

Independence Generation Plan Summary



Fact Sheet: Understanding Options for the Proposed Generation Plan

Main Points

- The City of Independence Power and Light Department manages a transmission and distribution grid for residents.
- The City is a member of the Southwest Power Pool (SPP). The resources the pool provides are combined with our own assets to provide energy at the lowest available cost.
 - We utilize a diverse mixture of owned and contracted resources with a variety of fuel sources to contribute our share to the Pool.
 - In order to be a member with SPP and receive the benefits of the collective membership, the City pays an annual membership of \$6,000.
- There is the opportunity to determine the future steps in terms of power generation, infrastructure upgrades, and other possible initiatives for IPL customers.



Opportunity and Options:

- Generally, for SPP approval, a member would normally need 4-5 years to conduct engineering studies to determine the impact on the electric grid and any updates.
 - This requires a new proposal and a mandatory cost share for any transmission improvements.

- The City has been granted a waiver from the Federal Energy Regulatory Commission (FERC) to utilize the Blue Valley Power Plant for a generation update should it be decided.
 - There is a very small window of opportunity to utilize the Blue Valley Power Plant: 36 months total to put a plan into operation (starting in October 2021 to October 2024).
 - The alternative path for replacing existing facilities shortens the engineering study and approval process to 12-18 months.
 - An additional advantage is avoiding any cost share with other proposed projects.

Take into Consideration the Following:



- Location Matters:
 - The cost of energy includes both the cost to produce it and the cost to deliver it to the user.
 - The further the generator is away from the end user, the higher the cost of transmission to get the energy to where it is needed.



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- Time is of the Essence:
 - SPP approval for generation generally takes 4-5 years but we have the opportunity to do so in 12-18 months.
 - FERC waiver allows us 36 months to replace generation at or below Blue Valley capacity without new full study requirements.
- Market opportunities currently available can help offset costs.

Who is Southwest Power Pool?



- The Southwest Power Pool (SPP) oversees the bulk electric grid and wholesale power market in the central United States on behalf of a diverse group of utilities and transmission companies in 17 states.
 - <https://bit.ly/3sMG3jM>
- The SPP Integrated Market covers 14 states.
- SPP schedules generation resources to protect the stability of the grid and meet the energy requirements of the entire region.



Independence and Southwest Power Pool:

- The City of Independence purchases all energy that is consumed from SPP
- We pay SPP for the entire energy load.
 - Even if we are generating electricity, it is sold to the SPP market and then the City receives reimbursement for power generated by our assets.
 - On days when our local combustion turbine generators (CTs) are running, we still pay SPP for all power consumed in the City of Independence.

- There are 6 CTs within the City of Independence that are fully owned and paid for. Operating costs remain for these CTs.
- As part of the SPP membership, the City is obligated to maintain generation assets that are capable of producing our maximum demand in addition to a reserve margin which is 12% above our maximum daily use.

Electricity Portfolio



- An electricity portfolio is a set of energy sources used to generate electricity.
- IPL has a diverse electricity portfolio (known as accredited capacity).
 - Our owned generation portfolio consists of coal, natural gas, fuel oil, wind, and solar.
 - Through SPP, we receive electricity from lots of different sources, and this will vary by the day.
 - The City of Independence doesn't own any nuclear or hydroelectricity but since it is part of SPP's membership portfolio, it is part of the collective pool of energy.

