S&P Global
Ratings

RatingsDirect®

Summary:

American Municipal Power Inc., Ohio; Wholesale Electric

Primary Credit Analyst:
Jeffrey M Panger, New York (1) 212-438-2076; jeff.panger@spglobal.com

Secondary Contact:
Paul J Dyson, San Francisco (1) 415-371-5079; paul.dyson@spglobal.com

Table Of Contents

Summary:

American Municipal Power Inc., Ohio; Wholesale Electric

Credit Profile		
US$96.945 mil combined hydroelectric projs rev bnds ser 2018A due 02/15/2048		
Long Term Rating	A/Stable	New
American Mun Pwr Inc. (Comb Hydroelec Pwr Proj)		
Long Term Rating	A/Stable	Affirmed
American Mun Pwr Inc. (Comb Hydroelec Pwr Proj) (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
American Mun Pwr Inc. (Comb Hydroelec Pwr Proj) (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed

Many issues are enhanced by bond insurance.

Rationale

S&P Global Ratings has assigned its 'A' rating to American Municipal Power, Inc. (AMP)'s combined hydroelectric project revenue bonds, series 2018A, and affirmed its 'A' rating on the utility's parity debt outstanding. As of Dec. 31, 2017, more than $2.2 billion of combined hydroelectric project debt was outstanding. The outlook is stable.

Proceeds of the 2018A bonds will be used to repay draws on lines of credit, which provided interim financing for construction costs associated with the three-facility combined hydro project. Securing the bonds is the trust estate, which consists primarily of payments from the participants under the power sales contact. The series 2018A bonds are subject to mandatory tender (Aug. 15, 2021). A failed remarketing of the bonds would not constitute an event of default, but would result in the interest rate increasing to 7.5% for the following 90-day period, and 9% thereafter. We would anticipate that AMP would use its line of credit to refinance the 2018A bonds in the event of a failed remarketing, thereby largely avoiding the need to pay the penalty rate.

The rating reflects our view of the project's long-term creditworthiness, which is primarily a reflection of the creditworthiness of the project participants.

The three hydroelectric facilities -- Cannelton, Willow Island, and Smithland -- total 208 megawatts (MW) of generating capacity, at three pre-existing dams owned by the U.S. Army Corps of Engineers (USACE). The project is part of a larger power supply strategy that includes other AMP projects.

The 'A' rating incorporates our view of the following credit strengths:

- A take-or-pay power sales contract with 79 of AMP's 135 members with a 25% step-up limit if any of the participants default on their payments. The contract, which expires no earlier than 2057, obligates the participants to pay their share of all power costs, including debt service, regardless of whether some or all of the three projects

are operating;

- The credit strength of the largest participating members, which we believe is, on balance, mid investment-grade, and the project's relatively small portion of each member's power supply; and,
- Hydroelectric power enhances the project's attractiveness because it is a renewable energy resource in an increasingly carbon-constrained environment. We believe that this attractiveness would be further enhanced should carbon reduction regulations be adopted. In our view, the U.S. Supreme Court's stay of the Clean Power Plan, and efforts by the Environmental Protection Agency to dismantle the regulation, offer utilities a regulatory reprieve, but we continue to believe that a carbon reduction regime is inevitable.

The rating incorporates the impact of project completion delays and cost overruns, which resulted in very high cost of project power ($149/MWh) and a significant project debt level (more than $10,800 per kilowatt (kW) including financing costs and capitalized interest). In our opinion, although the all-in-cost of combined hydro project power will be above-market, this is mitigated by the small percentage taken by each participant, and we note that overall power costs -- across all power supplied to all AMP members -- are generally manageable.

AMP's 135 members serve more than 645,000 end-use customers in Ohio, Michigan, Indiana, Maryland, Pennsylvania, Kentucky, Delaware, West Virginia, and Virginia. The 79 participants in the combined hydroelectric project represent a large pool of retail customers, primarily in Ohio. The large number of participants enables us to decouple the rating from a weak-link analysis. We believe that the likelihood that the step-up provision will be fully tested is minimal, and therefore, the rating reflects our view of the leading participating members' overall credit quality and the credit metrics of the project itself.

The three power plants have a combined generating capacity of about 208 MW. The Cannelton (three turbines totaling 88 MW) and Smithland (three turbines totaling 76 MW) facilities are in Kentucky. The Willow Island facility (two turbines totaling 44 MW) is in West Virginia, 20 miles up-river from AMP's existing Belleville hydroelectric project.

The construction of the facilities was significantly delayed. The Cannelton and Willow Island units were placed in service in 2016 -- about two and a half years behind the original schedule, while the Smithland units were placed in service in 2017, more than three years behind schedule. We understand that the delays were caused by slower-than-anticipated permit approvals for all three facilities, problems with concrete pouring, the need for unanticipated ground improvements at Cannelton and Smithland, and poorer-than-expected geologic conditions at Smithland. We understand that AMP has filed suit against Voith Hydro, Inc. the supplier of major powerhouse equipment, asserting $90 million in damages, and that Voith has asserted a counterclaim of $65 million. No trial date has been set.

Partially as a result of the delays, project costs were 10.4% above budget, including contingency. We note that the projected power cost for the combined hydro project is very high, at about $149/MWh, more than double the approximately $70/MWh that AMP's full requirement members pay across all projects and power purchases. Combined hydro power costs are expected to be level over the next five years, and given the nature of the project (with no fuel costs), we anticipate that project economics will improve relative to market prices toward the back end of the 40-year amortization schedule for all combined hydro project debt.

AMP maintains a $600 million line of credit (which is available to all AMP projects), and had drawn $93.5 million to provide interim financing for certain capital expenditures, costs, and expenses relating to the combined hydroelectric project during construction. AMP plans to reimburse the draws on the line with proceeds of the 2018A bonds. The project is highly leveraged, and the project cost measures a very high $10,822/kW of capacity.

However, our concern regarding the delays and high power costs is mitigated by the following considerations:

- The power sales contracts, which are hell-or-high-water, take-or-pay contracts obligating the AMP participants to make debt service payments (as operating expenses) whether or not the project is operating;
- The project generally represents a relatively small share (about 10%) of the participants' total power supply; and
- The project's zero emission attributes and no fuel costs should mean relatively stable power costs over the life of the units.

As the projects are run-of-the-river, generation is subject to USACE interruption for various reasons, chiefly high and low water de-rates. The project is expected to produce a 55%-60% capacity factor, largely in keeping with other hydroelectric projects located on the Ohio River. The capacity factors for 2016 and 2017 were in-line with this expectation, but high water de-rates have resulted in a lower capacity factor for 2018 (year-to-date through May).

In the past decade, AMP has added a significant amount of generation and has diversified its power supply portfolio. In addition to the Cannelton, Smithland, and Willow Island facilities, AMP owns Meldahl hydroelectric plant, and has part ownership in the Greenup hydroelectric plant, the coal-fired Prairie State Energy Center, and the Fremont combined cycle unit. In 2017 AMP members' exposure to market purchases was about 41% of total energy needs (down from 75% in 2007) while 21% of energy needs were supplied by the coal-fired assets (Prairie State and member owned units), 17% from Fremont (natural gas), 16% from hydroelectric, and 3% from wind, solar, and landfill gas.

Members participating in this hydroelectric project have also invested in AMP's other projects. Although AMP secures these projects separately, they ultimately will be obligations of most of the same members. We expect that project financing will result in substantial increases in members' fixed costs, but our rating assumes that participating members will exercise their rate-setting autonomy, thereby maintaining adequate coverage of all fixed costs.

Based on 2016 data from the U.S. Department of Energy's Energy Information Agency, member rates are generally above their respective state averages.

Fixed cost coverage for 2017 in our opinion was solid at 1.22x. At the project level, unrestricted cash ($19 million) measured 214 days of relatively low operating expenses (due to no fuel costs). Additional liquidity is provided by a $600 million committed revolving credit facility that can be used across all AMP projects, and can be used to fund taxable project costs and working capital. At Dec. 31, 2017, there was $281.6 million of undrawn line of credit capacity, available to all AMP projects. The line expire May 2, 2022. After the 2018A bonds provide funds to reimburse the draws on the line, an additional $93 million of capacity will be available to provide liquidity to all AMP projects. Lastly, we believe that billing procedures and contractual obligations of participants reduces project liquidity requirements.

Under the indenture, there is a 1.1x annual debt service rate covenant and a 1.1x additional bonds test two years after

commercial operation of the last unit placed in service. A parity common reserve is established, funded at lesser of maximum annual debt service, 125% average annual debt service, and 10% of principal, funded from bond proceeds, in each case, calculated net of expected federal subsidy payments on AMP's Build America Bonds (BABs) and Clean Renewable Energy Bonds (CREBs) issued for the project. The BABs and CREBs issued for the project each have a special reserve (funded with bond proceeds) with an amount equal to semiannual subsidy payment.

Outlook

The outlook reflects the stability afforded by the take-or-pay power sales contract and the depth and diversity of the participant base.

Upside scenario

We do not anticipate upward potential for the rating over the next two years given our assessment of the membership base and projections of sufficiency coverage.

Downside scenario

We could lower the rating within the next two years if there is significant additional debt issuance on this highly leveraged project, or if we view that the credit quality of the membership base, on balance, has deteriorated.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.