Kansas Power Pool

Community Power Alternatives
A joint effort by member cities to combine power supply assets and resources to gain the greatest economic efficiency and value for municipal utility customers.
KANSAS POWER POOL

Operational May 2005

Kansas’ fastest growing municipal energy agency

Collection of Kansas cities aggressively pursuing a consistent, reliable and affordable power supply for our citizens

Singular focus on providing a reliable and affordable power supply to our member cities to help sustain and grow our communities

Help efficiently utilize and dispatch each city’s generation and purchase power contracts

Explore joint capital projects necessary and beneficial to member cities
KANSAS POWER POOL

- Formed when cities were given notice of the pending cancellation of their long-term power supply contracts.
- Cancellation result of SPP’s need to be the transmission provider to all customers under the RTO footprint.
- Cities were required to make costly and intensive application to SPP for transmission service.
- Pooling together realized significant financial savings for cities.
KPP MEMBERSHIP

7 initial members of Kansas Power Pool
- Augusta, Chanute, Clay Center, Fredoia, Neodesha, Wellington & Winfield

42 Kansas municipal electric utilities are members of Kansas Power Pool
- Membership is spread across the state
- Two largest member cities have populations of 10,000 people
- Smallest member city has an approximate population of 150

Each community has each own unique set of service needs and challenges
- One challenge is to help the City of Greensburg achieve their goal of 100% renewable resources by supplying electrical needs via wind and hydropower

Total KPP peak load is 330MW with a generation capacity requirement of 380MW
**KPP MEMBERSHIP**

- 2 types of members in Kansas Power Pool
  - Voting member of KPP Operating Agreement (KPP OA)
  - Non-voting KPP Member City

- Member cities are located in two control areas in the state
  - Sunflower Electric Power Corporation and Westar Energy

- Member cities interconnect to transmission systems owned by three different utilities
  - Mid Kansas Electric Company, Midwest Energy and Westar Energy

- 34 member cities of 42 members are KPP OA members
  - KPP OA members achieve costs savings for their communities by pooling generation resources and supply contracts and combining transmission service requests.
Municipal electric utilities serve 18% of the state’s customers. The 42 geographically diverse communities in KPP represent approximately 380MW of total capacity.
KPP BENEFITS YOUR COMMUNITY

- All members have equal representation
- Pooling resources provides access to lower cost power to member city ratepayers
- Reduced costs to member communities through generation reserve sharing
- Collective resource planning and acquisition
- Firm transmission service between member generation and available regional generation supplies
- Cost sharing of operating expenses reduces the burden for one utility to be all things to its customers.
KPP OPERATING STRUCTURE

- 9-member Board of Directors elected by the voting members sets organizational direction

- Operating Committee is comprised of a representative from each voting member city that has signed the operating agreement

- 4 members of KPP Staff
  - General Manager
  - Operations Manager
  - Scheduling Analyst
  - Office Manager

- Contract services to members include:
  - Legal
  - Government Affairs Advocate/Communications
  - Engineering
  - Metering Communications

- Member and active participant in Kansas Municipal Utilities (KMU)
KPP BOARD OF DIRECTORS

1. BARRY HODGES
   Minneapolis
   1st Vice President

2. DOUG ALLEN
   Sabetha
   3 years

3. STAN LUKE
   Burlington
   2 years

4. LARRY PAINE
   Hillsboro
   3 years

5. FRANK SOUKUP
   Kingman
   3 years

6. BOB PORTER
   Winfield
   2nd Vice President

7. BOB PETER
   Ellinwood
   President

8. BILL CALLAWAY
   Clay Center
   Secretary

9. JIM SUTTON
   Augusta
   2 years
KPP DELIVERING VALUE
**KPP MUNICIPAL GENERATION**

- Majority of KPP members own and operate electric generating facilities to “keep the lights on”
  - Backup generators fueled by natural gas or diesel
  - Depend on the regional transmission system to supply the lowest cost service

- Ability of KPP cities’ to use their local high cost diesel and natural gas generation has been cited by transmission owners for not building needed transmission facilities

- Currently, KPP member cities are generating only to maintain voltage or as a result of restrictions on the transmission system
# KPP Power Portfolio

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>TYPE AND FUEL</th>
<th>CAPACITY RATING (in MWs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowersock Hydroelectric Dam</td>
<td>Intermediate - Hydro</td>
<td>2.7MW</td>
</tr>
<tr>
<td>Grand River Dam Authority (GRDA)</td>
<td>Baseload - Coal &amp; Hydro</td>
<td>25.3MW</td>
</tr>
<tr>
<td>Nearman Power Plant</td>
<td>Baseload - Coal</td>
<td>19.5MW</td>
</tr>
<tr>
<td>Greensburg Wind Farm</td>
<td>Intermittent - Wind</td>
<td>12.5MW</td>
</tr>
<tr>
<td>KCP&amp;L</td>
<td>System - Coal/Gas</td>
<td>40MW</td>
</tr>
<tr>
<td>Oklahoma Municipal Power Authority (OMPA)</td>
<td>Baseload - Coal</td>
<td>9MW</td>
</tr>
<tr>
<td>Omaha Public Power District (OPPD)</td>
<td>Energy only</td>
<td></td>
</tr>
<tr>
<td>Southwestern Power Authority (SWPA)</td>
<td>Intermediate - Hydro</td>
<td>9.4MW</td>
</tr>
<tr>
<td>Western Area Power Authority (WAPA)</td>
<td>Intermediate - Hydro</td>
<td>4.5MW</td>
</tr>
<tr>
<td>Jeffrey Energy Center</td>
<td>Baseload - Coal</td>
<td>50MW</td>
</tr>
<tr>
<td>Each city’s own generation</td>
<td>Peaking/Reserve</td>
<td>357MW</td>
</tr>
<tr>
<td><strong>TOTAL CAPACITY</strong></td>
<td></td>
<td><strong>172.9MW</strong>*</td>
</tr>
</tbody>
</table>

(*does not include each city’s own generation peaking/reserve)
2010 KPP APPROXIMATE LOAD DURATION CURVE
(Based on existing resources)

PEAK: 385 MW
ENERGY: 1,806 GWh

CONTRACT PURCHASES
- SWPA: 9.4MW @ -13%cf
- WAPA: 4.5MW @ -36%cf
- GRDA: 25.3MW @ 85%cf
- OMPA: 9MW @ 85%cf
- Nearman PPA: 19.5MW @ 85%cf
- KCP&L: 40MW @ 85%cf
- JEC: 50MW @ 85%cf
- Bowersock: 2.7MW @ -36%cf
- Greensburg Wind: 12.5MW @ 38%cf

CITY GEN RESOURCES
357MW @ ~20%cf
2019 KPP APPROXIMATE LOAD DURATION CURVE
(Based on existing resources)

PEAK: 439 MW
ENERGY: 2,062 GWh

CITY GEN RESOURCES
357MW @ -41%cf

CONTRACT PURCHASES
- WAPA: 4.5MW @ -36%cf
- GRDA: 25.3MW @ 85%cf
- Nearman PPA: 19.5MW @ 85%cf
- Bowersock: 2.7MW @ -36%cf
- Greensburg Wind: 12.5MW @ 38%cf

KANSAS POWER POOL MEMBER CITY COUNCIL SUMMIT
2029 KPP APPROXIMATE LOAD DURATION CURVE
(Based on existing resources)

PEAK: 515 MW
ENERGY: 2,416 GWh

MARKET PURCHASES:
-14,600 MWh

CITY GEN RESOURCES:
357MW @ -69%cf

CONTRACT PURCHASES:
- GRDA 25.3MW @ 85%cf
- Bowersock 2.7MW @ -36%cf
- Greensburg Wind 12.5MW @ 38%cf
KPP is providing the City of Erie a new 5/7.5/10 MVA substation and two new 4.16 kV circuits to support 1.5MW of new load new growth anchored by a new high school and nursing home. KPP is advancing a 30-mile 115kV transmission line to support new industry in the Clay Center BPU service territory.
KPP DELIVERING VALUE

→ KPP is undertaking a major capital project in Clay Center which will bring significant benefits to the entire KPP footprint
  • Clay Center 115kV transmission line

→ Currently the Clay Center BPU is served by a Westar 34.5 kV line
  • Existing line does not adequately meet the needs of the current load

→ Clay Center’s electric load will more than triple with the addition of the Riley Pump Center which supports the TransCanada pipeline
  • Riley Pump Station motor loads require a high voltage service
  • TransCanada required a higher voltage service

→ The first phase of the 115kV line is scheduled to go in service in 2012 following detailed routing, line design, construction and the regulatory approval process at SPP
The City of Luray was awarded a Community Improvement Grant (CIG) by the State to replace all the poles on their existing electric distribution system. The grant, totaling nearly $175,000 was written and prepared by KPP and our financial advisory firm.
Providing Affordable Renewable Energy

KPP takes all the power generated off the state’s only hydro-electric generation plant – Bowersock Hydro Dam located in Lawrence.
KPP also purchases all the power output off John Deere Wind’s Greensburg Wind Project totaling 12.5MW. By investing in renewable energy, KPP is offering a diverse power supply that helps its members meet renewable energy objectives while maintaining reliable and affordable power supplies.
Acquiring Power Resources for the Future–Dogwood Generating Plant
Energy conservation coupled with increased efficiency in energy usage can help us meet the growing needs of the communities we serve. To help with this effort, KPP offers energy programs designed to encourage efficiency through energy conservation and increased customer awareness including: energy audits, rebates on energy efficient air conditioners, heat pumps and water heaters.
KPP DELIVERING VALUE

→ Two KPP member cities participated in the “Take Charge Challenge” to promote energy efficiency throughout the community.

MOUNT HOPE & HAVEN
Participated in KPP’s appliance rebate program. In Mount Hope/Haven, 34 rebates were redeemed for more than 34,000 in kWh savings. By replacing old appliances, these residents will save a combined $7,000 on their electricity bills this year.

The elementary schools also hosted “Energy Bandits” skits where students learned about appliances that “steal” energy even when they’re off, and received powerstrips to battle these bandits.

WELLINGTON
Worked with KPP to encourage residents to switch to energy efficient CFL bulbs, changing more than 11,000 light bulbs.

Wellington City utility staff provided 56 free home energy audits, and helped 10 of the city’s businesses and churches identify energy-saving opportunities.

Also, residents redeemed 78 rebates for new energy-efficient appliances through Kansas Power Pool. These efforts will save Wellington citizens over $60,000 in avoided energy costs.
KPP EDUCATING POLICYMAKERS

- Represented municipal utilities across the US when provided testimony before the United State’s Senate Energy & Natural Resources Committee.

- Testified before the Kansas Energy Council and the Kansas Legislature’s Special Committee on Energy and the Environment - on the role of municipal electric utilities in Kansas and the needs of our system and communities.

- KPP hosts annual reception for Kansas legislators to foster interaction and greater understanding of municipal electric issues.
Further grow services to member communities and to attract new member cities while providing access to reliable, affordable power.

Provide long-term power solutions for our members:
- Long term purchase power agreements
- Joint municipal generation project
- Other investment or partnership opportunities

Advocate for upgrades to the existing transmission network used by municipal utilities while advocating for new right-sized transmission expansion.

Advocate for just and reasonable prices for generation and transmission that are appropriately allocated.

Help our member cities grow their communities.
QUESTIONS?

COLIN WHITLEY
general manager

200 W. Douglas, Suite 601
Wichita, KS 67202
phone 316-264-3166
fax 316-264-3434
e-mail cwhitley@KansasPowerPool.org