

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

House Committee on Agriculture and Natural Resources Budget
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Agenda

1. A review of the role of FERC vs. 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.
3. A review of the role of FERC vs. the KCC in cost allocation and ratemaking for Transmission investment.
4. A review of the Transmission Siting Process in Kansas.
5. A discussion about the use of Eminent Domain for Generation and Transmission Projects.

State versus Federal Regulatory Authority over Electric Transmission

Federal Regulation

- Transmission Planning—through Southwest Power Pool (SPP)
- Transmission Rates—Federal Energy Regulatory Commission (FERC) through the use of Transmission Formula Rates (TFR)

State Regulation

- Certificates (to become a Kansas utility)—K.S.A 66-131
- Line Siting Permits—K.S.A. 66-1,177 to K.S.A. 66-1,180

KCC Involvement in Federal Electric Transmission Issues

Formal

- K.S.A. 74-633: KCC authorized to participate at SPP
 - Regional State Committee (RSC) & Cost Allocation Working Group
- K.S.A. 66-106: KCC authorized to intervene in state and federal proceedings
 - Consistent intervention and advocacy at FERC and Federal Courts

Informal

- KCC maintains internal working group dedicated to tracking and participating on FERC & SPP issues
- KCC regularly meets with Kansas utilities and stakeholders to discuss FERC-jurisdictional issues

Regional Transmission Planning Background

- **FERC Order 2000** (issued in 1999)
 - Encouraged formation of Regional Transmission Organizations (RTOs)
 - Essential RTO functions:
 - Plan and coordinate necessary transmission upgrades and additions.
 - Develop processes that promote efficient use and expansion of transmission and generation facilities.
- **Southwest Power Pool (SPP)** achieved FERC-approved RTO status in 2004
 - SPP processes and services regulated by FERC
- **SPP was certificated as a utility in Kansas in 2006**, allowing it to perform the role of an RTO for Kansas utilities.

SPP Transmission Planning

- **SPP administers multiple processes**
 - Integrated Transmission Planning (ITP) Process
 - 10-year forward looking plan for the reliable and economic delivery of energy throughout the region. Re-evaluated annually.
 - Most large scale transmission projects arise out of this process.
 - Generator Interconnection Service
 - Open access
 - Transmission Service
 - Delivery Point Addition/Change (large new loads)
- Each process is governed by a separate FERC-approved tariff provision

SPP ITP Process

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:

- 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))

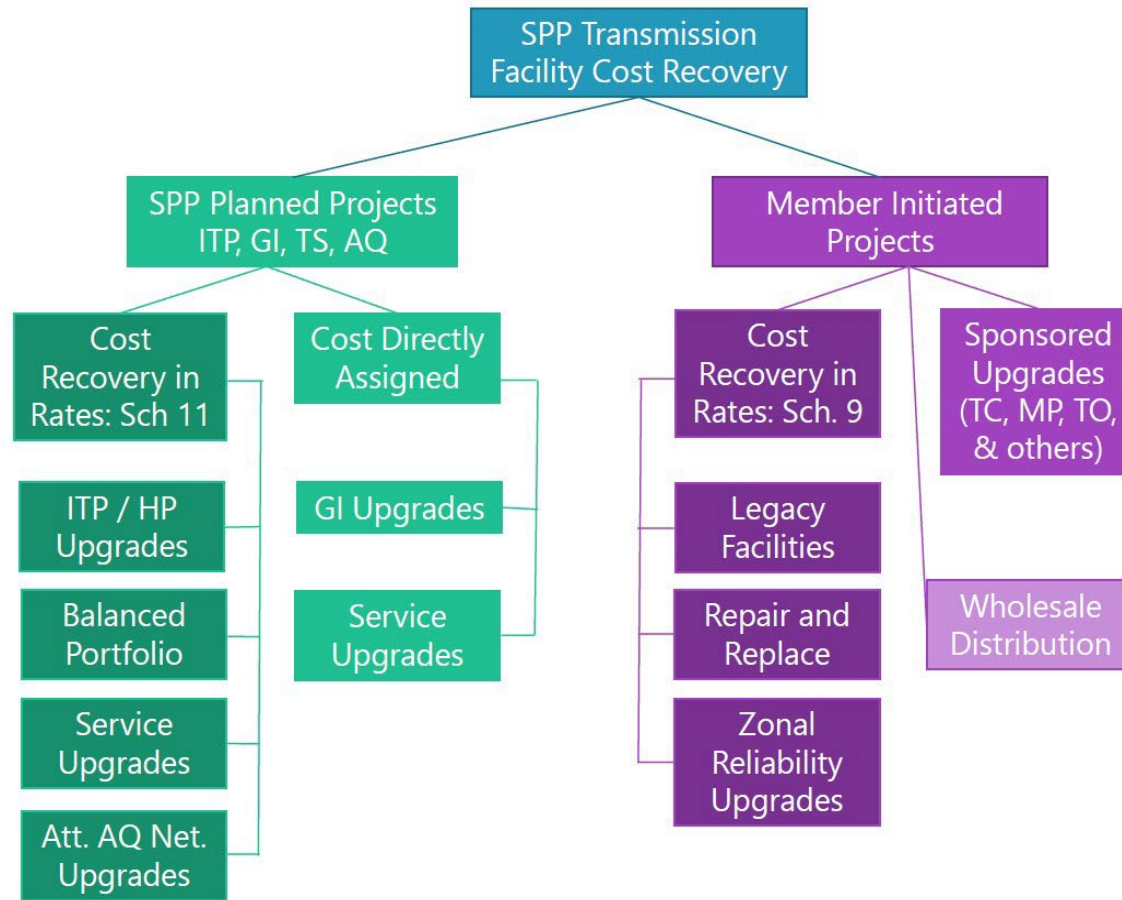
Cost/benefit tests are performed taking into account:

- 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.

Cost Allocation: Who Pays for Transmission?

- FERC must approve transmission rates
 - Cost allocation is a component of rates
- FERC requires costs to be allocated “roughly-commensurate” with benefits
- The SPP Regional State Committee (RSC) has primary authority to set cost allocation policy for SPP

Planning processes determine cost allocation method



Cost Allocation for Local Transmission

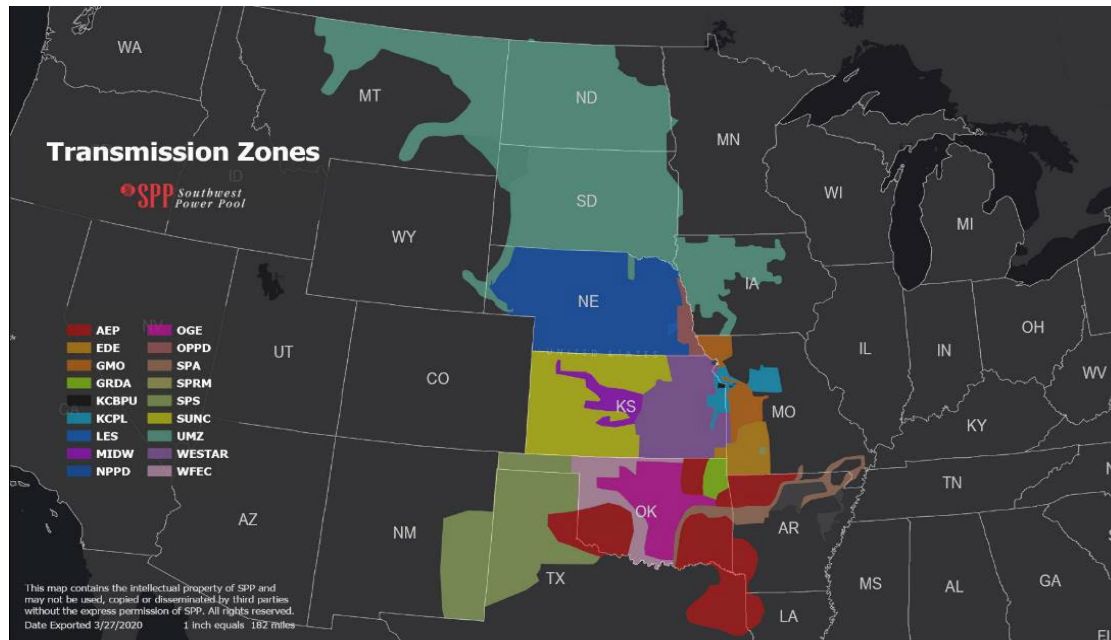
- Local Transmission includes:
 - Existing or rebuilt facilities
 - New, lower-voltage transmission
- Not planned by SPP
- Allocated 100% to local zone
- Largest percentage of transmission investment and largest transmission component of customer bills

Cost Allocation Methods for SPP Planned Projects

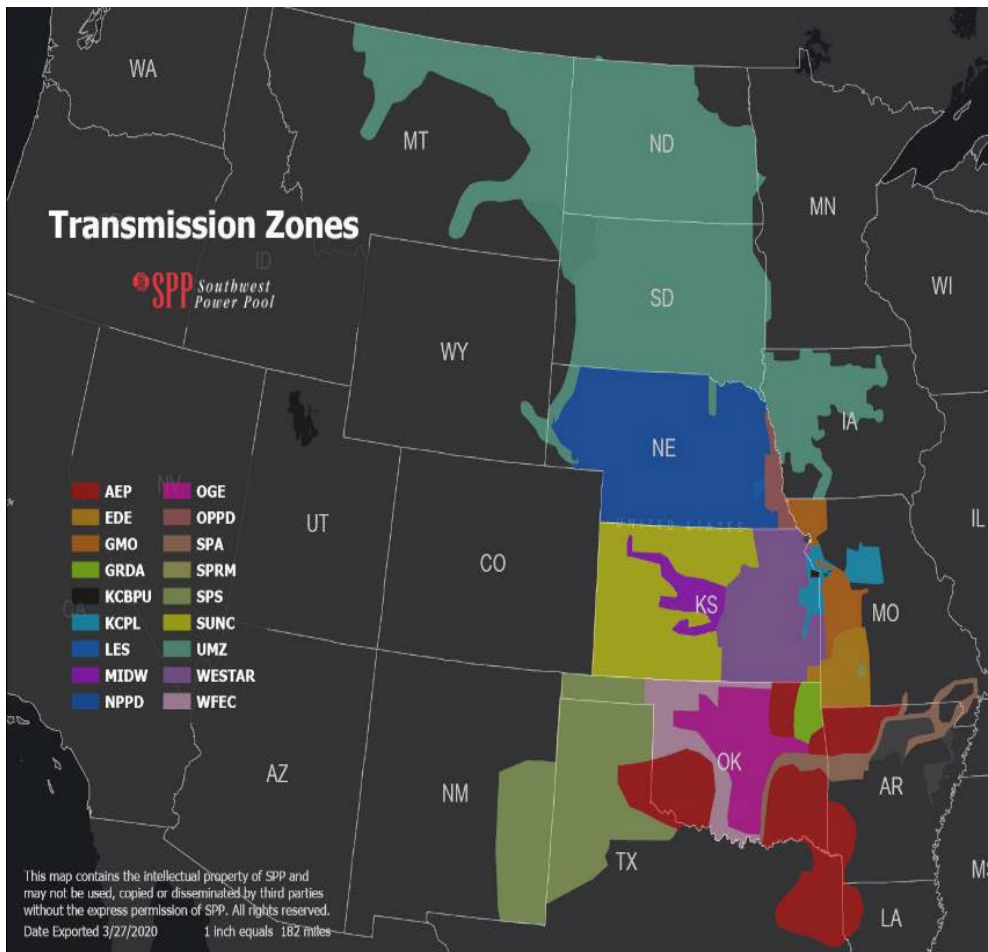
- **Direct Cost Assignment:** Transmission customer is responsible for cost recovery and receives credit for use of transmission lines
 - Generator interconnection requests
 - Transmission service requests
- **Highway/Byway:**
 - *Most SPP projects paid for under this methodology*
 - Allocates costs locally or regionally based on voltage level
 - Applicable to ITP Projects, Delivery point additions, etc.

Highway/Byway Cost Allocation

Voltage	Region Pays	Local Zone Pays
300 kV and above	100%	0%
above 100 kV and below 300 kV	33%	67%
100 kV and below	0%	100%



Regional Cost Allocation Review Report (version 3.1)



Pricing Zone	Benefit/Cost Ratio
American Electric Power	2.19
Empire District	3.80
KCPL - Greater Missouri Operations	8.60
Grand River Dam	5.25
Kansas City Board of Public Utilities	13.78
Kansas City Power and Light	8.37
Lincoln Electric System	5.17
Midwest Energy	12.01
Nebraska Public Power District	6.24
Oklahoma Gas & Electric	4.07
Omaha Public Power District	3.84
City Utilities of Springfield	3.83
Sunflower Electric	4.36
Xcel - Southwestern Public Service	8.36
Basin- WAPA - Heartland Integrated	7.55
Westar Electric	6.93
Western Farmers Electric	9.11
Total	5.80

Kansas Corporation Commission

Overview of Transmission Line Siting Process; Discussion on Wolf Creek to Blackberry Line

February 20, 2024

Leo Haynos — *Chief Engineer*



KCC's role in Certificating Transmission Lines in Kansas

- 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.
 - Nextera Energy Transmission Southwest LLC (NEET-SW) was granted a certificate to build the WC to Blackberry Transmission line in Docket No. 22-NETE-419-COC.
- If the project is to be built by an incumbent utility, a transmission-rights only certificate is required outside their certified retail territory.

Overview of Transmission Line Siting Process

K.S.A. 66-1,177 et seq.

- **Transmission lines 230kV and larger and at least five miles long.**
- **Determine Necessity of the project AND reasonableness of route.**
- **Must have public hearing in local area of proposed line.**
- **Order must be issued within 120 days of application**

Overview of Transmission Line Siting Necessity of the Project

- **Review the SPP issued Notice to Construct**
 - **Benefit to cost calculations and assumptions**
 - **Reliability requirements**
- **Review impact on Kansas ratepayers.**
 - **Over 300kV, Kansas ratepayers would pay 18% of cost**
 - **100-300KV, EKC ratepayers pay 67%**
 - **Less than 100kV balancing zone pays 100%**
- **Review if existing infrastructure can accomplish the same goal without new construction, (See Docket 137,177-U May 1985)**

Overview of Transmission Line Siting Reasonableness of the Route

- **Commission mandate to determine if proposed route is reasonable.**
 - **Does not pick route; there may be more than one reasonable route.**
- **Considerations Commission is required to address:**
 - **Reasonableness of the line location;**
 - **Benefit to Kansas consumers and out-of-state consumers;**
 - **Economic development benefits to Kansas.**
- **Commission may attach conditions to the permit provided that:**
 - **The conditions are just and reasonable;**
 - **Best protect the rights of interested parties;**
 - **Best protect the rights of the general public.**

Overview of Transmission Line Siting

Reasonableness of the Route

- **Subjective process weighing policy considerations on land use.**
 - Establishes right of eminent domain
 - Results in an easement “for perpetuity” on affected landowners.
- **Required to notify landowners within 600 feet of line; most notice to 1000 feet.**
 - Multiple parties providing their opinions on the definition of reasonableness.
- **Commission modification to the proposed route does not eliminate landowner concerns – it reassigns them to a different set of landowners.**

Overview of Transmission Line Siting

Reasonableness of the Route

Public Meeting(s):

- **Pre-meeting time for company and KCC to answer/ask questions, look at maps, talk with individual landowners**
- **Question/answer period for the group**
 - **Most questions on necessity**
 - **Safety concerns,**
 - **Impact on county and local farming practices.**
- **Commission portion of public meeting**
 - **All comments recorded**
 - **Commenters chance to explain their concerns.**

Overview of Transmission Line Siting Reasonableness of the Route

Applicants Routing Study of Area Between two endpoints:

- Prepared by consultant using some variation of industry siting methodology.
- Goal to balance cost and complexity with impact on land use.
- Assumptions in model based on industry and Applicant's construction experiences.
- Develops scoring methodology to select route with least impact on land use at lowest cost/complexity.
- After preliminary route selected, landowner and county government feedback are obtained.

Overview of Transmission Line Siting Reasonableness of the Route

Applicants Routing Study of Area Between two endpoints:

- Feedback from public may lead to changes in scoring methodology.
- Feedback often results in “micrositing” the line to accommodate a landowners interests.
 - Moving poles out of cultivated land
 - Moving farther from a house or outbuildings
 - Moving away from creek banks.

Overview of Transmission Line Siting Reasonableness of the Route

KCC Staff Analysis of the Routing Study:

- Every siting docket has elements that are unique from other cases
- Submit data requests to evaluate routing study assumptions
- Request model runs to stress test the model
- Consider impact on other infrastructure: (pipelines, roads, other transmission operators)
- Overlay proposed map on County parcel data.

Overview of Transmission Line Siting Reasonableness of the Route

KCC Staff Analysis of the Routing Study:

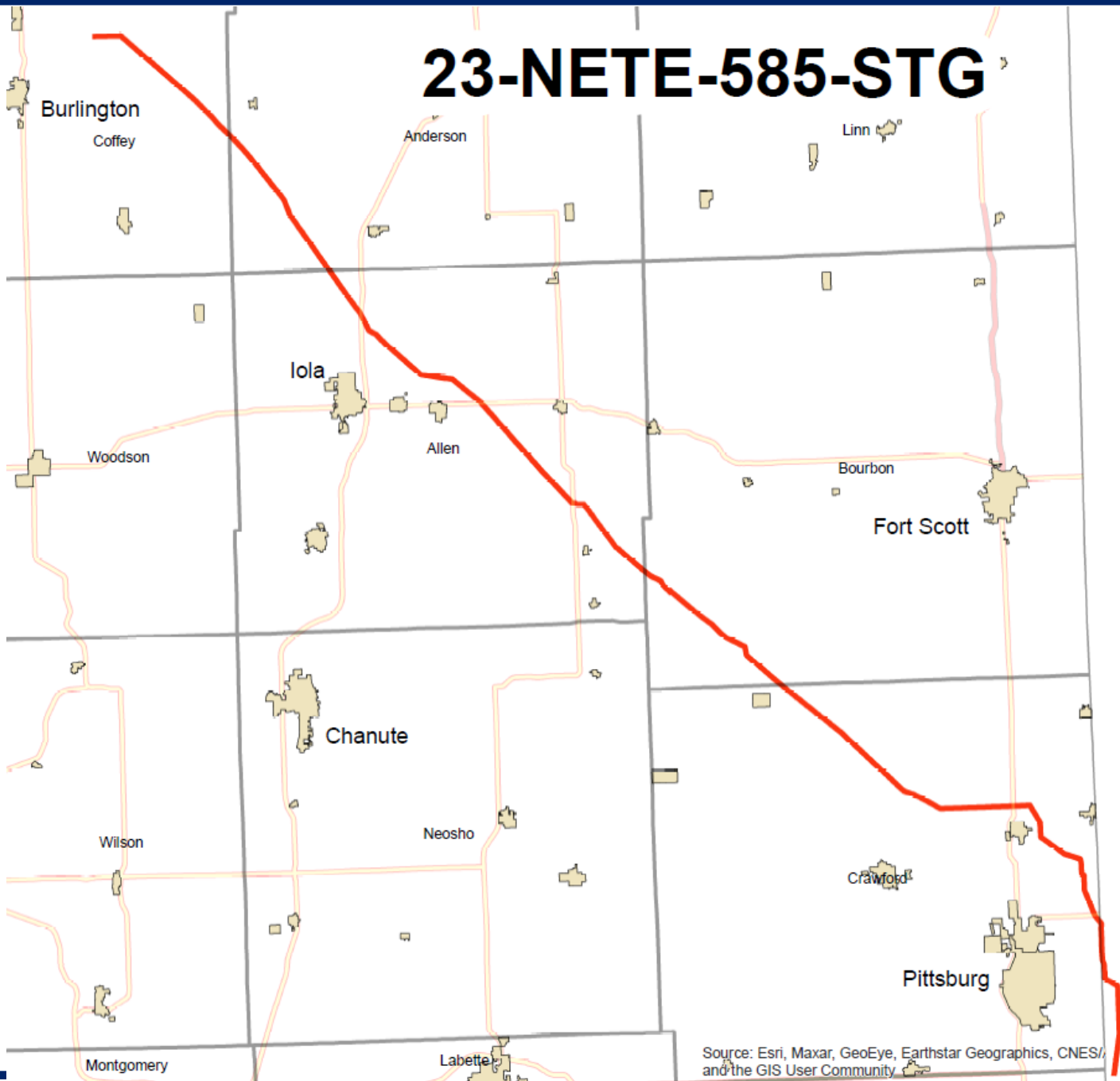
- **Conduct outreach with other parties**
 - **Contact local government to discuss any concerns they may have.**
 - **Investigate informal complaints from landowners**
 - **Answer questions from concerned landowners**
 - **Review company records of meetings to understand accuracy of message.**
 - **Discuss opportunities to microsite lines.**
 - **Drive the route as much as possible**
 - **Try to visit location of any caller that has contacted us.**

Overview of Transmission Line Siting Wolf Creek-Blackberry Order

Description:

- **Length: 83 miles in Kansas; 345kV**
- **Traverses Coffee, Anderson, Allen, Bourbon and Crawford counties.**
- **Crosses 295 parcels**
- **16 residences were within 500 feet of the line.**
- **Located 50% in rangeland and 39% in cropland**

23-NETE-585-STG



- City
- Kansas Highways**
 - Limited Access
 - Highways
- Proposed Route**
 - Voltage 345



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/ and the GIS User Community



Overview of Transmission Line Siting Wolf Creek-Blackberry Order

Routing Study Principles in Siting:

- Minimize length;
- Minimize angles;
- Maintain as much distance as practicable from residential areas, individual homes, and public facilities (i.e., religious facilities, schools, etc.);
- Minimize impacts to social resources such as residences and cultural resources;
- Minimize impacts to natural resources such as wetlands, woodlands, and wildlife;
- Minimize impacts to airports and airstrips

Overview of Transmission Line Siting Wolf Creek-Blackberry Order

Routing Study Principles in Siting (cont'd):

- Minimize conflict with current and planned uses of land;
- Minimize visual contrast with the natural landscape;
- Minimize impacts to irrigation systems;
- Follow existing rights-of-way (“ROW”) such as for roads or electric transmission lines, as appropriate; and
- Avoid federal and state lands and conservation and restricted easement areas.

Overview of Transmission Line Siting Routing Study Prioritization Factors

Criteria are weighted based on Applicants evaluation of importance:

Factor	Weight
Residential Proximity Score	10
Sensitive Species Score	9
Length Not Along Existing Transmission Line (feet)	8
Total Length (feet)	6
Wetlands in ROW (acres)	5
Length through Previously Mined Areas (feet)	4
Angles Over 30 Degrees (count)	4
Floodplain in ROW (acres)	3
Cropland in ROW (acres)	3
Stream Crossings (count)	3
Archeological Sites within ROW (count)	2
Transmission Line Crossings (count)	2
Total Length through Karst Area (feet)	1
Length Not Along Parcel Boundary (feet)	1
Public Facilities within 500 feet (count)	1



Overview of Transmission Line Siting Wolf Creek-Blackberry Order

Comments from Public Meeting and Hearing:

- **Three most contentious points**
 - Line runs at a diagonal
 - 25 miles of line is adjacent to an existing transmission line.
 - Payment should be equivalent to wind farm payments.
- **Commission Order issued 5/24/23**
- **Found proposed route to be reasonable but with slight modifications and placed some conditions.**
 - Split decision
 - Decision is on appeal to District Court

Overview of Transmission Line Siting Wolf Creek-Blackberry Order

Conditions included in the Order:

- **2 reroutes for landowners;**
- **micro-siting**
- **Permit and reclamation plans to be filed with the Commission**
- **Provide landowners notice of right to request EMF study.**
- **Provide Staff with agreements with counties regarding road/bridge inspections for possible damage during construction.**
- **Approach SPP to provide input on routing parameters to be included in future RFPs**

Overview of Transmission Line Siting Wolf Creek-Blackberry Order

24-GIME-102-GIE:

- **Investigation into the Principles and Priorities to be Established for Evaluating the Reasonableness of the Location of a Proposed Transmission Line in Future Line Siting Proceedings.**
- Opened August 3, 2023
- Staff Report and Recommendation on the Scope of the investigation filed on December 1, 2023.
- To date, 13 industry entities, CURB, Staff, Kansas Farm Bureau, and Kansas Livestock Association have intervened in the docket.
- Staff filed 27 topics for consideration in the Docket.
- Six interveners filed an additional 96 comments in response to Staff.
- Staff follow Report and Recommendation due March 15, 2024.

K.S.A 17-618. Eminent domain, exercise by sundry corporations and partnerships

- **Promulgated in 1868.**
- **Last Revised in 1964.**

17-618 Outline

17-618. Eminent domain, exercise by sundry corporations and partnerships.

lands may be appropriated

- for the use of
 - macadam-road,
 - plank-road,
 - hospital corporation or association,
 - telegraph and telephone corporations,
 - electric,
 - hydraulic,
 - irrigating,
 - milling and manufacturing corporations using power,
 - oil companies,
 - pipeline companies,
 - and for the piping of gas
- in the same manner as is provided in K.S.A. [26-501](#) to [26-516](#), inclusive,
- and any
 - macadam-road,
 - plank-road,
 - telegraph and telephone corporations,
 - hydraulic,
 - irrigating,
 - oil company,
 - pipeline company,
 - gas company,
 - partnership holding a certificate of convenience as a public utility issued by the state corporation commission,
 - milling or manufacturing corporation using power desiring the right
 - to dam or take water from any stream,
 - to conduct water in canals or raceways or pipes,
 - or to conduct compressed air in pipes,
 - or to conduct oil in pipes or conduct gas in pipes,
 - or transmit power or communications by
 - shafting, belting, or belting and pulleys, or ropes and pulleys, or by electrical current, or by compressed air,
- may obtain such right or the right-of-way for all necessary canals, raceways, pipes, shafting, belting and pulleys, ropes and pulleys or wires or cables in manner as aforesaid;

Purposes

Electric companies with eminent domain rights fall into the partnership holding a Cert of Convenience from KCC

Eminent Domain for Electric Lines (transmission and distribution)

- **Electric public utilities have the right of eminent domain for electric lines.**
- **All other operators of electric lines do not have the option of eminent domain.**
- **Renewable generation resources operating electric transmission lines may “opt out” of being considered a public utility.**

Wind Farms, Transmission Lines, and Eminent Domain: 66-104(e)

Any developer wishing to construct renewable generation facilities that sell wholesale power are allowed to do so without KCC permission, or becoming a public utility. To opt out of becoming a regulated public utility, the developer only needs to provide notice to the KCC that it is opting out.

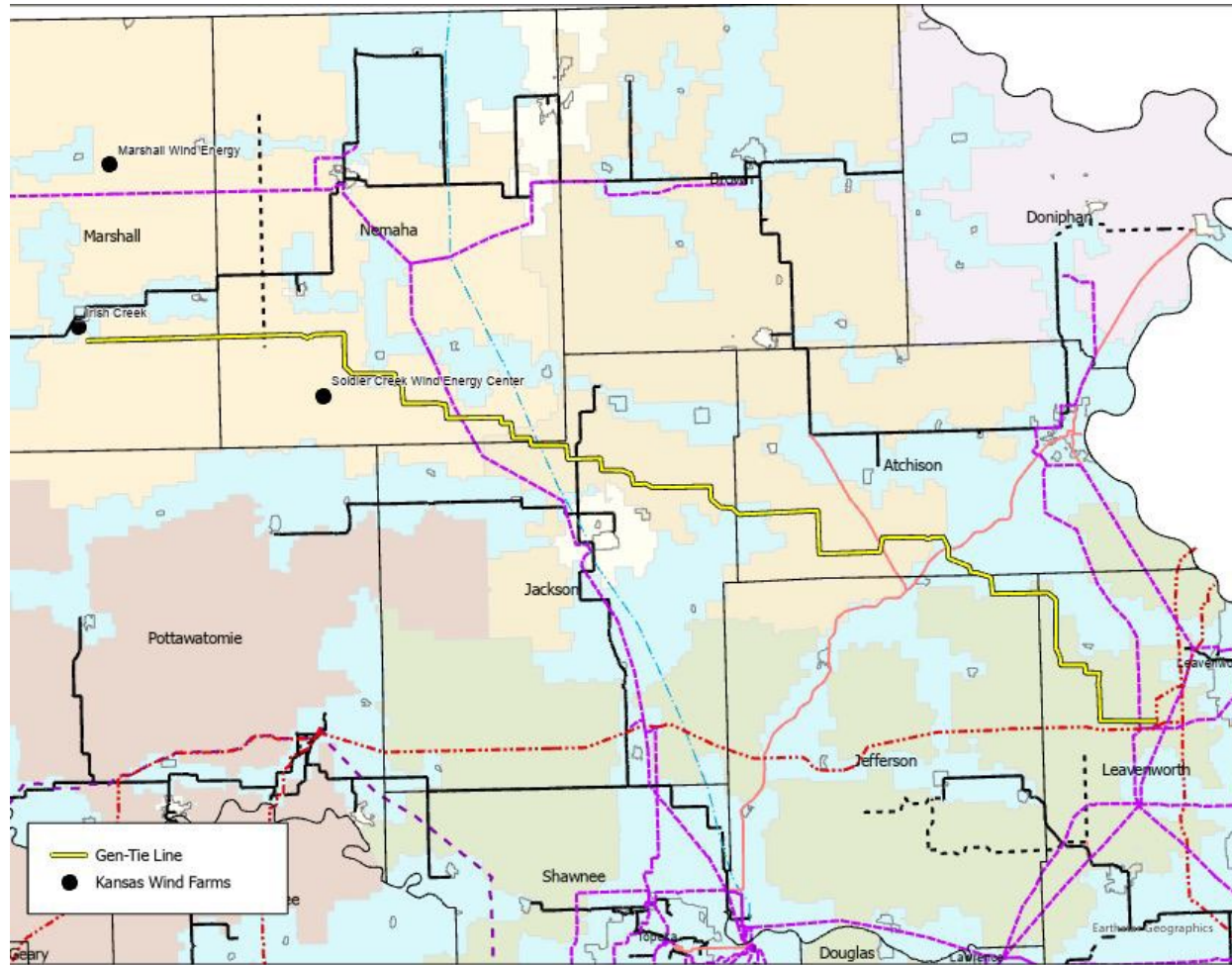
- The developer is not subject to the Kansas Electric Transmission Line Siting Act (K.S.A. 66-1,177 *et seq*) and is not required to obtain a certificate of public convenience and necessity under K.S.A. 66-131.
- The developer may not exercise the right of eminent domain under provisions of Kansas Law that grant eminent domain powers to public utilities.
- The developer is subject to the Commission's regulations with regard to wire stringing pursuant to K.S.A. 66-183 *et seq*. Wire stringing rules are KCC regulations with respect to the "support, maintenance, repair and reconstruction of electric lines" (K.A.R. 82-12-1 through 82-12-9).
- Even public utilities are not allowed to use eminent domain for wind farms, see K.S.A 66-104(g).

Wind Farms, Transmission Lines, and Eminent Domain

Renewable generation facilities can include transmission interconnection facilities that are also called a generator tie-lines.

- FERC has defined these tie-lines as facilities and equipment between the generating facility and the point of interconnection, including any modification, additions, or upgrades that are necessary to physically and electrically interconnect the generating facility to the transmission provider's transmission system.
- FERC has also determined that the interconnection facilities or tie-lines are sole-use, limited and discrete, radial in nature, and are *not* part of an integrated transmission network. Based on these definitions, generator lead lines do not fall under KCC jurisdiction
- As noted previously, the KCC now has wire stringing jurisdiction based on the modification to K.S.A. 66-104(e) (2) during the 2021 Session (HB 2367).

Transmissions Lines built with and without the ability to use eminent domain



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