systems.

This year, we also streamlined the statistical report to focus on the key graphs, tables, and data visualizations that members regularly commented on and requested. Additional detailed charts, reports, and data, such as regional capacity or retail choice rates, are still available on our website and various other channels.

Access to industry information is valuable, and we want to make sure you are aware of all the resources available to you. Below is a rundown of where you can access some of the most comprehensive sources of energy-related statistics.

#### **Curated information for public power**

- The "Stats and Facts" page on the Association website highlights key industry information and comparisons and links to statistical reports and documents, including this report and 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 for free or at a low cost, including our report on salaries and hourly pay in publicly owned utilities, the report on financial and operating ratios of public power utilities, and a link to subscribe to the eReliability Tracker service, which allows public power utilities to benchmark reliability on a regional or national scale and create reports based on the data collected https://ebiz.publicpower.org/APPAEbiz/productcatalog/ productdefault.aspx

#### Go to the source

www.eia.gov

- A primary source for much of the data in these reports is the Energy Information Administration. EIA is charged with gathering data from all segments of the energy sector, and does so through several surveys, which are all available for download on the EIA website. 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. EIA also collects data on generating capacity (Form EIA-860), generation (Form EIA-923), balancing authorities (Form EIA-930), and other more targeted surveys. EIA also produces annual and monthly reports based on the information it collects, including long- and short-term energy outlooks, which summarize EIA's 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. FERC Form 1 also collects financial data on all investor-owned utilities, including operations and maintenance costs, salaries of major employees, and other financial information. Larger wholesale electricity sellers must report cost-based sales, market-based rates, and other transactional information in the Electric Quarterly Report. www.ferc.gov/docs-filing/forms.asp
- Though not specifically geared to the energy industry, the Census Bureau is a great source of information which can be incorporated into your analysis. As an example of how we use census data, according to the Census Bureau, the number of people per household in the United States is 2.58. Using EIA data, we also know that public power utilities serve just under 19 million residential customer meters in the United States. Multiplying those two numbers we get 49 million, which is the estimated number of people served by a public power utility. Utilities can find information on their service area by searching by city or zip code.

www.census.gov

#### Additional expert analysis

There are other discrete sources of information for industry data.

- 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 which links to state policies and incentives related to energy efficiency, net metering, and renewable energy.
   www.dsireusa.org
- Organizations such as the Electric Power Research Institute, the Rocky Mountain Institute, and Lawrence Berkeley National Lab produce numerous reports each year, many of which incorporate deep dives into industry data.

www.EPRI.com www.rmi.org www.lbl.gov • The National Renewable Energy Laboratory's 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/Utility\_Rate\_Database https://openei.org/wiki/System\_Advisor\_Model\_(SAM)

There are many resources available to find energy and electric industry data, and it can be confusing to navigate precisely where to go and for what information. Between this new statistical report, the Association website, and the additional sources outlined above, you can find all that was in the previous printed report and much more. If you ever have any questions about the data, where to find it, and how to use it, don't hesitate to reach out to us at Statistics@ PublicPower.org.



#### **Summary of Payments and Contributions**

#### Net Payments and Contributions to State and Local Government

|   | Amount<br>(in Millions) | Percent<br>of Total |
|---|-------------------------|---------------------|
| Payments in Lieu of Taxes                 | \$631.9                 | 59.3%               |
| Other Taxes and Fees                      | \$220.8                 | 20.7%               |
| Gross Receipts Tax                        | \$162.2                 | 15.2%               |
| Free or Reduced Cost Electric Services    | \$42.1                  | 4.0%                |
| Use of Employees                          | \$7.2                   | 0.7%                |
| Other, including Equipment and Materials  | \$1.5                   | 0.1%                |
| Total                                     | \$1,065.7               | 100.0%              |
| Less: Services and Contributions RECEIVED | \$9.11 <sup>1</sup>     |                     |
| by the Utility FROM the Municipality      |                         |                     |
| Net Payments & Contributions              | \$1,056.6               |                     |

The study is based on a survey the Association sent to all publicly owned utilities. The next two sections of the report summarize results for 171 public power utilities that completed the survey.

The summaries exclude 17 Tennessee Valley Authority distribution utilities that completed the survey, because these utilities' payments and contributions are limited under the terms of their wholesale power contract with TVA.

The 171 utilities made a total of just under \$1.1 billion in total payments and contributions to state and local government in 2016. Payments in lieu of taxes were the largest share of payments and contributions, followed by other taxes and fees.

<sup>1</sup>The 171 utilities received \$9.1 million in contributions and services from the municipality. This amount does not include any contributions or services for which the city has been reimbursed, either through direct billing or a transfer of funds. Free or reduced cost office space and water are the major services provided, while operations and maintenance, legal services, information technology services, engineering services and financial service employees are the predominant type of employee contributions received by the utility. The \$9.1 million in free or reduced cost contributions and services provided by the municipality to the utility is subtracted from the \$1,065.7 million in payments and contributions from the utility to state and local government.

The result is \$1,056.6 million in net payments and contributions by the 171 utilities in 2016.



#### Types of Payments and Contributions, 2016

| Percentage of<br>Utilities Surveyed | Number<br>of Utilities  |
|-------------------------------------|---|
|                                     |   |
| 79.5%                               | 136   |
| 42.7%                               | 73  |
| 22.2%                               | 38  |
| 18.1%                               | 31  |
| 13.5%                               | 23  |
| 16.4%                               | 28  |
| 11.7%                               | 20  |
| 42.7%                               | 73  |
| 38.0%                               | 65  |
| 23.4%                               | 40  |
| 15.8%                               | 27  |
| 14.0%                               | 24  |
| 11.7%                               | 20  |
| 10.5%                               | 18  |
| 12.9%                               | 22  |
| 43.9%                               | 75  |
| 24.6%                               | 42  |
| 22.2%                               | 38  |
| 14.0%                               | 24  |
| 11.7%                               | 20  |
|                                     | 79.5% 42.7% 22.2% 18.1% 13.5% 16.4% 11.7% 42.7% 38.0% 23.4% 15.8% 14.0% 11.7% 10.5% 12.9% 43.9% 24.6% 22.2% 14.0% |

|                                     | Percentage of<br>Utilities Surveyed | Number of Utilities |
|-------------------------------------|-------------------------------------|---------------------|
| Use of Employees                    |                                     |                     |
| Tree Trimming for Other Departments | 15.8%                               | 27                  |
| Other Services                      | 12.9%                               | 22                  |
| Non-Utility Locates                 | 3.5%                                | 6                   |
| Technical Expertise                 | 4.1%                                | 7                   |
| Rewiring Municipal Buildings        | 2.9%                                | 5                   |
| Reading Water Meters                | 6.4%                                | 11                  |
| Other Resources                     | 24.0%                               | 41                  |
| Use of Vehicles and Equipment       | 18.1%                               | 31                  |
| Use of Materials and Supplies       | 7.0%                                | 12                  |
| Other                               | 9.4%                                | 16                  |
| II. Services and Contributions      |                                     |                     |
| Received                            | 23.4%                               | 40                  |
| Free or Reduced Cost Service        | 12.9%                               | 22                  |
| Use of Vehicles and Equipment       | 7.0%                                | 12                  |
| Use of Materials and Supplies       | 2.9%                                | 5                   |
| Use of Employees                    | 17.0%                               | 29                  |
|                                     |                                     |                     |

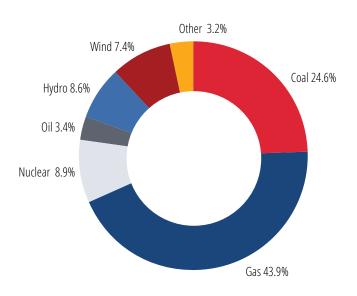


#### U.S. Electric Generating Capacity by Fuel Type, 2016

**National** 

Nameplate capacity in megawatts

|         | 1 7     | U                   |
|---------|---------|---------------------|
|         | MW      | Percentage of Total |
| Coal    | 289,429 | 24.6%               |
| Gas     | 517,327 | 43.9%               |
| Nuclear | 104,791 | 8.9%                |
| Oil     | 39,446  | 3.4%                |
| Wind    | 87,464  | 7.4%                |
| Hydro   | 101,020 | 8.6%                |
| Other   | 37,707  | 3.2%                |
|         |         |                     |

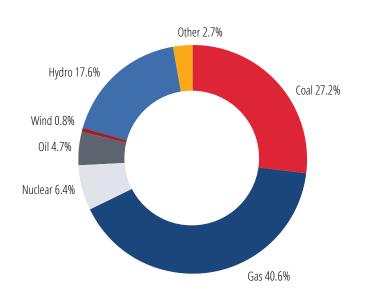


#### U.S. Electric Generating Capacity by Utility Type and Fuel Type, 2016

Nameplate capacity in megawatts. Data reflect joint ownership.

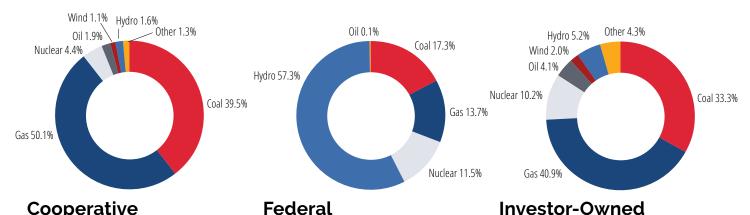
#### **Publicly Owned**

|         | MW     | Percentage of Total |
|---------|--------|---------------------|
| Coal    | 33,746 | 27.2%               |
| Gas     | 50,420 | 40.6%               |
| Nuclear | 7,975  | 6.4%                |
| Oil     | 5,810  | 4.7%                |
| Wind    | 962    | 0.8%                |
| Hydro   | 21,855 | 17.6%               |
| Other   | 3,296  | 2.7%                |



#### U.S. Electric Generating Capacity by Utility Type and Fuel Type, 2016

Nameplate capacity in megawatts. Data reflect joint ownership.

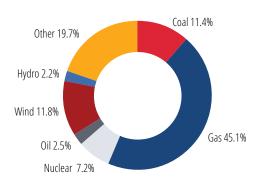


#### Cooperative

|         | MW     | Percentage of Total |
|---------|--------|---------------------|
| Coal    | 25,764 | 39.5%               |
| Gas     | 32,620 | 50.1%               |
| Nuclear | 2,864  | 4.4%                |
| Oil     | 1,268  | 1.9%                |
| Wind    | 732    | 1.1%                |
| Hydro   | 1,042  | 1.6%                |
| Other   | 872    | 1.3%                |

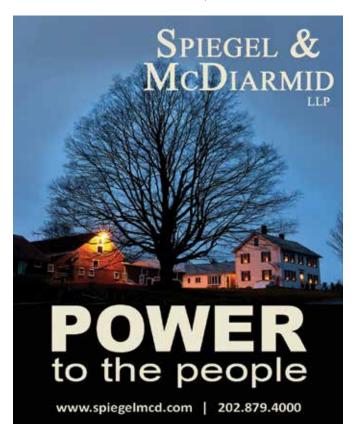
#### **Federal**

|         | MW     | Percentage of Total |         | MW      | Percentage of Total |
|---------|--------|---------------------|---------|---------|---------------------|
| Coal    | 12,763 | 17.3%               | Coal    | 158,889 | 33.3%               |
| Gas     | 10,132 | 13.7%               | Gas     | 194,883 | 40.9%               |
| Nuclear | 8,475  | 11.5%               | Nuclear | 48,815  | 10.2%               |
| Oil     | 68     | 0.1%                | Oil     | 19,367  | 4.1%                |
| Wind    | 23     | 0.0%                | Wind    | 9,377   | 2.0%                |
| Hydro   | 42,228 | 57.3%               | Hydro   | 24,678  | 5.2%                |
| Other   | 55     | 0.1%                | Other   | 20,510  | 4.3%                |



#### **Non-Utility Generators**

|         | MW Percentage of To |       |
|---------|---------------------|-------|
| Coal    | 58,268              | 11.4% |
| Gas     | 229,273             | 45.1% |
| Nuclear | 36,662              | 7.2%  |
| Oil     | 12,932              | 2.5%  |
| Wind    | 60,098              | 11.8% |
| Hydro   | 11,217              | 2.2%  |
| Other   | 100,439             | 19.7% |



#### **GENERATION**

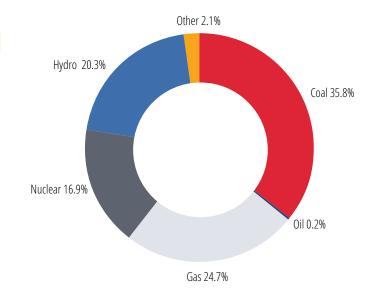
#### 2016 Generation by Fuel Type

Source: Ventyx Velocity Suite, November 2017

#### **Public Power**

Generation, in thousands of megawatt-hours

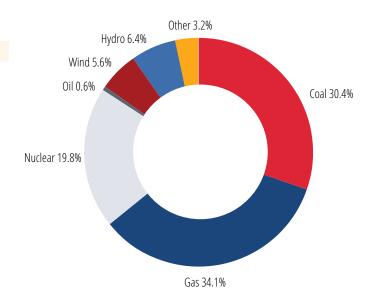
|         | MWh (000s) | Percentage |
|---------|------------|------------|
| Coal    | 38,324     | 35.8%      |
| Oil     | 602        | 0.2%       |
| Gas     | 95,522     | 24.7%      |
| Nuclear | 65,446     | 16.9%      |
| Hydro   | 78,236     | 20.3%      |
| Other   | 8,028      | 2.1%       |



#### **National**

Generation, in thousands of megawatt-hours

|         | MWh (000s) | Percentage |
|---------|------------|------------|
| Coal    | 1,239,149  | 30.4%      |
| Gas     | 1,391,114  | 34.1%      |
| Nuclear | 805,694    | 19.8%      |
| Oil     | 24,205     | 0.6%       |
| Wind    | 226,993    | 5.6%       |
| Hydro   | 261,126    | 6.4%       |
| Other   | 128,547    | 3.2%       |



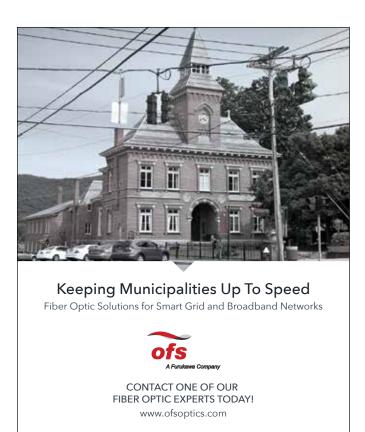




#### Renewable Capacity by Owner Type

Nameplate capacity, in megawatts

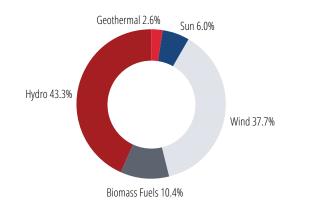
|   | Cooperative | Federal  | Investor-Owned | Public Power | Non-Utility<br>Generators | Total     |
|---|-------------|----------|----------------|--------------|---------------------------|-----------|
| <b>Renewable Fuels</b><br>Geothermal          | 3.7         |          | 133.7          | 220.0        | 3,447.2                   | 3,804.6   |
| Sun (Photovoltaic, Thermal)                   | 39.3        | 7.6      | 5,098.7        | 1,079.1      | 21,149.3                  | 27,374.0  |
| Wind  | 422.3       | 24.4     | 14,619.7       | 918.8        | 71,478.9                  | 87,464.1  |
| Biomass Fuels<br>Agricultural Crop Byproducts | 23.5        |          |                |              | 309.2                     | 332.7     |
| Black Liquor                                  |             | 20.8     | 37.3           | 60           | 50,89.6                   | 5,207.7   |
| Landfill Gas                                  | 115.0       |          | 110.6          | 299.2        | 1,703.9                   | 2,228.7   |
| Municipal Solid Waste                         | 48.0        |          | 212.9          | 723.4        | 1,815.1                   | 2,799.4   |
| Other Biomass Gases                           |             | 1.9      | 1.8            | 188          | 135.6                     | 327.3     |
| Other Biomass Liquids                         |             |          | 113.0          |              | 2                         | 115.0     |
| Other Biomass Solids                          |             |          |                |              | 166.3                     | 166.3     |
| Wood Waste Liquids                            |             |          |                |              | 44.0                      | 44.0      |
| Wood/Wood Waste Solids                        | 49.9        | 20.8     | 903.9          | 207.0        | 4,325.2                   | 5,506.8   |
| Hydro   | 1,042.5     | 42,227.5 | 24,677.7       | 21,855.4     | 11,216.6                  | 101,019.6 |
| Total Renewable Fuels                         | 1,744.2     | 42,303.0 | 45,909.3       | 25,552.9     | 120,880.9                 | 236,390.2 |



#### Generation from Renewable Energy, by Fuel Type, 2016

In thousand megawatt-hours and as a percent of all renewable generation

| Total Renewable Generation | 602.759    |         |
|----------------------------|------------|---------|
| Hydro                      | 261,126    | 43.3%   |
| Biomass Fuels              | 62,760     | 10.4%   |
| Wind                       | 226,993    | 37.7%   |
| Sun                        | 36,054     | 6.0%    |
| Geothermal                 | 15,826     | 2.6%    |
| M                          | MWh (000s) | Percent |
|                            |            |         |

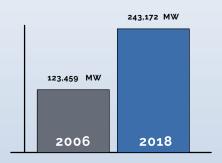


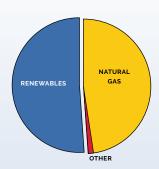
#### THE GREENING OF OUR POWER

OF GENERATING
CAPACITY
IN THE US IS FROM
RENEWABLE
RESOURCES

Capacity refers to how much electricity a generator can potentially produce.
Generation refers to the actual electrical output over a certain time.

# THE US' TOTAL RENEWABLE CAPACITY HAS NEARLY DOUBLED SINCE 2006





More than half of total capacity added in 2017 comes from renewable sources.

IN 2015, PUBLIC POWER OWNED MORE THAN

24,000 MW OF

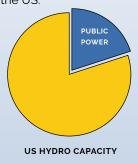
RENEWABLE

#### **HYDRO**



Hydro represents the largest renewable capacity in the US, with over **100.000 MW**.

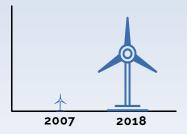
Public power owns more than 20% of all hydro capacity in the US.



#### WIND

Wind capacity is on track to surpass hydro in the next few years.

US WIND CAPACITY



More than 80% of the US' total wind capacity has come online since 2008.

Plus, more than 20,900 MW of wind capacity is already under construction or permitted.

#### **SOLAR**

Solar capacity has jumped from just over 500 MW in 2007 to over 30,600 MW in 2018.

In 2017, nearly 4,900 MW of utility-scale solar capacity was added to the grid.

That means the capacity has increased more than **60 TIMES IN 10 YEARS.** 



...and that doesn't include the more than 10,000 MW of rooftop PV installed on residences during that time.

#### **#PUBLICPOWER**

#### **GENERATION**

#### 100 Largest Public Power Systems Ranked by Generation, 2016

Net generation in megawatt-hours

| 1      | Naw York Dayor Authority                                | NIV      | 20 266 102               | Г1       | Drownguilla Dublic Utilitias Doord  | TV       | 1 620 570 |
|--------|---|----------|--------------------------|----------|---|----------|-----------|
| า<br>ว | New York Power Authority                                | NY<br>AZ | 29,266,192<br>28,783,319 | 51<br>52 | Brownsville Public Utilities Board  City of San Francisco (Hotch Hotchy Water & Power)      | TΧ       | 1,638,579 |
| 2      | Salt River Project                                      | TX       |                          | 53       | City of San Francisco (Hetch Hetchy Water & Power) Western Minnesota Municipal Power Agency | CA<br>MN | 1,596,378 |
| 3      | CPS Energy  | CA       | 23,404,684<br>20,691,273 | 54       | , , ,   | FL       | 1,590,824 |
| 4      | Los Angeles Department of Water & Power                 |          |                          |          | Gainesville Regional Utilities  |          | 1,556,679 |
| 5      | Santee Cooper (South Carolina Public Service Authority) | SC       | 20,412,502               | 55<br>56 | IID Energy  | CA       | 1,555,020 |
| 6      | Nebraska Public Power District                          | NE       | 14,787,399               | 56       | WPPI Energy   | WI       | 1,535,732 |
| 7      | Omaha Public Power District                             | NE       | 14,689,524               | 57       | Clark Public Utilities  | WA       | 1,441,105 |
| 8      | Lower Colorado River Authority                          | ΤX       | 14,067,638               | 58<br>50 | Sikeston Board of Municipal Utilities   | MO       | 1,364,754 |
| 9      | Puerto Rico Electric Power Authority                    | PR       | 13,502,935               | 59       | Yuba County Water Agency  | CA       | 1,258,370 |
| 10     | JEA<br>MEAG Power                                       | FL       | 13,277,163               | 60       | Silicon Valley Power  | CA       | 1,249,780 |
| 11     |   | GA       | 13,038,583               | 61       | Utah Associated Municipal Power Systems   | UT       | 1,170,008 |
| 12     | Public Utility District No. 2 of Grant County           | WA       | 10,165,921               | 62       | Anchorage Municipal Light & Power   | AK       | 1,145,358 |
| 13     | Energy Northwest  | WA       | 9,967,922                | 63       | Jonesboro City Water & Light  | AR       | 1,124,279 |
| 14     | Southern California Public Power Authority              | CA       | 9,785,479                | 64       | Placer County Water Agency  | CA       | 1,006,809 |
| 15     | Chelan County Public Utility District No. 1             | WA       | 9,175,079                | 65       | M-S-R Public Power Agency   | CA       | 1,006,765 |
| 16     | Austin Energy   | TX       | 9,077,239                | 66       | Kansas City Board of Public Utilities   | KS       | 954,459   |
| 17     | Intermountain Power Agency                              | UT       | 8,403,850                | 67       | Eugene Water & Electric Board   | OR       | 897,824   |
| 18     | Sacramento Municipal Utility District                   | CA       | 7,934,086                | 68       | Dalton Utilities  | GA       | 891,390   |
| 19     | Florida Municipal Power Agency                          | FL       | 7,864,215                | 69       | Muscatine Power & Water   | IA       | 878,621   |
| 20     | American Municipal Power                                | ОН       | 7,584,294                | 70       | Lafayette Public Power Authority  | LA       | 797,928   |
| 21     | North Carolina Municipal Power Agency No. 1             | NC       | 7,281,746                | 71       | City of Farmington  | NM       | 773,988   |
| 22     | Seattle City Light                                      | WA       | 6,698,623                | 72       | Minnesota Municipal Power Agency  | MN       | 768,262   |
| 23     | Orlando Utilities Commission                            | FL       | 6,607,921                | 73       | Northern Municipal Power Agency   | MN       | 749,016   |
| 24     | Grand River Dam Authority                               | OK       | 5,747,951                | 74       | NMPP Energy: Municipal Energy Agency of Nebraska  | NE       | 681,832   |
| 25     | Colorado Springs Utilities                              | CO       | 4,616,837                | 75       | Virgin Islands Water & Power Authority  | VI       | 674,010   |
| 26     | Public Utility District No. 1 of Douglas County         | WA       | 4,387,833                | 76       | Henderson City Utility Commission   | KY       | 595,466   |
| 27     | Indiana Municipal Power Agency                          | IN       | 3,462,823                | 77       | Modesto Irrigation District   | CA       | 585,534   |
| 28     | California Department of Water Resources                | CA       | 3,268,616                | 78       | Central Nebraska Public Power & Irrigation District   | NE       | 570,573   |
| 29     | Oklahoma Municipal Power Authority                      | OK       | 3,219,017                | 79       | Public Utility District No. 1 of Snohomish County   | WA       | 504,118   |
| 30     | Tacoma Public Utilities                                 | WA       | 3,149,870                | 80       | Tri-Dam Project   | CA       | 501,218   |
| 31     | Missouri Joint Municipal Electric Utility Commission    | MO       | 3,122,009                | 81       | Public Utility District No. 1 of Pend Oreille County  | WA       | 494,598   |
| 32     | Platte River Power Authority                            | CO       | 3,077,533                | 82       | City of Grand Island  | NE       | 492,337   |
| 33     | Lakeland Electric                                       | FL       | 2,674,311                | 83       | City of Redding   | CA       | 475,588   |
| 34     | City of Tallahassee Electric Utility                    | FL       | 2,583,195                | 84       | South Feather Water and Power Agency  | CA       | 471,876   |
| 35     | Illinois Municipal Electric Agency                      | IL       | 2,519,573                | 85       | Burbank Water and Power   | CA       | 464,690   |
| 36     | Piedmont Municipal Power Agency                         | SC       | 2,447,249                | 86       | Fremont Department of Utilities   | NE       | 457,775   |
| 37     | City Utilities of Springfield                           | MO       | 2,358,172                | 87       | Louisiana Energy and Power Authority  | LA       | 440,696   |
| 38     | Turlock Irrigation District                             | CA       | 1,948,416                | 88       | City of Hastings  | NE       | 436,355   |
| 39     | Owensboro Municipal Utilities                           | KY       | 1,930,517                | 89       | Alaska Energy Authority   | AK       | 418,997   |
| 40     | Northern California Power Agency                        | CA       | 1,861,847                | 90       | Utah Municipal Power Agency   | UT       | 407,578   |
| 41     | Lansing Board of Water & Light                          | MI       | 1,860,167                | 91       | Roseville Electric Utility  | CA       | 386,880   |
| 42     | Long Island Power Authority                             | NY       | 1,820,074                | 92       | Wyoming Municipal Power Agency  | WY       | 371,736   |
| 43     | Southern Minnesota Municipal Power Agency               | MN       | 1,815,741                | 93       | Anaheim Public Utilities  | CA       | 359,143   |
| 44     | Massachusetts Municipal Wholesale Electric Co.          | MA       | 1,787,949                | 94       | Nevada Irrigation District  | CA       | 353,229   |
| 45     | Lincoln Electric System                                 | NE       | 1,784,859                | 95       | Reedy Creek Improvement District  | FL       | 347,767   |
| 46     | Springfield City Water, Light & Power                   | IL       | 1,765,383                | 96       | Cedar Falls Utilities   | IA       | 317,215   |
| 47     | Michigan Public Power Agency                            | MI       | 1,720,111                | 97       | Los Alamos County Utilities   | NM       | 304,933   |
| 48     | Metropolitan Water District of Southern California      | CA       | 1,677,159                | 98       | Marquette Board of Light & Power  | MI       | 298,397   |
| 49     | Guam Power Authority                                    | GU       | 1,655,942                | 99       | City of West Memphis  | AR       | 289,352   |
| 50     | Texas Municipal Power Agency                            | TX       | 1,651,617                | 100      | Grand Haven Board of Light & Power  | MI       | 283,218   |

#### 100 Largest Public Power Utilities by Electric Revenues, 2016

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

| 1  | Los Angeles Department of Water & Power                 | CA      | \$3,383,656 | 51       | Gainesville Regional Utilities                    | FL     | \$265,737 |
|----|---|---------|-------------|----------|---|--------|-----------|
| 2  | Long Island Power Authority                             | NY      | \$3,309,834 | 52       | Massachusetts Municipal Wholesale Electric Co.    | MA     | \$265,352 |
| 3  | Puerto Rico Electric Power Authority                    | PR      | \$3,196,567 | 53       | Public Utility District No. 1 of Cowlitz County   | WA     | \$262,224 |
|    | Salt River Project                                      | AZ      | \$2,994,927 | 54       | Piedmont Municipal Power Agency                   | SC     | \$258,070 |
| 4  | · ·   | TΧ      |             | 55       | City of Tallahassee Electric Utility              | FL     | \$254,555 |
| 5  | CPS Energy  |         | \$2,287,422 | 55<br>56 | ·   |        |           |
| 6  | Santee Cooper (South Carolina Public Service Authority) | SC      | \$1,721,632 |          | Eugene Water & Electric Board                     | OR     | \$250,040 |
| 7  | New York Power Authority                                | NY      | \$1,638,039 | 57       | City of Garland                                   | ΤX     | \$249,374 |
| 8  | Sacramento Municipal Utility District                   | CA      | \$1,422,616 | 58       | Springfield City Water, Light & Power             | IL     | \$247,886 |
| 9  | JEA   | FL      | \$1,358,217 | 59       | Virgin Islands Water & Power Authority            | VI     | \$224,310 |
| 10 | Austin Energy   | TX      | \$1,250,849 | 60       | Southern Minnesota Municipal Power Agency         | MN     | \$220,137 |
| 11 | Memphis Light, Gas and Water Division                   | TN      | \$1,233,376 | 61       | Kansas City Board of Public Utilities             | KS     | \$218,517 |
| 12 | Nashville Electric Service                              | TN      | \$1,232,005 | 62       | Glendale Water & Power                            | CA     | \$213,863 |
| 13 | Omaha Public Power District                             | NE      | \$1,128,673 | 63       | Lubbock Power & Light                             | TX     | \$213,470 |
| 14 | Nebraska Public Power District                          | NE      | \$996,415   | 64       | Michigan Public Power Agency                      | MI     | \$211,585 |
| 15 | American Municipal Power                                | ОН      | \$970,073   | 65       | Fayetteville Public Works Commission              | NC     | \$204,511 |
| 16 | Seattle City Light                                      | WA      | \$890,270   | 66       | Northern California Power Agency                  | CA     | \$201,393 |
| 17 | MEAG Power  | GA      | \$783,325   | 67       | Platte River Power Authority                      | CO     | \$200,983 |
| 18 | Southern California Public Power Authority              | CA      | \$744,980   | 68       | Burbank Water and Power                           | CA     | \$198,672 |
| 19 | Orlando Utilities Commission                            | FL      | \$688,474   | 69       | Alabama Municipal Electric Authority              | AL     | \$198,352 |
| 20 | Public Utility District No. 1 of Snohomish County       | WA      | \$601,260   | 70       | Johnson City Power Board                          | TN     | \$193,763 |
| 21 | Intermountain Power Agency                              | UT      | \$557,165   | 71       | Lafayette Utilities System                        | LA     | \$193,343 |
| 22 | North Carolina Eastern Municipal Power Agency           | NC      | \$552,099   | 72       | Cleveland Public Power                            | OH     | \$190,619 |
| 23 | EPB - Chattanooga Electric Power Board                  | TN      | \$547,806   | 73       | Oklahoma Municipal Power Authority                | OK     | \$184,783 |
| 24 | Knoxville Utilities Board                               | TN      | \$529,733   | 74       | Roseville Electric Utility                        | CA     | \$183,884 |
| 25 | North Carolina Municipal Power Agency No. 1             | NC      | \$527,637   | 75       | Greenville Utilities Commission                   | NC     | \$178,157 |
| 26 | Florida Municipal Power Agency                          | FL      | \$516,651   | 76       | Pasadena Water and Power Department               | CA     | \$173,350 |
| 27 | Huntsville Utilities                                    | AL      | \$477,426   | 77       | Kissimmee Utility Authority                       | FL     | \$172,273 |
| 28 | WPPI Energy   | WI      | \$474,133   | 78       | Missouri River Energy Services                    | SD     | \$172,150 |
| 29 | Energy Northwest  | WA      | \$460,566   | 79       | Utah Associated Municipal Power Systems           | UT     | \$166,841 |
| 30 | Indiana Municipal Power Agency                          | IN      | \$448,986   | 80       | Bryan Texas Utilities                             | TX     | \$166,165 |
| 31 | Lower Colorado River Authority                          | ΤX      | \$445,112   | 81       | Murfreesboro Electric Department                  | TN     | \$165,010 |
| 32 | IID Energy  | CA      | \$416,846   | 82       | Marin Clean Energy                                | CA     | \$162,355 |
| 33 | Colorado Springs Utilities                              | CO      | \$416,257   | 83       | City of Vernon                                    | CA     | \$161,537 |
| 34 | Anaheim Public Utilities                                | CA      | \$393,729   | 84       | Lenoir City Utilities Board                       | TN     | \$161,450 |
| 35 | Grand River Dam Authority                               | OK      | \$391,024   | 85       | Anchorage Municipal Light & Power                 | AK     | \$160,984 |
| 36 | Silicon Valley Power                                    | CA      | \$387,050   | 86       | CDE Lightband                                     | TN     | \$159,199 |
| 37 | Tacoma Public Utilities                                 | WA      | \$374,968   | 87       | Naperville Department of Public Utilities         | IL     | \$155,995 |
| 38 | Clark Public Utilities                                  | WA      | \$367,279   | 88       | Connecticut Municipal Electric Energy Cooperative | CT     | \$155,825 |
| 39 | Modesto Irrigation District                             | CA      | \$362,712   | 89       | Sevier County Electric System                     | TN     | \$151,272 |
| 40 | Chelan County Public Utility District No. 1             | WA      | \$331,203   | 90       | Denton Municipal Electric                         | TX     | \$145,182 |
| 41 | Illinois Municipal Electric Agency                      | IL      | \$321,369   | 91       | Owensboro Municipal Utilities                     | KY     | \$143,313 |
| 42 | Turlock Irrigation District                             | CA      | \$316,310   | 92       | Jackson Energy Authority                          | TN     | \$142,499 |
| 43 | Missouri Joint Municipal Electric Utility Commission    | MO      | \$316,082   | 93       | Brownsville Public Utilities Board                | TX     | \$139,857 |
| 44 | City of Riverside Public Utilities                      | CA      | \$307,482   | 94       | Rochester Public Utilities                        | MN     | \$139,074 |
| 45 | Guam Power Authority                                    | GU      | \$306,897   | 95       | City of Redding                                   | CA     | \$137,176 |
| 46 | Lansing Board of Water & Light                          | MI      | \$303,610   | 96       | M-S-R Public Power Agency                         | CA     | \$133,691 |
| 47 | Lincoln Electric System                                 | NE      | \$301,060   | 97       | Independence Power & Light                        | MO     | \$132,866 |
| 48 | City Utilities of Springfield                           | MO      | \$284,673   | 98       | Vinton Public Power Authority                     | LA     | \$132,737 |
| 49 | Lakeland Electric                                       | FL      | \$282,037   | 99       | City of High Point                                | NC     | \$129,779 |
| 50 | Public Utility District No. 2 of Grant County           | WA      | \$278,321   | 100      | Benton PUD  | WA     | \$128,892 |
| 50 | Table July District No. 2 of Grant County               | V V / 1 | 46101761    | 100      | Denton I OD                                       | A 41 / | 4120,032  |

#### 100 Largest Public Power Utilities by Megawatt-hour Sales, 2016

Sales to ultimate customers and sales for resale.

|    |   |    | 00.677.006 |     |  | 6. | 0.000.554 |
|----|---|----|------------|-----|--|----|-----------|
| 1  | New York Power Authority                                | NY | 38,677,236 | 51  | Modesto Irrigation District                          | CA | 3,392,661 |
| 2  | Salt River Project                                      | AZ | 35,571,605 | 52  | Missouri River Energy Services                       | SD | 3,384,349 |
| 3  | CPS Energy  | TX | 27,321,920 | 53  | Michigan Public Power Agency                         | MI | 3,347,794 |
| 4  | Santee Cooper (South Carolina Public Service Authority) | SC | 23,700,074 | 54  | Anaheim Public Utilities                             | CA | 3,313,890 |
| 5  | Los Angeles Department of Water & Power                 | CA | 23,549,105 | 55  | Massachusetts Municipal Wholesale Electric Co.       | MA | 3,235,827 |
| 6  | Nebraska Public Power District                          | NE | 18,902,172 | 56  | Turlock Irrigation District                          | CA | 3,232,672 |
| 7  | Omaha Public Power District                             | NE | 17,902,948 | 57  | Southern Minnesota Municipal Power Agency            | MN | 3,219,349 |
| 8  | Long Island Power Authority                             | NY | 17,852,922 | 58  | Utah Associated Municipal Power Systems              | UT | 3,184,083 |
| 9  | Puerto Rico Electric Power Authority                    | PR | 17,311,056 | 59  | Alabama Municipal Electric Authority                 | AL | 3,138,554 |
| 10 | Lower Colorado River Authority                          | TX | 14,973,300 | 60  | Lakeland Electric                                    | FL | 3,030,066 |
| 11 | Chelan County Public Utility District No. 1             | WA | 14,793,281 | 61  | Lafayette Utilities System                           | LA | 2,900,099 |
| 12 | Austin Energy   | TX | 14,661,874 | 62  | Oklahoma Municipal Power Authority                   | OK | 2,894,051 |
| 13 | American Municipal Power                                | OH | 14,380,823 | 63  | Kansas City Board of Public Utilities                | KS | 2,893,433 |
| 14 | JEA   | FL | 14,267,027 | 64  | Lansing Board of Water & Light                       | MI | 2,717,014 |
| 15 | Memphis Light, Gas and Water Division                   | TN | 13,721,843 | 65  | Vinton Public Power Authority                        | LA | 2,716,396 |
| 16 | MEAG Power  | GA | 13,651,385 | 66  | City of Tallahassee Electric Utility                 | FL | 2,687,021 |
| 17 | Seattle City Light                                      | WA | 13,304,079 | 67  | Lubbock Power & Light                                | TX | 2,651,784 |
| 18 | Sacramento Municipal Utility District                   | CA | 12,217,498 | 68  | Piedmont Municipal Power Agency                      | SC | 2,619,091 |
| 19 | Southern California Public Power Authority              | CA | 12,014,159 | 69  | Springfield City Water, Light & Power                | IL | 2,561,783 |
| 20 | Nashville Electric Service                              | TN | 11,991,016 | 70  | Minnesota Municipal Power Agency                     | MN | 2,324,927 |
| 21 | Energy Northwest  | WA | 9,967,922  | 71  | NMPP Energy: Municipal Energy Agency of Nebraska     | NE | 2,270,592 |
| 22 | Public Utility District No. 2 of Grant County           | WA | 9,785,085  | 72  | Benton PUD   | WA | 2,270,367 |
| 23 | Grand River Dam Authority                               | OK | 8,763,504  | 73  | City of Riverside Public Utilities                   | CA | 2,183,922 |
| 24 | Public Utility District No. 1 of Snohomish County       | WA | 8,497,292  | 74  | Fayetteville Public Works Commission                 | NC | 2,054,941 |
| 25 | Intermountain Power Agency                              | UT | 8,403,850  | 75  | Marin Clean Energy                                   | CA | 2,054,644 |
| 26 | Orlando Utilities Commission                            | FL | 7,896,364  | 76  | Burbank Water and Power                              | CA | 2,052,113 |
| 27 | Florida Municipal Power Agency                          | FL | 7,706,166  | 77  | Gainesville Regional Utilities                       | FL | 2,033,274 |
| 28 | North Carolina Eastern Municipal Power Agency           | NC | 7,513,988  | 78  | Bryan Texas Utilities                                | TX | 2,029,340 |
| 29 | North Carolina Municipal Power Agency No. 1             | NC | 7,504,395  | 79  | Owensboro Municipal Utilities                        | KY | 2,007,741 |
| 30 | Tacoma Public Utilities                                 | WA | 7,358,610  | 80  | Roseville Electric Utility                           | CA | 1,956,376 |
| 31 | Indiana Municipal Power Agency                          | IN | 6,706,130  | 81  | Johnson City Power Board                             | TN | 1,918,859 |
| 32 | WPPI Energy   | WI | 6,563,896  | 82  | Murfreesboro Electric Department                     | TN | 1,766,211 |
| 33 | EPB - Chattanooga Electric Power Board                  | TN | 5,606,785  | 83  | Sikeston Board of Municipal Utilities                | MO | 1,765,935 |
| 34 | Knoxville Utilities Board                               | TN | 5,495,823  | 84  | Greenville Utilities Commission                      | NC | 1,721,702 |
| 35 | Clark Public Utilities                                  | WA | 5,235,684  | 85  | Jackson Energy Authority                             | TN | 1,717,993 |
| 36 | Missouri Joint Municipal Electric Utility Commission    | MO | 5,233,345  | 86  | Connecticut Municipal Electric Energy Cooperative    | CT | 1,714,761 |
| 37 | Huntsville Utilities                                    | AL | 5,175,972  | 87  | Muscatine Power & Water                              | IA | 1,710,970 |
| 38 | Public Utility District No. 1 of Cowlitz County         | WA | 5,039,734  | 88  | M-S-R Public Power Agency                            | CA | 1,681,208 |
| 39 | Colorado Springs Utilities                              | CO | 4,974,149  | 89  | Dalton Utilities                                     | GA | 1,665,858 |
| 40 | California Department of Water Resources                | CA | 4,964,497  | 90  | Lenoir City Utilities Board                          | TN | 1,656,361 |
| 41 | Lincoln Electric System                                 | NE | 4,460,263  | 91  | Louisiana Energy and Power Authority                 | LA | 1,618,701 |
| 42 | Public Utility District No. 1 of Douglas County         | WA | 4,338,387  | 92  | Kansas Municipal Energy Agency                       | KS | 1,613,917 |
| 43 | Eugene Water & Electric Board                           | OR | 4,163,724  | 93  | Cleveland Public Power                               | ОН | 1,612,906 |
| 44 | Illinois Municipal Electric Agency                      | IL | 4,156,897  | 94  | City of San Francisco (Hetch Hetchy Water & Power)   | CA | 1,595,486 |
| 45 | Platte River Power Authority                            | CO | 3,945,145  | 95  | Glendale Water & Power                               | CA | 1,593,509 |
| 46 | City of Garland   | TX | 3,740,680  | 96  | Western Minnesota Municipal Power Agency             | MN | 1,590,824 |
| 47 | City Utilities of Springfield                           | MO | 3,691,470  | 97  | Brownsville Public Utilities Board                   | TX | 1,590,555 |
| 48 | Northern California Power Agency                        | CA | 3,669,467  | 98  | Guam Power Authority                                 | GU | 1,574,340 |
| 49 | Silicon Valley Power                                    | CA | 3,425,802  | 99  | Texas Municipal Power Agency                         | ΤX | 1,571,797 |
| 50 | IID Energy  | CA | 3,399,595  | 100 | Public Utility District No. 1 of Grays Harbor County | WA | 1,547,916 |

#### 100 Largest Public Power Utilities By Electric Customers Served, 2016

Ultimate customers served

| 1  | Duarta Dica Flactric Dawar Authority                    | חח       | 1 450 062 | Г1  | No. 11 December 10 Healight                          |           | F0 007 |
|----|---|----------|-----------|-----|--|-----------|--------|
| 1  | Puerto Rico Electric Power Authority                    | PR       | 1,459,963 | 51  | Naperville Department of Public Utilities            | IL<br>TNI | 59,097 |
| 2  | Los Angeles Department of Water & Power                 | CA       | 1,419,468 | 52  | Murfreesboro Electric Department                     | TN        | 59,071 |
| 3  | Long Island Power Authority                             | NY       | 1,122,226 | 53  | Roseville Electric Utility                           | CA        | 57,938 |
| 4  | Salt River Project                                      | AZ<br>TV | 1,029,831 | 54  | Independence Power & Light                           | MO        | 57,013 |
| 5  | CPS Energy  | TX       | 794,768   | 55  | Sevier County Electric System                        | TN        | 55,969 |
| 6  | Sacramento Municipal Utility District                   | CA       | 619,622   | 56  | Silicon Valley Power                                 | CA        | 53,659 |
| 7  | Austin Energy   | TX       | 464,322   | 57  | Bryan Texas Utilities                                | TX        | 53,449 |
| 8  | JEA   | FL       | 453,703   | 58  | Burbank Water and Power                              | CA        | 53,153 |
| 9  | Seattle City Light                                      | WA       | 435,361   | 59  | Rochester Public Utilities                           | MN        | 52,469 |
| 10 | Memphis Light, Gas and Water Division                   | TN       | 409,814   | 60  | City of Ocala Electric Utility                       | FL        | 52,456 |
| 11 | Nashville Electric Service                              | TN       | 384,986   | 61  | Denton Municipal Electric                            | TX        | 51,305 |
| 12 | Omaha Public Power District                             | NE       | 369,485   | 62  | Guam Power Authority                                 | GU        | 50,207 |
| 13 | Public Utility District No. 1 of Snohomish County       | WA       | 341,109   | 63  | Benton PUD   | WA        | 49,792 |
| 14 | Orlando Utilities Commission                            | FL       | 231,229   | 64  | Public Utility District No. 1 of Cowlitz County      | WA        | 49,746 |
| 15 | Colorado Springs Utilities                              | CO       | 225,406   | 65  | Chelan County Public Utility District No. 1          | WA        | 49,407 |
| 16 | Knoxville Utilities Board                               | TN       | 199,984   | 66  | Florence Utilities                                   | AL        | 49,127 |
| 17 | Clark Public Utilities                                  | WA       | 199,623   | 67  | Columbia Water & Light                               | MO        | 49,116 |
| 18 | Huntsville Utilities                                    | AL       | 179,773   | 68  | Brownsville Public Utilities Board                   | TX        | 48,232 |
| 19 | Tacoma Public Utilities                                 | WA       | 176,781   | 69  | Danville Department of Utilities                     | VA        | 48,069 |
| 20 | Santee Cooper (South Carolina Public Service Authority) | SC       | 176,776   | 70  | Public Utility District No. 2 of Grant County        | WA        | 46,492 |
| 21 | EPB - Chattanooga Electric Power Board                  | TN       | 167,360   | 71  | Riviera Utilities                                    | AL        | 45,788 |
| 22 | IID Energy  | CA       | 149,431   | 72  | City of Athens                                       | AL        | 44,934 |
| 23 | Lincoln Electric System                                 | NE       | 136,634   | 73  | City of Redding                                      | CA        | 43,944 |
| 24 | Anaheim Public Utilities                                | CA       | 129,919   | 74  | Public Utility District No. 1 of Grays Harbor County | WA        | 42,017 |
| 25 | Lakeland Electric                                       | FL       | 127,153   | 75  | City of Farmington                                   | NM        | 41,900 |
| 26 | Modesto Irrigation District                             | CA       | 121,615   | 76  | Marietta Power and Water                             | GA        | 41,147 |
| 27 | City of Tallahassee Electric Utility                    | FL       | 114,573   | 77  | City of College Station                              | TX        | 40,869 |
| 28 | City Utilities of Springfield                           | MO       | 113,966   | 78  | City of High Point                                   | NC        | 40,841 |
| 29 | City of Riverside Public Utilities                      | CA       | 108,607   | 79  | City of Edmond                                       | OK        | 39,097 |
| 30 | Lubbock Power & Light                                   | ΤX       | 103,803   | 80  | Central Lincoln People's Utility District            | OR        | 38,795 |
| 31 | Turlock Irrigation District                             | CA       | 101,867   | 81  | Longmont Power & Communications                      | CO        | 38,509 |
| 32 | Lansing Board of Water & Light                          | MI       | 96,842    | 82  | City of North Little Rock Electric Department        | AR        | 38,481 |
| 33 | Gainesville Regional Utilities                          | FL       | 95,161    | 83  | Greeneville Light & Power System                     | TN        | 38,078 |
| 34 | Eugene Water & Electric Board                           | OR       | 93,162    | 84  | City of Rock Hill                                    | SC        | 37,702 |
| 35 | Nebraska Public Power District                          | NE       | 90,115    | 85  | Albany Water, Gas & Light Commission                 | GA        | 37,083 |
| 36 | Glendale Water & Power                                  | CA       | 87,347    | 86  | New Braunfels Utilities                              | TX        | 36,761 |
| 37 | Fayetteville Public Works Commission                    | NC       | 82,021    | 87  | Provo City Power                                     | UT        | 36,493 |
| 38 | Johnson City Power Board                                | TN       | 78,802    | 88  | Loveland Water & Power                               | CO        | 35,875 |
| 39 | Cleveland Public Power                                  | ОН       | 71,905    | 89  | Jackson Energy Authority                             | TN        | 35,797 |
| 40 | Springfield City Water, Light & Power                   | IL       | 71,305    | 90  | Jonesboro City Water & Light                         | AR        | 35,773 |
| 41 | Fort Collins Utilities                                  | CO       | 71,016    | 91  | Anderson Municipal Light & Power                     | IN        | 35,577 |
| 42 | Kissimmee Utility Authority                             | FL       | 69,905    | 92  | City of Vero Beach                                   | FL        | 35,216 |
| 43 | City of Garland   | TX       | 69,533    | 93  | Alameda Municipal Power                              | CA        | 34,833 |
| 44 | CDE Lightband   | TN       | 67,928    | 94  | Beaches Energy Services                              | FL        | 34,601 |
| 45 | Lafayette Utilities System                              | LA       | 66,325    | 95  | Dickson Electric System                              | TN        | 34,390 |
| 46 | Greenville Utilities Commission                         | NC       | 66,298    | 96  | Wilson Energy  | NC        | 34,115 |
| 47 | Kansas City Board of Public Utilities                   | KS       | 65,034    | 97  | Mason County Public Utility District No. 3           | WA        | 33,345 |
| 48 | Pasadena Water and Power Department                     | CA       | 63,669    | 98  | Bristol Tennessee Essential Services                 | TN        | 33,328 |
| 49 | Lenoir City Utilities Board                             | TN       | 63,295    | 99  | Springfield Utility Board                            | OR        | 32,021 |
| 50 | Virgin Islands Water & Power Authority                  | VI       | 60,599    | 100 | Public Utility District No. 1 of Lewis County        | WA        | 31,770 |
| -  | <u> </u>  |          | /         | 100 | . abile build bibuilet ito. I of Lewis county        | **/ \     | 31,770 |

# Public Power Costs Less

ow much a person pays for electricity depends on a variety of factors — including where they live and from whom they get their power.

Across the country, publicly owned electric utilities continue to provide customers with low-cost energy for their homes and businesses.

The tables and graphs on the following pages show revenue per kilowatt-hour information by state and utility type.

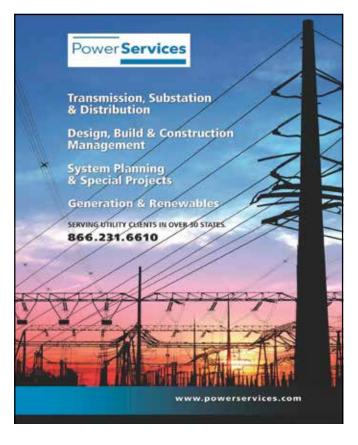
Residential customers in IOU service territories paid average rates that were 12 percent above those paid by customers of publicly owned systems during 2016. Nationwide, the average residential customer served by public power pays 11.55 cents per kWh, compared to 11.62 cents for co-ops, and 13.09 cents for customers served by IOUs.

Commercial customers of IOUs paid slightly more for electricity than public power customers in 2016, while cooperative commercial customers paid roughly the same. Both public power and cooperative commercial customers paid an average of 10.5 cents per kWh, compared to 10.9 cents per kWh paid by commercial customers of IOUs. Industrial customers of IOUs paid an average of 6.8 cents per kWh, which was less than the average rate for public power industrial customers of 7.3 cents per kWh. Industrial customers of cooperative utilities paid average rates of 7.1 cents per kWh.

The map on pages 20-21 shows the average revenue from bundled sales per kWh for residential, commercial, and industrial customers served by public power, cooperative, and investor-owned utilities in 2016. Take a look to see how your state compares.

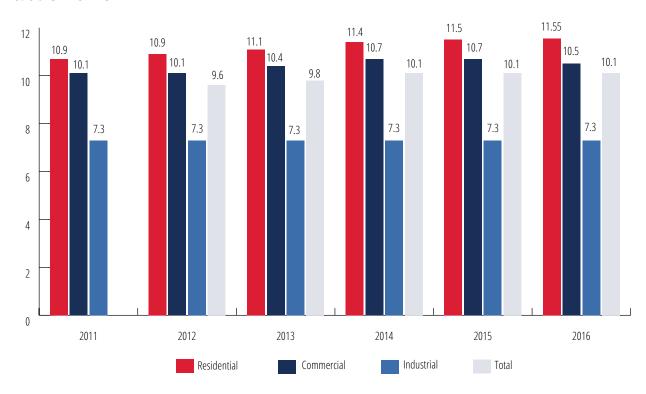


The 2016 averages presented here are based on the Department of Energy, Energy Information Administration's data from Form EIA-861, "Annual Electric Utility Report." Most utilities with under 100,000 megawatt-hours in total sales report sales and revenue information on Form EIA-861S. Though total revenue and sales data are available, individual sector data for these utilities are not. As such, these utilities, which represent approximately 1 percent of total customer load in the United States, were not included in these calculations.

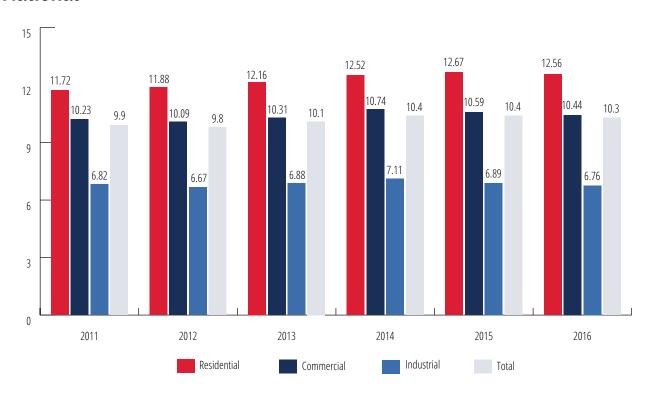


#### **Trends in Average Revenue By Customer Class**

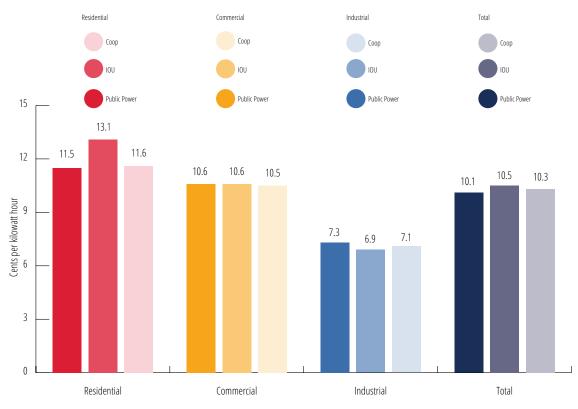
#### **Public Power**

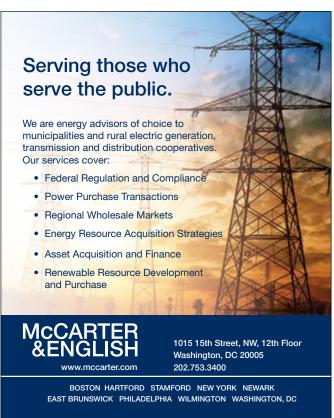


#### **National**



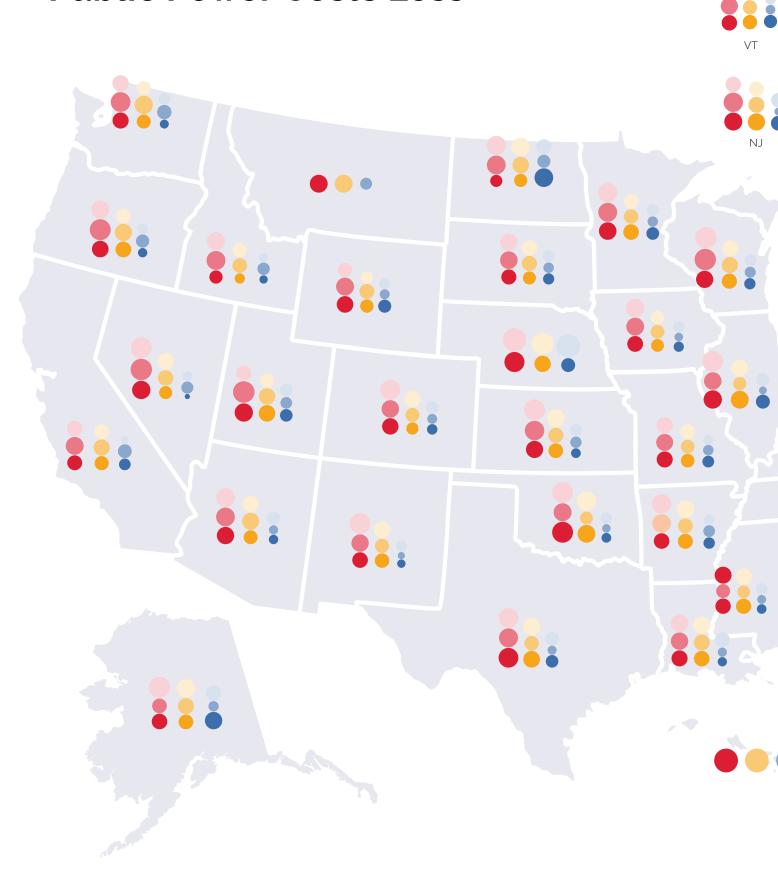
#### **Average Retail Rates by Customer Class**

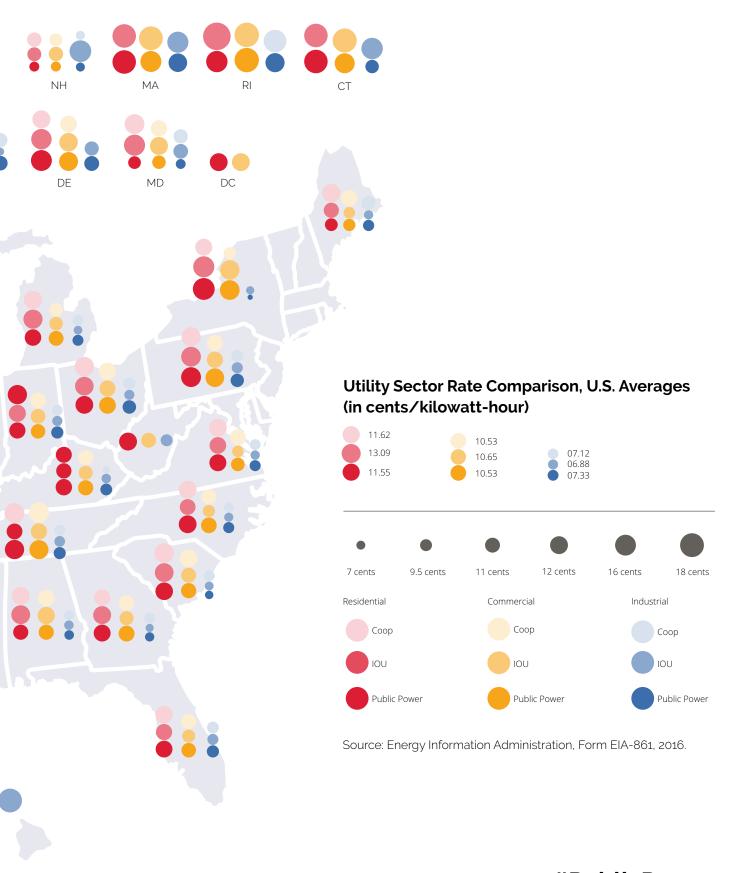






## Coast to Coast, Public Power Costs Less





#### **#PublicPower**

#### **DATA BY STATE**

#### Public Power Data by State, 2016

|                             | Ultimate Customers<br>(MWh) | Sales to Ultimate Customers | Generation<br>(MWh) |
|-----------------------------|-----------------------------|-----------------------------|---------------------|
| Alabama                     | 549,080                     | 16,613,313                  | 56,730              |
| Alaska                      | 59,878                      | 1,547,269                   | 1,879,103           |
| Arizona                     | 1,133,354                   | 31,280,617                  | 28,783,439          |
| Arkansas                    | 198,192                     | 6,217,673                   | 1,831,473           |
| California                  | 3,242,986                   | 61,330,887                  | 59,439,748          |
| Colorado                    | 453,996                     | 8,917,722                   | 7,714,202           |
| Connecticut                 | 73,869                      | 1,857,314                   | 8,102               |
| Delaware                    | 68,378                      | 1,976,489                   | 55,323              |
| Florida                     | 1,444,418                   | 36,265,724                  | 34,930,403          |
| Georgia                     | 339,372                     | 12,235,813                  | 13,969,193          |
| Idaho                       | 46,049                      | 1,111,585                   | 197,881             |
| Illinois                    | 272,981                     | 6,790,240                   | 4,376,227           |
| Indiana                     | 262,545                     | 7,927,599                   | 3,487,623           |
|                             |                             | 5,340,876                   | 1,916,417           |
| lowa                        | 214,255                     | 5,340,876<br>7,068,574      |                     |
| Kansas                      | 236,621                     |                             | 1,082,107           |
| Kentucky                    | 210,198                     | 6,490,539                   | 2,538,759           |
| Louisiana                   | 170,314                     | 7,407,182                   | 1,414,834           |
| Maine                       | 16,412                      | 351,002                     | 645                 |
| Maryland                    | 34,303                      | 690,503                     | (1,782)             |
| Massachusetts               | 402,294                     | 7,515,565                   | 2,149,029           |
| Michigan                    | 306,887                     | 7,452,567                   | 4,335,933           |
| Minnesota                   | 375,095                     | 9,617,219                   | 5,216,952           |
| Mississippi                 | 136,080                     | 3,909,936                   | 10,548              |
| Missouri                    | 433,971                     | 10,821,844                  | 7,288,141           |
| Montana                     | 991                         | 16,053                      | -                   |
| Nebraska                    | 1,021,209                   | 29,363,171                  | 34,071,796          |
| Nevada                      | 30,374                      | 1,992,889                   | -                   |
| New Hampshire               | 12,220                      | 180,899                     | -                   |
| New Jersey                  | 62,703                      | 1,156,793                   | 142,843             |
| New Mexico                  | 84,053                      | 2,040,563                   | 1,078,921           |
| New York                    | 1,288,814                   | 42,084,293                  | 31,362,919          |
| North Carolina              | 600,689                     | 16,263,139                  | 7,283,728           |
| North Dakota                | 11,119                      | 318,932                     |                     |
| Ohio                        | 377,609                     | 10,099,047                  | 7,850,948           |
| Oklahoma                    | 204,429                     | 5,970,323                   | 9,000,824           |
| Oregon                      | 304,094                     | 8,896,582                   | 1,022,985           |
| Pennsylvania                | 85,627                      | 1,408,031                   | 12,890              |
| Rhode Island                | 4,682                       | 56,769                      |                     |
| South Carolina              | 357,890                     | 12,571,269                  | 22,862,714          |
| South Dakota                | 60,749                      | 1,524,130                   | 52                  |
| Tennessee                   | 2,253,213                   | 68,136,568                  | -<br>-              |
| Texas                       | 1,923,611                   | 52,588,892                  | 50,445,638          |
| Utah                        | 249,928                     | 4,774,375                   | 10,223,822          |
| Vermont                     | 55,834                      | 770,275                     | 292,938             |
| Virginia                    | 167,314                     | 4,391,606                   | 57,522              |
|                             | 1,714,470                   | 4,351,000<br>47,545,034     |                     |
| Washington<br>West Virginia |                             |                             | 46,255,626          |
| •                           | 3,629                       | 68,608<br>7,707,673         | -<br>1 000 700      |
| Wisconsin                   | 285,597                     | 7,787,573                   | 1,880,798           |
| Wyoming                     | 36,701                      | 666,116                     | 565,959             |
|                             | 21,879,077                  | 581,409,982                 | 407,093,953         |

Source: Energy Information Administration Form EIA-861 and 861S, 2016 data. Customer, sales, and revenue data reflect full-service and delivery-only sales.

#### **Number of Public Power Utilities, 2016**

| Public Power Customers as Percentage of<br>Total Residential Customers in State |  |
|---|--|
| 20.1%   |  |
| 15.1%   |  |
| 36.8%   |  |
| 12.2%   |  |
| 20.8%   |  |
| 16.1%   |  |
| 3.3%  |  |
| 12.5%   |  |
| 13.4%   |  |
| 5.9%  |  |
| 4.2%  |  |
| 2.4%  |  |
| 6.1%  |  |
| 10.0%   |  |
| 12.5%   |  |
| 8.2%  |  |
| 5.7%  |  |
| 1.5%  |  |
| 0.8%<br>8.4%  |  |
| 5.4%  |  |
| 11.8%   |  |
| 7.6%  |  |
| 11.4%   |  |
| NA  |  |
| 95.0%   |  |
| 1.6%  |  |
| 0.6%  |  |
| 1.0%  |  |
| 6.7%  |  |
| 13.0%   |  |
| 10.5%   |  |
| 1.0%  |  |
| 3.9%  |  |
| 7.3%  |  |
| 15.5%   |  |
| 0.4%  |  |
| 0.8%  |  |
| 13.0%   |  |
| 10.7%   |  |
| 68.6%   |  |
| 15.4%   |  |
| 18.5%   |  |
| 12.9%   |  |
| 3.9%  |  |
| 50.4%<br>NA   |  |
| NA<br>8.1%  |  |
| 8.1%  |  |
|   |  |
| 12.6%   |  |

| Alabama        | 37  | Nebraska                 | 150   |
|----------------|-----|--------------------------|-------|
| Alaska         | 36  | Nevada                   | 8     |
| American Samoa | 1   | New Hampshire            | 5     |
| Arizona        | 30  | New Jersey               | 9     |
| Arkansas       | 15  | New Mexico               | 7     |
| California     | 54  | New York                 | 51    |
| Colorado       | 31  | North Carolina           | 74    |
| Connecticut    | 9   | North Dakota             | 12    |
| Delaware       | 9   | Northern Mariana Islands | 1     |
| Florida        | 34  | Ohio                     | 86    |
| Georgia        | 53  | Oklahoma                 | 63    |
| Guam           | 1   | Oregon                   | 18    |
| Idaho          | 11  | Pennsylvania             | 35    |
| Illinois       | 42  | Puerto Rico              | 1     |
| Indiana        | 73  | Rhode Island             | 1     |
| Iowa           | 137 | South Carolina           | 23    |
| Kansas         | 118 | South Dakota             | 36    |
| Kentucky       | 29  | Tennessee                | 61    |
| Louisiana      | 24  | Texas                    | 77    |
| Maine          | 5   | Utah                     | 42    |
| Maryland       | 5   | Vermont                  | 15    |
| Massachusetts  | 42  | Virgin Islands           | 1     |
| Michigan       | 42  | Virginia                 | 17    |
| Minnesota      | 129 | Washington               | 42    |
| Mississippi    | 24  | West Virginia            | 2     |
| Missouri       | 87  | Wisconsin                | 84    |
| Montana        | 1   | Wyoming                  | 14    |
|                |     | Total                    | 2,014 |
|                |     |                          |       |



# **Looking for the Public Power Directory?**

The Public Power Directory that historically paired with the Statistical Report is moving online.

Starting in late 2018, American Public Power Association members will be able to access a searchable and filterable web database of public power utilities, federal power agencies, joint action agencies, regional associations, and other utility organizations and systems.

The online directory will feature new data as it is collected, both from members and from the Energy Information Administration. This new format will allow users to access up-to-date information on their peers and use filtering options to find utilities that fit specific criteria. Within each listing, you'll also be able to see utility contact information, website, and social media handles.

The new format will allow you to:

- Search and filter by more than a dozen options
- Access the latest information available
- Ensure your utility information is correct
- Find and connect more easily with peers

In the meantime, you can find information on public power providers in the 2017-2018 Directory, on PublicPower.org, or by contacting us at Info@PublicPower.org.

ISSUE



COMING LATE 2018

# The Public Power Directory





STATE

**BOARD REGION** 

NUMBER OF EMPLOYEES

YEAR ESTABLISHED

DEED AND RP3 DESIGNATION

**GOVERNANCE STRUCTURE** 

NUMBER OF CUSTOMERS

**REVENUE AND SALES** 

**GENERATION** 

**CAPACITY** 

SERVICES OFFERED

**EDUCAT** ES & POLICIES



### PARTNERSHIP 2.0

Proven Capabilities. New Opportunities...

New challenges require a new mindset. TEA has transformed to bring the analytical capabilities and market knowledge you've depended on for over 20 years to bear on the new challenges you're facing.

Whether you're integrating distributed energy resources, analyzing your "big data" for meaningful insights, or transitioning to become "Utility 2.0," TEA's advanced analytical capabilities can help you thrive in the world to come.



TEA-Energy Authority

www.teainc.org