



AMERICAN MUNICIPAL POWER ORGANIZATION AND GENERATION PROJECTS OVERVIEW *JULY 2010*

AMERICAN MUNICIPAL POWER INC.

American Municipal Power (AMP) is the nonprofit wholesale power supplier and services provider for 128 member municipal electric systems in six states; Ohio, Pennsylvania, Michigan, Virginia, Kentucky and West Virginia. Combined, these public utilities serve more than 570,000 customers. Formed in 1971, AMP is headquartered in Columbus, with more than 240 employees at headquarters and generating facilities. The organization is governed by a 19-member Board of Trustees, comprised of member community officials.

AMP's mission is to develop, manage and supply diverse, competitively priced, reliable wholesale energy to public power members through strategic partnerships, member-focused relationships and a diversified power supply resource mix.

In 2009, the organization sold 10.8 million MWh of energy with power sales revenue of more than \$730 million.

In addition to power supply, the organization offers a variety of services to member utilities to assist in their service to customers. These services include, engineering, financial, environmental, generation, legal, mutual aid coordination, safety training, public relations and other support services.

AMP is currently embarking on an aggressive generation asset development effort that is designed to reduce member communities' current overexposure to the volatile and dysfunctional wholesale electric market. These projects will yield a balanced, responsible generation portfolio, with predictable, below market rates.

AMP FINANCIAL STRENGTH

AMP's financial strength and strong management have been consistently recognized by rating agencies and the financial community as a whole. Since 2000, all AMP project financing and entity ratings have been in the "A" category. The organization works to maintain these ratings through our member credit scoring program, sound financial practices and relationship management. In April 2010, Moody's Investors Service released its entity or counterparty rating on AMP, giving the organization an A1 rating.

CLEAN RENEWABLE ENERGY BONDS (CREBS)

In October 2009, AMP was awarded an allocation of \$143.7 million in Clean Renewable Energy Bonds (CREBs) from the Internal Revenue Service (IRS). This represented the largest allocation of CREBs to a single entity for the year. In total, more than \$1.4 billion in CREBs were allocated to 37 public power providers and cooperatives. CREBs are tax-credit bonds that allow governmental agencies, public power providers, and electric cooperatives to access lower-cost financing in order to develop new renewable generation projects. These bonds allow investors to receive federal tax credits in lieu of payment of 70 percent of the interest on the bonds.

AMP received CREBs allocations to help finance eight renewable energy projects—utilizing four technologies (hydroelectric, wind, biomass/landfill gas, and solar) in five states. The bulk of the IRS allocations (\$107 million) will go to AMP's five hydroelectric projects currently under development, with three in Kentucky and one each in Ohio and West Virginia. Ohio also gained an allocation for a landfill gas project in Wood County, Ohio, while other allocations are for a solar project in Danville, Virginia and a wind project in Berlin, Pennsylvania.

AMP has received CREBs allocations in each of the three years the bonding authority has been available. A total of \$172.9 million has been received since the initial offering in 2006. The allocations serve to validate AMP's position of providing a range of energy options to our member communities and being leaders in the deployment of renewable generation technology.

AMP - STANDARD ENERGY SOLAR GENERATION PROJECT

- AMP and Standard Energy, an affiliate of Virginia-based Standard Solar, recently announced an agreement for the development of up to 300 megawatts (MW) of new solar energy generation capacity.
- The 30-year agreement has the potential to yield one of the largest groups of solar electric facility developments in the country.
- Under the terms of the agreement, AMP will offer power from Standard Energy to its member utilities. The agreement involves the installation of solar electric facilities in or near participating AMP member communities, placing the facilities close to the load these utilities serve, resulting in reduced complications associated with regional transmission organization (RTO)-run markets.
- The agreement represents a major commitment to bring new renewable energy generation to tens of thousands of customers, as well as jobs and further diversification of power supply resources.

- Construction on the first of these projects is expected to begin this year. Locations for installation sites for future projects are still being determined.

EFFICIENCY SMART - AMP'S ENERGY EFFICIENCY PROGRAM

- AMP has signed a contract with the Vermont Energy Investment Corporation (VEIC) to provide a wide range of energy-efficiency and implementation services for AMP members.
- The Vermont Energy Investment Corporation is a mission-driven nonprofit organization, founded in 1986, dedicated to reducing the economic, social, and environmental costs of energy consumption through cost-effective energy efficiency and renewable energy technologies. VEIC operates Efficiency Vermont – the nation's first statewide energy efficiency utility – as well as other implementation services across the country.
- The goal of the new venture, known as the “Efficiency Smart Power Plant,” is to encourage residential, business and industrial customers to adopt cost-effective energy efficiency services that provide reliable and verifiable cost savings. In addition to lowering customers’ energy bills through efficiency, the Efficiency Smart Power Plant will stimulate local economies, create green jobs, provide technical resources for AMP’s member utilities and establish a platform for sustainable growth.
- The 3-year contract between VEIC and AMP, valued at approximately \$21 million, has the potential to cumulatively save 70,000 MWh of participating member utilities energy needs by the end of the contract. All savings will be independently verified and guaranteed – if the goals are not met, municipalities will be refunded for the savings not delivered.

AMP-ODNR CARBON OFFSET PROGRAM

- AMP and the Ohio Department of Natural Resources (ODNR) Division of Forestry have partnered on a cooperative effort to reforest approximately 25 acres within the Shawnee State Forest in southern Ohio.
- The growth and survival of 17,500 seedlings planted in designated plots within Shawnee State Forest will be tracked and verified in order for AMP to obtain carbon offsets for the project. This is the first activity in what is being described by officials as an ongoing joint effort to develop similar carbon offset projects.
- Carbon offsets are tradable commodities, which can be created when entities undertake actions that reduce or “offset” carbon dioxide (CO₂) and other greenhouse gas emissions. AMP will use scientifically based protocols, such as

those established by the Chicago Climate Exchange, of which AMP is a member, to track, measure and verify the project's performance.

- Under the partnership, AMP purchased the seedlings and work with Division of Forestry staff to prepare the site for planting.

AMP HYDROELECTRIC PROJECTS

- AMP is developing five hydroelectric projects designed to further diversify our members' generation portfolio and increase the use of renewable generation resources. A sixth project on the Ohio River is also being pursued by the organization.
- The run-of-the-river projects on the Ohio River are currently under development at Willow Island Locks and Dam; Smithland Locks and Dam; Cannelton Locks and Dam, and Meldahl Locks and Dam (being developed in partnership with the AMP member community of Hamilton, Ohio). The member community of Wadsworth, Ohio, working with AMP has secured a permit from the Federal Energy Regulatory Commission (FERC) for a project at the R.C. Byrd Locks and Dam and a pre-application for development is pending with FERC. A public hearing on the development application was held October 1, 2009 in Gallipolis, Ohio and a follow-up meeting with local residents was held February 13, 2010. AMP and its Member the City of Oberlin has applied for a permit from FERC for a sixth project at the on the Ohio River at the Pike Island Locks and Dam.
- Projects are run-of-the-river at existing locks and dams on the Ohio River.
- Combined, the six projects will add more than 400 megawatts (MW) of renewable generation to the region.
- 79 AMP member communities from the states of Ohio, Michigan, Virginia, Kentucky and West Virginia are participating in the Phase I hydroelectric projects (which includes projects on the Smithland, Cannelton and Willow Island dams) at this time. 48 communities are participating in Phase II, which includes a new project on the Captain Meldahl dam and a portion of power produced from an existing facility at the Greenup dam.
- In June 2008, AMP signed a contract with York, Pennsylvania based Voith Hydro for the purchase of turbines and generators for the Cannelton, Smithland and Willow Island projects. The more than \$300 million contract was the largest signed by the North American branch of the company. In March, 2009, an additional \$123 million contract was signed for equipment for the Meldahl project.
- In November 2009, Voith and AMP announced that a manufacturing facility would be located in Hannibal, Ohio in support of the AMP contract. The Hannibal facility will employ 40-50 people manufacturing the stators for the generators.

AMP and Voith worked closely with Ohio Governor Ted Strickland and U.S. Senator Sherrod Brown in bringing the manufacturing facility to the state. The contract is also responsible for 30-40 jobs at Voith's manufacturing facility in York, Pennsylvania.

- In addition to those noted on individual projects, other potential contractors include Morgan Engineering (Alliance, Ohio) for the supply of crane equipment (\$20 million), preserving 10-12 jobs; and Tiffin (Ohio) Loader Crane for the supply of log grabbers (\$1 million). A contract with Oregon Iron Works for gate manufacturing will preserve 20-30 jobs in Klakamas, Washington.
- AMP currently operates the Belleville Hydroelectric Plant on behalf of a joint venture of 42 AMP member communities that collectively own the facility. The 42 MW plant, located at the Belleville Locks and Dam on the Ohio River, annually contributes \$2.5 – \$3 million to the local economy, which includes annual in-lieu-of-taxes payment in excess of \$800,000 to the schools and local government.

Cannelton project

- Run-of-the-river project on the Cannelton Locks and Dam, located on the Ohio River, near Hawesville, Kentucky, approximately 1.5 hours from Louisville.
- Project currently under construction and is located on the Kentucky side of the river. Formal ground breaking took place August 5, 2009. The event featured Kentucky Governor Steve Beshear, Congressman Brett Guthrie, U.S. Army Corps of Engineers Colonel Keith Landry, Federal Energy Regulatory Commission engineer Peggy Harding, as well as a number of state and local officials.
- Estimated capacity of the project: 84 MW.
- Estimated capital cost to develop: \$415.9 million.
- Estimated construction jobs: 200-400 peak, 4 year construction.
- Estimated permanent jobs: 9-12.
- Excavation and coffer dam construction started May 2009.
- Power house construction is anticipated to start July 1, 2010.
- Anticipated commercial operation: Fall 2013.
- Kiewit/Traylor Construction (Omaha, NE/Evansville, IN) contractor for excavation and coffer dam construction.
- Safex (Westerville, Ohio) is the safety consulting services provider for this project.



Willow Island project

- Run-of-the-river project on the Willow Island Locks and Dam, located on the Ohio River, near St. Marys, West Virginia approximately one hour from Parkersburg.
- Project will be constructed on the West Virginia side of the river.
- Estimated capacity of the project: 44 MW.
- Estimated capital cost to develop: \$276.1 million.
- Estimated number of construction jobs: 200-400 peak, 4 year construction.
- Estimated permanent jobs: 7-9.
- Anticipate issuance of permits by Army Corps of Engineers, Fall 2010.
- Anticipated commercial operation: Spring 2015.
- In final negotiations with Ruhlin Construction (Sharon Center, Ohio) for excavation and coffer dam construction (\$31 million).

Smithland project

- Run-of-the-river project on the Smithland Locks and Dam, located on the Ohio River, near Smithland, Kentucky approximately 3.5 hours southwest of Louisville.
- Project is under construction on the Kentucky side of the river.
- Army Corps of Engineer 404 and 408 permits issued April 2010
- Estimated capacity of the project: 76 MW.
- Estimated capital cost to develop: \$432.4 million.
- Estimated construction jobs: 200-400 peak, 4 year construction.
- Estimated permanent jobs: 7-9.
- Preliminary excavation and coffer dam construction began April 2010.
- Formal ground breaking scheduled August 9, 2010.
- Anticipated commercial operation: Spring 2014.
- A contract has been executed with CJ Mahan Construction (Grove City, Ohio) for excavation and coffer dam construction (\$45 million).
- Safex (Westerville, Ohio) will provide safety consulting services for this project.



Meldahl project



- Run-of-the-river project on the Captain Anthony Meldahl Locks and Dam, located on the Ohio River, near Maysville, Kentucky approximately two hours from Cincinnati.
- Project is under construction on the Kentucky side of the river.
- Army Corps of Engineer 404 and 408 permits issued April 2010.
- Estimated capacity of the project: 105 MW.
- Estimated capital costs to develop: \$472.9 million.
- Estimated construction jobs: 200-400 peak, 4 year construction.
- Estimated permanent jobs: 7-9.
- Preliminary excavation and coffer dam construction will begin May 2010 by Angelo Iafrate Construction Company of Warren, Michigan.
- A formal ground breaking was held June 29, 2010, featuring Kentucky Governor Steve Beshear, U.S. Army Corps of Engineers Colonel Robert Peterson, as well as federal, state, local and AMP officials.
- Anticipated commercial operation: Spring 2014.

- AMP member community of Hamilton, Ohio holds license to develop. In July 2009, AMP and the City of Hamilton signed an agreement for the development of the project. AMP will build and own the facility. Other AMP members will receive 48.6 percent of the output.
- Upon commercial operation of the Meldahl project, AMP will obtain 48.6 percent share of the existing Greenup hydro project, currently owned by the City of Hamilton.

Byrd project

- Run-of-the-river project on the Robert C. Byrd Locks and Dam, located on the Ohio River, near Gallipolis, Ohio.
- Actual construction site will be on the Ohio side of the Ohio River.
- AMP member community of Wadsworth, Ohio, working with AMP has secured a permit from the Federal Energy Regulatory Commission (FERC) for this project and a preliminary application for development is pending before FERC.
- Estimated capacity of the project: 48 MW.
- Estimated capital cost to develop: \$300 million



PRAIRIE STATE ENERGY CAMPUS

- 1,600 MW pulverized coal plant under construction in Southern Illinois, near Lively Grove. AMP is the largest equity owner of the facility at 23 percent, which translates into 368 MW of the power output.
 - The project will employ approximately 2,700 construction workers and once complete will create approximately 500 permanent jobs.
- Prairie State would set a new Best Available Control Technology (BACT) standard for the type of coal being used and would be among the cleanest coal-fueled plants in the nation.

- The ownership group is comprised of public power entities with a similar mission to AMP. Peabody Energy is the project developer.
- A ground breaking was held for the facility in October 2007, with full construction commencing in February 2008. The first unit is projected to be on-line in 2011 with the second unit in 2012. Construction is approximately 45 percent complete through June 2010.
- 68 AMP member communities from the states of Ohio, Michigan, Virginia and West Virginia are participating in the project. Two AMP Kentucky member communities are participating in the Prairie State project separately through their joint action agency.
- AMP has undergone two separate bond sales to finance its portion of the project cost. Offerings in July, 2008 and March, 2009 raised \$928 million through the sale of tax-exempt bonds.

AMERICAN MUNICIPAL POWER GENERATING STATION

- Proposed generation facility in Meigs County, Ohio.
- Project was cancelled as a coal-fired facility in November 2009 due to significant and unanticipated construction cost increases.
- AMP has been investigating the possible conversion of the project to a natural gas combine cycle (NGCC) facility.
- AMP staff and consultants also investigated a potential site in southern Virginia.
- In April, AMP announced that based on investigations, the Meigs County site was the primary site for a self-build option, dependent upon the successful final negotiation of appropriate tax abatements as well as economic and infrastructure incentives.
- As an alternative to this self-build option, AMP is actively exploring options of partnering with a third party or individually purchasing 100% of one of several NGCC existing facilities and projects under development in the region.
- A decision regarding the project will be made later this year.

RICHARD H. GORSUCH GENERATING STATION

- The Richard H. Gorsuch Generating Station (RHGS) is a 213 MW coal-fired power plant located adjacent to the Ohio River in Washington County near the city of Marietta, Ohio.
- RHGS began generating electricity in 1951, originally constructed by Union Carbide.
- American Municipal Power, Inc. (AMP), (then known as AMP-Ohio) purchased a 70 percent interest in the facility in 1988 from then owner/operator Elkem Metals. The remaining share was purchased by AMP in 1999 in accordance with the 1988 Purchase Agreement.
- A total of 48 AMP member communities are supplied with a portion of their current base load power supply needs from the facility. Additionally, several industrial facilities located near the plant purchase service water and process steam generated at RHGS from AMP to support their operations.

- On April 1, 2009, AMP received a Notice and Finding of Violation (NOV) from the USEPA. Specifically, the NOV cited boiler replacement performed at the facility in the 1981-1986 timeframe (prior to AMP ownership) and an upgrade project performed in the 1988-1991 timeframe to decouple the electric generation from the process steam production at the plant.
- RHGS is in compliance with its operating permits. AMP has responsibly operated the facility since taking ownership and we have made a number of improvements at the facility that have actually *reduced* emissions.
- On May 18, 2010, AMP executed a consent decree with the USEPA as a proposed settlement to the NOV.
- Among other provisions contained in the consent decree is the binding obligation that AMP ceases coal-fired electric generation operations at RHGS no later than December 31, 2012.
- Given the provisions in the consent decree, age of the plant, current power market conditions and economics of operating the plant, AMP has determined it to be in the best interest of the participating member communities to cease operations at the facility by December 15, 2010. This will avoid the need for additional investments in a plant that, given RHGS' expected life, would not be economic.
- The plan is to operate all four boilers during summer peak demand period and then reduce to two boilers through mid December 2010.
- AMP will meet and bargain with the employees union, who has already been notified, over the effects of our decision, and plant staff will be reduced after summer peak. AMP has a fully-funded pension fund for plant retirees and the organization will work with existing employees to ensure awareness of available job training and other resources.
- AMP will continue to work with steam and water customers on the cessation of current of operations.
- AMP is exploring the possibility of a gas peaking project at the site. Such a new project will require a substantially smaller workforce and would be re-subscribed to AMP members.