

CREDIT OPINION

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New Issue

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American Municipal Power Inc.

New Issue: Moody's has assigned an A1 rating to AMP Inc. \$140 mil. Greenup Hydroelectric Project Rev. Bonds, Ser. 2016 A

Summary Rating Rationale

Moody's Investors Service has assigned an initial A1 rating to the American Municipal Power Inc. (AMP) sale of \$140 million Greenup Hydroelectric Project Revenue Bonds, Series 2016 A. The bonds are expected to be sold in May 2016. The rating outlook is stable.

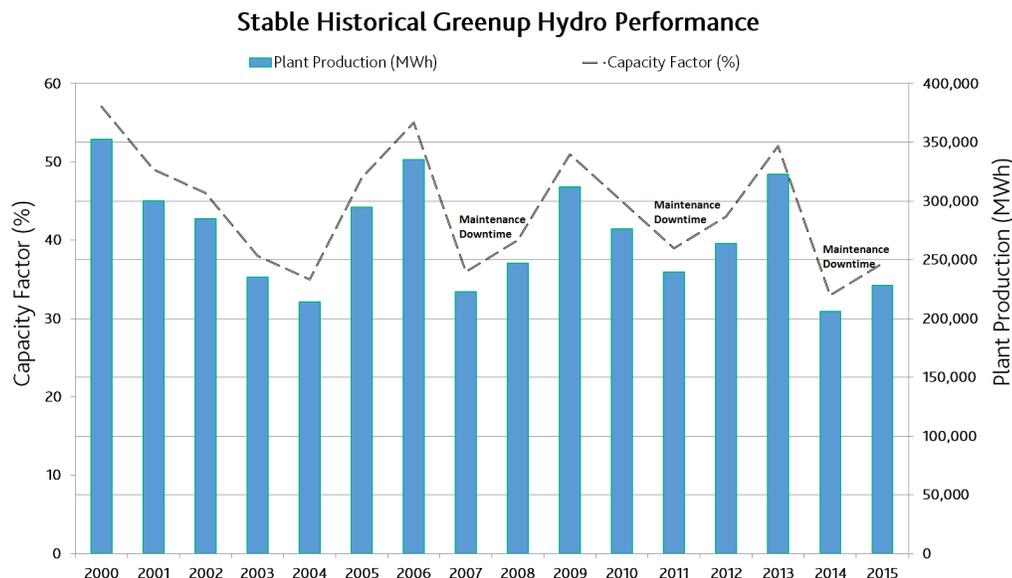
The rating takes into consideration the sound operating record of the Greenup Hydroelectric facility; the strong bond security including AMP's take-or-pay contracts with 47 municipal electric utilities that have a weighted average credit quality of A3 and the AMP's credit characteristics reflected in the AMP's. A1 rating. See Moody's April 4, 2016 report that describes the affirmation of the A1 rating.

The bonds will finance the acquisition of 48.6% of the 70.2 MW Greenup run-of-the-river hydroelectric facility from Hamilton, Ohio (electric utility A3; stable). Hamilton will retain ownership of the balance of the facility (51.4%) and continue to operate it. There is no construction risk since the hydroelectric facility has been in operation since 1982 and has registered an average capacity factor of 44%. An important factor is that the forecasted capacity factors for Greenup should remain steady as the facility is located on the Ohio River and the lock and dam system requires river flows adequate for water transportation and commerce which also then produces sufficient water levels for electric generation.

The acquisition of a portion of the Greenup facility is part of AMP's overall strategy of expanding through the development of hydroelectric generation environmental attributes and the diversification of power resources for its participants and reducing regional energy market exposure.

Bond security is derived from AMP's take-or-pay power sales agreements that extend to the final maturity of the debt with 47 municipal electric utilities. Security provisions include a 25% step-up and a fully funded maximum annual debt service reserve. No participant has a major portion of the project obligation nor their share of the hydroelectric generation project represent a material portion of their own power supply mix.

Exhibit 1

Stable Historical Greenup Hydro Performance

Source: Leidos

Credit Strengths

- » A sound historical record of a 44% capacity factor has been achieved and we expect it will remain in that range given the water flow record and requirement that water elevations be sufficient for commercial navigation
- » Hydroelectric generation will assist members to meet potential federal and state carbon standards
- » Take-or-pay contract with municipalities with a weighted average credit quality of A3 with geographic diversity among the 47 participants.
- » AMP has an A1 issuer rating
- » Competitive participant retail rates
- » AMP has a well-regarded fiscal monitoring system to provide an ongoing assessment of member's financial position

Credit Challenges

- » FERC license expiration is in 2026; AMP and Hamilton expect to file for a 30 year renewal
- » Greenup Project is 34 years old and facility maintenance costs have increased
- » Run-of-the-river hydroelectric system could be subjected to lesser water flow levels and availability of generation amounts
- » US Army Corps of Engineers regulates water levels through lock and dam systems which subjects water levels to administrative action
- » No assurance can be given that environmental regulation will remain the same

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Rating Outlook

The stable outlook is based on our expectation that the Greenup Hydroelectric facility will have steady capacity factors; the strong take-or-pay contractual relationship between AMP and its Project participants and the favorable economic and environmental attributes of the project.

Factors that Could Lead to an Upgrade

- » Improvement in the participant credit quality which is an important weight in the credit rating assigned.

Factors that Could Lead to a Downgrade

- » If participants challenge their take-or-pay power supply contracts with AMP.
- » The average weighted credit quality of participants erodes.

Key Indicators

Exhibit 2

AMP Greenup			
	2017*	2018*	2020*
Gross Participant All-in Cost (\$/MWh)	75	79	91
Net Participant All-in Cost (\$/MWh)	65	68	76
Debt Ratio (%)	106.5	106.5	106.5
Adjusted Days Liquidity on Hand (incl. Bank Lines)(days)	150 ⁽¹⁾	150 ⁽¹⁾	150 ⁽¹⁾
Fixed Obligation Charge Coverage (if applicable)(x)	1.10	1.20	1.30

*Projected; ⁽¹⁾ While internal liquidity is limited for the project, AMP has a line of credit authorized to \$750 million which the project has access.

Source: Leidos

Recent Developments

- * AMP's A1 Issuer Rating was affirmed on April 4, 2016
- * AMP expects the commercial operation date of the last of the 3 units at the Cannelton Hydro Project (88MW) in Spring 2016
- * AMP expects all three units of the Smithland Hydro Project (76MW) to be in commercial operation by the 4th quarter 2016
- * The Willow Island Hydro Project (44MW) is now in commercial operation
- * All of the Meldahl Project (105 MW) three units are in commercial operation by Spring 2016

Detailed Rating Considerations

Revenue Generating Base

Greenup Project Description

The Greenup facility is a 70.2 MW run-of-the-river hydroelectric generating facility located on the Ohio River. The Greenup facility entered commercial operation in 1982. The City of Hamilton has owned and operated the facility since 1988. While the FERC license expires in 2026 in advance of bond maturity, AMP and Hamilton management have stated they will begin a proceeding before FERC in the relicensing process well in advance of the expiration.

Legal research provided by AMP indicates that FERC has only denied one re-licensing application by an existing licensee. We expect that as long as the hydro units are run prudently this will not be a material risk. As part of the transaction for Hamilton to participate with AMP, Inc. in the development of the 105 MW Meldahl Hydroelectric Project which Hamilton is a 51.4% participant, AMP and Hamilton agreed that AMP would acquire a 48.6% ownership interest in Greenup, with the balance remaining with Hamilton and the city will still operate Greenup. Upon closing, as previously approved by FERC, AMP will be a co-licensee with Hamilton for the Greenup Hydro.

Rate competitiveness has been maintained with AMP members averaging retail rates in the 20% range lower than region's investor-owned utilities. It is noted that several AMP participants retail rates are higher than the regional average.

AMP historically has been a wholesale power supplier using market purchases to resell to its members. AMP Master Service Agreements in place with counterparties that allow for energy trading. AMP has undertaken a significant shift in its power resource strategy from mostly market purchases to moving towards generation ownership. The main driver has been to mitigate the volatility that municipal electric utilities have had to face with the restructured wholesale power markets. AMP had derived over 70% of its energy from purchased power in 2006 and AMP forecasts it will lower its reliance on purchased power to about 41% of its energy in 2016.

Operational and Financial Performance

Financial Operations and Position

Greenup Project has no financial operations yet as it is being acquired from the City of Hamilton. It is expected that the debt service coverage will be at 1.10 times to reflect the bond covenants and the take-or-pay nature of the power supply contracts.

Once Greenup is operational, as partly an AMP Inc. asset, financial operations will be accounted for in a separate project fund.

AMP has historically operated on a breakeven basis as a Non-Profit wholesale power supplier with the bulk of its energy resources from market purchases resold to its municipal utility participants. AMP's move to be an owner of generation with operating risks has required a significant increase in operating liquidity. While AMP has an unregulated authority to set its rates to recover its costs, financial liquidity to manage changes in fuel prices and meet other immediate impacts has increased in importance. AMP has taken several strong steps to mitigate the risks in the forecast period including adding increased bank lines and a five-year tenor with no MAC clauses. AMP entered into an agreement with The Energy Authority (an entity owned by several public power utilities that has energy market trading; fuel purchase and risk management skills useful to mitigate operating risks).

LIQUIDITY

Greenup Project will have required reserves with about 72 days cash on hand as of March 31, 2016. but a main source of liquidity would be project access to AMP liquidity. AMP has a \$750 million revolving a line of credit with 8 banks. The line was effective January 9, 2012 with a current maturity date of January 9, 2020. The LOC has an accordion feature to expand the line to \$1 billion. AMP has about \$310.8 million available on the line at this time.

Debt and Other Liabilities

DEBT STRUCTURE

All AMP Greenup Hydroelectric debt is fixed rate debt with a maturity schedule starting in 2022-2052.

DEBT-RELATED DERIVATIVES

None

PENSIONS AND OPEB

No material credit risk related to the AMP Greenup Project. Participant cities have pension obligations but there is limited risk to municipal electric utility operations.

Management and Governance

AMP will be involved in the operation of the Greenup hydroelectric facility with representation on the Owners Management Committee.

AMP was established pursuant to state statute (Ohio Revised Code Chapter 1702) as a non-profit corporation in 1971 to provide its members, which are municipal electric utilities, to provide for a reliable and competitive power supply. AMP is governed by a 20-member Board of Trustees made up of officials from 19 member municipalities and DEMEC, each of which appoints an official to represent it. AMP operates like a joint powers agency and most of its members have home rule charters which permit retail rates to be set by the local governing boards with no external regulation.

The Ohio members have their authorization to enter into power sales contracts derived from the state constitution. AMP has obtained a determination letter and qualifies as a Section 501(c) 12 corporation and has a private letter ruling that in effect permits it to issue tax-exempt bonds and determines its revenues are exempt from taxation pursuant to Section 115. AMP has a master services

agreement with all its members that provides a legal framework for the relationship of the municipal electric utility and AMP as it relates to power pools, energy products, power supply arrangements and individual services. The AMP members from the other states have specific state statutes that govern their authority and participation in power sales contracts and take-or-pay obligations.

Legal Security

Greenup Project bond security, under the Master Trust Indenture which includes US Bank National Association as Trustee, AMP has pledged the gross revenues in the Trust Estate, derived from take-or-pay power sales contracts with municipal electric utility participants, payable monthly regardless of whether the project is completed, operating or operable. The take-or-pay contracts have a 25% step-up provision. The master indenture includes a 1.10x net revenue rate covenant; 1.10x minimum additional bonds test after commercial service; and a fully cash funded maximum annual debt service reserve. The participant payments are payable as an O&M expense of their respective electric systems. Except for the Michigan participants (Coldwater (3.35%); Wyandotte (3.39%) and Marshall (1.14%) who pledge a subordinate lien to O&M and their direct debt.

Legal opinions have been issued that the take-or-pay contracts are valid and enforceable. Also, on December 7, 2007, the Franklin County, Ohio Court of Common Pleas issued a non-appealable order validating the power sales contract relating to the Meldahl hydroelectric project between AMP and the Ohio participants. In that project, including the take-or-pay and step-up provisions were exactly similar to the Greenup provisions. Several of the participants are located in Michigan, Kentucky and Virginia. Michigan and Virginia have passed specific legislation authorizing take-or-pay contracts, including step-up provisions with out-of-state corporations. Kentucky does not have specific statutory authority for electric plant boards to enter into long-term take-or-pay contracts but the Kentucky State Counsel has opined that KRS Chapter 96 provides sufficient authority for such contracts. There are two Kentucky participants (Princeton and Paducah) that represent 10.56% of the project.

If there is a payment default of any participant, AMP has the power to suspend delivery, which in Moody's opinion creates a significant incentive for the municipal participant to pay given the essential nature of the service. Should such a default occur, AMP would first offer the power to other project participants, other AMP members, other entities that are not AMP members (to the extent that doing so won't impact the tax advantaged status of AMP and/or its bonds) and then exercise the 25% step-up provision that requires non-defaulting participants to be legally responsible for any defaulted costs for up to their original entitlement.

Payment compliance by participants is aided by AMP's credit monitoring program that AMP manages which produces early warning signs should a member be in fiscal distress. This includes monthly evaluations of participant credit by monitoring a credit scorecard that includes financial metrics.

The participant Agreement and the Greenup Operating Agreement are the two legal documents that establishes the framework for the sale of the Greenup Hydro asset from Hamilton to AMP Inc. and how the units will be operated.

Use of Proceeds

The proceeds will fund AMP's acquisition of 48.6% Greenup Hydroelectric facility from the City of Hamilton. Also, repayment of the portion of the AMP credit line used for costs related to the acquisition and to fund a common debt service reserve.

Obligor Profile

AMP operates like a joint powers agency and most of its members have home rule charters which permit retail rates to be set by the local governing boards with no external regulation. The Greenup Hydroelectric Project is a generation project secured by take-or-pay contracts with 47 member participants.

Joint Action Agency-Take-or-Pay Methodology Scorecard Factors: Greenup Project Rating:

As indicated below, the grid indicated rating for AMP-Greenup Project is A1, in line with the assigned rating. The grid is a reference tool that can be used to approximate credit profiles in the joint action agency sector in most cases. However, the grid is a summary that does not include every rating consideration. Please see the US Municipal Joint Action Agencies Methodology for more information about the limitations inherent to grids.

Exhibit 4

Methodology Scorecard Factors

Factor	Subfactor/Description	Score	Metric
1. Participant Credit Quality and Cost Recovery Framework	a) Participant credit quality. Cost recovery structure and governance	A3	
2. Asset Quality	a) Asset diversity, complexity and history	A	
3. Competitiveness	a) Cost competitiveness relative to market	Aa	
4. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	A	150
	b) Debt ratio (3-year avg) (%)	Baa	106.5
	c) Fixed obligation charge coverage ratio (3-year avg) (x)	Baa	1.1
Material Asset Event Risk	Does agency have event risk?	No	
Notching Factors		Notch	
	1 - Contractual Structure and Legal Environment	0.5	
	2 - Participant Diversity and Concentration	0.5	
	3 - Construction Risk		
	4 - Debt Service Reserve, Debt Structure and Financial Engineering		
	5 - Unmitigated Exposure to Wholesale Power Markets		
Scorecard Indicated Rating:		A1	

Note: Financial Strength and Liquidity is based on projected FY17, FY18 and FY20 data; While internal liquidity is limited for the project, AMP has a line of credit authorized at \$750 million to which the project has access.

Source: Moody's Investors Service

Methodology

The principal methodology used in this rating was US Municipal Joint Action Agencies published in October 2012. Please see the Ratings Methodologies page on www.moody's.com for a copy of this methodology.

Ratings

Exhibit 5

American Municipal Power, Inc.

Issue	Rating
Greenup Hydroelectric Project Revenue Bonds - Series 2016A	A1
Rating Type	Underlying LT
Sale Amount	\$140,000,000
Expected Sale Date	05/02/2016
Rating Description	Revenue: Government Enterprise

Source: Moody's Investors Service

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