



PJM Interconnection Workshop #3: EKPC perspectives

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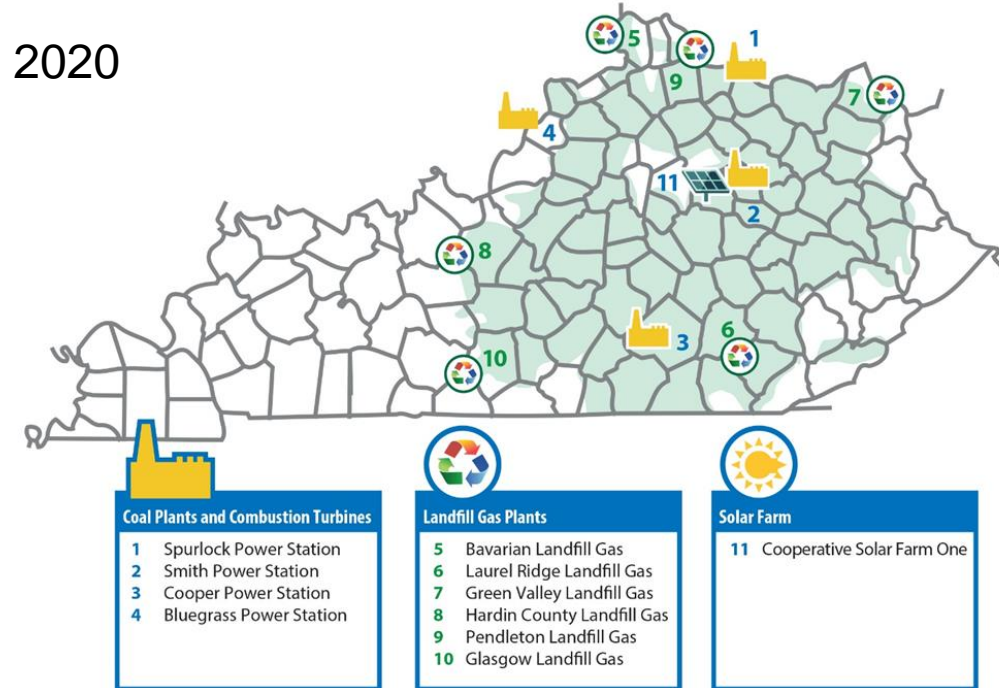
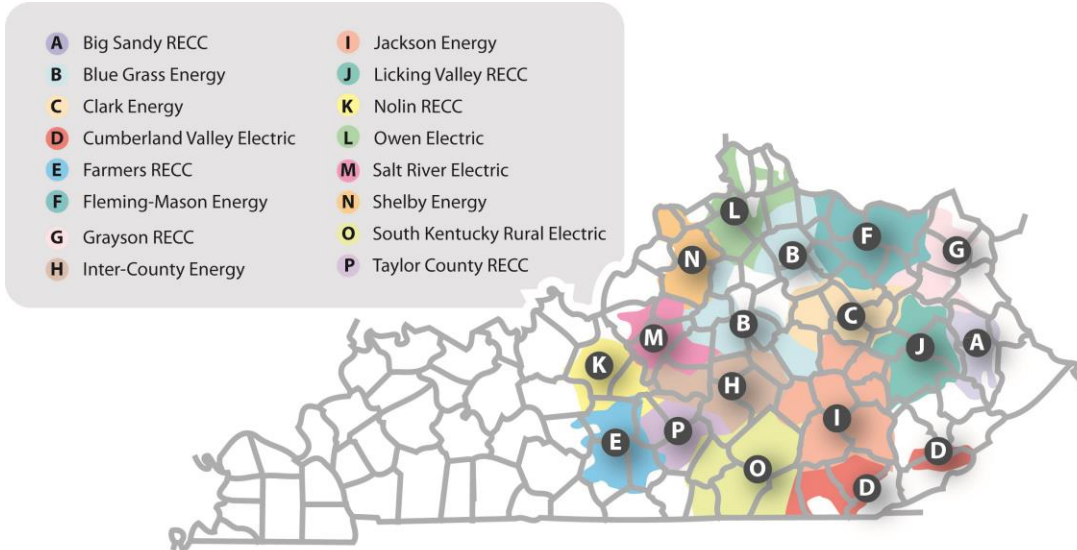
VP, Federal & RTO Regulatory Affairs

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East Kentucky Power Cooperative

Member co-ops provide electricity to more than 1.2 million Kentuckians in 87 counties

- Not-for-profit, member-owned generation and transmission cooperative
- Regulated by the Kentucky Public Service Commission
- Provides wholesale power to 16 member-owner distribution cooperatives serving rural Kentucky
- 2020 Annual Report:
 - Over \$787 million in operating revenue; \$3.5 billion in assets
 - 3,400 WW of winter generating capacity
 - 13.4 million MWh delivered to member-owners in 2020



* Hydropower via contract with SEPA

EKPC's Experience with Interconnection Process

- In fulfilling our full-requirements generation supply service requirements to our member owners, EKPC enters into Power Purchase Agreements and in the future may develop generation projects.
- As a Transmission Owner, EKPC performs interconnection studies and engages in the interconnection process.
- EKPC integrated into PJM in 2013; Its zone had not experienced much interconnection activity until recently.
 - Witnessing delays in study process; potential risk for timely PPA commercial operation
 - Concern about future study churn (re-tool cycle, etc.) experienced elsewhere in PJM region

EKPC generally supports the direction PJM is heading with its proposed reforms in the Interconnection Process Reform Task Force; additional details TBD

Transmission Planning

- Foundational Principle #1: The system must be reliable.

EKPC's interest is to ensure that it will be able to reliably serve its owner members.

- The current interconnection process encourages the efficient location of generation resources through LMP (energy) and LDA (capacity) price signals and the cost to reliably connect to the grid.
 - Interconnecting generator pays the “but for” cost of network upgrades, protecting customers from bearing costs that otherwise would not need be incurred
- Proactively “harmonizing” grid needs and policy drivers may result in a more efficiently planned grid of the future. **However:**
 - Need to balance risks: what if the “build it, they will come” does not result in the planned generation build out. Who bears the cost risk? How do we minimize generation development risk shifting to consumers who cannot mitigate those risks?
 - Need to consider all state policies (not just renewable generation development policies) as well as resource adequacy.
 - Stakeholders soon will be engaging in Stage 2 Resource Adequacy/Capacity Market reform discussions. What resources will the grid need? Efficient, proactive transmission planning need consider the connection of dispatchable generation necessary to reliably operate a grid with increased penetration of intermittent resources.
- Assuming a more proactive approach to transmission planning to support efficient connection of new generation to the grid will result in larger, regional transmission projects being identified, how do we handle reliability concerns associated with permitting, siting and other delays to the construction timeline?
 - What “off ramps” (or is it an “EZ Pass lane”?) could be created to allow reliability needs or other local planning needs to be timely addressed?

Cost Allocation

EKPC takes no position at this time on any potential legal issues associated with changing cost allocation rules

- **EKPC's interest is to ensure allocated costs are limited to those associated with reliably serving its owner members.**
 - EKPC is not-for-profit cooperative that does not earn an incentive return on its investment; it is not seeking to expand its transmission system for reasons beyond reliably serving its load
 - Assigning additional costs to EKPC necessarily will reduce the amount of capital dollars EKPC has available to spend to support its owner members' needs (aging infrastructure, new customer connections, etc.)

Considerations in thinking about any shift from "cost causer" approach:

- **Changes to the cost allocation necessarily will alter the incentives for generators to select the most cost-effective location**
- **Who is paying for the generator's output?**
 - Allocation to zone where physically interconnected likely would not align cost to benefitting load (e.g., PPA with load in another zone)
- **What policies would a planning process be designed to address?**
 - Peanut-buttering costs across the system under a theory that all loads benefit from transmission is not sufficient justification
 - State policies differ across the region (and between regions/RTOs); costs should not be imposed on states not sharing the policy objectives
 - Cost allocation must not mute the incentive to ensure the transmission build out is needed – i.e., that planned for generation interconnection will materialize – and not result in fallow transmission paid for by consumers
 - Generation development risk should not shift to consumers who cannot mitigate the risk
 - Voluntary agreements to share costs should be permitted
 - Some stakeholders have raised the "free rider" concern in support of increased cost socialization
 - Need more detail and explanation to understand this concern
- **Consider how any available federal funds may be used to pay for transmission grid expansion**
 - Depending on whether the law/regulations specifically earmark their purpose, such funds should not be limited to interconnection of generation but also should be used to replace aging infrastructure.
 - The grid of the future needs to build upon the grid of the past.

Practical Consideration – *not new, but perhaps magnified by any changes to the planning process?*

- All transmission build out need be coordinated.
 - Outages to perform the necessary construction may become more challenging to coordinate as multiple system changes are pursued simultaneously
 - National need to address aging transmission infrastructure (at all voltage levels)
 - Generation portfolio changes
 - Transmission expansion to support multiple need drivers
- Who bears the risk of this challenge? Is it greater in any locations in PJM?
- How can we minimize any risks associated with this challenge?