

Kansas Energy Council Presentation

by Kansas Municipal Energy Agency

May 13, 2008

What is KMEA?

The Kansas Municipal Energy Agency (KMEA) is a quasi-municipal corporation organized under the laws of Kansas, K.S.A. 12-885 to 12-8,111 originally passed in 1978. In layman's terms we are a nonprofit joint action agency made up of electric municipalities. KMEA has similar rules as a city --- such as open meetings and open records. KMEA could also be viewed as a COOP of cities.

Each member city has a representative on our Board of Directors. Our members serve as both customers and bosses.

Members:

The original 1978 legislation restricted membership to electric municipals who generated in 1977. In 1980, KMEA had 32 members. In 1996, KMEA had 32 members. Legislative changes in 1998 allowed any electric municipality to join.

The 2006 Annual Report (pages 10 and 11) lists 70 members. In addition, at our November, 2007 Board meeting the Kansas City Board of Public Utilities (KC-BPU) and Cawker City were approved as members. On Thursday of this week membership for the cities of Arma, Glen Elder and Lakin will be voted on bringing KMEA's membership to 75 municipals.

Project participation is voluntary with some members not in any projects and others in several.

Projects Prior to 2005:

Pages 8 and 9 of the 2006 Annual Report provide some detail of power supply projects that are in place. KMEA's prime function was to assist cities in acquiring an economical supplemental base power supply to the power normally provided by their control area utility. For the Federal hydro projects of Western Area Power Administration (WAPA) and the Southwestern Power Administration (SWPA), KMEA's role was to assist the cities in applying, negotiating contracts, obtaining firm transmission, aggregating loads, coordinating operations with other utilities, scheduling, processing billings, and ensure compliance with all applicable rules.

The other two main projects are unit participation (with back-up) with KC-BPU's coal fired Nearman Power Plant and the Grand River Dam Authority (GRDA) system participation. GRDA is a state enabled utility in northeast Oklahoma with power assets of several hydro facilities (one with pump storage) and two coal units. The Grand Lake of the Cherokees (Grand Lake) is one of their projects. Again, KMEA's role was to negotiate contracts, obtain firm transmission, etc.

Industry Change:

During the last five years major industry changes have occurred that have drastically impacted municipals as agreements with their control area utilities have expired. Some of the issues are escalating fuel prices, SPP transmission, and new power supply offers from the existing control area.

Most of KMEA members own and operate gas and/or diesel generating units. These would typically be used during high peak usage days to shave load, prevent the step down tie transformer from overloading, or during storm emergencies with loss of tie lines. The escalating and volatile fuel prices have forced cities to look for alternatives. Prices for natural gas have escalated from the \$2-3 per mmBTU in 1997/1998 to \$10+ per mmBTU in 2008. Just the fuel cost for cities to generate are typically in the \$0.10 – 0.15 per kWh range.

Most of the early transmission paths were based on the old "contract path" rules and grandfathered transmission rights. As power supply contracts expire, the cities have been forced to seek Southwest Power Pool (SPP) transmission rights. In some cases grandfathered transmission gets easily rolled into the SPP. Otherwise, SPP will need to do an aggregate study with about a year of study time and occasionally unusual results.

A third factor has been renewal contracts being offered by the control areas that are higher priced with restrictions. The cities are forced to look for alternatives.

Post 2005:

KMEA has responded to the industry changes and the cities' concerns by concentrating on additional base power supplies and forming power pools where cities can share resources.

Our Energy Management Project No. 1 (EMP1) went active on June 1, 2006. The five participants were all under Kansas City Power and Light's (KCP&L) control area and all have generation and external power supplies through KMEA. Network transmission through SPP was obtained and the cities have real time metering that each city as well as KCP&L, SPP, and KMEA can see. KMEA through a facilitator (Rainbow Energy) tries to maximize benefits of purchases, generation, and sales for the participating cities.

EMP2 started on November 1, 2007 and includes nine cities under the MKEC/Sunflower footprint. Features similar to EMP1 are utilized.

EMPs provide 100% of the participants energy needs through local generation, power contracts, and market purchases.

Future Power Supply Plans:

With our members typically having sufficient local peaking units, KMEA will primarily concentrate on base load resources with the following utilities:

- a) WAPA – Two members have applied for WAPA hydro electric power to start in October of 2009. At this time, WAPA has not announced if any or how much power will be allocated to the cities. Transmission would then need to be obtained.
- b) GRDA – Additional system power is contingent on obtaining SPP firm transmission. Up to 18 MW might be added.
- c) Omaha Public Power District (OPPD) – One of KMEA members has an agreement in place for up to 20 MW of system power starting in 2008. This is contingent on SPP firm transmission being in place.

- d) KC-BPU – Discussion has been ongoing for several years with Kansas City BPU on KMEA's participation in the second coal plant at Nearman. The original 1982 agreement has provisions anticipating KMEA participation. With Sunflower's air permit denial last fall, discussions have stopped.
- e) Sunflower/MKEC – Several supply projects have been discussed and are in various stages of agreements.
 - 1) Our Northwest Cities project will be expanded by 500 kW starting June 1, 2008 to serve the City of St. Francis.
 - 2) A system participation agreement for 30 MW is close to completion and is planned to start in 2008 for the EMP2 participants.
 - 3) A verbal agreement for KMEA to receive **ownership** of 40 MW of Holcomb East has been reached. With Sunflower's air permit denial, discussions have been put on hold.
 - 4) In conjunction with Holcomb East ownership, Sunflower has offered additional power from their wind generation. This has also been put on hold.
- f) Other – The City of Greensburg was prepared to be the tenth member of EMP2 prior to the tornado. Presently KMEA is supplying Greensburg energy through a second 6 month interim agreement. Greensburg is reviewing their options for a long term power supply.

Summary:

KMEA's primary power supply plan centers on ownership of base load plants with a secondary plan of long term unit participation of base load plants or system participation. Ownership is preferable due to a longer term (typically, 40 + years), lower cost, participation on decisions, and obtaining financial credit points from SPP.

Transmission is also a concern that needs to be solved in both the short and long term.

KMEA will also continue to work to provide members opportunity to participate in EMPs.

Base Power Supply (added on May 20, 2008):

At the request of the Committee, I have attached a bar chart showing KMEA's base power supply resource amounts and termination dates. With KMEA already short base power, the future becomes unclear with KMEA having options to rely on the market, install combustion turbines, or look at out of state providers like the Grand River Dam Authority or the Omaha Public Power District.

KMEA Mix of Base Power Supply

