October 30, 2023

Kansas Corporation Commission
1500 SW Arrowhead Road
Topeka, Kansas 66604

RE: 24-EKCE-254-CPL – HB 2225 Compliance Filing

To Whom it May Concern:

Evergy Kansas Central, Inc. and Evergy Kansas South, Inc. (collectively referred to herein as "Evergy Kansas Central") submitted their Compliance Filing September 15, 2023, as required by Kansas House Bill 2225, K.S.A. 66-1237. Evergy has updated the confidential designations made in the original filing and those updates are reflected in the attached.

Sincerely,

Cathryn J. Dinges

cc: All parties

(a) Project Identifier or Name	(b) Anticipated ISD	(c) TFR Spend (Includes 34kV)	(d) Specific Location within Utility's System	(e) Project Type	(f) Purpose for Project and Reliability Benefits	(g) Original Vintage of Replaced Facilities	(h) Economic Development Benefits
[redacted] 138kV Line Conversion	[redacted]	$ 45,587,783	Wichita	Upgrade	Following the past retirement of peaking resources in [redacted], the system is more reliant upon the 345/138 kV transformers at the [redacted] substation to serve the load. The [redacted] 138kV rebuild and [redacted] substation expansion allow an additional 345/138 kV transformation path into the Wichita load pocket and reduces the risk of manual load shed for reliability issues that can arise during high load periods.	1951	n/a
[redacted] 345/138kV and 138/69kV Conversion	[redacted]	$ 27,571,500	Wichita	New Build	Following the past retirement of peaking resources in [redacted], the system is more reliant upon the 345/138 kV transformers at the [redacted] substation to serve the load. The [redacted] 138kV rebuild and [redacted] substation expansion allow an additional 345/138 kV transformation path into the [redacted] load pocket and reduces the risk of manual load shed for reliability issues that can arise during high load periods.	n/a	n/a
[redacted] Substation Rebuild 69/12kV	[redacted]	$ 15,835,074	Wichita	Upgrade	Rebuild substation to eliminate aged unit substation equipment and improve reliability. This project will also move the substation out of the middle of a church parking lot. The current configuration does not allow for normally closed connection of all four lines in the substation. Rebuilding as a ring bus allows greater connectivity of the lines and the addition of a breaker reduces exposure of customers at [redacted] and [redacted]	1958	n/a
[redacted] 115kV Substation Rebuild and [redacted] Voltage Conversion from 69kV to 115kV & 138kV	[redacted]	$ 22,856,820	Hutchinson	Upgrade	Part of plan for improving infrastructure around [redacted]. Consolidates load served from 69kV system to 115kV transmission path within the area and upgrades substations, allowing the retirement and dismantling of the aging 69kV infrastructure. Addresses maintenance and operational flexibility concerns including: - Inability to add capacity and / or expand existing substations - Age and condition of substations and 69kV transmission line equipment - Uncommon 115/69/34kV transformer configurations - Maintenance outages that expose customers to elevated outage risks - Radial operation of load serving substations - Safety hazards across the system	1965	n/a
[redacted] 115kV New Line Build / 69kV Line Demo (Included due to relationship with [redacted] 115kV Substation Rebuild and [redacted] Voltage Conversion from 69kV to 115kV & 138kV)	[redacted]	$ 13,524,589	Hutchinson	Upgrade	Part of plan for improving infrastructure around [redacted]. Consolidates load served from 69kV system to 115kV transmission path within the area and upgrades substations, allowing the retirement and dismantling of the aging 69kV infrastructure. Addresses maintenance and operational flexibility concerns including: - Inability to add capacity and / or expand existing substations - Age and condition of substations and 69kV transmission line equipment - Uncommon 115/69/34kV transformer configurations - Maintenance outages that expose customers to elevated outage risks - Radial operation of load serving substations - Safety hazards across the system	1978	n/a
[redacted] 115kV Rebuild	[redacted]	$ 24,278,394	Topeka	Upgrade	Removing multiple lines in area and rebuilding as 115 kV. Increases overall transmission capacity in the area.	1925	n/a
[redacted] Temp Construction Power (Related to [redacted])	[redacted]	$ 420,888	Shawnee	New Build	Infrastructure needed to serve [redacted] load.	n/a	Serves [redacted] and other load growth in the area.
[redacted] 115kV Substation Rebuild (Related to [redacted])	[redacted]	$ 5,129,036	Shawnee	New Build	Infrastructure needed to serve [redacted] and other load growth in the area. May be receiving NTC from SPP for project.	n/a	Serves [redacted] and other load growth in the area.
[redacted] 345/115 kV Transformer Addition (Related to [redacted])	[redacted]	$ 9,929,983	Shawnee	New Build	Infrastructure needed to serve [redacted] and other load growth in the area. May be receiving NTC from SPP for project.	n/a	Serves [redacted] and other load growth in the area.
[redacted] 115kV New Substation, [redacted] [redacted] 115kV Rebuild / Relocation (Related to [redacted])	[redacted]	$ 46,366,623	Shawnee	New Build	Infrastructure needed to serve [redacted] and other load growth in the area. May be receiving NTC from SPP for project.	n/a	Serves [redacted] and other load growth in the area.
[redacted] Substation 345/115kV New Substation & Transmission Lines (Related to [redacted])	[redacted]	$ 86,406,971	Shawnee	New Build	Infrastructure needed to serve [redacted] and other load growth in the area. May be receiving NTC from SPP for project.	n/a	Serves [redacted] and other load growth in the area.
[redacted] 138kV Line Rebuild with 34kV Underbuild	[redacted]	$ 65,008,778	Independence	Upgrade	Replacing line originally built in 1924. No shield wires exist on the line. NERC identified it as having one of the highest sustained outage frequency rates for lines 100-199 kV.	1924	n/a
[redacted] 69kV Line Rebuild	[redacted]	$ 28,913,725	Pittsburg	Upgrade	Line was built in 1969 and has known maintenance issues due to underclass poles.	1969	n/a
[redacted] 161kV Rebuild	[redacted]	$ 43,524,516	Pittsburg	Upgrade	Rebuilding sections of line due to age and condition to improve reliability. Unable to do energized maintenance work due to poor conductor condition.	1952	n/a
[redacted] 69 kV Rebuild and 138kV Conversion	[redacted]	$ 20,691,111	Independence	Upgrade	Rebuilding line due to age and condition to improve reliability. Operations sees contingency overload issues on the line when transformers in the area are out of service.	1956	n/a
[redacted] 161-69kV [redacted] Substation (formerly [redacted]) & New 161kV Line (in and out)	[redacted]	$ 23,696,951	Independence	New Build	New source into [redacted] area and replacement for Erie substation. If [redacted] 69kV source is lost, remaining transmission capacity is not sufficient to support area and [redacted] generation must run to support reliability.	1975	n/a
[redacted] Substation ([redacted] Rebuild)	[redacted]	$ 14,831,824	Lawrence	Upgrade	Supports reliability inside the city of [redacted]. Breakers will be added to the substation to help with reliability.	1974	n/a

Note: The five year forecast is still under development and that may impact the project list, especially those with in-service dates in 2025.

Note:
Project Type according to definitions below:
New Build: Greenfield or expansion of existing infrastructure (substation expansion, for example).
Upgrade: Increase in ampacity of existing assets.
Rebuild: Like-for-like replacements.