Overview of KCC's Role in Transmission Planning, Oversight, Siting, Cost Allocations and Cost Recovery

Justin Grady—Chief of Revenue Requirements, Cost of Service and Finance Leo Haynos—Chief Engineer



Agenda—Questions Presented

- 1. A review of the role of the KCC in the planning and siting of transmission lines.
- 2. A review of the KCC's interactions with the SPP in the siting and cost allocations of proposed transmission lines in Kansas. Brief description of FERC Order 1000 and the competitive bidding process in SPP.
- 3. A review of the role of the KCC in reviewing the rates of regulated entities and cooperatives with regard to the costs of transmission investments in rates. How are transmission costs included in rates? At what point in the process does the public have an opportunity to review and comment on plans for the siting and cost of transmission?

Agenda—Questions Presented cont...

- 4. An explanation of the authority of the KCC to respond if a line fails:
 - Are there standards for construction of building transmission lines? (All sizes including private lines?)
 - If a line fails, is the owner required to repair the line and restore electricity within a particular time frame?
 - What is the process for a private citizen or business to complain if outages occur?
 - How does the KCC hold public utilities accountable (located in or out of state) for repetitive or catastrophic failure to provide reliable service?

Agenda—Questions Presented cont...

- 5. In the past few years, Kansans have raised concerns about the building of major power lines across Northeast Kansas and most recently Southeast Kansas. What role has the KCC played in the resolution of Kansans concerns with siting of the lines and cost allocation?
- 6. Does the KCC have less or more regulatory oversight over transmission than regulators in other states? Can the KCC stop the building of a transmission line that has been approved by the SPP?
- 7. Please provide the Committee with an update of planned development of renewable energy projects in Kansas and building or upgrading of transmission lines in Kansas to meet those needs.

The KCC does not plan transmission development in Kansas. The Southwest Power Pool (SPP), was certificated as a utility in Kansas in 2006 to perform the role of a Regional Transmission Operator (RTO) for Kansas utilities.

- While the KCC does not directly plan transmission, we do participate extensively in SPP activities.
 This includes maintaining a Kansas representative on the Regional State Committee (Commissioner Andrew French) and the Cost Allocation Working Group (former Commissioner Shari Feist Albrecht).
- We also monitor and participate in the following SPP stakeholder groups: Market Working Group, Regional Tariff Working Group, Supply Adequacy Working Group, Improved Resource Availability Working Group, Operations Reliability Working Group, Regional Allocation Review Task Force, Consolidated Planning Process Task Force, and others.
- The KCC does regulate the granting of certificates to own and operate transmission in Kansas pursuant to K.S.A. 66-131, and the siting of transmission lines pursuant to K.S.A. 66-1,177—K.S.A. 66-1,180.

SPP is regulated by the Federal Energy Regulatory Commission (FERC). SPP carries out its transmission planning responsibilities pursuant to Attachment O of its Open Access Transmission Tariff (OATT).

- Attachment O, Section 2, 1)(c) provides: "The Transmission Provider (SPP) shall perform transmission
 planning studies to assess the reliability and economic operation of the Transmission System in accordance
 with Section III of this Attachment O." Results in Regional Upgrades to meet North American Electric
 Reliability Corporation (NERC) Standards, and other SPP Standards.
- SPP also coordinates and reviews Zonal Reliability Upgrades as proposed by Transmission Owners to meet Zonal Planning Criteria, including those developed pursuant to FERC-approved local planning processes, to ensure coordination of the projects set forth in the plans with the potential solutions developed in the regional planning process. Results in Zonal Reliability Upgrades to meet Zonal Planning Criteria.
- SPP also plans interregional transmission development with neighboring transmission providers or RTOs, including the results from coordinated system plans. <u>Results in Interregional Transmission Upgrades.</u>

Proposed transmission facilities can arise out of several distinct planning processes at SPP:

 Transmission Service Request (TSR) process; Generator Interconnection (GI) Request process; Attachment AQ process (delivery point changes, unexpected step change in load); Integrated Transmission Planning (ITP) assessments; Balanced Portfolio process; High Priority Study process; Sponsored Upgrades; Proposed Interregional projects; and Generator Retirement process.

If Network upgrades are identified exclusively as a result of TSR (Attachment Z1), GI Requests (Attachment V), or Delivery Point Changes (Attachment AQ), the entity causing additional costs on the transmission system is Directly Assigned the costs of those Network Upgrades.

See SPP OATT Attachment V, Section 3.1 and Attachment J, Section 1.

Most large-scale regional transmission is identified as a result of the ITP process.

 The ITP process results in a 10-year forward looking regional transmission plan for the reliable and economic delivery of energy throughout the region. This is reevaluated annually.

Pursuant to Attachment O of SPP's OATT, the following is incorporated into an ITP study:

- NERC Reliability Standards, SPP Reliability Criteria, Zonal Planning Criteria, previously identified and approved transmission projects, zonal reliability upgrades developed by transmission owners, long-term firm transmission service, load forecasts, existing and planned demand management programs, capacity forecasts—including generation additions and retirements, existing and planned demand response resources, congestion within SPP and between the SPP region and other regions, renewable energy standards, fuel price forecasts, energy efficiency requirements, other relevant environmental or government mandates, public policy requirements, operational experience in markets operated by SPP, other requirements identified during the stakeholder process, identified persistent operational issues.
- The completed 2021 ITP report can be accessed here: https://spp.org/documents/66812/2021%20itp%20report%20&%20addendum%2 0v2.0.pdf

Once a list of proposed transmission needs is identified during the ITP process, SPP publishes the list and allows stakeholders to propose alternative projects/solutions, including:

- Detailed project proposals, which can award incentive points in competitive bidding process.
- Generation options, demand response programs, smart grid technologies, and energy efficiency programs. These solutions are evaluated against each other on the basis of relative effectiveness of performance and economics. (Attachment O, Section III, 7) (c))

Cost/benefit tests are performed taking into account:

- 40 years of modeled financial benefits (20-years as terminal value);
- Quantified dispatch savings (adjusted production costs), loss reductions, avoided projects, applicable environmental impacts, reduction in required operating reserves, interconnection improvements, congestion reduction, and other benefit metrics as appropriate;
- Modeled results are stressed across different scenarios evaluating load forecasts, wind generation levels, fuel prices, environmental costs, other relevant factors;
- Cost/benefit ratios are reported on a regional, zonal, and state-specific basis;
- Rate impact estimates are performed for typical residential customer and on a \$/kWh basis.

Once a transmission project is identified SPP must designate an entity to build the transmission project, then issue a Notice to Construct (NTC).

SPP's Attachment O and Y determine how SPP determines the entity responsible for building the transmission project.

- Attachment O—Sponsored Upgrades that are rebuilds of an existing facility are assigned to the Transmission Owner of the existing facility. Sponsored Upgrades that are new facilities can be built by any utility as long as that utility is qualified to be a Transmission owner pursuant to Section III.1(b) of Attachment Y.
- Attachment Y—SPP's Transmission Owner Designation Process, submitted in compliance with FERC Order 1000.

FERC Order 1000 required public utility transmission providers (like SPP) to participate in a regional planning process that produces a regional transmission plan, that is funded by regional cost allocation.

 SPP's Transmission Expansion Plan, and the Highway/Byway cost allocation methodology were already compliant with this requirement.

FERC Order 1000 also required transmission providers to remove the federal right of first refusal (ROFR) from any FERCjurisdictional tariff (SPP's OATT) for certain categories of transmission.

• It also allowed competitive bidding to determine transmission projects or developers. This competitive transmission owner selection process is contained within SPP's Attachment Y.

<u>SPP's Attachment Y</u>—Removes federal ROFR (opens to competitive bidding) for:

- Transmission upgrades identified in the ITP, Network Upgrades required pursuant to Attachment AQ, High Priority Upgrades, Generator Retirement Upgrades, or Interregional Projects;
- Transmission projects with an operating voltage above 100kV;
- Transmission projects that are not a rebuild of an existing facility;
- Transmission projects that will not alter a Transmission Owner's use and control of existing right of way;
- Transmission projects that are to be built in a state <u>without</u> a State ROFR;
- Transmission projects that do not require the rebuild of existing facilities and new transmission facilities; and
- Transmission facilities that are not a local transmission facility.

SPP's Attachment Y—Removes federal ROFR for:

- Projects in which <u>less</u> than 80% of the cost of the combined project is for rebuild of existing facilities—in these instances, incumbents rebuild existing facilities, new portion of facilities chosen pursuant to competitive bidding.
- Projects with a need-by date for reliability purposes longer than three years in the future. (Shorter projects are not subject to competitive bidding).

Transmission Owner Selection Process:

- Must be a Qualified RFP Participant (QRP) to bid on projects—41 QRPs as of Jan. 2023 (list evaluated annually);
- QRPs must pass screening for: financial criteria, operational and managerial criteria.
- Competitive bids are reviewed by an Industry Expert Panel. RFP respondents are scored as follows: 20% Engineering Design (reliability, quality, general design); 20% Project Management; 25% Operations, Management, Safety; 22.5% Rate Analysis/Cost to Customer; 12.5% Financial Viability of Owner. An extra 10% incentive is available if a RFP respondent provided a detailed project proposal that was selected for a competitive bid project.
- IEP chooses the winner and a runner up. Must be approved by Board.

For a transmission project to be built in Kansas, the owner/operator has to be certificated as a public utility pursuant to K.S.A. 66-131. This certificate cannot be granted unless it will "promote the public convenience and necessity." For non-incumbent utilities, the KCC only issues project-specific certificates. This means that the KCC has to evaluate whether the *project* will promote the public interest of the State of Kansas.

- If the project is to be built by an incumbent utility, a transmission-rights only certificate is required outside their certified retail territory.
- K.S.A. 66-1,177 to 66-1,180 also requires line siting proceedings for any Transmission line at least five miles long and greater than 230 kilovolts (kV) of electricity.

Line siting proceedings require affected landowners (660 feet on each side of the center line) to be noticed, and an opportunity for public hearing provided.

The Commission is required to rule on:

"the necessity for and the reasonableness of the location of the proposed electric transmission line, taking into consideration the benefit to both consumers in Kansas and consumers outside the state and economic development benefits in Kansas. The commission shall issue or withhold the permit applied for and may condition such permit as the commission may deem just and reasonable and as may, in its judgment, best protect the rights of all interested parties and those of the general public."

Cost Allocations—SPP is a FERC-jurisdictional utility that must comply with FERC cost allocation principles and legal standards.

- The SPP Regional State Committee (RSC) is responsible for overseeing cost allocations among the States/Utilities in SPP. The Cost Allocation Working Group (CAWG) reports to the RSC and assists in this responsibility. The KCC has representation on both the CAWG and RSC.
- The current SPP cost allocation methodology for the regional transmission plan is the FERC-approved, Highway/Byway methodology.
 - This methodology allocates transmission facilities with an operating voltage below 100kV 100% to the Local Transmission Zone where the facility is located.
 - Facilities between 100kV-300kV are allocated 67% to the Zone, 33% to the Region.
 - Facilities larger than 300kV are allocated 100% to the entire SPP region.
 - Kansas customers pay about 16.5% of region-wide SPP transmission costs.

- 3. A review of the role of the KCC in reviewing the rates of regulated entities and cooperatives with regard to the costs of transmission investments in rates. How are transmission costs included in rates? At what point in the process does the public have an opportunity to review and comment on plans for the siting and cost of transmission?
- Transmission costs at the wholesale level are regulated by FERC.
- FERC allows the use of Transmission Formula Rates (TFR) to incentivize this investment, using projected test years, higher ROEs, an adder for being part of an RTO, and more.
- TFRs largely rely on a customer-driven review process (at FERC) to ensure rates remain just and reasonable. The KCC participates in these reviews, and files complaints at FERC if needed.
- For Investor Owned Utilities (IOUs), K.S.A 66-1237 governs the retail recovery of Transmission costs in Kansas—authorizing a Transmission Delivery Charge (TDC). This statute provides IOUs the right to change rates to recover transmission costs from Kansas customers within 30-business days after the filing of a "report." These charges "shall be conclusively presumed prudent." The KCC's role in these proceedings is to ensure that the charges reflected in the TDC are an accurate reflection of what the utility included in the TFR for recovery. Also, we ensure that the costs are spread equitably through the customer classes.
- While interested parties can participate in the review at FERC, there is no comment period or meaningful review at the KCC, pursuant to 66-1237.

- 3. A review of the role of the KCC in reviewing the rates of regulated entities and cooperatives with regard to the costs of transmission investments in rates. How are transmission costs included in rates? At what point in the process does the public have an opportunity to review and comment on plans for the siting and cost of transmission?
- The KCC has proposed a change in 66-1237 this session to narrow the definition of transmission investments that are eligible for inclusion in this mechanism to RTO directed investments.
 - This would allow more KCC involvement and oversight of local transmission, planned and directed by the local utilities planning.
 - It would also apply a KCC-authorized return, and more traditional ratemaking practices than FERC.
- The KCC participates in the review of cooperative TFRs at FERC, but we do not have retail ratemaking authority over cooperatives in Kansas.
 - For a smaller subset of transmission lines (34.5kV sub-transmission), we regulate the charging of local access charges to third-party wholesale users in Kansas, if those lines haven't been placed in the SPP OATT. Largely a formula rate process similar to FERC without incentives.
- For line siting cases, the public has opportunity for public comment and public hearings, as directed by 66-1,178 and 66-1,179.

- 5. In the past few years, Kansans have raised concerns about the building of 18 major power lines across Northeast Kansas and most recently Southeast Kansas. What role has the KCC played in the resolution of Kansans concerns with siting of the lines and cost allocation?
 - The KCC coordinates with affected landowners as much as possible during line siting cases. Adjustments have been made to proposed routes and structures to accommodate reasonable concerns.
 - Cost allocation (between states) is regulated by FERC. For large lines such as Wolfcreek to Blackberry 345 kV, Kansans will pay approximately 16.5%.
 - See Rates and Revenue Requirements file for April 2022 "Reg & Zonal Avg. Loads" tab. https://spp.org/search?q=RRR%20file%20. Calculation assumes 5% of Empire District Electric Company load is Kansas, and 50% of Evergy Metro's load is Kansas. Also includes 100% of EKC, MIDW, and SECI load.
 - Some media outlets have misreported the purpose for this project and that it will be "largely paid for by Kansas customers." We have devoted resources to explain these inaccuracies. in testimony, at hearings, etc.
 - See pages 5-13 of Testimony in support of Settlement Agreement: https://estar.kcc.ks.gov/estar/ViewFile.aspx/S202206071639043899.pdf?Id=6b69ae0d-02f6-4242ae9d-fb0d0bca112c

- Does the KCC have less or more regulatory oversight over transmission than regulators in other states? Can the KCC stop the building of a transmission line that has been approved by the SPP?
- Our understanding is that our regulatory oversight over Transmission utilities in Kansas is very similar to other States.
- However, we know that several states in SPP have a state ROFR law, which does not exist in Kansas.
- We are not intimately familiar with the cost recovery mechanisms used by all other states. We do know that some states like Missouri do not have a TDC statute like ours, and therefore regulate transmission cost recovery through base rates.
- Yes. The KCC can stop the building of a transmission line in Kansas that has been approved by the SPP if that line would not promote the public interest. SPP can issue a notification to construct a transmission line, but a line cannot be built by the entity that receives the NTC unless that entity receives a public utility certificate pursuant to K.S.A 66-131. The Standard for the issuance of that project-specific certificate is that it must "promote the public convenience and necessity." Also, if the line is at least five miles in length and 230kV or greater, the Commission must approve the siting of the line, and the "necessity for, and reasonableness of the location of the proposed line." See K.S.A. 66-1,178

- 7. Please provide the Committee with an update of planned development of renewable energy projects in Kansas and building or upgrading of transmission lines in Kansas to meet those needs.
- The KCC does not have advanced or proprietary knowledge of planned renewable energy projects in Kansas. Other than projects owned by IOUs (there are none known at this time), we find out about these projects when we receive a notice of exemption from being a public utility, pursuant to K.S.A. 66-104(e).
- Our best source of information as to the potential for future renewable generation in Kansas is the SPP Generator Interconnection Queue, available at
 - https://app.powerbi.com/view?r=eyJrljoiNWRIMjYyN2EtOTA2Ny00NTE0LWI2M2QtMGE3MTAxZTAxOGE0liwidCl6ljA2NjVkY2EyLTExNDEtNDYyNS1hMmI1LTY3NTY0NjNIMWVIMSIsImMiOjF9
- As of January 29, 2023, there were approximately 21,700 MW of generation additions in the queue, consisting of 3.2 GW of Battery Storage, 2.8 GW of Hybrid Resources, 9.6 GW of Solar, and 5.9 GW of Wind.
- Not all GI requests that are put in the queue end up being built.

- 7. Please provide the Committee with an update of planned development of renewable energy projects in Kansas and building or upgrading of transmission lines in Kansas to meet those needs.
- Pursuant to SPP OATT, Attachment V, Network upgrades caused by GI requests are paid for by the entity causing them. These costs are not socialized throughout the region in transmission rates.
- The best source of information for planned regional transmission lines in Kansas at any one time is the SPP Project Tracking list, available at: https://spp.org/spp-documents-filings/?id=18 291
- As of the 4th quarter of 2022, there were 18 projects being tracked by SPP, with projected in service dates from 2022-2025. Those projects totaled \$198 million of estimated investment. There are another 6 projects totaling \$211 million that haven't been issued NTC's, with estimated need by dates of 2033. These projects were the result of the 20-year ITP, which doesn't issue NTC's, it just identifies potential needed future projects.

4. An explanation of the authority of the KCC to respond if a line fails

- Are there standards for construction of building transmission lines? (All sizes including private lines?)
 - The KCC has adopted the National Electric Safety Code (NESC) as a construction standard for these lines. These apply to generation lead lines, cooperatives and IOUs in Kansas. SPP also has construction standards that are specified in competitive bidding documents, NTCs, etc.
- If a line fails, is the owner required to repair the line and restore electricity within a particular time frame?
 - The KCC has not defined a specific time frame for restoration of a transmission line. Often case by case specifics dictate restoration times. For non-incumbent utilities, the KCC has previously required "good utility practice" and "industry standards" as well as reporting of outage times to monitor.
 - National Electric Reliability Corporation (NERC) with FERC authority establishes a multitude of requirements for electric transmission. Two notable requirements related outages are:
 - https://www.nerc.com/pa/Stand/Reliability%20Standards/IRO-017-1.pdf
 - https://www.nerc.com/pa/Stand/Reliability%20Standards/IRO-018-1(i).pdf

4. An explanation of the authority of the KCC to respond if a line fails

- What is the process for a private citizen or business to complain if outages occur?
 - Complaints can occur informally or formally pursuant to K.S.A. 66-101e.
 - Staff received 516 inquiries in 2022 related to electric service.
 - Staff has filed show cause dockets to get resolution of reliability concerns.
- How does the KCC hold public utilities accountable (located in or out of state) for repetitive or catastrophic failure to provide reliable service?
 - The KCC has authority pursuant to K.S.A. 66-101h to "examine and inspect the condition" or public utilities in Kansas. Ultimately, fines and or certificate revocation are the ultimate enforcement tool.
 - Newest out of state utility will file a compliance docket with specific reporting requirements.

Contact Information

Justin Grady—
Chief of Revenue Requirements, Cost of Service and Finance j.grady@kcc.ks.gov
Leo Haynos—
Chief Engineer 1.Haynos@kcc.ks.gov

