# Public Power Sector — With Some Exceptions— Remains Healthy

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## OVERVIEW

Public, or municipally-owned, electric utilities serve fewer customers in the US than do investor-owned utilities but many urban and rural areas in the southern and western US rely on these entities for electric service. By par amount of new issuance, public power bond issues were the 12th largest sector of the municipal bond market in 2018.[1]

Public utilities have experienced a fair share of negative events in recent decades, from the 1983 default of the Washington Public Power Supply System (now Energy Northwest) to more recent problems with nuclear construction at the **Municipal Electric Authority of Georgia** (MEAG) and **South Carolina Public Service Authority** (Santee Cooper).

This report by *Debtwire Municipals* examines more than 100 electric utilities that have outstanding long-term debt > USD 50m. We chose this criterion because borrowers with at least this amount of outstanding debt are more frequently traded than less-indebted borrowers. Information in the attached excel table was used to compare these borrowers.

## THE ELECTRIC UTILITY INDUSTRY IN THE US

Investor-owned utilities (IOUs), public utilities, and rural electric cooperatives (co-ops) are the major providers of US electric service. IOUs serve 68% of the population, municipal utilities 15%, and co-ops 13%.[2] The first municipal utilities began operating in the 1880s and were typically created in areas not served by IOUs.

Rural electric co-ops are not-for-profit entities owned by local governments in their service areas. As with municipal utilities, co-ops were established due to insufficient electric service in rural areas. Co-ops were first created with federal loans provided under terms of the US Rural Electrification Act of 1936.

## ELECTRIC GRID

We have classified utilities in our list as providing one or more of the following types of service: generation, transmission, and distribution.

**Generation** can be either centralized or decentralized, but municipal utilities specialize in centralized generation, in which generation occurs at a distance from the end user. Common sources of generation include coal, oil, nuclear power, natural gas, hydro power, and wind.

Decentralized generation refers to electricity generated close to the consumer, e.g. rooftop solar.

**Transmission** refers to the process of transporting electricity from generating plants to a substation, typically over long distances. A substation converts electricity to a safe level of voltage before it is distributed to consumers.

**Distribution** is the final stage in the electricity supply chain, in which electricity travels from a substation via the distribution system to consumers.

## DEBT COMPARISONS

### *Outstanding debt*

Median debt outstanding for public utilities that provide generation, transmission, and distribution (*GTD utilities*) was USD 474.4m in FY17. Fourteen GTDs had debt that year in excess of USD 1bn.

The Tennessee Valley Authority (TVA) had the most debt outstanding of any utility, with USD 20.3bn.[3] Among joint action agencies[4] (JAAs), American Municipal Power, Inc. (AMP) had the most debt, USD 5.9bn in the aggregate for its various projects. AMP's Prairie State Project, a coal-fired generating plant in which AMP has a 23.26% ownership share, accounts for USD 2.3bn of AMP's total.

AMP consists of 135 members in nine states, mostly in Ohio and Pennsylvania. AMP has received approval via a private letter ruling from the Internal Revenue Service to issue tax -exempt securities on behalf of its members.[5]

Of the 47 GTDs in our study, the Puerto Rico Electric Power Authority (PREPA), Long Island Power Authority (LIPA), and Santee Cooper each has long-term debt exceeding USD 7bn. LIPA and Santee Cooper have investment grade bond ratings from Moody's, S&P Global Ratings, and Fitch although Santee Cooper has a negative outlook from each of the three.

Bonds issued by PREPA are in default and have non-investment grade ratings from Moody's and Fitch.

### *Debt-to-Assets*

There are five utilities in our sample that have debt-to-assets (DTA) ratios above 100%. Of those five, the two with the highest DTA ratios are the Southern Transmission System Project and the Canyon Power Project, both financed by the Southern California Public Power Authority (SCPPA).

The Southern Transmission System Project is a 488-mile transmission line that transports energy from the Intermountain Power Plant in Utah to purchasers in Southern California. The Canyon Power Project is a natural gas-fired facility owned by SCPPA and located in Anaheim, California.

### *Debt Service Coverage*

The median debt service coverage (DSC) in FY17 for GTDs and JAAs is 2.56x and 1.48x, respectively. Of 38 GTDs in our study that provided DSC ratios, 21 DSCs exceeded 2.5x and three of those 21 exceeded 5x coverage.

The Memphis (City of) TN Electric Enterprise reported the highest DSC with 22.98x in FY17 for its senior lien revenue obligations, well above its 1.20x rate covenant. The utility has USD 185.5m debt outstanding according to its FY17 audit.

The only utility that has DSC below 1.00x is the Greenville (City of) TX Electric Enterprise. The borrower posted a DSC ratio of 0.81x for FY17, well below its required rate covenant of 1.25x[6].

## ELECTRIC REVENUES

The median amount of electric revenues in FY17 for those utilities on our list, regardless of type, was USD 206.4m. Thirteen utilities generated more than five times this amount.


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**LINK TO EXCEL TABLE**

Public Power Data

1. SIFMA: US Municipal Bond Credit Report, Fourth Quarter 2018
2. American Public Power Association
3. TVA has no tax-exempt debt. We include it in our list for general interest and because Moody's includes TVA in its report on public power issuers, which is a source for this report (see "Methodology" below).
4. A joint action agency is an organization formed by two or more public utilities that provides opportunities for economies of scale by sharing resources, lowering the purchase cost for electric power, and improving energy efficiency.
5. American Municipal Power, Inc. - Consolidated Financial Statements for 31 December 2017 and 2016, p. 9.
6. Greenville owed USD 3m to the Texas Municipal Power Agency for power purchased in FY16. Greenville paid this amount in FY17, increased its operating expense by USD 3m and causing the rate covenant violation.

## RATINGS

The table below indicates rating categories of the utilities included in our study.

| Rating Agency | Aaa/ AAA | Aa/ AA | A/A | Baa/ BBB | Ca/C or lower | NR/ NR |
|---|---|---|---|---|---|---|
| Moody's | 1 | 35 | 55 | 4 | 1 | 6 |
| S&P | 1 | 44 | 39 | 1 | - | 17 |
| Fitch | 2 | 30 | 36 | 5 | 1 | 28 |

Most utilities have investment-grade ratings and stable outlooks. The only utility that has a non-investment grade rating is PREPA, which has defaulted on USD 487m in bond principal and plans to restructure its debt.

Negative outlooks apply to fifteen Moody's-rated borrowers, seven that are rated by S&P, and seven rated by Fitch.

Two utilities, Santee Cooper and JEA, are at particular risk of downgrade. Santee Cooper, owned by the state of South Carolina, abandoned construction of two nuclear facilities and may be sold sale by the state. JEA and the Municipal Electric Authority of Georgia (MEAG) are in litigation regarding JEA's 20-year power purchase agreement for energy to be produced by MEAG's still uncompleted Vogtle 3&4 nuclear projects. The parties are currently in settlement talks.

In addition to the table above, we also included another table that breaks out each utility group by its assigned ratings. The table is included in the excel spreadsheet attached to the report.

Based on the table, utilities rated in the A category make up the largest rating cohort in our study.

## ENVIRONMENTAL REGULATIONS AND CONCERNS

A common challenge for electric utilities is compliance with environmental regulations. Most recently, greenhouse gas (GHG) emissions such as carbon dioxide have become the focus of the public, regulatory bodies, and elected officials.

GHG emissions result from burning of fossil fuels, including coal and natural gas. According to the American Public Power Association, coal and natural gas made up approximately 35%, and 24%, respectively, of fuel used by public power utilities in 2017.

The US Environmental Protection Agency (EPA) reported that electricity generated and delivered through existing electrical grids was responsible for 28% of US GHG emission in 2017[7]. The EPA is responsible for regulating greenhouse gas emissions from existing coal-fired generation plants under the Clean Air Act.

Ongoing media coverage on climate change and global warming from GHG emissions have led to additional pressure for electric providers to diversify their energy portfolios in order to reduce carbon emissions, especially those that result from burning coal. This environmental agenda has led to some states adopting legislation that require all electricity generated in the state to be derived from clean energy sources by a specific year.

States that have set this ambitious target include Hawaii, California, and more recently, Washington.

Nineteen utilities on our list are located in California and ten are in Washington. Of those 29, 25 generate electricity.

## FY17 MEDIANS BY UTILITY TYPE[8]

| Utility Type | Sample Size | Debt Service Coverage | Long-term Debt Outstanding (USD m) | Electric Revenue (USD m) | Total Assets (USD m) | Long-term Debt to Total Assets (%) |
|---|---|---|---|---|---|---|
| GTD | 47 | 2.56x | 506.5 | 315.3 | 1,084.4 | 0.38 |
| JAA | 22 | 1.48x | 420.2 | 165.2 | 598.4 | 0.60 |
| GT | 5 | 5.2x | 975.8 | 2,552 | 8,660 | 0.41 |
| GD | 2 | 1.61x | 208 | 105.9 | 325.3 | 0.61 |
| TD | 1 | 22.98x | 185.5 | 1,234 | 1,723.2 | 0.11 |
| G | 20 | 2.73x | 458.3 | 51.9 | 389.4 | 0.81 |
| T | 3 | NA | 535.8 | 114.9 | 295.4 | 0.66 |
| D | 2 | 3.93 | 65 | 55 | 87.9 | 0.74 |

Of the 102 public power utilities surveyed, 47 were GTD, JAAs were 22, and generation-only utilities numbered 20.

Of these three types, generation-only utilities had the highest median DSC with 2.73x, followed closely behind by GTD utilities with 2.56x.

JAAs have the lowest DSC of the three types of utilities mentioned above. This is because JAA rate covenants are typically lower than they are for other utility types, as JAA members have rate covenants of their own that provide a cushion for the JAA itself.

Based on the table above, utilities that only generate electricity have the highest DTA ratio, 81%.

These utilities' higher debt levels result from the higher capital costs needed to build generating facilities, compared to the capital needed to build transmission and distribution service. Large power plants, especially those for nuclear generation, are also more likely to have cost overruns and construction delays.

The Washington Public Power Supply System (WPPSS), Santee Cooper, and MEAG all encountered these problems when building their nuclear facilities.

WPPSS and Santee Cooper decided to stop project construction before their projects were completed. WPPSS subsequently defaulted in 1984 on USD 2.25bn revenue bonds.

7. US EPA - Inventory of U.S Greenhouse Gas Emissions and Sinks 1990-2017, p. 2-26
8. As indicated in the column "Sample Size", in some cases the medians are based on very small samples. In addition, not all borrowers included in each "Utility Type" category reported items such as DSC and DTA, resulting in an even smaller number of samples that were used for calculation of medians.

## CONCLUSION

Financial performance as measured by DSC and DTA ratios appears adequate for the utilities in our table. Other than Greenville, TX, no borrower had DSC below 1.00x.

Public electric utilities have several characteristics that help them maintain their financial status, including:

- In most cases, autonomy in setting rates,
- Operating in a non-competitive environment, and
- Their provision of an essential service.

Bond ratings support the above conclusions. Most utilities surveyed are rated "A" or higher by Moody's, S&P Global Ratings, and Fitch. Only one utility out of 102—PREPA—is rated below investment grade.

## METHODOLOGY

Our list of municipal utilities was compiled using Moody's most recent public power median report and other information provided by that rating agency.[9]

To identify public electric utilities that are likely to be frequently traded, we only included borrowers with debt of > USD 50m in FY17.

Our sources for data in the attached excel table were annual financial statements and bond official statements found on *Electronic Municipal Market Access* (EMMA), rating agency information, and borrower websites. The excel table is sorted by debt outstanding.

Not all types of information, such as debt service coverage, were readily available for all issuers.

All rating information is as of 17 May 2019.

9. "Public Power Medians: Stability continues amid low energy prices, clean energy shift." Moody's Investors Service, 13 September 2018.