BEFORE THE KANSAS CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of Kansas Power Pool for a Certificate of Convenience and Authority to Transact the Business of an Electric Public Utility in the State of Kansas for Transmission Rights Only in Cross Service Territory of Southern Pioneer Electric Company and Ninnescah Rural Electric Company.	))))))	Docket No. 18-KPPE-343-COC

PREFILED DIRECT TESTIMONY OF

COREY W. LINVILLE
VICE PRESIDENT, POWER SUPPLY AND DELIVERY
SUNFLOWER ELECTRIC POWER CORPORATION

ON BEHALF OF

MID-KANSAS ELECTRIC COMPANY, INC.

JULY 9, 2018

Q. Please state your name and business address.

A. My name is Corey W. Linville. My business address is 2075 W St John Street, Garden City, KS 67846.

Q. By whom are you employed and in what capacity?

A. I am employed by Sunflower Electric Power Corporation ("Sunflower") as the Vice President, Power Supply and Delivery. By agreement, Sunflower, through its employees, operates Mid-Kansas Electric Company, Inc. ("Mid-Kansas"). That said, I also serve in the same position for Mid-Kansas.

Q. Please state the duties and responsibilities of your position.

A. In my role as Vice President, Power Supply and Delivery I am responsible for overseeing all aspects of the power supply department, including system operations, power contracts, resource planning, market operations, and billing.

Q. What is your educational and professional background?

A. I am a graduate of Kansas State University, earning a Bachelor of Science Degree in mechanical engineering (honors program) in December 1992. I became a licensed professional engineer in the state of Kansas in July 1997.

Q. Please summarize your work experience.?

A. I began my employment with Sunflower in 1993 as a generation engineer. In 2006, I was promoted to Manager of Generation Engineering, and in 2007, I was promoted to Manager of Generation Expansion. In 2009, I was promoted to Senior Manager of Power supply, and in 2013, I was promoted to Vice President, Power Supply and Delivery, the role that I'm currently serving.

Q. Have you testified before the Commission in prior dockets?

A. Yes. I have provided testimony in Docket Nos. 15-MKEE-461-TAR and 18-MKEE-160-TAR.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to evaluate the financial analysis submitted by the Kansas Power Pool ("KPP") as to (i) marketing of excess capacity, (ii) losses from the inability to receive compensation for startup costs on the Kingman generation, and deviation costs, and (iii) the value of increasing the import capability for the City of Kingman.

Q. What experience have you had in the Southwest Power Pool ("SPP") Integrated Marketplace ("IM") in the buying and selling of energy?

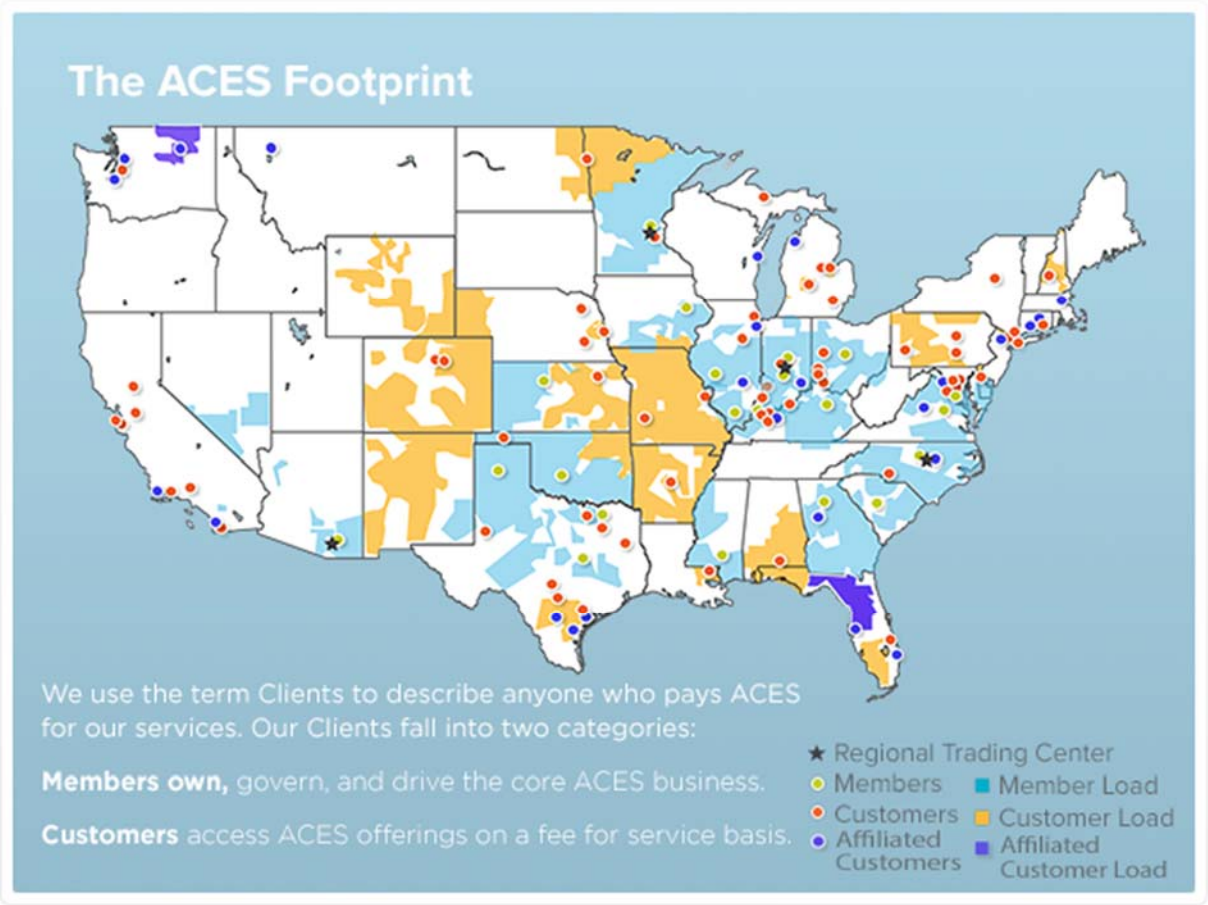
A. Sunflower has been a market participant in the SPP IM since the market started in March 2014. I have been in charge of overseeing our participation in the market since then. In 2017, Sunflower purchased approximately 4,713,000 MWh of energy from the SPP IM, with an hourly peak of 908 MW, to serve the Sunflower and Mid-Kansas Member loads as well as the loads of various wholesale customers who have contracted with Sunflower and Mid-Kansas for power supply. Sunflower also manages the market participation of 22 generators owned by Sunflower and Mid-Kansas. These generators have a combined nameplate capacity of 1,106 MW. In addition to these generators, Sunflower is also the market participant for 178 MW of generating capacity from three wind farms that Sunflower and Mid-Kansas purchase energy and capacity through power purchase agreements.

Q. What experience have you had in the selling and purchase of capacity in the marketplace?

A. The SPP IM does not currently include a capacity market. However, Sunflower has been a party in several bilateral capacity transactions over the last several years with a variety of counterparties. Sunflower and Mid-Kansas currently have capacity purchase agreements in place with seven municipal utilities with a total combined capacity of 64 MW. Sunflower and Mid-Kansas also have current or pending capacity sales agreements in place with two generation and transmission cooperatives and one municipal energy agency.

Q. Do you rely upon any outside expertise to assist you in assessing the market value of energy and capacity?

A. Sunflower is a member of ACES along with 20 other electric cooperatives from across the country. ACES is an organization that helps its members and customers buy, sell, and manage energy more efficiently and with less risk. Sunflower relies on ACES' support in a variety of areas, including assessing the market value of energy and capacity. ACES is recognized as an industry leader in providing these types of energy management services. In addition to serving its member owners, ACES also contracts out services to a large number of customers across the entire United States as illustrated by the map below.



Q. Regarding the application filed by KPP for a certificate of convenience for transmission rights only, are you familiar with the application and the testimony filed by Larry Holloway?

A. Yes, I am familiar with the application and have read the testimony filed by Mr. Holloway. Furthermore, I am familiar with the KPP loads and resources tied to the 34.5 kV system that is owned by Mid-Kansas Members, including the City of Kingman's load and its generators. I have responsibility for assisting with the administration of the Mid-Kansas Open Access Transmission Tariff ("OATT") on behalf of the Mid-Kansas Member-Owners that provide local access delivery service ("LADS") across the 34.5 kV system to KPP and other third-party wholesale users.

Q. Let's focus on Mr. Holloway's assertion that KPP is unable to market Kingman's excess capacity due to transmission constraints. First, for the lay person, would you explain what generation capacity is?

A. Generation capacity is the maximum amount of output, in MW, that a generator can provide under prescribed operating conditions. When a generator is running, the actual output of the generator is referred to as energy while the maximum potential output is referred to as the generator's capacity. An analogy is a car with a top speed of 120 mph (its "capacity") that is being driven at 65 mph (its "energy"). In SPP, the process for accrediting generation capacity is outlined in Section 7.1 of the SPP Planning Criteria[1]. This process includes periodic tests that must be run to demonstrate the capability of a generator within certain ambient test conditions and for defined durations. Once a generator has been tested as prescribed by SPP, the demonstrated capability of the unit is deemed to be accredited capacity and can be used to meet the Minimum Required Capacity Margin[2] that all Load Serving Members in SPP must comply with after the appropriate transmission service from the generator to the load has been secured.

Q. Please explain the SPP Minimum Required Capacity Margin and how Load Serving Members in SPP comply with this requirement.

A. In simple terms, Load Serving Members in SPP, such as KPP, are required to have at least enough accredited capacity to cover their annual peak load plus a 12% reserve margin. For example, a Load Serving Member with an annual peak load of 100 MW is required to have

[1] https://www.spp.org/documents/33003/spp%20effective%20planning%20criteria_v1.4_10092017.pdf
[2] Capitalized terms other than those specifically set forth in this document are as defined in the SPP OATT, the SPP Planning Criteria, or the SPP Integrated Marketplace Protocols.

112 MW of accredited generation.[3] Load Serving Members comply with the Minimum Required Capacity Margin by accrediting capacity from generators that they own or that they have purchased capacity from.

Q. You use the term Load Serving Members. Explain who is a Load Serving Member in SPP?

A. A Load Serving Member is any SPP Member who assumes legal obligation to provide firm electric service to a customer or group of customers within SPP.

Q. Is KPP a Load Serving Member?

A. Yes, KPP is a Load Serving Member in SPP.

Q. Is the City of Kingman a Load Serving Member?

A. No, by virtue of its membership with KPP, the City of Kingman is not a Load Serving Member in SPP.

Q. Is that distinction between KPP and the City of Kingman an important distinction in the determination of reserve margins?

A. Yes. Since KPP is the Load Serving Member, it allows KPP to claim all of its members' capacity from its member's total fleet of generation resources and any other purchased or

[3] SPP outlines its minimum capacity requirements in Section 4.0 of the SPP Planning Criteria. A Load Serving Member's Capacity Margin is the amount by which its System Capacity exceeds its System Peak Responsibility. As previously discussed, System Capacity is a function of the accredited capacity that a Load Serving Member either owns or has purchased. In order for accredited capacity to be included as SPP System Capacity for purposes of meeting the Minimum Capacity Reserve Margin, such capacity must have firm deliverability (i.e., firm transmission service) to the Load Serving Member's load. A Load Serving Member's System Peak Responsibility is equal to its greatest Net Load during a Capacity Year. The Percent Capacity Margin is calculated by dividing System Capacity into the Capacity Margin.

For example, if a Load Serving Member had a System Capacity of 120 MW and a System Peak Responsibility of 100 MW, their Capacity Margin would be 20 MW (120 – 100). Their Percent Capacity Margin would be 20/120 = 16.67%. SPP requires each Load Serving Member maintain a Minimum Required Capacity Margin. The current Minimum Required Capacity Margin in SPP is 10.7%. The minimum requirement is often expressed in terms of a minimum reserve margin instead of a minimum capacity margin. Reserve margin substitutes System Peak Responsibility for System Capacity in the denominator of the equation. In the example used above, the reserve margin would be 20/100 = 20%. The 10.7% Minimum Required Capacity Margin equates to a minimum reserve margin of 12%.

owned capacity to meet the entire KPP member peak load and KPP's capacity reserve requirements. If the City of Kingman was the Load Serving Member, it would be limited to the capacity from its own individual generation resources to meet its own individual peak load and capacity reserve requirements. By KPP being designated as the Load Serving Member, KPP is able to pool or combine all of its capacity resources to meet its reserve margin which provides it much more latitude and flexibility in marketing the excess capacity it has accredited within SPP.

Q. Are there any proposed changes to the minimum capacity requirements in SPP?

A. Yes. There is currently a SPP tariff filing before FERC that would, among other things, change deliverability requirements associated with capacity and add penalties for entities that fail to meet the minimum capacity requirements.[4] Under the new language in the filing, Load Responsible Entities (a new term that would replace the term Load Serving Members) would be required to meet their Net Peak Demand plus Planning Reserve Margin with a combination of Firm Capacity and Deliverable Capacity. Without getting into the details that have yet to be approved by FERC, the tariff revisions would still require a Load Responsible Entity to have firm deliverability for the portion of their capacity up to the Net Peak Demand but would allow a Load Responsible Entity to meet its 12% reserve margin with resources that are deliverable to the SPP system but not necessarily deliverable to the Load Responsible Entity's load.

Q. Please explain what excess capacity is and what limitations are there, if any, in the marketing of capacity?

[4] See FERC docket ER18-1268.

A. Under the current SPP Planning Criteria, excess capacity is any System Capacity that a Load Serving Member has in excess of the capacity required to meet its Minimum Required Capacity Margin. For example, a Load Serving Member with accredited capacity of 120 MW and an annual peak load of 100 MW is required to have 112 MW of accredited capacity to meet its Minimum Required Capacity Margin. It would then have 8 MW of excess capacity. The excess capacity can be marketed to other Load Serving Members in SPP or to load serving entities in other Regional Transmission Organizations. In order for purchased capacity to count towards a Load Serving Member's minimum capacity requirement, it must have a firm transmission path to the purchaser's load. When capacity transactions are negotiated it is generally the responsibility of the purchasing party to secure any transmission service that might be required to make the transaction firm.

Q. Do you concur with Mr. Holloway that at the present time KPP has excess capacity it could sell?

A. Per the information included in KPP's 2018 Resource Adequacy Workbook ("RAW"),[5] it appears that KPP has 13.2 MW of excess capacity available in 2018.[6] There are several discrepancies in KPP's RAW which I will address later that could cause the amount of excess capacity to vary.

Q. For how long does KPP have excess capacity to sell?

[5] The Resource Adequacy Workbook, or RAW, is a spreadsheet workbook that Load Serving Members in SPP submit to SPP to validate their resource adequacy requirement and document compliance with the Minimum Required Capacity Margin. It is also used to gather the data required by Energy Information Association (EIA)-411 data request, mandated annually through the North America Electric Reliability Corporation (NERC). The workbook contains information on load, resources, purchase, and sales for the previous year, current year, and future ten years.
[6] See KPP's RAW, "Ten Year Forecast Overview" worksheet cells E107.

A. As stated above, KPP's excess capacity in 2018 is 13.2 MW. KPP's 2018 RAW shows that KPP has 36.8 MW of excess capacity in 2019, 35.8 MW of excess capacity in 2020, 34.4 MW of excess capacity in 2021, and 58.2 MW of excess capacity in 2022[7]. The increase from 2018 to 2019 in KPP's excess capacity is a result of their capacity sale to Omaha Public Power District ("OPPD") reducing from 50 MW to 25 MW. The capacity sale ends in 2021, resulting in the second increase in KPP's excess capacity between 2021 and 2022. At the end of 2022 a 59 MW capacity purchase from Westar is terminated, and KPP is reporting that they are capacity deficient in 2023 and beyond.[8] Again, the discrepancies in KPP's RAW could cause these amounts to vary. Table 1 below summarizes data from the Ten-Year Forecast Overview worksheet of the KPP's 2018 Resource Adequacy Workbook.

Table 1

Year	Excess Capacity	Deficient
2018	13.2	-
2019	36.8	-
2020	35.8	-
2021	34.4	-
2022	58.2	-
2023	-	2.0
2024	-	3.3
2025	-	4.5
2026	-	29.0
2027	-	30.4
2028	-	31.5

Q. Can you explain the discrepancies you noted in KPP's RAW?

A. The discrepancies I noted are in the Resource Summary worksheet in the RAW. This worksheet includes information for each resource that KPP or KPP's members own. There

[7] See KPP's 2018 RAW, "Ten Year Forecast Overview" worksheet, cells E107 - O108.
[8] See KPP's 2018 RAW, "Purchases and Sales" worksheet, cells K32 – V32.

are several pieces of data reported for each resource associated with capacity. Some of these data points include: Testing Capacity Date (Month-Year), Gross Testing Capacity (MW), Nameplate Capacity (MW), Summer Capacity (MW), Winter Capacity (MW) and Firm Capacity (MW). The capacity numbers are interrelated. For example, the Gross Testing Capacity should represent the gross capability that was demonstrated during the most recent capability test. The results of that test, reduced for station service, should represent the Summer Capacity. The amount of Summer Capacity associated with firm transmission should represent the Firm Capacity. For any given resource, the Gross Testing Capacity must be greater than or equal to the Summer Capacity since the Summer Capacity is equal to the Gross Testing Capacity less any station service. Also, for any given resource the Summer Capacity is the basis for Firm Capacity, and Summer Capacity must be greater than or equal to Firm Capacity. However, for many of the resources listed in KPP's RAW, these simple data quality checks do not hold true. As an example, the Kingman 4 generator shows a Gross Testing Capacity of 2.3 MW,[9] a Summer Capacity of 2.3 MW,[10] and a Firm Capacity of 3.3 MW.[11] It's impossible to claim a Firm Capacity for a resource that is greater than the accredited capacity for that resource, but KPP has done so for the Kingman 4 generator in years 2018 – 2028.[12] The Firm Capacity numbers are the numbers that flow through the workbook to ultimately calculate the Load Serving Member's capacity reserve margin and their excess or deficient capacity. As such, if the Firm Capacity numbers are incorrect, then the capacity reserve margin will be incorrect.

Q. Did you see similar discrepancies for other resources in KPP's RAW?

[9] See KPP's 2018 RAW, "Resource Summary" worksheet, cell U8.
[10] See KPP's 2018 RAW, "Resource Summary" worksheet, cell X8.
[11] See KPP's 2018 RAW, "Resource Summary" worksheet, cell Z8.
[12] See KPP's 2018 RAW, "Resource Summary" worksheet, cells Z8 – AJ8.

A. Yes. Table 2 below was prepared by me using data from KPP's RAW, and it summarizes the discrepancies. In total, the Firm Capacity appears to have been overstated on 11 of the 32 resources that were listed in the resource summary. The total apparent overstatement was 6.4 MW. Based on the frequency of erroneous reporting, it is possible that there were also understatements of Firm Capacity, but I did not have enough information to attempt to quantify the understatement errors. The fact that over one third of the reported resources contained overstatement reporting discrepancies draws into serious question the accuracy of all the data reported in KPP's RAW.

TABLE 2

Resource	RAW - Gross Testing Capacity (MW)	RAW - Summer Capacity (MW)	RAW - Firm Capacity (MW)	Is Summer Capacity > Gross Testing Capacity?	Is Firm Capacity > Summer Capacity?	Apparent Overstatement of Firm Capacity (MW)
Kingman 4	2.3	2.3	3.3		Yes	1
Kingman 6	3.5	3.3	2.3			
Kingman 7	2.3	2.3	2.4		Yes	0.1
Kingman 8	2.5	2.4	2.4			
Kingman 9	6.3	6	6			
Ellinwood 1	1.7	1.9	1.9	Yes		0.2
Ellinwood 2	1.3	1.3	1.3			
Augusta N1	3.8	4.1	4.1	Yes		0.3
Augusta N2	3.8	4	4	Yes		0.2
Augusta N3	5.7	6.1	6.1	Yes		0.4
Augusta N4	6.7	6.3	6.3			
Burlington 1A	2.3	2	2			
Burlington 4A	3	1.8	1.8			
Burlington 6	4.8	4.7	4.7			
Minneapolis D3	1	1.1	1.1	Yes		0.1
Minneapolis D5	1.9	1.9	1.9			
Minneapolis D6	3	2.9	2.9			
Mulvane 9	4.1	4	4			
Mulvane 10	4.1	4	4			
Wellington 2	19	17.7	17.7			
Wellington 1	16.5	19.2	19.2	Yes		2.7
Winfield ST	26.7	25.4	25.4			
Winfield GT	10.3	11	11	Yes		0.7
Clay Center D1	2.8	0.9	0.9			
Clay Center D2	3.5	2	2			
Clay Center D3	4.5	5.1	5.1	Yes		0.6
Clay Center D4	3.5	3.4	3.4			
Clay Center D5	3.5	3.5	3.5			
Clay Center D8	6.7	6.8	6.8	Yes		0.1
Dogwood CT1	19.158	18.5	18.5			
Dogwood CT2	18.849	18.3	18.3			
Dogwood ST1	27.81	26.2	26.2			
					TOTAL	6.4

Q. Mr. Holloway states in his testimony on page 16 that the current value of excess generation capacity in the SPP market is over $2.00 kW/month. In your experience with the marketing of generation capacity, does that appear to be a correct statement?

A. First of all, capacity is not part of the SPP IM. There is no formalized market for capacity in SPP like there is for energy. The sale or purchase of capacity is by private contract, and the market value of capacity is whatever value two parties agree to for a transaction. As such, I am not clear what Mr. Holloway is referring to when he says, "in the SPP market." In general, the market value of capacity is a function of the type of capacity being sold as well as basic supply and demand economics. In SPP, there is currently an abundance of excess capacity. The 2017 SPP Resource Adequacy Report[13] states that SPP currently has a planning reserve margin of approximately 30% compared to a minimum reserve margin requirement of 12%. That equates to about 9,000 MW of excess capacity across the SPP footprint. By 2022, when KPP runs of out excess capacity, the SPP planning reserve margin is projected to still be high at 25.9% with total SPP excess capacity at 7,135 MW. The abundance of excess capacity in SPP has driven the value of excess capacity down due to the basic principles of supply and demand economics. The type of capacity being purchased also has an impact on the value of the capacity. Capacity transactions come with energy call rights that allow the purchasing entity to schedule energy against the capacity being purchased at a set price. Capacity resources with lower energy prices are typically higher priced than capacity resources with higher energy prices because the lower energy prices provide a hedge against the market price of energy. Capacity sold from resources that produce energy at a cost that is very rarely, if ever, competitive with the

[13] https://www.spp.org/documents/52237/june%202017%20resource%20adequacy%20report.pdf

market price of energy is often referred to as “paper capacity”. Paper capacity is typically used to meet capacity obligations with little or no expectation of utilizing the resources to generate energy. The municipal resources claimed by KPP, including the Kingman generators, fall into this category. The $2.00/kW-month price referenced by Mr. Holloway is in the ballpark for the value that we’ve seen for paper capacity in our region. We currently have capacity transactions that are on either side of that price, with $2.00/kW-month being towards the high end of the range. Capacity values can vary depending upon a variety factors, but we do not foresee the value for paper capacity changing very much in the near term and certainly not before KPP runs out of excess capacity in 2022. Mr. Holloway’s initial estimate of a $2.00/kW-month value for capacity from Kingman is somewhat high, but reasonable.

Q. Considering the amount of excess capacity in the SPP footprint, would it be prudent to incur costs for the Kingman Direct Connection for the sole purpose of attempting to derive value from Kingman’s generation capacity?

A. No. When you consider the cost of the Kingman Direct Connection project, the ongoing O&M costs associated with owning generation, the significant amount of excess capacity in the SPP footprint, and the fact that KPP only has excess capacity through 2022 to attempt to sell, it makes no sense at all to pursue the project if the only purpose is to derive value from Kingman’s generation capacity. The current capacity market in SPP is very much a buyer’s market, and that is not projected to change over the next four years when KPP has excess capacity to try to sell. To think that Kingman’s 16 MW of generation capacity in some way has an advantage over the resources that comprise the 9,000 MW of excess capacity in the SPP footprint is delusional.

Q. On page 16 of Mr. Holloway's testimony he asserts that KPP will never be able to receive market value for any excess available generation capacity due to the SPEC Local Access Delivery Service ("LADS") charge. Is this true?

A. No. KPP currently has firm transmission service from all the accredited capacity provided by the Kingman generators without having to pay any LADS charge for generation service. KPP takes service from 34.5 kV facilities owned by the Mid-Kansas Members (including Southern Pioneer) for several of its loads and resources. Service across these 34.5 kV facilities is governed by the Mid-Kansas OATT. KPP has loads and resources in multiple regions including the Mid-Kansas, Midwest Energy, and Westar footprints. As long as the KPP load being served in the Mid-Kansas footprint exceeds the resource utilization of KPP resources in the Mid-Kansas footprint, KPP is paying for its use of the Mid-Kansas 34.5 kV system through LADS charges to its load. In other words, KPP's utilization of the 34.5 kV system to export generation would not be assessed a "first mile" point-to-point transmission charge to serve its load because it would be utilizing the generation to serve loads also located on the 34.5 kV system in the Mid-Kansas footprint and those loads would be appropriately paying for the local delivery of the KPP resource to the KPP load.[14] KPP's annual peak load in the Mid-Kansas footprint is approximately 19 MW. The accredited capacity of Kingman's generation is approximately 16.4 MW. Therefore, for purposes of meeting the minimum capacity obligation associated with the KPP load in the Mid-Kansas footprint, Kingman's generation capacity can be fully utilized with no additional LADS charge for point-to-point transmission service. As discussed in more detail later in my

[14] This is what is referred to as Network Integrated Transmission Service ("NITS"), which allows transmission customers to designate network generation resources to serve any of its designated network loads located within the transmission provider's footprint and the load pays the NITS charge.

testimony, because KPP socializes all its loads and resources to meet its Minimum Required Capacity Margin, there is no reason that KPP can't derive full value of its excess capacity from its pool of generation resources. Similarly, the amount of excess capacity provided by the Kingman generators in excess of Kingman's load and reserve requirement can be used to help satisfy KPP's total capacity obligation in 2023 and beyond to reduce the amount of capacity that KPP will have to procure to eliminate its projected capacity deficiency.

Q. Does Kingman have a transmission service export limitation that prevents KPP from fully utilizing the Kingman generation?

A. No. KPP has a Network Integration Transmission Service Agreement ("NITSA") with SPP that includes five Kingman generators, with a total capacity of 16.5 MW, listed as Network Resources.[15] This gives KPP the ability to serve any of its Network Loads, which are also identified in the NITSA, with these resources across SPP transmission facilities. Furthermore, KPP's local NITSA under the Mid-Kansas OATT that is associated with LADS on the 34.5 kV system includes the same Kingman generators at 16.5 MW of capacity.[16] This local NITSA identifies a 6 MW path limit associated with Kingman's import service. There is no mention of an export limit. I'm not aware of any other service agreement or any other restriction from a market perspective that would put an export limitation on Kingman's generation. In Dr. Tamimi's testimony, he will address export limitation and how it is calculated.

[15] See Appendix 1 to Attachment 1 of the Service Agreement for Network Integration Transmission Service between Southwest Power Pool, Inc. and Kansas Power Pool dated April 1, 2018

[16] See Appendix 1 to Attachment 1 of the Service Agreement for Network Integration Transmission Service between the Kansas Power Pool and Mid-Kansas Electric Company, LLC dated January 11, 2012

Q. Does pooling capacity and strategically identifying resources as the sources for the sale of excess capacity produce any benefit for KPP or for Kingman?

A. There is a benefit to KPP associated with pooling its members' capacity and strategically identifying resources as the source of the sale of excess capacity. By identifying source resources that are not subject to LADS charges associated with exporting the capacity across non-SPP facilities, KPP can reduce their costs and maximize their profit from any capacity sales they can make. KPP can also strategically identify sources that might minimize the transmission service costs for potential capacity purchasers, making their excess capacity that much more marketable. Kingman would be held harmless in a scenario where any excess capacity they have is used in a pooled arrangement to help source a capacity sale from another resource. Kingman would continue to receive the $/kW-year capacity payment that KPP makes to all its members that have accredited, city-owned generation. Any revenues from the sale of excess capacity would be assigned as a credit in the calculation of KPP's overall capacity costs, and all KPP members would benefit equally from the reduction in the KPP demand charge which is tied to the capacity costs. Mr. Holloway confirms KPP's ability to pool capacity and strategically sell excess capacity sourced from certain resources in his response to Mid-Kansas DR 26 (attached hereto as **Exhibit CWL-1**) when he states: "KPP has not evaluated all contracts to determine if capacity sales from all KPP contracted resources are allowed. Furthermore, such an analysis would be irrelevant because KPP has generation which either KPP owns or is KPP member-owned that would have no constraints."

Q. Based on your understanding of how KPP handles capacity, can you walk through an example of how Kingman derives value from its capacity and how a KPP sale of excess capacity would be accounted for by KPP?

A. With regard to value that the City of Kingman derives from its owned generation, KPP pays all of its members a flat rate for accredited capacity that is owned by the members. KPP provided a breakdown of the charges KPP currently pays its members for accredited capacity in its response to KCC Staff DR 1.[17] The rate paid by KPP for such capacity in 2017 was $7.48/kW-year (or $0.62/kW-month). Applying this rate to the total accredited capacity from the Kingman generators resulted in an annual payment of $133,876 to the City of Kingman. This rate is paid to the city no matter how the city's capacity is used or not used by KPP. With regard to additional value the City of Kingman derives from excess capacity sales made by KPP, KPP currently has a 50 MW capacity sale in place with OPPD which illustrates how such value is distributed among KPP members. In 2018, the rate associated with the 50 MW capacity sale to OPPD is $1.15/kW-month per Mid-Kansas DR 19 to KPP.[18] This will result in an annual revenue of $690,000 in 2018 ($1.15/kW-month * 50,000 kW * 12 months). This amount is offset by a $2,875 per month ($34,500 per year) payment to Tenaska who arranged the transaction. On page 9 of Exhibit LWH-2, it shows how these transactional costs are accounted for in determining KPP's 2018 monthly demand charge of $10.76/kW-month. The capacity sale revenue of $690,000 less the $34,500 payment to Tenaska is shown as a $655,000 credit in the list of capacity costs. It then appears that the Tenaska payment is erroneously shown again (double counted) as a $34,500 cost. Correcting for this double-counting, the net result is that the $20,177,046

[17] Attached as **Exhibit CWL-2**.
[18] Attached as **Exhibit CWL-3**

capacity costs are reduced by $621,000 as a result of the OPPD capacity sale, resulting in total costs of $19,556,046. The capacity sale provides about a 3.1% reduction in the demand rate that is charged to all KPP members, including Kingman. Based on Table 5 in Exhibit LWH-3, it appears that Kingman is typically billed for about 85 MW of demand on an annual basis. Applying the $10.76/kW-month demand rate shown on page 9 of Exhibit LWH-2 to 85 MW of annual demand results in total annual demand charges to Kingman of approximately $914,600. The 3.1% savings from the 50 MW OPPD capacity sale equates to an annual benefit of approximately $28,900 to the City of Kingman. This benefit is on top of the $133,876 direct payment that Kingman receives from KPP for its capacity.

Q. In Mr. Holloway's economic analysis for the Kingman Direct Connection he is projecting KPP revenue from Kingman capacity sales with a net present value of $7,529,412. Does this make sense to you?

A. No, it does not make sense for two reasons. First, KPP is projecting that they will have excess capacity to sell only through 2022 as documented in their 2018 RAW that was submitted to SPP. Yet Mr. Holloway's economic analysis assumes that KPP will be able to derive value from excess capacity through 2039; an additional 17 years beyond the time KPP will no longer have such excess capacity available. Second, to the extent Kingman's capacity is contributing to KPP's overall excess capacity position between now and 2022, there is no reason that KPP can't use this contribution to sell excess capacity from sources in other areas. In fact, that is what KPP is doing in 2018 to effectuate the 50 MW capacity sale to OPPD. KPP is showing 16.4 MW of capacity from Kingman's generators in their RAW which goes towards calculating their 13.2 MW of excess capacity shown in their

RAW. If KPP was deriving no value from Kingman's generation capacity, as Mr. Holloway asserts, then they would show no capacity from the Kingman generators on their RAW and their excess capacity position would drop by 16.4 MW, and they would have a capacity deficiency of 3.2 MW instead of a 13.2 MW surplus, and their capacity sale to OPPD would not be viable.

Q. Just to be clear, are you asserting that KPP is in fact deriving value from Kingman's generating capacity today?

A. Yes. KPP has pooled all its owned and purchased capacity, including all 16.4 MWs of capacity from Kingman, to meet its minimum capacity requirement. Table 3 below contains a summary of data from KPP's 2018 RAW. It shows in detail how KPP has pooled all its owned capacity, purchased capacity, and firm power purchases to meet its minimum capacity requirement. Line 16 shows that KPP has 281.3 MW of owned and purchased capacity. Line 24 shows that KPP has a minimum capacity requirement of 218 MW. The difference between these two numbers, shown in line 25 as 63.3 MW, is the excess amount of capacity that KPP has available to sell to others if it can find a purchaser. KPP has taken advantage of this excess capacity position to negotiate a 50 MW capacity sale to OPPD sourced from KPP's ownership share of the Dogwood generator. Removing this sale from KPP's capacity position leaves 13.2 MW of remaining excess capacity. Table 4 shows a similar data summary to Table 3, but with Kingman's generating capacity removed. Without this 16.4 MW total of capacity, KPP's marketable excess capacity drops to 46.9 MW (Line 25) and their 50 MW capacity sale to OPPD would not be possible as it would leave them with a negative excess capacity position (Line 27).

TABLE 3		
	Owned Capacity	
1	Kingman Generators - 5 units	16.4
2	Ellinwood Generators - 2 units	3.2
3	Augusta Generators - 4 units	20.5
4	Burlington Generators - 3 units	8.5
5	Minneapolis Generators - 3 units	5.9
6	Mulvane Generators - 2 units	8
7	Wellington Generators - 2 units	36.9
8	Winfield Generators - 2 units	36.4
9	Clay Center Generators - 2 units	21.7
10	Dogwood Generators - 3 generators	63
11	OWNED CAPACITY SUBTOTAL *(Sum of 1 - 10)*	220.5
	Purchased Capacity	
12	Westar Energy Purchase	59
13	Greensburg Wind Farm Purchase	0.5
14	Marshall Wind Farm Purchase	1.3
15	PURCHASED CAPACITY SUBTOTAL *(Sum of 12 - 14)*	60.8
16	Owned plus Purchased Capacity *(11 + 15)*	281.3
	Firm Power Purchases	
17	Southwestern Power Administration Purchase	5.5
18	Western Area Power Administration Purchase	2.6
19	Grand River Dam Authority Purchase	15.3
20	PURCHASED FIRM POWER SUBTOTAL *(Sum of 17 - 19)*	23.4
21	2018 Peak Load Forecast	218.1
22	2018 Net Peak Load *(21 - 20)*	194.7
23	Minimum Capacity Margin *(22 * 12%)*	23.3
24	Minimum Capacity Requirement *(22 + 23)*	218
25	Excess Capacity Above Minimum Requirements *(16*	63.3
26	OPPD Capacity Sale (sourced from Dogwood)	50
27	Remaining Excess Capacity *(25-26)*	13.3

TABLE 4		
	Owned Capacity	
1	Kingman Generators - 5 units	0
2	Ellinwood Generators - 2 units	3.2
3	Augusta Generators - 4 units	20.5
4	Burlington Generators - 3 units	8.5
5	Minneapolis Generators - 3 units	5.9
6	Mulvane Generators - 2 units	8
7	Wellington Generators - 2 units	36.9
8	Winfield Generators - 2 units	36.4
9	Clay Center Generators - 2 units	21.7
10	Dogwood Generators - 3 generators	63
11	OWNED CAPACITY SUBTOTAL *(Sum of 1 - 10)*	204.1
	Purchased Capacity	
12	Westar Energy Purchase	59
13	Greensburg Wind Farm Purchase	0.5
14	Marshall Wind Farm Purchase	1.3
15	PURCHASED CAPACITY SUBTOTAL *(Sum of 12 - 14)*	60.8
16	Owned plus Purchased Capacity *(11 + 15)*	264.9
	Firm Power Purchases	
17	Southwestern Power Administration Purchase	5.5
18	Western Area Power Administration Purchase	2.6
19	Grand River Dam Authority Purchase	15.3
20	PURCHASED FIRM POWER SUBTOTAL *(Sum of 17 - 19)*	23.4
21	2018 Peak Load Forecast	218.1
22	2018 Net Peak Load *(21 - 20)*	194.7
23	Minimum Capacity Margin *(22 * 12%)*	23.3
24	Minimum Capacity Requirement *(22 + 23)*	218
25	Excess Capacity Above Minimum Requirements *(16*	46.9
26	OPPD Capacity Sale (sourced from Dogwood)	50
27	Remaining Excess Capacity *(25-26)*	-3.1

Q. Does this real-life example illustrate how KPP can derive value from Kingman's capacity by selling pooled resources, with the Southern Pioneer LADS in place, per your previous testimony?

A. Yes, it does. It shows how KPP is pooling its owned and purchased capacity resources to derive value from the sale of its pooled excess capacity by allocating Kingman's capacity to its reserve capacity margin requirement and marketing the excess capacity derived from its other capacity resources.

Q. Are there any advantages for KPP to source capacity sales from Kingman's generators as opposed to sourcing such transactions from any of the other resources owned or purchased by KPP due to transmission constraints?

A. No, Mr. Holloway's response to data request 26[19] indicates that KPP has other KPP-owned and KPP member-owned generation resources that have no constraints.

Q. Are there any advantages that the Kingman generators might have due to their production costs compared to market prices that might make them attractive to potential capacity purchasers looking to hedge their energy price?

A. Kingman's generators are internal combustion engines that have a high production cost compared to other types of generators in the SPP footprint. On page 13 of Exhibit LWH-3, Mr. Holloway describes the generation costs associated with these resources as being conservatively low at $70/MWh without factoring in start-up costs or no load costs. As a frame of reference, the highest hourly market price that these engines would have been eligible for in the SPP IM day ahead market in all of 2017 was $60.77/MWh. In other words, during the very best hour that these generators could have sold day ahead energy into the SPP IM, they would have *lost* $9.23/MWh without factoring in the additional costs of starting them up. Therefore, these generators would be considered paper capacity with no value as a hedge against energy prices.

Q. On page 15 of Mr. Holloway's testimony he states that SPP and Mid-Kansas find the City of Kingman's generation valuable. Can you comment on this assertion?

A. While Kingman's generation might have provided limited value to Mid-Kansas when Sunflower was a Balancing Area Authority before March 2014, Kingman's generation has

[19] See **Exhibit CWL-1.**

had no value to Mid-Kansas since SPP became the Balancing Area Authority with the advent of the SPP IM on March 1, 2014. The value that SPP finds in Kingman's generation is largely a function of KPP's need to self-commit the units to meet the City's load when its demand exceeds the import limit. When units are self-committed in the SPP IM, the resource owner is not eligible to receive make-whole payments for start-up costs. When SPP is in situations that it needs to commit units to protect reliability for short durations, units that are not eligible to receive compensation for startup costs are a cheap alternative. When Kingman's generators are committed by SPP it is usually for reliability purposes during a period that is a few hours before or a few hours after a period when the generator was running anyway due to a self-commitment. If KPP did not self-commit the Kingman generators, it is likely they would not run as frequently because their value in the SPP IM would be much less.

Q. What is your conclusion regarding the value to KPP or Kingman in sourcing capacity transactions from Kingman versus other KPP resources?

A. I do not see any value in sourcing capacity value from Kingman versus the other KPP capacity resources.

Q. On page 20 of Mr. Holloway's testimony he states that the Kingman generators are undercompensated because they do not receive compensation for start-up costs when the units get "picked up by the market when they are already operating due to import limits." Do you agree that the Kingman units are undercompensated in these scenarios?

A. No, I do not. When a Market Participant self-commits a resource in the SPP IM, they are agreeing to cover start-up costs themselves, and they are acknowledging that the only

market compensation they will receive will be for the energy they produce based on the Locational Marginal Price ("LMP") for energy at the generator node during the time they are generating. The example below shows simplified cost accounting for a resource with a $500 start-up cost and a $50/MWh variable cost of production. The example assumes that the resource has been self-committed to run for 5 hours on a given day. The data on the right shows how the resource would settle in the market and the associated economics if the unit run time was purely due to the Market Participant's self-commitment. The data on the left shows how the resource would settle if the unit ran for 5 hours due to a self-commitment but then ran an additional two hours because SPP committed the resource for reliability reasons during those two hours. When SPP implements a reliability unit commitment ("RUC") on a generating resource, SPP agrees to make the resource owner whole for startup costs and any variable operating costs that the resource owner does not recover through normal market revenue associated with the market energy price paid at the generator node. In the situations where Kingman generators are RUCed during a day when they have already been self-committed, the market's obligation to make the generator whole for start-up costs is eliminated because the market participant has agreed to pay those costs by virtue of the fact that they self-committed the resource. Note that in the example below, the Market Participant's net economic position after the resource run period is the same. In other words, the market makes the Market Participant whole for the additional two hours of run time that were associated with SPP's RUC. That RUC does not relieve the Market Participant's obligations for the original 5 hour run that was scheduled through the self-commitment. Mr. Holloway's assertion that Kingman is missing out on some sort of compensation for start-up costs in these scenarios makes no sense and is inaccurate.

Five-Hour Self Commitment

ENERGY REVENUE			
Hour	Output	Real Time LMP	Market Revenue
	(MWh)	($/MWh)	($/hr)
1	3.2	$23.50	$75.20
2	2.8	$23.00	$64.40
3	3.6	$22.00	$79.20
4	3.8	$21.00	$79.80
5	3.5	$24.00	$84.00
6	0	$26.00	$0.00
7	0	$25.00	$0.00
TOTAL	**16.9**		**$382.60**

VARIABLE PRODUCTION COSTS			
Hour	Output	Production Cost	Cost
	(MWh)	($/MWh)	($/hr)
1	3.2	$50.00	$160.00
2	2.8	$50.00	$140.00
3	3.6	$50.00	$180.00
4	3.8	$50.00	$190.00
5	3.5	$50.00	$175.00
6	0	$50.00	$0.00
7	0	$50.00	$0.00
TOTAL	**16.9**		**$845.00**

Operating Costs	
Startup	$500.00
Variable	$845.00
Total	$1,345.00

Market Revenue	
Real Time Energy Sales	$382.60
Total	$382.60

Net Position (Revenue - Cost)	**-$962.40**

Five-Hour Self Commitment plus Two-Hour SPP RUC

ENERGY REVENUE			
Hour	Output	Real Time LMP	Market Revenue
	(MWh)	($/MWh)	($/hr)
1	3.2	$23.50	$75.20
2	2.8	$23.00	$64.40
3	3.6	$22.00	$79.20
4	3.8	$21.00	$79.80
5	3.5	$24.00	$84.00
6	3	$26.00	$78.00
7	3	$25.00	$75.00
TOTAL	**22.9**		**$535.60**

VARIABLE PRODUCTION COSTS			
Hour	Output	Production Cost	Cost
	(MWh)	($/MWh)	($/hr)
1	3.2	$50.00	$160.00
2	2.8	$50.00	$140.00
3	3.6	$50.00	$180.00
4	3.8	$50.00	$190.00
5	3.5	$50.00	$175.00
6	3	$50.00	$150.00
7	3	$50.00	$150.00
TOTAL	**22.9**		**$1,145.00**

RUC MAKE-WHOLE			
Hour	Energy Revenue	Production Cost	Make-Whole
	($/hr)	($/hr)	($/hr)
6	$78.00	$150.00	$72.00
7	$75.00	$150.00	$75.00
TOTAL	$153.00	$300.00	$147.00

Operating Costs	
Startup	$500.00
Variable	$1,145.00
Total	$1,645.00

Market Revenue	
Real Time Energy Sales	$535.60
RUC Make-Whole	$147.00
Total	$682.60

NET POSITION (Revenue - Cost)	**-$962.40**

Q. Mr. Holloway further contends on page 20 of his testimony that because Kingman's generators are self-committed "it is difficult to match any SPP Integrated Market dispatch instructions, often resulting in deviation costs." Do you agree that Kingman's generators are subject to deviation charges due to their self-commitment status?

A. No, I do not. Based on Mr. Holloway's characterization of the deviation charges he is describing, it sounds like he is implying that because Kingman's generators have difficulty following a dispatch instruction from SPP they are incurring some sort of a charge because of this difficulty. First, the commitment status of a resource has no bearing on its ability to follow dispatch instructions. Unit commitment is only associated with whether a unit is running or not. The ability of a resource to follow dispatch instructions once it has been committed is a separate issue altogether and is not impacted by whether the unit is running due to a self-commitment, a reliability commitment, or an economic commitment. Once a generator has been committed and it is running, there is a penalty charge in the SPP IM that could apply based on certain criteria if the generator does not follow market dispatch instructions. This penalty charge is applied to a resource's Uninstructed Resource Deviation ("URD"). URD is defined, in simple terms, as the difference between a resource's actual output for a given interval and that resource's dispatch instruction for that interval. If the URD exceeds the Operating Tolerance for any given interval, a penalty charge is applied. The Operating Tolerance for a resource in the SPP IM is defined as 5% of the resource's maximum dispatch limit subject to a minimum of 5 MW and a maximum of 20 MW.[20] Only one of Kingman's generators has a total capacity greater than the minimum 5 MW Operating Tolerance, and that is Kingman 9 which has a total capacity of 6 MW. Of the internal combustion engines used for generation of electric energy that I'm aware of, none of them have a minimum sustainable operating limit that is less than 20% of the nameplate rating. It is highly unlikely that Kingman 9 has a minimum operating limit less than 1 MW, which means that the 5 MW Operating Tolerance would fully cover

[20] See Section 4.4.4.1 of the SPP Market Protocols.

the entire dispatch range of Kingman 9 just as it does all the other resources that Kingman has registered in the market. As such, it would be impossible for KPP to be assessed any deviation charges associated with URD.

Q. Mr. Holloway has stated that if the Kingman Direct Connection project is not approved, there is no reason to proceed with the upgrade at the SemCrude Substation.[21] Do you concur with his assessment?

A. I perhaps do not have all the information necessary to fully evaluate Mr. Holloway's statement, but it is clear to me that the decision to build the Kingman Direct Connection cannot be justified upon the ability to sell 16 MW of capacity from Kingman for at least 20 years into the future, as Mr. Holloway claims. As I've previously stated, Kingman's capacity is already being fully claimed and reported by KPP and is currently being utilized to support an existing capacity sale. Furthermore, KPP's own projections show KPP will be capacity deficient with no ability to market any excess capacity beyond 2022. Clearly, the sale of excess capacity is not a justification for the Kingman Direct Connection project or the SemCrude Substation Upgrade project. That said, either project would still provide some value to Kingman by eliminating the need to run Kingman's generation. As Mr. Holloway has pointed out in his testimony, due to the 6 MW import limitation currently in place on the local delivery system, Kingman currently runs its generation to serve its load. The $70.00/MWh production cost of these resources is substantially higher than the price of energy from the SPP IM that KPP could use to serve Kingman's load if either the SemCrude Substation Upgrade project or the Kingman Direct Connection project is built. In this discussion, it's important to note that 95% of Kingman's energy needs on an annual

[21] Holloway Direct Testimony, page 22, Lines 6-13.

basis can be met with the current 6 MW import limit. Even Mr. Holloway's analysis shows the annual savings of not having to run the Kingman generation is only about $120,000 per year. The Kingman Direct Connection project is twice the cost of the SemCrude Substation Upgrade project, so it would seem the SemCrude Substation Upgrade project is the most economical means to generate these annual savings for KPP's members.

Q. The SemCrude Substation Upgrade project still subjects KPP to the Southern Pioneer LADS charge though. Wouldn't avoidance of that charge be a reason that would favor constructing the Kingman Direct Connection project?

A. The avoidance of the LADS charge by KPP is not a savings to the public. Whatever costs KPP would avoid by not paying the LADS would be shifted to the rest of the public that utilizes the 34.5 kV system. There is no savings to the public; there is only a shifting of costs from KPP to others. Plus, the Kingman Direct Connection project duplicates the Southern Pioneer SemCrude facilities and is not the most cost effective or efficient method of delivering service to the public.

Q. In summary, what is the value of the Kingman Direct Connection?

A. From a public interest perspective, there is not sufficient incremental value to Kingman's generation capacity and energy to justify the construction of the Kingman Direct Connection.

Q. Does this conclude your testimony?

A. Yes.

VERIFICATION OF COREY LINVILLE

STATE OF KANSAS)
) ss
COUNTY OF FINNEY)

The undersigned, Corey Linville, upon oath first duly sworn, states that he is the Vice President of Power Supply and Delivery for both Sunflower Electric Power Corporation and Mid-Kansas Electric Company, Inc., and that the foregoing testimony was prepared by him or under his supervision, that he is familiar with the contents thereof, and that the statements contained therein are true and correct to the best of his knowledge and belief.

Corey Linville

Subscribed and sworn to before me this 9th day of July, 2018.

NOTARY PUBLIC-State of Kansas
ALYSSA N. POWERS
My Appt. Exp 01/04/2021

Notary Public

My appointment expires: 01/04/2021

KANSAS POWER POOL RESPONSE TO MID-KANSAS ELECTRIC COMPANY, INC.
INFORMATION REQUEST #26

Company Name	Kansas Power Pool
Docket Number	18-KPPE-343-COC
Request Date	June 22, 2018
Response Date	June 29, 2018

Please Provide the Following:
In response to SPEC DR 18, KPP supplied a resource adequacy workbook. The resource adequacy workbook indicates that during the 5 years from 2018-2022, KPP has between 13 and 58 MW of excess available generation capacity. Please identify all KPP generation capacity resources which are available to be economically sold to receive market value for that excess capacity. Subsequent to the preparation of the workbook, has KPP sold any of that capacity?

Objections & Response:
Kansas Power Pool objects to this request because it seeks information that is not clearly relevant to the proceedings in this docket. *See* K.A.R. 82-1-234a (a) & May 15, 2018 Discovery Order entered in this docket, ¶ 22. Kansas Power Pool further objects to this request because it is overly broad, vague, ambiguous, and does not identify with reasonable particularity the information sought. *See* May 15, 2018 Discovery Order entered in this docket, ¶ 22.

Without waiving these objections, the Resource Adequacy Workbook identifies all KPP capacity resources, capacity purchases and capacity sales. KPP has no subsequent sales. KPP has not evaluated all contracts to determine if capacity sales from all KPP contracted resources are allowed. Furthermore, such an analysis would be irrelevant because KPP has generation which either KPP owns or is KPP member-owned that would have no constraints. Of KPP owned and member-owned units, KPP believes that only the Kingman units are subject to a local access charge if capacity is sold outside of the MKEC zone. In this case, the Kingman units that would be subject to a local access charge making bilateral sales agreements and opportunities uneconomic, as the astronomical costs of using Southern Pioneer's 34.5 kV is about twice that of any anticipated capacity sales revenue.

Submitted By:	Kansas Power Pool
Submitted To:	Mid-Kansas Electric Company, Inc.

EXHIBIT CLW-2

2017 Monthly Capacity Paments to Cities

	Accredited Tested Capacity (kW) for 2017	Annual Amount	January	February	March	April	May	June	July	August	September	October	November	December	Total 2017 Payments
Kingman	17,909	$133,875.74	$11,156.31	$11,156.31	$11,156.31	$11,156.31	$11,156.31	$11,156.31	$11,156.31	$11,156.31	$11,156.31	$11,156.31	$11,156.31	$11,156.31	$133,875.74
Ellinwood	6,895	$51,542.42	$4,295.20	$4,295.20	$4,295.20	$4,295.20	$4,295.20	$4,295.20	$4,295.20	$4,295.20	$4,295.20	$4,295.20	$4,295.20	$4,295.20	$51,542.42
Augusta	20,521	$153,401.31	$12,783.44	$12,783.44	$12,783.44	$12,783.44	$12,783.44	$12,783.44	$12,783.44	$12,783.44	$12,783.44	$12,783.44	$12,783.44	$12,783.44	$153,401.31
Burlington	10,514	$78,595.65	$6,549.64	$6,549.64	$6,549.64	$6,549.64	$6,549.64	$6,549.64	$6,549.64	$6,549.64	$6,549.64	$6,549.64	$6,549.64	$6,549.64	$78,595.65
Clay Center	21,734	$162,468.89	$13,539.07	$13,539.07	$13,539.07	$13,539.07	$13,539.07	$13,539.07	$13,539.07	$13,539.07	$13,539.07	$13,539.07	$13,539.07	$13,539.07	$162,468.89
Erie	4,156	$31,067.48	$2,588.96	$2,588.96	$2,588.96	$2,588.96	$2,588.96	$2,588.96	$2,588.96	$2,588.96	$2,588.96	$2,588.96	$2,588.96	$2,588.96	$31,067.48
Minneapolis	7,745	$57,896.46	$3,524.70	$3,524.70	$3,524.70	$3,524.70	$3,524.70	$3,524.70	$3,524.70	$3,524.70	$3,524.70	$3,524.70	$3,524.70	$3,524.70	$42,296.40
Mulvane*	8,210	$61,372.49	$5,114.37	$5,114.37	$5,114.37	$5,114.37	$5,114.37	$5,114.37	$5,114.37	$5,114.37	$5,114.37	$5,114.37	$5,114.37	$5,114.37	$61,372.49
Oxford	4,502	$33,653.95	$2,804.50	$2,804.50	$2,804.50	$2,804.50	$2,804.50	$2,804.50	$2,804.50	$2,804.50	$2,804.50	$2,804.50	$2,804.50	$2,804.50	$33,653.95
Wellington	40,788	$304,903.89	$25,408.66	$25,408.66	$25,408.66	$25,408.66	$25,408.66	$25,408.66	$25,408.66	$25,408.66	$25,408.66	$25,408.66	$25,408.66	$25,408.66	$304,903.89
Winfield	40,268	$301,016.72	$25,084.73	$25,084.73	$25,084.73	$25,084.73	$25,084.73	$25,084.73	$25,084.73	$25,084.73	$25,084.73	$25,084.73	$25,084.73	$25,084.73	$301,016.72
Total	183,242	$1,369,795.00													$1,354,194.94
		$1,369,795													
Amount per Kw		**$7.48**													
Additional $2/Kw		$366,484													
Fixed Budget		$1,003,311													
Total Amount		$1,369,795													

EXHIBIT CLW-3

Confirmation

This Confirmation is being provided pursuant to and in accordance with the Energy Management Agreement ("Agreement") effective July 1, 2016 between Tenaska Power Services Co. ("TPS") and Kansas Power Pool ("KPP") and forms a part of, and is expressly subject to, the terms of the Agreement. Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Agreement.

The Parties establish the following:

In lieu of TPS purchasing Product from KPP under the WSPP Agreement and then reselling such Product to a Third Party under a Third Party Transaction (as contemplated by Section 2(B) of the Base Agreement), TPS has assisted KPP in arranging a transaction directly with Omaha Public Power District ("OPPD") whereby KPP has agreed to sell electric capacity to OPPD and OPPD has agreed to purchase such electric capacity from KPP as identified below (the "Transaction"):

Seller: KPP

Buyer: OPPD

Product: Capacity

Term: June 1, 2017 through May 31, 2022

Period	June 2017-May 2018	June 2018-May 2019	June 2019-May 2020	June 2020-May 2021	June 2021-May 2022
Contract Quantity (MW)	50	50	25	25	25
Contract Price ($/KWm)	$1.15	$1.15	$2.00	$2.25	$2.50
TPS Monthly Payment	$2,875	$2,875	$2,500	$2,813	$3,125

As compensation for arranging the Transaction, KPP shall pay TPS the amount identified in the table above as the "TPS Monthly Payment" with respect to each month during the Term of the Transaction; provided, however such payment shall be contingent upon OPPD obtaining any transmission service necessary to enable performance of the KPP and OPPD Transaction. The TPS Monthly Payment shall be invoiced by TPS and payable by KPP in accordance with Section 7 of the General Terms and Conditions of the Agreement.

ACCEPTED AND AGREED TO

This ___ day of _____, 2016

Tenaska Power Services Co.

By: Kevin R. Smith

Name: KEVIN R. SMITH

Title: PRESIDENT

LEGAL KP

ACCEPTED AND AGREED TO

This 2nd day of Jun, 2016

Kansas Power Pool

By: Mark Chesney

Name: Mark Chesney

Title: CEO / GM