

BEFORE THE STATE 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

AMENDED DIRECT TESTIMONY OF

H. DAVIS ROONEY  
VICE PRESIDENT AND CHIEF FINANCIAL OFFICER

ON BEHALF OF

MID-KANSAS ELECTRIC COMPANY, INC.

JULY 9, 2018

1    **Q.    Please state your name.**

2    A.    My name is H. Davis Rooney.

3    **Q.    Are you an officer of Mid-Kansas Electric Company, Inc. (“Mid-Kansas”)?**

4    A.    Yes. I am Vice President and Chief Financial Officer of Mid-Kansas and have been since  
5    November 21, 2008.

6    **Q.    By who are you employed and what is your business address?**

7    A.    I am employed by Sunflower Electric Power Corporation (“Sunflower”). My business  
8    address is 301 W. 13th Street, Hays, Kansas.

9    **Q.    What is your present position at Sunflower, how long have you held the position and  
10    other positions at Sunflower?**

11   A.    I am Vice President and Chief Financial Officer. I assumed this position on October 22,  
12   2008. Although Mid-Kansas has no employees, I also hold the same position in Mid-  
13   Kansas.

14   **Q.    What prior positions have you held?**

15   A.    Prior to joining Sunflower, I held positions at Kansas City Power & Light Company  
16   (“KCP&L”); Aquila, Inc. (“Aquila”); and Arthur Andersen.

17   **Q.    Please describe your education, experience and employment history.**

18   A.    I graduated from the University of Kansas. I received a B.A., with distinction, in  
19   Mathematics (1982), and a B.S., with distinction, in Business (1983), with majors in  
20   Accounting and Business Administration and a concentration in Computer Science. I  
21   obtained my Certified Public Accountant certificate in 1983 and practiced in public  
22   accounting from 1983 to 1992. In 1992, I joined Aquila, Inc. as Controller of its WestPlains  
23   Energy division and held several positions focused on financial management and analysis

1 including Director of Accounting and Finance for the Missouri Electric divisions of Aquila  
2 Networks. My last position at Aquila was as Director of Resource Planning and  
3 Commodity Analysis. At KCP&L I held the position of Manager, CEP Business  
4 Operations. My responsibilities included business planning and analysis concerning  
5 infrastructure investment projects for KCP&L and Aquila (d/b/a KCP&L Greater Missouri  
6 Operations Company).

7 **Q. What is Sunflower's relationship with Mid-Kansas?**

8 A. Sunflower provides contract services to Mid-Kansas for all the generation and transmission  
9 activities of Mid-Kansas. Mid-Kansas has no employees, so Sunflower operates Mid-  
10 Kansas under a contract approved by the Commission.

11 **Q. What is the purpose of your testimony?**

12 A. The purpose of my testimony is to respond to testimony of Mr. Larry Holloway, and in  
13 particular, his financial analysis of the transmission project proposed by KPP.

14 **Q. What are the important considerations for the Commission to understand regarding**  
15 **the financial analysis?**

16 A. The following are the key considerations:

- 17 • The KPP proposal is more expensive to the public than an alternative electrically  
18 equivalent SemCrude Substation Upgrade that was the result of the Commission  
19 approved local planning process. Granting of a certificate of convenience to KPP  
20 will not result in the selection of the least cost option and will raise the total costs  
21 paid by public.
- 22 • KPP's financial analysis addresses only the impact on the applicant and not the  
23 impact on the public. I prepare an analysis of the public costs and the public

benefits. Additionally, much of Mr. Holloway's financial analysis is incomplete, incorrect and misleading. A proper financial analysis of the costs and benefits to the public focuses on capital cost (investment outlay), incremental annual operating costs to the public (excluding financing costs), incremental benefits to the public, and a proper discount rate. Mr. Holloway's analysis does none of these.

- KPP is embracing a new business model that is aimed only at its self-interest and should be rejected by the Commission. That model strategically builds transmission projects that will be paid for by others. The benefits of the project are substantially from the ability to make others pay for those projects. The higher cost of the Kingman Direct Connection will not be recovered solely, or even mostly, from KPP customers but from other customers in western Kansas.

### **Projects Under Consideration**

**Q. What is the project in the application and what is the least cost project identified by the local planning process?**

A. The first project called the Kingman Direct Connection and proposed by the Kansas Power Pool (KPP) in its application, involves building an additional substation near the existing Southern Pioneer Electric Company (SPEC) 115/34.5 kV SemCrude Substation and building approximately 5 miles of line to connect to an existing 34.5 kV line owned by the City of Kingman. The second project, identified as the least cost option in the Mid-Kansas local planning process, is called the SemCrude Substation Upgrade which would upgrade the existing SemCrude substation and require building approximately 3.2 miles of line to connect to the existing 34.5 kV line owned by the City of Kingman.

**Project Costs and Who is Paying**

**Q. Please explain why you state that the Kingman Direct Connection is more expensive to the public than an alternative electrically equivalent SemCrude Substation Upgrade.**

A. I performed a benefit to cost analysis and reached a conclusion that the cost of the Kingman Direct Connection was more than twice the cost to the public than the SemCrude Substation Upgrade, which was the least cost option resulting from the local planning process, as testified to by Dr. Tamimi.

**Q. Can you summarize your benefit to cost analysis?**

A. My analysis can be summarized in the following table:

Table 1

| <b>Item</b>                      | <b>NPV Cost/(Benefit)<br/>Kingman Direct<br/>Connection</b> | <b>NPV Cost/(Benefit)<br/>SemCrude Substation<br/>Upgrade</b> |
|----------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Investment Outlay                | \$3,021,106                                                 | \$1,754,840                                                   |
| O&M Costs                        | <u>\$2,057,955</u>                                          | <u>\$1,195,384</u>                                            |
| Total NPV of Costs               | \$5,079,061                                                 | \$2,950,224                                                   |
|                                  |                                                             |                                                               |
| Kingman Generation Savings       | \$(1,375,038)                                               | \$(1,375,038)                                                 |
| Area Loss Savings                | <u>\$(321,056)</u>                                          | <u>\$(261,617)</u>                                            |
| Total NPV of Public Benefits     | \$(1,696,094)                                               | \$(1,636,655)                                                 |
|                                  |                                                             |                                                               |
| <b>Net Public Cost/(Benefit)</b> | <b>\$3,382,967</b>                                          | <b>\$1,313,569</b>                                            |

The net cost to the public of the Kingman Direct Connection is more than twice the net cost to the public of the SemCrude Substation Upgrade.

**Q. What types of costs are there for the proposed projects?**

A. There are investment outlays (capital costs) and operating and maintenance (O&M) costs.

**Q. What are the capital costs of the proposed projects?**

A. Below is a table comparing the project capital costs:

| Table 2            |                           |                             |
|--------------------|---------------------------|-----------------------------|
|                    | Kingman Direct Connection | SemCrude Substation Upgrade |
| Total Capital Cost | \$3.0mm                   | \$1.8mm                     |

1  
2 **Q. Are there other capital costs not included above that may be required to complete the**  
3 **projects?**

4 A. Yes. Neither project would be possible, but for the acquisition of the Ninnescah 115 kV  
5 line by Mid-Kansas in 2014 for \$950,000. Although this cost is now a sunk cost and does  
6 not impact the public cost analysis today, it is important to recognize the financial  
7 commitment and efforts SPEC and the members of Mid-Kansas have made to help  
8 Kingman achieve full import capabilities.<sup>1</sup> Upgrades are required at the Kingman  
9 Substation. Exhibit LWH-3 attached to Mr. Holloway's testimony includes a letter from  
10 Olsson Associates that identifies a probable construction cost of \$555,000 to replace the  
11 7/10 MVA transformer with a 15/28 MVA transformer. The loss study performed under  
12 Dr. Tamimi's supervision identifies the potential need for a 6 MVAR Capacitor  
13 (approximately \$250,000) at the Kingman Substation. These costs, if needed, would be  
14 required for either project. Additionally, the testimony of Mr. Sonju states that the  
15 Kingman Direct Connection project will cost over \$1 million more than the \$3.0 million  
16 KPP has presented. These capital costs, if incurred, will also require increased O&M costs.

17 **Q. What would the public costs and benefits look like if these additional costs are**  
18 **considered?**

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<sup>1</sup> Additional discussion of the project development history can be found in the testimony of Randy Magnison.

A. The following table summarizes the public costs and benefits if the additional capital costs (Kingman city substation and costs identified by Mr. Sonju) and associated O&M costs were included for both projects:

Table 3

| Item                             | NPV Cost/(Benefit)<br>Kingman Direct<br>Connection | NPV Cost/(Benefit)<br>SemCrude Substation<br>Upgrade |
|----------------------------------|----------------------------------------------------|------------------------------------------------------|
| Investment Outlay                | \$4,884,814                                        | \$2,559,840                                          |
| O&M Costs                        | <u>\$3,327,499</u>                                 | <u>\$1,743,744</u>                                   |
| Total NPV of Costs               | \$8,212,313                                        | \$4,303,584                                          |
|                                  |                                                    |                                                      |
| Kingman Generation Savings       | \$(1,375,038)                                      | \$(1,375,038)                                        |
| Area Loss Savings                | <u>\$(321,056)</u>                                 | <u>\$(261,617)</u>                                   |
| Total NPV of Public Benefits     | <u>\$(1,696,094)</u>                               | <u>\$(1,636,655)</u>                                 |
|                                  |                                                    |                                                      |
| <b>Net Public Cost/(Benefit)</b> | <b>\$6,516,219</b>                                 | <b>\$2,666,929</b>                                   |

The difference between the two projects increases from \$2.1 million to \$3.8mm. This table was added for information only. The remainder of my testimony relates to Table 1.

**Q. What are the annual O&M costs of the proposed projects?**

A. Below is a table comparing the 20-year NPV of each project's annual O&M costs. Included are operations, maintenance, administrative and general, and property taxes (or an allowance for city services) calculated as described later in my testimony:

| Table 4       |                              |                                |
|---------------|------------------------------|--------------------------------|
|               | Kingman Direct<br>Connection | SemCrude Substation<br>Upgrade |
| NPV O&M costs | \$2.1mm                      | \$1.2mm                        |

**Q. What is the source of the information you used for these costs?**

A. The KPP capital cost was obtained from Exhibit LWH-3 page 5 attached to Mr. Holloway's Direct Testimony. The SPEC capital cost was obtained from the PSE estimate in Mr.

1 Sonju's Direct Testimony. The O&M costs are calculated as described later in my  
2 testimony.

3 **Q. Why is the capital cost of the project the key financial consideration?**

4 A. Because the two projects are electrically equivalent, as confirmed by Dr. Tamimi's Direct  
5 testimony in this docket, both projects provide the same physical transmission service and  
6 benefits. The key financial consideration for the Commission is whether the KPP requested  
7 project puts higher or lower costs on the public than other alternatives. Most other annual  
8 costs of the project (operations, maintenance, overheads, etc.) are presumed to be  
9 proportional to the project cost. Variations in those other costs, will generally be dwarfed  
10 by the cost of the project itself. Although cost allocations need to be addressed, the primary  
11 financial issue to the rate paying public is whether to allow a high cost project when an  
12 electrically equivalent lower cost project is available.

13  
14 **Cost Benefit and Economic Analysis**

15 **Q. In Table 2 and Table 3 of his Direct Testimony and Table 12 of Exhibit LWH-3, Mr.**  
16 **Holloway presents recaps of the costs and benefits of his scenarios. Do you agree with**  
17 **his analysis?**

18 A. No. Mr. Holloway makes a number of significant errors in his analysis. Below is a  
19 summary of my testimony on this topic:

20 a. Public as a Whole. His analysis is deficient because he does not analyze the economic  
21 impact on the public as a whole; only the impact to his utility (KPP) and his member  
22 (Kingman).<sup>2</sup>

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<sup>2</sup> *Kansas Gas & Electric Co. v. Public Service Comm'n*, 122 Kan. 462 (1927) – "In determining whether such certificate of convenience should be granted, the public convenience ought to be the commission's primary concern,

- 1           b. Costs vs. Cost Allocations. Costs and benefits are not the same as cost allocations.  
2           Many of the “benefits” to KPP and Kingman are cost shifts from KPP ratepayers to  
3           non-KPP ratepayers and therefore not public “benefits”, especially for those ratepayers  
4           paying the cost of these “benefits” to KPP. Mr. Holloway’s testimony does not  
5           distinguish between “costs” and “cost allocations”. This causes confusion over the true  
6           costs and benefits of the Kingman Direct Connection to the public
- 7           c. Capacity Sale Benefit. Mr. Holloway inappropriately includes as a benefit of the project  
8           the potential sale of generation capacity. KPP can sell all its available 20-year excess  
9           capacity today, without this project. Additionally, Mr. Holloway vastly over states the  
10          potential benefit of generation capacity sales.
- 11          d. Improper Analysis. His analysis is neither a proper project analysis nor a proper  
12          analysis of revenue requirements. As discussed below, he includes items that should  
13          not be included and excludes items that should be included. Additionally, as discussed  
14          below he uses an improper discount rate.
- 15          e. Incremental vs. Total Costs and Benefits. Rather than properly analyzing the  
16          incremental costs and benefits, Mr. Holloway presents a mix of total and incremental  
17          costs, but only incremental benefits. He fails to present the total benefits when  
18          including total costs; or more properly, including only incremental costs and  
19          incremental benefits.

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the interest of public utility companies already serving the territory secondary, and the desires and solicitations of the applicant a relatively minor consideration.”

1 f. Inappropriate O&M Calculation. Mr. Holloway uses an inappropriate comparison  
2 group to estimate his O&M charge rate, and then applies it to less than the full project  
3 cost, understating his O&M cost estimate.

4 g. Inappropriate Loss Benefit Calculation. Mr. Holloway does not quantify the  
5 incremental change in losses that will occur from either project. Instead, he quantifies  
6 the amount of losses KPP will not be billed by SPEC if the Kingman Direct Connection  
7 is built instead of the electrically equivalent SemCrude Substation Upgrade.

8 h. Other Items. Mr. Holloway inappropriately presents costs and benefits in his scenarios.  
9

10 a. **Public as A Whole**

11 Q. **What problems did you find with the cost and benefit analysis prepared by Mr.**  
12 **Holloway?**

13 A. First, and most importantly, although his analysis and testimony is that up to 97%<sup>3</sup> of the  
14 costs of the project, plus \$9.4mm of local access charges currently paid by KPP plus the  
15 cost of the existing Kingman 34.5 kV line, will be paid by the non-KPP ratepaying public,  
16 he provides no testimony as to how this facilitates the public's convenience and necessity  
17 other than for KPP/Kingman. Frankly, I do not see how he could justify the project under  
18 such a public interest standard since KPP's approach is to build a more expensive project  
19 than the least cost electrically equivalent project and make others pay for it. KPP's failure  
20 to address the impact of its project on the public as a whole is a material deficiency.  
21 Obtaining the Commission's support for building more expensive projects that impose cost  
22 recovery on those who neither need it nor benefit from it, will accelerate the growth of

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<sup>3</sup> Holloway Direct Testimony, p.24, footnote 28. Winfield cost allocation was based on zone load ratio share. KPP is 2.69% of the Mid-Kansas zone.

transmission costs well beyond the benefits they provide. Kansas is already struggling to contain the growth of utility costs. Transmission related costs are a contributor to that cost growth. In my opinion, it is imprudent to facilitate a more expensive project when a less expensive one will do. It is wasteful of materials and contributes to higher costs in serving the public.

**b. Costs vs. Cost Allocations**

**Q. You state that costs are not the same as cost allocations and Mr. Holloway does not distinguish between the two. Can you elaborate?**

A. Yes. Allocations are costs that do not go away but are simply shifted from one ratepayer to another. From a public cost point of view, it is not appropriate to claim a public benefit when one has merely reduced the cost to one group of ratepayers and increased the cost by the same amount to another group of ratepayers.

**Q. What costs benefits does KPP claim that are cost allocations?**

A. In Mr. Holloway's Exhibit LWH-3 on page 14 of 17 in Table 11, he lists most of the costs and benefits that appear in his analysis. Notably, KPP omits the following important items from his analysis, some of which I will discuss later:

- The actual capital costs (investment outlay) of the two projects;
- The O&M cost of the SemCrude Substation Upgrade, which is the relevant incremental cost to the public, not the local access delivery service (LADS) charges (sometimes referred to as local access charge (LAC)).
- The substantial benefits of the existing 6MW connection;
- The cost shift of the existing Kingman 34.5 kV line to the Mid-Kansas pricing zone when he places it under the Southwest Power Pool (SPP) Open Access Transmission

Tariff (OATT) as described in Mr. Holloway's direct testimony (Holloway Direct p.24 lines 1-3 and footnote 28);

Below is a reproduction of Mr. Holloway's Table 11 in his Direct Testimony identifying those costs that are allocations.

Table 5

| Item                                  | Total 2019 NPV | Categorization      |
|---------------------------------------|----------------|---------------------|
| SPEC Project Bond Payments            | \$2,302,492    | Not Relevant        |
| Kingman Direct Connection Bond Costs  | \$4,365,099    | Not Relevant        |
| O&M Costs (Kingman Direct Connection) | \$1,424,180    | Cost                |
| LAC Charges with 6 MW limit           | \$9,395,727    | Allocation          |
| LAC Charges with No Limit             | \$11,624,627   | Allocation          |
| Increase in Capacity Payments         | \$2,186,469    | Allocation          |
| Kingman Loss Savings                  | \$1,292,015    | Benefits Both Proj  |
| Kingman Generation Savings            | \$2,374,793    | Benefits Both Proj. |
| Kingman Capacity Sale Revenue         | \$7,529,412    | Not Relevant        |

**Q. Why are some items categorized as "Not Relevant"?**

A The first two items are not items that are properly included in a project financial cost benefit analysis, and therefore are not relevant to the analysis. I will discuss these two items in more detail later. Although the capacity sale revenue has been vastly overstated, as discussed later, KPP is able achieve the sale of all its excess generation capacity today. As such, it is not an incremental benefit of this project, and therefore, is not relevant.

**Q. Can you explain further the items categorized as public benefits to both projects.**

A. The generation savings is the easiest to explain. Kingman runs its generation when its loads are high because of import constraints at its current delivery point. Both projects will remove that import constraint, reducing the need for Kingman to run its generation. The

1 Kingman Direct Connection and the SemCrude Substation Upgrade are electrically  
2 equivalent, as discussed by Dr. Tamimi.

3 The loss savings is next. Kingman incurs electrical losses on the 34.5kV line from  
4 Pratt to Cunningham. These losses will be replaced by lower losses on the Ninnescah line  
5 but higher losses from increasing the imports to Kingman. Both projects will have the  
6 same losses on the Ninnescah line. Both projects will also have similar losses across a  
7 115/34.5kV transformer. Again, this is true because the two projects are electrically  
8 equivalent.

9 **Q. Are the LAC charges really allocations and not costs savings?**

10 A. Yes. Neither project will change the amount of existing costs to be recovered by Southern  
11 Pioneer from the public in its LAC cost-based rates. Mr. Holloway proposes only to shift  
12 recovery of those costs from KPP to other customers in western Kansas. Therefore, the  
13 LAC charges are really allocations between groups of ratepayers and not savings to the  
14 public.

15 **Q. Are the Kingman Capacity Payments to KPP really allocations and not costs savings?**

16 A. Yes. The capacity payment between KPP and Kingman is an allocation of costs between  
17 KPP and its members. This can be seen in Table 12 of Exhibit LWH-3 where KPP lists a  
18 benefit to KPP, and Kingman (KPP's member) shows an equivalent expense. Clearly costs  
19 are being shifted from all the members of KPP to Kingman. As KPP is self-regulated as  
20 to its rates with its members, this amount can be as large or as small as the KPP board  
21 members decide. They are allocations among ratepayers, not costs or benefits to the public  
22 as a whole.

23 **Q. What impact should these allocations have on the Commission's decision making?**

1 A. The Commission's concern is with the public interest. As such, it should consider whether  
2 it is in the public interest to approve a \$5.0mm (capital and O&M cost) for the Kingman  
3 Direct Connection project when an electrically equivalent option in the SemCrude  
4 Substation Upgrade that only costs \$3.0mm is available.

5 c. **Capacity Sale Benefit**

6 **Q. Why do you believe Mr. Holloway has made such a significant issue of the generation**  
7 **in his testimony?**

8 A. Mr. Holloway assigns a \$7.5mm value to selling all 16MW of Kingman capacity in the  
9 market for the next 20 years. Without this "value" there are insufficient public benefits  
10 under his analysis to justify his project.

11 **Q. Do you agree with KPP's valuation of KPP's excess generation?**

12 A. No. It is a clear over-statement by Mr. Holloway designed to justify his higher cost project.  
13 Without this "benefit" the project produces only increased costs to the public.

14 **Q. Why do you disagree with KPP's valuation?**

15 A. I disagree for the following reasons:

- 16 • As stated in the testimony of Mr. Linville and Dr. Tamimi there is currently no SPP  
17 or Mid-Kansas transmission or economic limitation on KPP's ability to deliver the  
18 Kingman generation to serve KPP's load in SPP. Building a new interconnection  
19 does not change this and therefore it does not produce a public benefit.
- 20 • KPP does not have 20 years of excess capacity to sell. KPP is capacity deficient  
21 after 2022. You can't sell what you don't have.<sup>4</sup>

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<sup>4</sup> See Table 1 in Mr. Linville's direct testimony.

- To have excess capacity to sell, KPP would have to acquire it at a cost. KPP has omitted the cost of acquiring that excess capacity in its calculation. Acquiring capacity at a market cost, and then selling it at market, would greatly reduce, if not eliminate the benefit completely.

**Q. What do you conclude regarding the valuation of KPP's excess generation?**

**A.** As described in the testimony of Mr. Linville and Dr. Tamimi, KPP has vastly overstated the value of selling its excess capacity. In any event, KPP currently can obtain value from all the pooled excess capacity currently available to it. As such, this is not a valid incremental benefit of the Kingman Direct Connection project.

**Q. Are there other generation issues?**

**A.** Yes. At page 14 of Exhibit LWH-3 attached to Mr. Holloway's direct testimony, he discusses the allocation of certain SPP resource adequacy revenues. He states, "Because Kingman generation cannot be delivered economically over the SPEC 34.5 kV system it would not be available for these revenues." This statement is not accurate.

In March, SPP filed its proposed tariff with FERC for approval. I reviewed the proposed tariff and noted no economic test that determines eligibility for the revenue allocation. Further, and more the point, it specifically provides that excess capacity for purposes of revenue allocation includes all firm resources.<sup>5</sup> As Mr. Holloway testifies on page 15 line 21, "Today, all 5 of these (Kingman) generators are considered designated network resources under KPP's SPP NITSA." Designated network resources are considered firm. This is supported by KPP response to Staff DR 18 in which the supplied

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<sup>5</sup> From section 14.1 of the proposed tariff. "LRE Excess Capacity: Deliverable Capacity and Firm Capacity less Resource Adequacy Requirement, or zero if the Deliverable Capacity and Firm Capacity is less than or equal to the Resource Adequacy Requirement". In this context "and" means "plus".

1 Resource Adequacy Workbook shows the Kingman generators as firm resources (See  
2 **Exhibit HDR-6**).

3 **d. Improper Analysis**

4 **Q. In your opinion is Mr. Holloway's cost benefit analysis appropriately prepared?**

5 A. No. I have spent a significant portion of my career performing project analysis and cost  
6 benefit analyses. Mr. Holloway makes several fundamental errors. First, he includes  
7 financing cash flows in his analysis in the form of Bond Issue Payments and Bond Reserve  
8 Refunds. These are not appropriate for a proper NPV project cost benefit analysis.  
9 Additionally, he has selected an inappropriate discount rate. Proper project analysis  
10 requires the discount rate be appropriate to the project Mr. Holloway instead uses a 2%  
11 inflation assumption as the basis for his discount rate (Holloway Direct Appendix F, page  
12 2 of 3) rather than a project appropriate discount rate, significantly distorting the NPV  
13 calculations.

14 **Q. What support do you have for your conclusion that inclusion of financing costs and**  
15 **the discount rate are inappropriate?**

16 A. Contrary to the fundamentals of NPV analysis, Mr. Holloway has a) included financing  
17 costs; b) not included the total investment outlay; c) included a mix of current cash flows  
18 and incremental cash flows instead of just incremental cash flows; and d) has not used a  
19 discount rate that is either KPP's weighted average cost of capital (WACC) or a project  
20 based discount rate. Although some financing costs enter into a net present value of  
21 revenue requirements analysis through the return calculations, Mr. Holloway has not  
22 prepared such an analysis since he has omitted the cost of his debt service coverage  
23 requirements. I refer to an authoritative article addressing these issues titled "Financing

1 Costs and NPV Analysis in Finance and Real Estate.” By: Delaney, Charles J.; Rich,  
2 Steven P.; Rose, John T. Journal of Real Estate Portfolio Management. Jan-Mar2008, Vol.  
3 14, Issue 1, p. 35-39. Excerpts from that article succinctly describe certain principles of  
4 NPV analysis including the irrelevance of financing costs and the appropriate discount rate  
5 as follows (emphasis added):

6 “A review of eight finance principles texts, which (in their full-length or  
7 abbreviated edition) account for nearly 80% of the introductory finance  
8 textbook market, revealed that only four books—Brealey, Myers, and  
9 Marcus (2004), Keown, Martin, Petty, and Scott (2006), Moyer, McGuigan,  
10 and Kretlow (2006), and Ross, Westerfield, and Jordan (2007)—  
11 specifically mention financing costs in discussing NPV analysis. But all  
12 four books are consistent in arguing (1) that NPV analysis should focus on  
13 the total investment outlay to purchase the assets of a project without any  
14 adjustment for how the assets will be financed, and (2) that financing costs  
15 should not be considered in calculating the cash flows expected from the  
16 project. Likewise, the remaining four textbooks can be viewed as implicitly  
17 arguing for the irrelevance of financing costs in NPV analysis since these  
18 books ignore such costs in their capital investment examples...”

19  
20 “First, finance theory teaches that in evaluating new projects, the focus  
21 should be on the incremental cash flows generated by the assets of the  
22 project, which are unaffected by the manner in which the assets are  
23 financed. Second, as Keown et al. (2006, p. 298) note, “(w)hen we discount  
24 the incremental cash flows back to the present at the required return, we are  
25 implicitly accounting for the cost of raising funds to finance the new project.  
26 In essence, the required rate of return reflects the cost of the funds needed  
27 to support the project...”

28  
29 “Moreover, in the finance approach to NPV analysis the relevant “cost of  
30 funds” for a project of the same risk as the firm's existing assets should be  
31 the firm's weighted average cost of capital (WACC) as calculated using  
32 weights from the firm's market-value target capital structure...”

33  
34 “In addition, finance texts typically argue that firms should use a consistent  
35 cost of funds for all projects of the same risk, even if different projects are  
36 actually funded by different mixes of debt and equity, say, at different points  
37 in time. Otherwise, a firm might discount two projects of the same risk by  
38 different required rates of return if the firm focused on the specific manner  
39 of financing, which would distort the calculated NPV's of the two projects  
40 [e.g., the discussions in Keown et al. (2006, p. 340) and Moyer et al. (2006,  
41 p. 409)].”

1    **Q.     What would be an appropriate discount rate?**

2    A.     As noted in the article above, the Company's weighted average cost of capital would be  
3           appropriate "for a project of the same risk as the firm's existing assets..."

4    **Q.     What is KPP's weighted average cost of capital (WACC)?**

5    A.     In response to Mid-Kansas data request 11, (see DR attached as **Exhibit HDR-7**) KPP  
6           replied "The KPP is not required to calculate a weighted average cost of capital." KPP was  
7           unable to provide its WACC.

8    **Q.     Were you able to estimate KPP's WACC?**

9    A.     Yes. Using other data request responses, I was able to estimate KPP's WACC for this  
10          project as approximately 9.10%. I also was able to estimate a probable range for KPP's  
11          WACC as 8.36% to 12.12%.

12   **Q.     Are KPP's existing assets the same risk as the proposed project?**

13   A.     No. KPP has only one major utility asset representing nearly 100% of their utility assets  
14          but only approximately 50% of their total assets. That one asset is KPP's fractional  
15          ownership interest in the Dogwood natural gas combined cycle generating facility. As of  
16          the end of 2016, I saw no ownership by KPP of transmission or distribution assets.

17   **Q.     What discount rate do you recommend?**

18   A.     The above article goes on to say "...finance texts typically argue that firms should use a  
19          consistent cost of funds for all projects of the same risk, even if different projects are  
20          actually funded by different mixes of debt and equity..." SPP adopted a net present value  
21          of revenue requirements template to aid in analyzing transmission project alternatives in  
22          their competitive bidding process. That model was reviewed by internal and outside  
23          consultants as well as SPP member representatives. I performed the review and provided

input to the template on behalf of Sunflower. In that model, SPP adopted a standard 8% discount rate as the appropriate transmission project based discount rate. I recommend using an 8% discount rate consistent with the conclusions of SPP and its membership.

**e. Incremental Costs vs. Total Costs**

**Q. Does Mr. Holloway's analysis properly focus on incremental cash flows?**

A. No. The analysis includes a mix of existing and incremental flows. As noted in the article above, a proper analysis focuses on total investment outlay and incremental cash flows. By including an unbalanced mix of current and incremental costs and benefits, the analysis confuses the cost of the status quo with the costs and benefits of the project at issue.

**Q. Can you give an example?**

A. Yes. Mr. Holloway includes the results of his NPV analysis as Table 2 on page 19 of his direct testimony. In the "Do Nothing" scenario, KPP presents the NPV cost of LAC charges of \$9.4mm. This is a current cost not an incremental cost. In the "SPEC Project" scenario, KPP presents the NPV cost of LAC charges of \$11.6mm. This is both the current cost (\$9.4mm) and the incremental cost (\$2.2mm) of LAC charges. In the SPEC Project scenario, he presents the benefit of Kingman Generation Savings of \$2.2mm. This is only the incremental benefit of obtaining import service beyond the current 6MW limit. However, the analysis inexplicably omits the benefit of the \$9.4mm of LAC charges. Just as access to import service above 6MW produces a benefit, so does the access to the first 6 MW. KPP presents an unbalanced mix of current and incremental costs and benefits, the analysis confuses the cost of the status quo with the costs and benefits of the project at issue.

**Q. Did you estimate the savings created by access to the first 6 MW of import service?**

1 A. Yes. The existing 6MW allows Kingman to replace over 95% of its self-generation with  
2 market energy. Had KPP estimated the NPV of generation savings for the first 6MW in  
3 the same manner as they did for the incremental reduction in generation, the comparable  
4 savings number is nearly \$40mm. The current generation savings KPP is achieving from  
5 its 6 MW access to market power at Cunningham (see **Exhibit HDR-5**) are over 4 times  
6 the cost of the LADS charges they pay SPEC.

7 **Q. Are these numbers relevant to the project analysis at hand?**

8 A. No, although they do provide some context as to the degree of imbalance in KPP's analysis,  
9 as well as why the initial 6MW project was so much more attractive than the follow-on  
10 project to remove the 6MW limit. Only the incremental costs and benefits to the public  
11 are relevant to the project analysis of the public impact.

12 **Q. Which costs and benefits are relevant to the project analysis?**

13 A. The incremental costs and benefits of "Do Nothing" are all zero. No change, no  
14 incremental costs or benefits. The incremental costs and benefits to the public are the  
15 following:

- 16 • The cost of the total investment outlay (capital costs) for each scenario
- 17 • The cost of incremental O&M costs
- 18 • The benefit of Kingman generation savings
- 19 • The benefit of loss savings from the 34.5kv system

20 **f. Inappropriate O&M Calculations**

21 **Q. How did Mr. Holloway estimate operations, maintenance, and administrative and**  
22 **general (O&M) expenses?**

1 A. He developed a comparison group from several transmission formula rates and developed  
2 an O&M rate per dollar of net plant. He then applied that rate only to the KPP portion of  
3 the project costs.

4 **Q. Does this approach result in a reasonable estimate of O&M costs?**

5 A. No. I believe his estimate is understated by more than half a reasonable estimate.

6 **Q. Please explain.**

7 A First the impact to the public is not the O&M on the KPP portion of the project, but rather  
8 the O&M on the entire project. KPP's O&M estimate is based on \$2.4mm of the \$3.0mm  
9 total project. Therefore, KPP's estimate is only 80% of the O&M for the full project.  
10 Secondly, the comparison group is not representative of costs on 34.5 kV systems. Lastly,  
11 the comparison group was limited to only companies with very new construction.

12 **Q. Why is the comparison group not representative of costs on 34.5 kV systems?**

13 A. KPP chose only comparison companies that own 345 kV, not 34.5 kV transmission plant.  
14 As a rule of thumb 345 kV plant is about 9 times the cost of 34.5 kV plant to construct per  
15 mile. Additionally, higher voltage transmission is built to a more robust standard than  
16 lower voltage plant. They are generally built with steel, not wood, structures that can  
17 withstand environmental risks of weather and deterioration better and thus require less  
18 maintenance. Additionally, many of the maintenance and operations costs, such as line  
19 patrols and vegetation management, do not have a significantly higher cost to perform for  
20 345 kV as compared to 34.5 kV. The result is that 345 kV plant O&M costs as a percent  
21 of plant investment are much lower than lower voltage construction.

22 **Q. Why is the age of the net plant important?**

1 A. The O&M cost is lowest in the first few years. For example, routine vegetation  
2 management and pole inspections may not be needed for several years after construction.  
3 The O&M cost of new plant will be lowest in the first years, before age and conditions  
4 require any maintenance. This approach fails to recognize that O&M costs will grow faster  
5 than inflation over time as age and condition drive higher costs. KPP only grows its O&M  
6 by inflation.

7 **Q. Can you suggest a better reference?**

8 A. Yes. Since KPP has testified that they are following the approach they did in Winfield, I  
9 looked to that docket. In Docket No. 12-KPPE-630-MIS, the costs for O&M, A&G, rate  
10 case, and city services (property taxes) amounted to 6.21% of transmission net plant. This  
11 is comparable to the 6.13% rate for similar costs in SPEC's 34.5 kV formula rate it recently  
12 filed in Docket No. 18-SPEE-477-RTS. Both dockets reflect the costs of operating and  
13 maintaining lower voltage systems in Kansas. Additionally, the average age of the SPEC  
14 plant is approximately 10 years. This is right in the middle of the 20-year forecast period  
15 used by KPP, but also in the first 25% of the total expected life. As such it includes at least  
16 some of the increased costs in excess of inflation that come from age and conditions. I  
17 recommend using a 6% rate instead of the 3% rate proposed by KPP. See **Exhibit HDR-**  
18 **2.**

19 **Q. Should the incremental O&M cost as a percent of net plant be different for KPP and**  
20 **SPEC?**

21 A. Based on the extent of my review, no, not significantly. While there may be variations,  
22 both companies will need to follow similar good utility practices in maintaining their  
23 projects.

1    **Q.     Should the total dollars of O&M cost be different for KPP and SPEC?**

2    A.     Yes. SPEC's total incremental O&M costs should be lower. SPEC is already maintaining  
3           one transformer and so its incremental cost to maintain one larger transformer will be less  
4           than KPP's cost to maintain its own additional transformer. The SemCrude Substation  
5           Upgrade has fewer miles of line than the KPP project, so those costs will also be less. This  
6           cost difference is substantially captured by applying the same O&M rate to the different  
7           capital costs of the two projects. My calculations of the O&M costs are included as **Exhibit**  
8           **HDR-1.**

9    **g.     Inappropriate Loss Benefit Calculation**

10   **Q.     Did KPP present a loss study in its direct testimony to determine the change in losses**  
11       **between its various options?**

12   A.     No.

13   **Q.     How did KPP estimate the quantity of losses used in its benefit calculation?**

14   A.     Mr. Holloway describes how his loss benefit is determined at page 11 of his Exhibit LWH-  
15       3 attached to his direct testimony. Essentially, he describes how KPP is billed 1.86% for  
16       system average losses by SPEC, not the actual losses. His testimony states "With the  
17       Kingman Direct Connection, the SPEC loss component of 1.86% will no longer be  
18       charged." KPP is describing how KPP is billed for losses, not how actual losses will  
19       change. He is describing how the applicant is impacted, not the public. The impact on the  
20       public is the incremental losses of the projects, not how KPP is or isn't billed for those  
21       losses.

22   **Q.     How did KPP value the losses used in its benefit calculation?**

A. KPP used its total embedded costs of capacity and energy to value its losses, \$20.83/kW-mo. and \$29.63/MWh, respectively, in 2020 (Exhibit LWH-3 page 10, Table 7 and KPP response to Staff DR 8).

**Q. Are these appropriate values to use?**

A. No. If KPP needed to provide additional energy or capacity for a shortfall due to losses, it could acquire that energy or capacity at market rates. If KPP could “free up” energy or capacity by reducing its losses, it would buy less market energy or have additional excess capacity to sell. As Mr. Holloway testifies on page 16 line 12 of his direct testimony, “The current value for excess generation capacity in the SPP market is over \$2.00/kW-mo.” This is much less than the \$20 for KPP’s embedded capacity costs. The market value of the capacity and energy is not KPP’s embedded costs since embedded costs include sunk costs that will not change by a change in the amount of losses.

**Q. Did Mid-Kansas perform a loss study?**

A. Yes. Mid-Kansas staff, under the supervision of Dr. Tamimi, quantified the area peak kW losses in each scenario using the KPP projected loads included with KPP’s AQ request to SPP. The results are attached as **Exhibit HDR-3**.

**Q. Did you assign a valuation to the losses identified in the Loss Study?**

A. Yes. The calculations are attached as **Exhibit HDR-4** and the incremental 20-year NPV cost or benefits from the changes in losses produced by each project are summarized below:

Table 6

| Item              | NPV Cost/(Benefit)<br>Kingman Direct<br>Connection | NPV Cost/(Benefit)<br>SemCrude Substation<br>Upgrade |
|-------------------|----------------------------------------------------|------------------------------------------------------|
| Area Loss Savings | \$(321,056)                                        | \$(261,617)                                          |

1    **h.    Other Items.**

2    **Q.    Are there other items inappropriately evaluated in Mr. Holloway's analysis?**

3    A.    Yes. Mr. Holloway inappropriately presents the costs and benefits in his scenarios. In  
4        doing so, he double counts the benefits to Kingman of the generation savings. He counts  
5        it both as a "cost" in his Do Nothing Scenario and as a benefit in the two project scenarios.  
6        This leads the reader to the incorrect conclusion that going from the Do Nothing to the  
7        project scenarios creates twice as much benefit from the generation savings as is  
8        appropriate.

9    **Summary Economic Analysis**

10   **Q.    Based on your review have you developed a financial analysis of the projects?**

11   A.    Yes. Using a conventional finance approach to NPV, and based on an 8% discount rate  
12        the following table summarizes the costs and benefits to the public of the SPEC Project  
13        and the KPP Kingman Direct Connection Project:

14   Table 7

| Item                             | NPV Cost/(Benefit)<br>Kingman Direct<br>Connection | NPV Cost/(Benefit)<br>SemCrude Substation<br>Upgrade |
|----------------------------------|----------------------------------------------------|------------------------------------------------------|
| Investment Outlay                | \$3,021,106                                        | \$1,754,840                                          |
| O&M Costs                        | <u>\$2,057,955</u>                                 | <u>\$1,195,384</u>                                   |
| Total NPV of Costs               | \$5,079,061                                        | \$2,950,224                                          |
|                                  |                                                    |                                                      |
| Kingman Generation Savings       | \$(1,375,038)                                      | \$(1,375,038)                                        |
| Area Loss Savings                | <u>\$(321,056)</u>                                 | <u>\$(261,617)</u>                                   |
| Total NPV of Public Benefits     | \$(1,696,094)                                      | \$(1,636,655)                                        |
|                                  |                                                    |                                                      |
| <b>Net Public Cost/(Benefit)</b> | <b>\$3,382,967</b>                                 | <b>\$1,313,569</b>                                   |

15  
16        The net cost to the public of the Kingman Direct Connection is more than twice the net  
17        cost to the public of the SemCrude Substation Upgrade.

1    **Q.     What are the differences between your analysis and KPP's?**

2    A.     As described in my testimony above:

- 3            • I replaced the bond payments and bond reserve financing costs with the investment
- 4            outlay, as is appropriate for a financing net present value analysis.
- 5            • I adjusted the O&M rate from 3% to 6% to be more representative of lower voltage
- 6            operation and maintenance costs. I also included O&M costs for the SemCrude
- 7            Substation Upgrade where KPP had omitted them.
- 8            • I used the same annual generation savings as proposed by KPP.
- 9            • I replaced KPP's billing-based loss benefit with the incremental public loss benefit
- 10           or cost calculated from an area loss study.
- 11           • I removed the Capacity Sale because it is not an incremental benefit of the Kingman
- 12           Direct Connection project.
- 13           • I removed the LADS charges shifted from KPP customers to SPEC customers and
- 14           the KPP Capacity Charges between Kingman and KPP because they are
- 15           reallocations of costs among members of the public, not incremental cost reductions
- 16           benefiting the public as a whole.
- 17           • I replaced KPP's inflation based discount rate of 2% with the standard transmission
- 18           project discount rate of 8% used by SPP, as is appropriate for a financing net present
- 19           value analysis.

20    **Present Value of Revenue Requirements**

21    **Q.     Did you perform a net present value of revenue requirements (PVRR) analysis?**

22    A.     Yes. I used the PVRR template that was developed by SPP for competitive transmission

23           projects to calculate the PVRR for the two scenarios. The PVRR template was adopted to

1 standardize assumptions and project analysis presentations to make review and  
2 comparisons easier. The template was developed in a stakeholder driven process that  
3 included internal (SPP and stakeholders) and external (third party) expert reviews. I  
4 prepared a calculation using the template for the Kingman Direct Connection. I also  
5 prepared a calculation for the SemCrude Substation Upgrade. Because the SemCrude  
6 Substation Upgrade calls for part of the project to be funded by KPP, I split the SemCrude  
7 Substation Upgrade into two parts, a KPP portion and an SPEC portion. I calculated the  
8 PVRR of the two parts and added them together to get the total PVRR for the SemCrude  
9 Substation Upgrade.

10 **Q. Did you make any modifications to the template or to the results?**

11 A. Yes, I made two modifications. First, I changed the standard 2.5% inflation assumption in  
12 the template to match the 2.0% assumption used by KPP. Second, I made a modification  
13 to the results. The template assumes a 4-year construction cycle and discounts all costs  
14 back to 4-years before the in-service year. To be consistent with KPP's presentation of  
15 NPV as of the in-service year, I adjusted the template result to reflect the NPV as of the in-  
16 service year, not 4-years before the in-service year.

17 **Q. Did you identify any limitations to the template?**

18 A. Yes. It is my understanding that SPEC does not recover income taxes on a normalization  
19 basis. Instead it collects income taxes when paid (flow-through basis). The template  
20 reflects taxes on a normalization basis. If properly reflected, I believe the impact would be  
21 to make the SPEC PVRR lower (better in comparison to KPP).

22 **Q. What were the assumptions made for the PVRR analysis?**

23 A. The following table captures the key assumptions:

Table 8

| Item                                  | KPP Assumptions     | SPEC Assumptions |
|---------------------------------------|---------------------|------------------|
| Capital Cost                          | \$3,021,106         | \$1,754,840      |
| O&M Rate                              | 6.0%                | 6.0%             |
| Interest Rate                         | 5.361% <sup>6</sup> | 5.26             |
| Percent of Project Initially financed | 100%                | 85% <sup>7</sup> |
| DSC Requirement                       | 1.30 <sup>8</sup>   | 1.75             |
| Loan Type                             | Mortgage            | Mortgage         |
| Loan Term                             | 20 years            | 30 years         |
| Income Tax Rate                       | 0.00%               | 26.53%           |
| Inflation Escalator                   | 2.0%                | 2.0%             |

**Q. What were the results?**

A. The PVRR for the SemCrude Substation Upgrade was \$4.0mm and for the KPP project it was \$6.7mm. Like the finance approach the KPP project is higher cost to the public than the SemCrude Substation Upgrade. This is primarily because of the higher cost of investment and the higher projected incremental O&M costs. The table below summarizes the results shown in **Exhibit HDR-8**.

Table 9

|                                              | Kingman<br>Direct<br>Connection | SemCrude<br>Substation<br>Upgrade |
|----------------------------------------------|---------------------------------|-----------------------------------|
| Present Value of Revenue Requirements (PVRR) | 6,017,146                       | 3,569,399                         |

<sup>6</sup> The KPP interest rate of 4.5% used by Mr. Holloway was adjusted to an effective interest rate to reflect his 3% bond issuance costs and his 10% bond reserve requirement.

<sup>7</sup> This is SPEC's debt to capitalization ratio, although the debt required for \$23mm of capex over the last three years was only about 10% of the projects, as reported in their audited financial statement.

<sup>8</sup> This is KPP's reported target DSC, although the 3-year average of the DSC ratios reported in KPP audited financial statements 2015-2017 is 1.57 and would significantly increase the PVRR.

1 **Economic Benefits Projected by Mr. Kriz**

2 **Q. Did KPP provide an economic benefit analysis in its testimony in this docket?**

3 A. No, it did not. Mr. Holloway referenced some testimony filed in the 17-092 Docket by Mr.  
4 Kriz<sup>9</sup>, but no such testimony is part of this case. As such, KPP has not presented any  
5 evidence upon which the Commission could find that the Kingman Direct Connection will  
6 provide economic benefits to the Kingman local economy. However, I will respond to the  
7 Kriz testimony in case the Commission decides to somehow consider it in this case.

8 **Q. Does the Kriz report address benefits to the public?**

9 A. No.

10 **Q. Please explain.**

11 A. First, the testimony of Mr. Kriz from the 17-092 docket to which Mr. Holloway refers in  
12 this case considers only how the numbers provided by Mr. Holloway impact the City of  
13 Kingman. It does not consider how Mr. Holloway's proposal impacts the larger public  
14 which includes the City of Kingman, the customers of Southern Pioneer and the customers  
15 of Mid-Kansas. As noted above, up to 97% of the Kingman Direct Connection project will  
16 be paid by customers other than KPP or Kingman. Additionally, the Local Access Charge  
17 costs will be shifted from Kingman to other customers. Any economic benefits to Kingman  
18 from these cost shifts, will be more than offset by economic detriments to the rest of the  
19 public.

20 Secondly, the entirety of Mr. Kriz testimony is predicated on assumptions provided  
21 by Mr. Holloway but apparently not vetted by Mr. Kriz. Neither Mr. Holloway, nor Mr.  
22 Kriz describe how those assumptions were developed.

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<sup>9</sup> Holloway Direct, p. 20, footnote 23.

1 Third, the impact, though touted as impressive, is small relative to Kingman's  
2 economy.

3 **Q. To the extent the Commission considers Mr. Kriz' analysis, can you respond to his**  
4 **economic analysis and conclusion that the KPP project would provide significant**  
5 **economic benefits to Kingman and should be allowed to proceed?**

6 A. Yes. I have three comments regarding Mr. Kriz' analysis and conclusion.

7 First, and most importantly, like Mr. Holloway, Mr. Kriz' analysis focuses only on  
8 the impact of the project on Kingman; it does not consider the public interest. My  
9 understanding of the issue before the Commission is to determine what is in the public  
10 interest for Kansas and all customers impacted by the KPP project if it were to go forward.  
11 This includes the customers of Southern Pioneer as well as other customers in the region  
12 who will pay for the Kingman Direct Connection by virtue of the SPP OATT. Presumably,  
13 one of the benefits to the City of Kingman is the avoidance of its local access delivery  
14 charge. Since, these costs will still need to be recovered from someone, the City is simply  
15 shifting that cost to others. Obviously, assuming there is a positive economic impact to  
16 Kingman from shifting costs away from Kingman, there is going to be an off-setting  
17 negative economic impact in the area to which those costs are shifted. As a public utility  
18 regulated by the Commission, KPP is aware of the overall public interest standard  
19 applicable to this situation but chose to limit their retention of Mr. Kriz' service and  
20 testimony to an evaluation that only considers whether "the KPP project makes economic  
21 sense *for the City*".<sup>10</sup>

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<sup>10</sup> Kriz Direct in 17-092, p. 12, emphasis added.

1           Second, the analysis is highly subjective and its results should not be viewed as  
2           very reliable. Since there is no data specifically evaluating the impact of utility rate  
3           reductions on business attraction, retention and expansion, Mr. Kriz uses tax rate data for  
4           this factor and assumes utility rate reductions would have approximately one-fourth the  
5           impact of tax reductions.<sup>11</sup> This assumption is not supported. Mr. Kriz also assumes that  
6           the reduction in cost for utility service will be equally distributed among all income groups  
7           in Kingman. Unless usage habits among various income groups are identical, in practice  
8           and reality this distribution of the reduction will not happen.

9           Additionally, Mr. Kriz uses data obtained from KPP on estimated growth rates and  
10          the value of cost savings Kingman will realize because of the project.<sup>12</sup> Such data cannot  
11          be assumed to be independent and unbiased.

12          Finally, even if we accept Mr. Kriz' results, the amount of the benefits he calculates  
13          are miniscule in comparison to the overall numbers for Kingman. For example, total  
14          personal income in Kingman in 2014 was \$228 million, compared to the \$130,729 annual  
15          increase in labor income he attributes to the KPP project (Kriz Exhibit 1, Table 1 and Table  
16          3).<sup>13</sup> The very small amounts he calculates as benefits when considered in the overall  
17          scheme of the economic environment in Kingman undermine the credibility of his  
18          conclusion that the impact will directly cause additional jobs or businesses to locate or  
19          expand in Kingman.

20   **Q.    What about the offsetting negative impact of the KPP project on other Kansas**  
21   **citizens, such as the customers of Southern Pioneer and Mid-Kansas?**

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<sup>11</sup> Kriz Direct in 17-092, pp. 2-3; Kriz Exhibit 1, p. 4.

<sup>12</sup> Kriz Direct in 17-092, Exhibit 1, pp. 3-4.

<sup>13</sup> Kriz Direct in 17-092, Exhibit 1, pp. 4, 6.

1 A. One must assume that the negative impact of costs shifts at least fully offsets the positive  
2 impacts. If this were not true, economic development projects across Kansas would be  
3 able to produce infinite growth through an endless cycle of cost shifts. Again, Mr. Kriz  
4 does not factor the negative impacts of cost shifts to other ratepayers into his analysis.  
5

6 **The New Transmission Business Model**

7 **Q. What are the key aspects of this new transmission business model?**

8 A. The new model strategically builds transmission projects that are paid for by others. The  
9 benefits of the project are substantially from the ability to make others pay for those  
10 projects.

11 **Q. How has this new business model developed?**

12 A. FERC has radically changed the landscape for transmission development. FERC's focus  
13 in transmission policy, has become a) increased reliability, b) greater socialization of costs;  
14 and c) reduced, if any, consideration of costs. Whether they intended to or not, FERC has  
15 reduced many of the old constraints of least cost planning and cost/benefit prudence in  
16 favor of a "more transmission" policy. Although open, transparent, and coordinated  
17 centralized planning at the RTO (SPP) level and coordinated local planning at the TO level  
18 are intended to provide the benefits of holistic least cost planning and prudence, there have  
19 been gaps and mixed levels of compliance. In the sparsely populated areas of western  
20 Kansas, the cost implications from the new concepts are magnified by the limited number  
21 of ratepayers. Even seemingly small cost shifts can compound to significantly impact rate  
22 payers. Sunflower and Mid-Kansas have been aggressively pushing back on these policies  
23 to limit the rate impacts on Kansas customers.

1   **Q.     Can you give an example of this push back?**

2   A.     Yes, since 2012, Mid-Kansas and Sunflower have been instrumental in restudying,  
3         redesigning or reconsidering SPP’s western Kansas projects, resulting in the reduction,  
4         deferral, or withdrawal of nearly \$190M of transmission projects on the Bulk Electric  
5         System. Considering Sunflower and Mid-Kansas together had transmission net utility  
6         plant of only \$115M in 2011, this is a significant savings for our customers. While we  
7         have been partially successful in constraining unnecessary costs at the Bulk Electric  
8         System level, Sunflower/Mid-Kansas transmission net utility plant still more than doubled  
9         to \$286M by 2017. The new project development battle ground is in local planning (sub-  
10        transmission and distribution) projects such as this one.

11   **Q.     Why do you believe this is the new battle ground?**

12   A.     Sunflower and Mid-Kansas are aware of projects (including this one) where the cost of the  
13         initial proposed project design is significantly greater than the least cost solution and/or is  
14         designed at a higher voltage to enhance the chances of getting someone else to pay for it.  
15         This approach is being actively marketed to municipals and cooperatives by industry  
16         consultants and at least one independent transmission company.<sup>14</sup>

17   **Q.     What do these consultants advise?**

18   A.     Below are some quotes from a recent “info-mercial” mailed out by MCR Performance  
19         Solutions<sup>15</sup> (emphasis added):

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<sup>14</sup> See testimony of Stephen J. Epperson in Docket 17-KPPE-092-COM.

<sup>15</sup> “Transmission Spending in SPP: Are You Obtaining Your Share of Transmission Investment?” April 2018 MCR Performance Solutions, LLC.

- 1           • Each entity “should analyze its current distribution and sub-transmission assets to  
2           determine if there are investments that can be made to make existing assets eligible  
3           for transmission revenue recovery.”
- 4           • “The lower the percentage of load a company has of the entire load in the joint  
5           pricing zone, the more attractive their investment is, because other customers will  
6           pay a portion of the costs.”
- 7           • “The larger the investment, the larger the dollar margin.”
- 8           • “Upgrading an aging transmission system and obtaining a rightful share of new  
9           transmission has become imperative as industry factors continue to drive increases  
10          in transmission rates and transmission costs become a more significant portion of  
11          the customer’s total bill.”

12          Note the point about small load ratio share entities in a zone. If a project owner has a larger  
13          load ratio share of the zone, expensive projects cause increased rates to the project owner.  
14          The owner’s desire to keep rates low is in alignment with the owner’s desire to keep project  
15          costs low. However, if a project owner has a small load ratio share, projects with high  
16          costs can result in reduced rates to the project owner and higher rates to everyone else in  
17          the zone. The profits and cost shift benefits for the owner from the project are larger than  
18          the project owner’s share of the cost of the project. This is a perverse incentive. Projects  
19          are no longer driven by sound economics and sufficient overall benefits, but by pursuing  
20          shifts in allocated costs to other customers. Potential project owners will seek to justify  
21          transmission investments by making claims of inadequate reliability and poor service.  
22          Rarely are these claims supported by documentation, and rarely do they relate to the  
23          customary standards for sufficient and efficient service. More importantly, I reject the idea

1 that the road to lower cost is through driving higher costs onto others. This is a race to  
2 higher electric transmission prices for everyone, including the ones building it.

3 **Q. Does MCR also view it as a race?**

4 A. Yes, their website at [www.mcr-group.com](http://www.mcr-group.com) references a white paper prepared by MCR  
5 entitled “The Transmission Arms Race Continues: Are You Obtaining Your Share of  
6 Transmission Investment?”. Basically, the paper abstract implies that if you are not  
7 investing as fast as everyone else, you are carrying higher costs from “them”, when, by  
8 investing more yourself, they could be carrying more of your costs.

9 **Q. Is any of this activity occurring or is it just hypothetical?**

10 A. It is occurring. I refer to South Central MCN, LLC’s (“South Central”) activity with Tri-  
11 County Electric Cooperative, Inc. Originally, Tri-County submitted a filing through SPP  
12 to FERC to uplift the costs of its facilities to the SPS<sup>16</sup> pricing zone. SPP filed the request  
13 with FERC and FERC subsequently approved the request. SPS became aware that its rates  
14 had risen because of the uplift. Xcel Energy Services Inc. (XES), on behalf of SPS,  
15 complained to FERC and FERC subsequently ruled the Tri-County facilities were radial  
16 and not eligible for uplift. These facilities have since been acquired by South Central.  
17 South Central has again filed for uplift of the facility costs based upon significant new  
18 capital investments. XES has again complained. See the Comments of XES in FERC  
19 Docket ER18-1267, attached hereto as **Exhibit HDR-9**.

20 **Q. Does the Tri-County/South Central filing epitomize the new business model?**

21 A. It does and XES’s comments could not sum up the concerns any better. I found the  
22 following XES comments and allegations instructive:

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<sup>16</sup> Southwest Public Service Company (SPS) is a utility operating company affiliate of Xcel Energy Services Inc.

- 1 • Page 7. “As XES previously warned, South Central is attempting to cram significant  
2 new capital into potentially unneeded transmission development so South Central can  
3 then transfer control to SPP and earn its rate of return on those investments from other  
4 SPP transmission service customers who receive no benefits from those facilities and  
5 had no role or opportunity for input on the planning of those facilities.”  
6
- 7 • Page 8. “The centrality of cost-shifting in the South Central business model is also  
8 highlighted by South Central’s ability to force Tri-County to buy back all of the  
9 facilities if the cost shift to SPP is not successful. As stated in South Central’s Section  
10 203 application in Docket No. EC15-206-000, once the expected upgrades are  
11 completed, the costs of those upgrades as well as the formerly radial Tri-County  
12 facilities “are expected to be included in a larger SPP pricing zone, thereby reducing  
13 [Tri-County’s] overall transmission costs.”  
14
- 15 • Page 9. “But even though South Central was a public utility transmission provider  
16 when these facilities were planned and developed, South Central never followed any  
17 planning procedures outlined in a tariff when developing those facilities and that  
18 planning was not subject to SPP oversight. Moreover, South Central did not follow any  
19 of the Commission’s open access requirements for transmission planning despite  
20 stating that the assets it acquired from Tri-County “will be subject to the open access  
21 policies of the Commission.” Instead, the facilities to be developed were agreed upon  
22 by Tri-County and South Central as part of the initial acquisition, without any claim  
23 that those facilities were needed.”

24 **Q. Could these issues impact Kansas?**

25 A. Yes. Closer to home, GridLiance, the parent company of South Central, is working with  
26 KPP and the City of Winfield to purchase a line owned by the City of Winfield.<sup>17</sup>

27 **Q. What strategies are employed to achieve shifting costs to others?**

28 A. The number of strategies keeps increasing but I have identified the following:

- 29 1. **Bypass local planning** (or change local planning or get your own local planning)  
30 - This allows an entity to build what it wants, without consideration of the  
31 implications on others. This is one of the issues cited by XES in the South Central  
32 docket. South Central is employing its own local planning criteria to build what it

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<sup>17</sup> See article attached as **Exhibit HDR-10**.

wants and then uplifting it to the SPS zone so others can pay for it. At issue is “Does the local planning criteria of the uplift zone (SPS) have priority over the local planning criteria of the uplifting transmission owner (South Central)?”

2. **Loop a Line** – Lines that are looped, and not radial, are easier to uplift to achieve cost shifting. This is also an issue in the XES comments. South Central is converting radial lines to looped lines by building additional facilities. XES is concerned that this is driven solely by the cost shift benefits.

3. **Increase the Voltage** – Higher voltage lines are easier to uplift and can shift out of local planning to SPP planning, where oversight is sometimes less.

4. **Connect to a Different Zone** – This is similar to “Loop a Line” but connecting to a different zone increases the likelihood of uplift under SPP rules.

5. **Add a Customer** – Connecting an additional customer aids in classifying facilities as transmission. The value of the cost shift can easily exceed the cost to interconnect a new customer, or even to entice a new customer to interconnect.

**Q. Does KPP embrace these cost shift strategies?**

A. Yes. KPP is already using “bypass local planning.” KPP has rejected the least cost results of the local planning process in favor of a more expensive project that increases KPP’s opportunity to shift costs to others. KPP, as a public utility, should put the public interest ahead of its self-interest, which in this instance means seeking and supporting the option that provides the lowest total cost to serve the public.

**Q. Your analysis shows a net public cost for the Kingman Direct Connection. Why does KPP show a benefit from this project?**

1 A. The Kingman Direct Connection only produces a net benefit to KPP by being able to shift  
2 the LADS charges to other ratepayers. It does not produce a net benefit to the public.

3 **Q. How will those costs shifts occur?**

4 A. Even without uplift to the zone, by building a more expensive project than necessary, KPP  
5 will shift the cost of its LADS charges to other customers. The LADS cost shift is valued  
6 by KPP at up to \$11.6M<sup>18</sup> and is the largest benefit identified by KPP. As discussed above,  
7 KPP's second largest benefit, selling its excess capacity for the next 20 years, is not  
8 achievable because KPP does not have excess capacity after 2022. The LADS cost shift  
9 benefit to KPP is sufficient to pay for the higher cost of the project to KPP. This LADS  
10 charge shift will occur even without uplifting the project to the Mid-Kansas zone. In  
11 pursuing the Kingman Direct Connection project, KPP has put its self-interest ahead of the  
12 public interest.

13 **Q. Are you saying customers should never be allowed to leave the 34.5 kV system?**

14 A. No. There will certainly be occasions where the least cost project to serve the public results  
15 in (not justifies) a customer leaving the local access system.

16 **Q. Does KPP discuss any additional cost shift strategies to achieve uplift?**

17 A Yes. KPP discusses the "Add a Customer" strategy. In his Direct Testimony, pp. 23-24,  
18 Mr. Holloway testifies:

19 "...KPP stands ready, willing and able to work with the City of Kingman to  
20 provide direct access to SPP OATT service, up to and including placing  
21 applicable portions of the Kingman Direct Connection and Kingman's  
22 existing 34.5 kV line under the SPP OATT. Should other entities in the area  
23 wish to access the SPP transmission network by interconnection with these  
24 facilities, KPP and the City of Kingman will provide the necessary  
25 transmission service without the needless restrictions SPEC places on  
26 transmission service on use of its 34.5 kV transmission service."  
27

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<sup>18</sup> Holloway direct testimony, Exhibit LWH-3, page 14, Table 11.

1 By “needless restrictions” he means “cost”. Mr. Holloway is saying KPP is actively  
2 looking at strategies to also shift its \$5M of project costs and O&M costs to others as well.<sup>19</sup>  
3 Such a customer addition would effectively provide both KPP and the interconnecting  
4 customer with free use of the Kingman Direct Connection facilities. KPP would potentially  
5 be able to shift those costs to the Mid-Kansas zone, where 97% would be paid for by others.  
6 Rather than the new customer paying a reasonable portion of the Kingman Direct  
7 Connection, nearly all the costs would be shifted to other ratepayers. Since making this  
8 happen could shift an additional \$5M or more in costs to others, the financial incentives to  
9 entice another customer to connect are high.

10 **Q. Are you saying customers should never be allowed to connect to new or different**  
11 **facilities?**

12 A. No. Since the Semcrude Substation Upgrade is electrically equivalent but at a lower cost,  
13 any new customer connecting to the Kingman 34.5 kV line will be still be served at a lower  
14 total cost to the public.

15 **Q. Does KPP discuss some of the other cost shift strategies to achieve uplift?**

16 A. Yes. KPP indirectly discusses “Loop a Line” and “Connect to a Different Zone”. At  
17 Exhibit LWH-3, p. 2, under a section titled “Alternatives Not Considered”, KPP considers  
18 interconnections at Rago, Westar (a different zone), and other locations. KPP discusses  
19 these in the context of service and reliability. However, these interconnections, while  
20 bringing more costs and likely few benefits, would potentially allow KPP to shift all the  
21 costs of multiple projects (the Kingman Direct Connection, the existing Kingman 34.5 kV  
22 line, as well as the new interconnection) to the Mid-Kansas zone. Since they would only

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<sup>19</sup> Holloway Direct Testimony, pp. 23-24.

1 pay 3% of the final costs, they could afford to spend well over \$60 million on such a project  
2 and still come out ahead because of the cost shift. Effectively, there is no cost barrier.

3 **Q What would be the likely driver of such projects?**

4 A. As described above, these are projects are not driven by sufficient public benefits, but  
5 rather, by shifts in allocated costs to other customers. If not constrained by the public  
6 utilities themselves, then these costs can only be constrained by the Commission.

7  
8 **34.5 kV Business Model**

9 **Q. What is the advantage of keeping the LADS as a separate charge apart from the SPP**  
10 **revenue requirement?**

11 A. One consideration is that it more closely associates the payment costs with those who  
12 should pay it. It adds cost discipline by more closely aligning charges with cost causers.  
13 The current model is nothing new or out of the ordinary. The separate charge is a  
14 continuation of the Aquila tariffs. Aquila had a FERC approved separate charge for its  
15 lower voltage system back to at least 1995. There are customers who are only on the high  
16 voltage system who do not benefit from the low voltage system. By having a separate  
17 charge for the low voltage system, only those customers who are on the low voltage system  
18 are charged to use it. If the cost are socialized among all customers, customers who don't  
19 use the low voltage system are forced to pay for it. This separate charge attempts to assign  
20 greater costs to cost causers on the lower voltage system rather than socializing those costs  
21 across both those customers only on the higher voltage system and those customers on the  
22 lower voltage system. This approach drives greater investment discipline and keeps costs  
23 lower for all customers. Waste will not be minimized and efficiency maximized when

1           valuable limited resources (transmission capacity) can be obtained for free. Our members  
2           have clearly not chosen the path of least resistance. However, the member owners feel it  
3           is the path that is more likely to keep rates lower for all customers while maintaining  
4           reliable service, all in the public interest.

5   **Q.   In your opinion, is the approval of the Kingman Direct Connection in the public**  
6   **interest?**

7   A.   No. The Kingman Direct Connection is more than twice the net cost to the public of the  
8       least cost project that came out of the Commission approved local planning process. The  
9       planning process determined that the SemCrude Substation Upgrade was the least cost  
10      option for the public. My analysis supports the local planning recommendation.  
11      Furthermore, the Commission approval of KPP's application will greatly undermine the  
12      objectives of local planning in achieving the least cost solution.

13   **Q.   Does this conclude your testimony?**

14   A.   Yes.