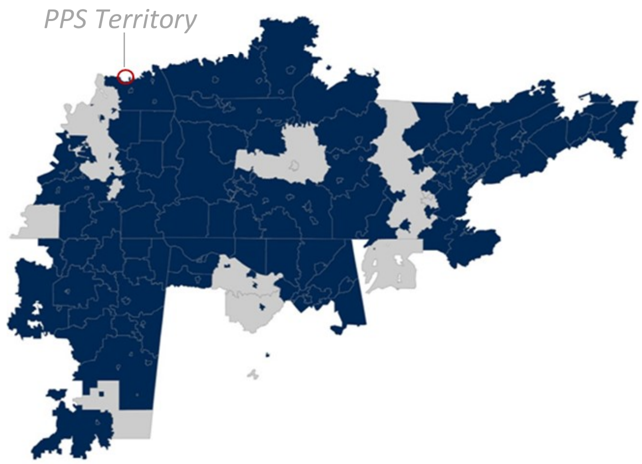
Expected vs. Actual Outcomes in Power Supply Alternative:
A Case Study of Paducah Power System

At the advice of an energy consultant firm, Paducah Power System (PPS) gave TVA their five-year power contract termination notice in 2004 and agreed to take ownership of their own generation and transmission. Many benefits of this action were touted, but few have materialized.



PPS now owns 6.5% of a 1600MW coal plant and coal mine, Prairie State Energy Campus (PSEC), in southern Illinois. PPS also operates a 124MW gas CT in their territory. PPS has a summer peak demand of approximately 140MW and uses the LG&E/KU transmission system to connect their load to the MISO market.

Key considerations: Anticipated benefits and actual outcomes

Cost Overruns

- Original estimate for coal plant was $2.9B, but actual cost was $5.1B.
- Original plan for gas CT generator was $75M, but actual was more than $100M.

Delayed Timelines

- PSEC Unit #1 was delayed by a year beyond schedule in 2012.
- PSEC Unit #2 was delayed six months beyond schedule in 2012.
- Consultant documentation indicated an 85% or better Net Capacity Factor for the units in the first year and every year thereafter, but the units averaged closer to 60% due to design issues in their first three years. (2019 Net Capacity Factor was 84.1%.)

Higher Rates

- PPS Chairman of the Board promoted to customers that rates would decrease 25% once the PSEC was available. PPS's Energy Consultant report stated wholesale cost would be 10-15% lower than TVA wholesale rates.
- While other rate adjustments may have occurred, it is confirmed that PPS raised retail rates by 8.2% in 2013, 7.5% in 2014, and 5% in 2015, in addition to adding a Power Cost Adjustment charge to customer bills.
- PPS retail rates are 20-40% higher than average TVA LPC rates in KY today and 125% of national average.
- At 13.16 cents/kWh, PPS has one of the three highest average retail rates of the more than 45 retail electric utilities in Kentucky.

High Debt & Lower Credit Rating

- PPS's current debt of nearly $550M has ballooned 100-fold from its 2004 (pre-termination notice) debt level of $5.5M. Annual revenue is approximately $80M.
- Since leaving TVA, both Moody's and Fitch have downgraded PPS's credit rating. Moody's has downgraded twice (from A3 to A2 to Baa1). Fitch has downgraded from A- to BBB.