

Timeline for City of Martinsville (“City”) Membership in American Municipal Power, Inc (“AMP”) and Participation in AMP Projects

December 7, 2012

In 2006, City Council made the decision to embark on a wholesale power supply philosophy that would limit its total dependence on power purchased from the electricity markets and reduce exposure to the volatility of those markets by securing a portfolio of power generation assets for the future wholesale power needs.

2005

- RFP issued (2-1-05) for full-requirements power supply to replace the American Electric Power (“AEP”) 1-year (7/1/2005 thru 6-30-2006) contract that yielded 19 interested suppliers out of which 14 actually submitted proposals.
- June 30, 2005--service under the 1998-2005 Cinergy fixed-price, market-based power supply contract ended. (\$28.00/MWh delivered—MWh = megawatt hour = 1 million watt hours)
- July 1, 2005—service began under the AEP one-year, full requirements, fixed price, market-based contract completed in September 2004 as the result of a 2002 RFP issued by Blue Ridge on Martinsville’s behalf. (\$50.00/MWh delivered, a 79% increase)
- AMP and AEP/APCo were the finalists from the RFP in a short list of four (Cinergy and Constellation were the other two).
- AMP offered a strategy of market-based block power purchases of varying terms for the near future and the development of an asset-based generation portfolio for long term, reducing market risk and stabilizing rates.
- AEP/APCo offered a 20-year, formula-rate, full requirements contract with no right for cancellation by City. The contract allowed for generation from our existing hydro (1.3 MW) and our allocation (1.6 MW) of Federal Southeastern Power Administration (SEPA) hydro projects only and provided no avenue for development of future power assets. (The City’s current landfill methane generation project would not have been allowed).
 - It also utilized true-up (power cost adjustment) each summer based on APCo’s actual costs to produce power during the prior calendar year.
 - The fuel factor clause would be adjusted monthly based largely on a coal based fuel supply.

2006

- Historically, opportunities to develop self-built, jointly-owned generation projects and/or long term power purchased from a generating unit have been a quest for the City. In 1905 the City self-built the Smith River Hydroelectric Dam and assumed all the risk, cost and benefits. Over the past 30 years, additional projects were reviewed by staff and/or Council:
 - Hydroelectric power generation development at existing Army Corps sites were explored in the 1980’s (Gathright Dam)
 - The Ridgeway Hydroelectric Project was studied in late 1970’s – early 1980’s

- With other fellow municipals in the APCO service territory a waste-to-energy generation plant near the Pittsylvania/Henry County line was studied and considered in the 1990's.
- The City started receiving power through AMP in the form of “blocks” (a portfolio of short term contracts of fixed price and varying term lengths) on the wholesale power market (overall quoted price of \$60.59/MWh delivered, 21% over AEP 2005-6 rate and 116% over Cinergy '98-'05 rate).

2007

- AMP offered members subscriptions in power generation projects, the first being AMP's 368 MW share of the Prairie State Energy Campus, a 1,600 MW coal-fired, mine-mouth plant under construction in southwest Illinois, a jointly-owned facility originally developed by Peabody Energy with AMP having 23% ownership.
- The next project was from AMP's three hydroelectric projects (“Phase 1”), totaling 208 MW, on the Ohio River at existing Army Corps dam and lock sites; Cannelton, Smithland and Willow Island.
- The third project was the 2-unit, 960 MW, coal-fired American Municipal Generating Station (AMPGS).
- GDS Consultants reviewed the three project offerings as they were presented.
- Brickfield, Burchette, Ritts and Stone, attorneys for the City reviewed the AMP contacts for the three projects.

2008

- AMP project participation deadline for the City was extended to March 1, 2008 and City Council requested alternatives to the projects be reviewed and instructed staff to negotiate with AEP/APCo for a contract for power in lieu of participation in the AMP projects.
- Staff and Consultants approached AEP/APCo asking for contact terms similar to the 20-year, formula-based, full requirements contract offered in 2006.
- AEP/APCo responded it would take some time to put together a contract and explore their ability to serve our load.
- The Power Advisory Committee was appointed in February 2008 and was comprised of citizens to review the AMP projects as compared to an AEP/APCo contract and provide input to Council.
- AEP/APCo was unable to provide a response on their ability to supply power to the City by the AMP participation deadline of March 1.
- Council heard from GDS Consultants, the Power Advisory Committee, and Blue Ridge Power Agency and Staff each recommending proceeding with participation in the AMP generation projects securing 57% of future electric energy needs.
- On February 26, 2008, City Council, after conducting public hearings for citizen input, Council authorizing participation in the three AMP projects for a term of 50 years.

Prairie State Energy Campus

- 1,600 MW, 2-unit, mine-mouth coal-fired plant located in southwestern Illinois. AMP's share of the facility is 23% or 368 MW of the power output and the balance, except for the 5% owned by Peabody Energy, belongs to the other municipal and cooperative participants (Illinois Municipal Electric Agency, Indiana Municipal Power Agency, Kentucky Municipal Power Agency, Missouri Public Utility Alliance, Northern Illinois Municipal Power Agency, Prairie Power, Peabody Energy and Southern Illinois Power Cooperative).
- 2007 estimate for the engineering, procurement and construction (“EPC”) contract portion the plant costs was \$2.95 billion, representing approximately 75% of the total project capital costs.
- Ground breaking held in October 2007 and full construction ramped up in February 2008.
- This plant is a “Mine Mouth” project, meaning the coal used for power generation is on site at a mine owned by the owners group.
- The plants projected EPC costs have increased over the original estimate of \$2.95 billion. Owners cited general increases in industry construction costs as well as rising commodity prices and labor costs as reasons for the increase. The Prairie State Generating Company owners group has negotiated a lump sum turnkey agreement to hold the EPC costs to approximately \$4.0 billion.
- AMP’s total share of costs is \$1,292,889,960
- Generating Unit 1 was synched to the grid on October 7, 2011
- Generating Unit 2 was synched to the grid on January 26, 2012
- .
- Unit 1 has achieved full generating capacity of 877 MW and went on line June 18, 2012. Unit 2 achieved full generating capacity of 809 MW and went online November 2, 2012 City’s share is 5.78 MW.

AMP Hydroelectric Projects – Phase 1

1. Cannelton 88 MW
2. Smithland 76 MW
3. Willow Island 44 MW

- Cannelton, Smithland and Willow Island are run-of-the-river hydro projects being developed on the Ohio River and will provide approximately 4.3 MW of power as the City’s share.
- AMP awarded the turbine/generator contracts for the three plants to Voith Hydro in June 2008 which represented the largest order in the company’s 131 year history
- Original capital cost estimate (not including financing cost) to construct the three projects was \$701 million. The projected capital cost has risen to approximately \$1.26 billion as of April 2011 as stated by AMP President and CEO, Marc Gerken during an AMP project update provide to City Council on November 22, 2011. Some reasons cited for the increase in construction cost are a 39% increase in bids over the MWH estimate for turbine-generator units and new design aspects that increased power output by 15%. Additional cost associated with subsurface excavation of 55’ to 105’ deeper to reach bedrock and the related increases in

costs for engineering and design of foundations to accommodate the increased depth of excavation.

- The total cost, including financing, will increase to a lesser extent due to lower interest rates for bonds that have been issued and the securing of Federal Clean Renewable Energy Bonds (“CREBs”). In addition, the AMP project management team is working very hard to reduce construction costs through proactive monitoring and scheduling efforts, with increasing success.
- As of November 2011, the estimated combined cost for power from the Phase 1 hydro project sites is \$117.75 MWh when construction is finished and all units are generating in January 2015.

Cannelton

- Cannelton ground breaking was on August 5, 2009 for the 88 MW plant.
- A contract for the construction of the powerhouse and appurtenances was issued during the week of September 10, 2010 to Walsh Construction Group, valued at approximately \$192 million.
- As of November 16, 2012 structural concrete pours for the powerhouse are progressing with a total of 69,481 cubic yards poured out of a total of 95,000 cubic yards needed for construction completion.
- Estimated project completion date is June 2014 at which time Martinsville will receive its 1.818 MW share.

Smithland

- A contract for the cofferdam and power house excavation was completed in April 2010
- Ground breaking was held September 1, 2010
- C. J. Mahan was selected as the contractor for the powerhouse in November 2011. During severe flooding of the Ohio River in May 2011; the Army Corps of Engineers ordered the dried-in excavation site behind the coffer dam to be flooded to prevent damage to the coffer dam. Draining and drying out of the flooded excavation site has caused some delay in construction but excavation has resumed.
- Excavation of the site revealed a karst limestone base requiring additional engineering and design changes in the foundation work.
- As of November 16, 2012, concrete work is just getting started with 5936 cubic yards poured of the estimated 94,500 cubic yards needed for project completion. Draft tube liner assembly and bulb turbine housing assembly continue at this time.
- Estimated completion date of the project is January 2015 then providing Martinsville’s 1.57 MW share.

Willow Island

- Ruhlin Construction Company was awarded the contract for cofferdam construction and site excavation in September 2010
- Ground breaking was held on July 21, 2011
- As of November 16, 2011, cofferdam construction is complete with rock excavation for the powerhouse foundation is continuing.

- Estimated project completion date is January, 2015 providing Martinsville's 0.909 MW share.

American Municipal Power Generating Station (AMPGS)

- A 960 MW 2-unit, coal-fired plant was slated for construction in Meigs County, Ohio utilizing new clean coal technology called PowerSpan and estimated in January 2008 to have a total construction cost (not including financing) of \$2.95 billion.
- Approximately 750 MW of the 960 MW was subscribed by AMP members and AMP was actively seeking subscriptions for the remaining power.
- The City subscribed to 8.059 MW from the facility in February 2008.
- AMP offered an additional opportunity to increase subscription levels but recommendations from GDS Consulting and Blue Ridge advised the City to decline the offer, which it did.
- On November 24, 2009, participants voted to terminate the coal-fired project due to the EPC contractor suddenly increasing the construction cost estimate by 37% causing it to no longer be a feasible project.
- On August 19, 2010 AMP membership voted to proceed with a self-build 600 MW Natural Gas Combined Cycle (NGCC) plant on the Meigs County site under a lump sum, turnkey fixed price contract.
- February 9, 2011, AMP membership authorized AMP officials to sign a memorandum of understanding (MOU) to negotiate purchase of the Fremont Energy Center, a 707 MW natural gas combined cycle generation plant that was under construction in Fremont Ohio. The Fremont Energy Center was owned by First Energy Generation Corp.
- AMP suspended plans to pursue a self build NGCC plant at the Meigs County site in lieu of purchasing the Fremont Energy Center.
- February 11, 2011, AMP filed a complaint against Bechtel Power Cooperation, the AMPGS EPC contractor, in U. S District Court stemming from a sudden increase in cost that necessitated the cancellation of the proposed AMPGS project. AMP is seeking \$97 million in damages.
- In the complaint, AMP alleges breach of contract, gross negligence and breach of fiduciary duty on the part of Bechtel.

AMPGS Stranded Cost

- In November 2011, AMP released stranded cost estimates for Martinsville of \$1,305,506 less Fremont Participation Credit of \$479,404 leaving an estimated balance due of \$826,102. This figure was revised as of August 31, 2012 to reflect an estimated balance due of \$858,950.00 which includes legal litigation fees, accumulated interest and bank fees for the time frame of November 2011 – August 2012.
- In December 2011, AMP provided to participants (5) stranded cost repayment options to assist members in making a decision on a method of repayment for stranded cost.

The options are as follows:

1. Option A - Lump Sum Payment

2. Option B - \$/MWh Adder to Monthly Invoice
 3. Option C – Rate Levelization Adder
 4. Option D - \$ Adder to Monthly Invoice for a term of up-to fifteen (15) years
 5. Option E – Continue to carry stranded cost of AMP line of credit until AMPGS litigation is settled.
- GDS Associates and staff reviewed the five options and approached AMP with an alternate option to initiate a rate stabilization plan in conjunction with Option C.
 - Late in September 2012 staff presented to Council a Rate Stabilization Plan to stabilize wholesale power costs for a term of 42 months, retroactive to July 1, 2012, at \$69.97 MWh. The plan will also set aside funds to repay AMPGS stranded cost over the 42 month term.

AMP Fremont Energy Center

- AMP offered subscriptions in the Fremont facility during the first quarter of 2011 at which time, a new Power Advisory Committee was appointed and asked to review the subscription offering along with GDS Consultants and Blue Ridge Power Agency. The outcome of each group’s review was to provide recommendations for or against participation in the project to City Council.
- The Power Advisory Committee conducted an in-depth analysis of the project through review of numerous reports and documents, a site visit to the former AMPGS site in Meigs County, Ohio and teleconferencing with AMP officials as well as GDS staff.
- In June 2011, after hearing recommendations from the Power Advisory Committee Members, GDS Consultants, Blue Ridge Power Agency, General Manager, Duane Dahlquist and Staff, all of which recommended participation in the Fremont Energy Center, City Council passed a resolution by a 4 to 1 vote to approve participation in the project.
- Commercial operation of the Fremont Energy Center began on January 20, 2012 and the City began receiving 4.579 MW of 5X16 intermediate power plus 1.458 peaking power for a total allocation of 6.037 MW from the facility.
- The units have been operational to date except for three routine inspections and two service related events requiring repairs to the turbine blades on one unit and repairs to the spring bar welds on the Steam Turbine Generator.

American Municipal Power is a nonprofit organization offering power supply and services for municipal electric systems and they help member communities control their destinies in the volatile world of power supply.

It is owned and governed by the members and they purchase, generate and distribute electrical power for 129 publicly owned utilities serving more than 570,000 customers in six states – Kentucky, Michigan, Ohio, Pennsylvania, Virginia, and West Virginia

CANNELTON AERIAL :



 © Copyright 2009 American Municipal Power, Inc. | All Rights Reserved.



Cannelton



CANNELTON SITE



SMITHLAND SITE



AMB © Copyright 2009 American Municipal Power, Inc. | All Rights Reserved

Willow Island



SMITHLAND PHASE II GROUND IMPROVEMENT

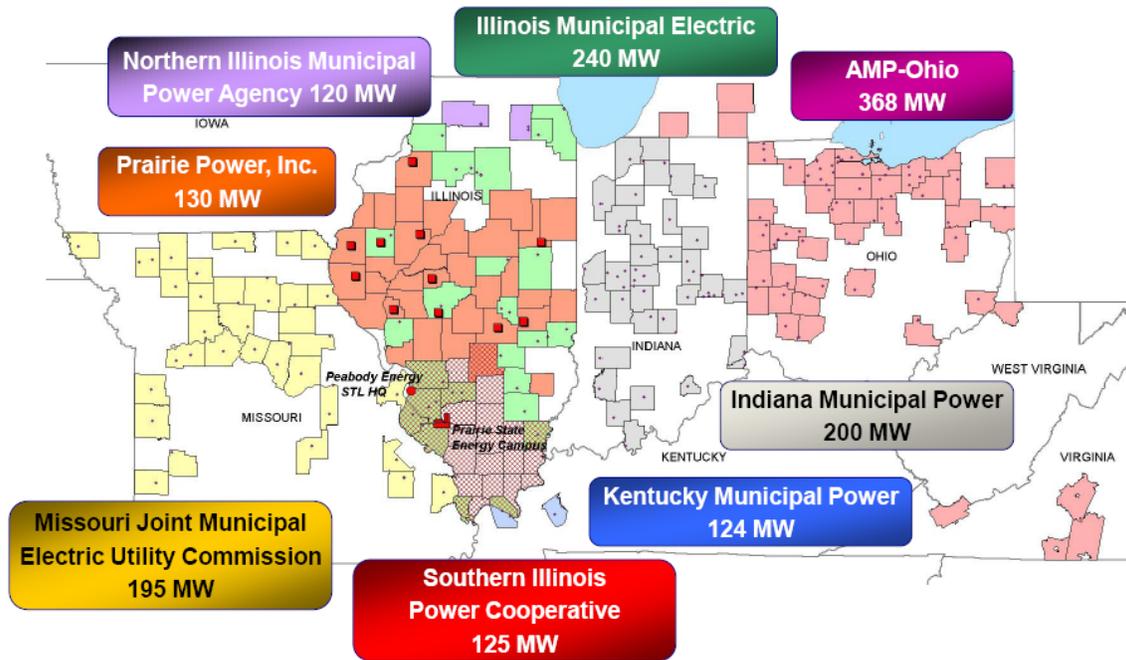


AMP Fremont Energy Center





Prairie State's Owners Serve More Than 2.5 Million People In Eight States



Prairie State Energy Campus



Prairie State Energy Campus

