

**BEFORE THE KANSAS CORPORATION COMMISSION**  
**OF THE STATE OF KANSAS**

In the Matter of the Annual Filing of )  
Southern Pioneer Electric Company for )  
Approval to Make Certain Changes to Its )  
Charges for Electric Services Pursuant to ) Docket No. 16-SPEE-\_\_\_\_\_-RTS  
the 34.5kV Formula Based Rate Plan )  
Approved in Docket No.16-MKEE-023- )  
TAR. )

**PREFILED DIRECT TESTIMONY OF**  
**RICHARD J. MACKE**  
**VICE PRESIDENT, ECONOMICS, RATES, AND BUSINESS**  
**PLANNING**  
**POWER SYSTEM ENGINEERING, INC.**

**ON BEHALF OF**

**SOUTHERN PIONEER ELECTRIC COMPANY**

May 3, 2016

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**PART I - QUALIFICATIONS**

**Q. Please state your name and business address.**

A. My name is Richard J. Macke. My business address is 10710 Town Square Drive NE, Suite 201, Minneapolis, Minnesota 55449.

**Q. What is your profession?**

A. I am a Vice President and lead the Economics, Rates, and Business Planning Department at Power System Engineering, Inc. ("PSE"), which is headquartered at 1532 W. Broadway, Madison, Wisconsin 53713.

**Q. Please describe the business activities of PSE.**

A. PSE is a consulting firm serving electric utilities across the country, but primarily in the Midwest. Our headquarters is in Madison, Wisconsin with regional offices in Indianapolis, Indiana; Minneapolis, Minnesota; Marietta, Ohio; and Sioux Falls, South Dakota. PSE is involved in: power supply, transmission and distribution system planning; distribution, substation and transmission design; construction contracting and supervision; retail and wholesale rate and cost of service ("COS") studies; economic feasibility studies; merger and acquisition feasibility analysis; load forecasting; financial and operating consultation; telecommunication and network design, mapping/GIS; and system automation including Supervisory Control and Data Acquisition ("SCADA"), Demand Side Management ("DSM"), metering, and outage management systems.

**Q. Please describe your responsibilities with PSE.**

A. I lead and direct staff in Indiana, Kansas, Minnesota, Ohio and Wisconsin who provide economic, financial, and rate-related consulting services to investor-owned, cooperative and municipal utilities as well as regulators and industry associations. These services include:

- Cost of Service Studies.
- Capital Credit Allocations.
- Demand Response.
- Distributed Generation Rates.
- Energy Efficiency.
- Financial Forecasting.
- Individual Customer Profitability.
- Large Power Contract Rates/Proposals.
- Line Extension Policies/Charges.
- Load Management Analysis.
- Load Forecasting.
- Market and Load Research.
- Merger Analysis.
- Pole Attachment Charges.
- Policy and Board Audits.
- Power Cost Adjustments.
- Rate Consolidation.
- Retail Rate Design and Analysis.
- Special Fees and Charges.
- Statistical Performance Measurement (Benchmarking).
- Value of Service.

**Q. What is your educational background?**

A. I graduated from Bethel University in St. Paul, Minnesota in 1996 with a Bachelor of Arts degree in Business, which included an emphasis in Finance and Marketing. In 2007, I received my Masters of Business Administration degree, with an emphasis in Finance and Strategic Management, from the University of Minnesota in Minneapolis, Minnesota. I have also attended numerous industry seminars/courses on cost of service, pricing, valuation, distributed generation, etc.

**Q. What is your professional background?**

A. From 1996 to 1998, I was employed by PSE in its Minneapolis, Minnesota office as a Financial Analyst in the Utility Planning and Rates Department. My work responsibilities primarily were focused on retail rate studies, including revenue requirements and bundled/unbundled COS studies. I also provided analyses used to support testimony, mergers and acquisitions analysis, and financial forecasting.

From 1998 to 1999, I was employed as a Senior Analyst by Energy & Resource Consulting Group, LLC in Denver, Colorado, a financial, engineering, and management consulting firm. I performed consulting services related to electric, gas, and water rate studies. As part of the Legend Consulting Advisor Team contracted to the City Council of the City of New Orleans,

1 Louisiana, I assisted in various electric and gas utility matters. I also provided general  
2 financial, management, and public policy support to clients.

3 I rejoined PSE in 1999; and from 1999 to 2002, I held the position of Rate and Financial  
4 Analyst in the Rates and Financial Planning Department. From 2002 to March 2008, I held  
5 the position of Senior Rate and Financial Analyst in the Utility Planning and Rate Division.  
6 My responsibilities have included performing complex financial analyses, such as rate studies  
7 consisting of determination of revenue requirements, bundled and unbundled COS analysis,  
8 and rate design. Other responsibilities included performing analysis of special rates and  
9 programs, key account analyses, financial forecasting, merger and acquisition analysis,  
10 activity-based costing, policy development and evaluation, and other financial analyses for  
11 various PSE clients. Additional responsibilities included strategic planning, litigation support,  
12 regulatory compliance, capital expenditure and operational assessments, and advisement.  
13 From April 2008 to June 2010, I held the position of Leader, Rates and Financial Planning. In  
14 July 2010, my title changed to Vice President, Rates and Financial Planning. Since June 2011,  
15 I have held the position of Vice President, Economics, Rates, and Business Planning. In this  
16 capacity, I continue to provide, amongst other things: (1) rate, financial, and economic  
17 consulting services to clients,(2) management and leadership to the Economics, Rates, and  
18 Business Planning Department, and (3) management and leadership at the corporate level to  
19 PSE through participation on the Executive Committee and Board of Directors.

20 **Q. Have you previously presented testimony before the Kansas Corporation Commission**  
21 **(“KCC” or “Commission”)?**

22 A. Yes. I submitted testimony on behalf of: Pioneer Electric Cooperative, Inc. in Docket No. 09-  
23 PNRE-563-RTS; Wheatland Electric Cooperative, Inc. in Docket No. 09-WHLE-681-RTS;  
24 Mid-Kansas Electric Company, LLC (“Mid-Kansas”) in Docket Nos. 09-MKEE-969-RTS, 11-  
25 MKEE-439-RTS, 12-MKEE-491-RTS, 12-MKEE-380-RTS, 13-MKEE-452-MIS, and 16-

1 MKEE-023-TAR; and Southern Pioneer Electric Company in Docket Nos. 14-SPEE-507-  
2 RTS, 15-SPEE-161-RTS, and 15-SPEE-519-RTS.

3 **Q. Do you have any other relevant experience?**

4 A. Yes. I have directed well over 100 rate and cost of service (COS) studies and numerous other  
5 rate and financial related projects. Many times these projects were conducted for self-regulated  
6 electric utilities. I have also performed such analysis which was filed in regulated rate cases  
7 on behalf of cooperatives in Iowa, Kansas, Michigan, Minnesota, New Hampshire, and Texas.

8 I have also conducted seminars and made presentations to utilities, consumers, and industry  
9 groups on a variety of topics including: COS, rate design, rate change communications, line  
10 extension policies, mergers and acquisitions, DSM pilot programs, conservation and energy  
11 efficiency, distributed generation rates, and industry trends.

12  
13 **PART II - SUMMARY OF DIRECT TESTIMONY**

14 **Q. What is the purpose of your testimony in this proceeding?**

15 A. The purpose of my testimony is to support the Application submitted in the instant Docket by  
16 Southern Pioneer Electric Company ("Southern Pioneer") for the approval of its 34.5kV  
17 Formula Based Rate ("FBR") Annual Update filing for the 2015 Test Year.

18 **Q. Are there particular Exhibits to Southern Pioneer's Application that you will be**  
19 **describing and explaining?**

20 A. Yes. My testimony concerns, and is supported by, the following Exhibits to the Application  
21 in the instant docket:

22 Exhibit 3 - 34.5KV FBR Calculation for Test Year  
23 Exhibit 13 - Proposed Tariff Sheets Including Rate Adjustment

24 **Q. Have the exhibits been prepared by you or under your supervision?**

25 A. Yes.

**Q. Please briefly recap Southern Pioneer's 34.5kV FBR.**

A. The 34.5KV FBR, as approved for Southern Pioneer by the Commission in Docket No. 16-MKEE-023-TAR ("16-023 Docket"), is a three-year ratemaking plan that provides for the annual recovery of the costs associated with owning, operating, and maintaining Southern Pioneer's 34.5 kV sub-transmission system. In essence, the 34.5kV FBR serves as a method for periodic adjustments to the following rates: (1) a demand rate for the wholesale Local Access Delivery Service ("LADS") over Southern Pioneer's 34.5kV sub-transmission facilities; as well as (2) the resulting retail rates for those Southern Pioneer retail customers taking service over its 34.5kV sub-transmission facilities. The details of the predetermined and agreed-upon calculations for the corresponding rate adjustments are outlined in Section D of the Commission-approved Southern Pioneer's 34.5kV FBR Protocols ("Protocols"), attached as Exhibit A to the March 10, 2016 Commission Order Approving Settlement and April 26, 2016 Order Granting Petition for Clarification in the 16-023 Docket. The purpose of this formulaic ratemaking mechanism is to allow for timely adjustments to the aforementioned rates without incurring the substantial expense and/or experiencing regulatory lag typically associated with the preparation of a full rate case.

**Q. What data formed the basis for Southern Pioneer's 2016 34.5KV FBR calculation?**

A. Consistent with the Protocols, the calculation was based upon a 2015 Historical Test Year. As such, it utilizes historical figures from Southern Pioneer's December 2015 Financial and Statistical Report ("Form 7"), Trial Balance, Payroll Journal.<sup>1</sup>

**Q. Please summarize the results of Southern Pioneer's 2016 34.5KV FBR calculation.**

A. Completing the 34.5kV FBR template calculation consistent with the Protocols approved by

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<sup>1</sup> Included in Southern Pioneer's Application as part of Exhibits 2 (Form 7 for test year and 2 prior years), 4 (Trial Balances for test year and 2 prior years), and 5 (Payroll Journals for test year and 2 prior years).

1 the Commission in the 16-023 Docket results in the Revenue Requirement of \$5,072,909.  
2 Considering this is the first Annual Update of the 34.5kV FBR, Section E, Annual True-Up of  
3 the Protocols is not applicable in this year's filing.<sup>2</sup> However, this year, Southern Pioneer  
4 elected to apply a \$480,914 payment it received from the Kansas Municipal Energy Agency  
5 ("KMEA") in accordance with the Commission Order in Docket 15-MKEE-461-TAR as an  
6 offset to the 34.5kV FBR calculated Revenue Requirement, which resulted in the net \$  
7 \$4,591,995 for the final total dollars allocable to the 34.5kV system.<sup>3</sup> In accordance with  
8 Section D.4 of the Protocols, the resultant net Revenue Requirement amount was divided by  
9 the total billing demand for the Historical Test Year to arrive at the unadjusted wholesale  
10 LADS rate of \$4.72/kW.<sup>4</sup> Next, a \$0.316/kW Property Tax Surcharge applicable to the 34.5kV  
11 system is subtracted to arrive at the final LADS rate of \$4.41/kW, a \$0.10/kW decrease from  
12 Southern Pioneer's current rate for LADS of \$4.51/kW, last approved in Docket No. 15-SPEE-  
13 161-RTS. Translated to the total dollars, the 10 cents per kW constitutes around \$100,700 in  
14 an overall decrease.<sup>5</sup> Applying Load Ratio Share ("LRS"), the (\$42,896), or about 43 percent,  
15 is applicable to Southern Pioneer's wholesale LADS customers, and the remaining (\$57,803),  
16 or 57 percent, is applicable to Southern Pioneer's retail customers. In accordance with Section  
17 D.5 of the Protocols, the decrease is to be spread amongst the retail rate schedules of Southern  
18 Pioneer based upon the Test Year base revenue (i.e., gross revenue less purchased power  
19 expense). The detailed 34.5KV FBR calculation for the Test Year is contained in Exhibit 3  
20 attached to the Application filed in the instant Docket. Table 1 below summarizes the revenue  
21 adjustment in total and the allocation to each of the applicable retail rate schedules.  
22

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23 <sup>2</sup> Per E.3 of the Protocols, the initial True-Up will be applicable with the third Annual Update filing.

24 <sup>3</sup> The noted payment, booked as a revenue in 2015, was attributable to the LADS and PTS rate revenue.

25 <sup>4</sup> The billing demand for the Historical Test Year, shown on page 7 of Exhibit 3, is provided by Mid-Kansas Electric Company, Southern Pioneer's Generation and Transmission provider.

<sup>5</sup> Applied to Test Year total billing determinants.



**TABLE 1**

<b>SOUTHERN PIONEER ELECTRIC COMPANY</b>			
<b>Allocation of 34.5kV FBR Retail Rate Adjustment to Rate Classes</b>			
	<b>Test Year Rate</b>		
	<b>Schedule</b>	<b>34.5kV FBR</b>	<b>Change</b>
<b>Rate Schedule</b>	<b>Revenue</b>	<b>Adjustment</b>	<b>As Percent *</b>
	<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>
Residential Service (RS)			
General Use	15,768,066	(23,759)	-0.2%
Space Heating	937,451	(1,334)	-0.1%
General Service Small (GSS)	1,787,831	(2,921)	-0.2%
General Service Large (GSL)	16,702,915	(21,627)	-0.1%
General Service Space Heating	596,672	(667)	-0.1%
Industrial Service (IS)	3,471,395	(3,485)	-0.1%
Interruptible Industrial Service (INT)	-	-	0.0%
Real -Time Pricing (RTP)	(5,467,259)	-	0.0%
Sub-transmission Level Service (STR)	23,263,116	-	0.0%
Municipal Power Service (M-I)	205,095	(287)	-0.1%
Water Pumping Service (WP)	640,798	(854)	-0.1%
Irrigation Service (IP-I)	308,410	(454)	-0.1%
Temporary Service (CS)	19,574	(35)	-0.2%
Lighting	1,039,269	(2,380)	-0.2%
<b>Total Retail Rates</b>	<b>59,273,330</b>	<b>(57,803)</b>	<b>-0.1%</b>

**PART III - ADJUSTMENTS TO THE ACTUAL TEST YEAR RESULTS**

**Q. You stated that 2015 actual results formed the basis for the 34.5KV FBR calculation. The Protocols specify a limited number of adjustments to be made. What adjustments did you make to Southern Pioneer’s actual 2015 financial results in completing the 34.5kV FBR template?**

**A. Consistent with Section D.1 of the Protocols, adjustments to reflect the projected amounts for the Budget Year were made to the following categories of costs<sup>6</sup>:**

<sup>6</sup> Protocols also direct to remove Acquisition Premium amortization. Given the approved Template, populated as Exhibit 3, only lists Transmission and General Plant Depreciation, the amortization of Acquisition Premium is excluded by default and no further adjustment is necessary. Additionally, Protocols direct to make certain adjustments to Distribution Operation and Maintenance (“O&M”) expenses if lower voltage distribution plant is used to provide LADS. Southern Pioneer notes it is not applicable at this time. Therefore, there were no adjustments shown to Distribution O&M.

- Interest on Long-Term Debt
- Interest Expense - Other
- Debt Service Payments

In addition, Other Taxes were adjusted to reflect cash only portion for the Test Year.

Further, per Sections D.1.b and D.1.g of the Protocols, and in recognition of the Commission policy adopted per K.S.A. 66-101f (a), Administrative and General (“A&G”) expense and “Other Deductions” was adjusted to remove certain amounts associated with the dues, donations, charitable contributions, promotional advertising, penalties and fines, and entertainment expenses incurred during the Test Year.<sup>7</sup> The excluded amounts are noted on Page 8 of Exhibit 5. The supporting detail for the exclusions is provided by Southern Pioneer in Exhibit 12 attached to the Application in the instant Docket.

Finally, Section D.2 of the Protocols mandates that certain revenue and expense categories be further allocated to remove the costs unassociated with Southern Pioneer’s 34.5kV sub-transmission facilities.

**Q. Please describe the adjustments made to the 2015 Test Year Interest on Long-Term Debt.**

A. The historical amount of Interest on Long-Term Debt for the 2015 Test Year was \$ \$5,645,848 as reported on Southern Pioneer’s Form 7. The Protocols, in Section D.1.e, specify that the actual amount be adjusted to reflect Southern Pioneer’s budgeted amount for 2016. Southern Pioneer’s budgeted long-term interest expense is \$5,660,152, and so an adjustment of \$14,304 was included. The details of this adjustment are shown in Exhibit 3, page 4, lines 18-21.

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<sup>7</sup> K.S.A. 66-101f (a) allows adoption of a policy of “ disallowing a percentage, not to exceed 50%, of utility dues, donations and contributions to charitable, civic and social organizations and entities, in addition to disallowing specific dues, donations and contributions which are found unreasonable or inappropriate.” Additionally, Protocols direct to make certain adjustments to Distribution Operation and Maintenance (“O&M”) expenses if lower voltage distribution plant is used to provide LADS. Southern Pioneer notes it is not applicable at this time. Therefore, there were no adjustments shown to Distribution O&M.

**Q. Please describe the adjustments made to the 2015 Test Year Interest Expense - Other.**

A. The historical amount of Other Interest Expense for the 2015 Test Year was \$24,974 as reported on Southern Pioneer's Form 7. Consistent with Section D.1.f of the Protocols, the amount has been adjusted to reflect Southern Pioneer's 2016 Budget for short-term interest expense of \$48,227. To accomplish this, an adjustment in the amount of \$23,253 was included. The details of the adjustment can be found in Exhibit 3, page 4, lines 28-31.

**Q. Please describe the adjustments made to the 2015 Test Year Debt Service Payments.**

A. Debt Service Payments are comprised of interest and principal payments on debt outstanding. Since I previously discussed the adjustments to interest expense, I will here focus on the adjustment to principal payments. The historical amount of Principal Payments for the 2015 Test Year was \$1,788,305 (as reported on Southern Pioneer's Form 7). The Protocols, in Section D.1.h, require that the Test Year be adjusted to reflect Southern Pioneer's budgeted amount for 2016. Southern Pioneer's budget for 2016 principal payments is \$2,223,486, so an adjustment in the amount of \$435,181 was included. This adjustment is detailed in Exhibit 3, page 4, lines 37-40.

**Q. Please describe the adjustments made to the 2015 Other Taxes.**

Debt Service Payments are comprised of interest and principal payments on debt outstanding.

A. Per Section D. 1.d, Other Taxes should be adjusted to reflect cash only portion for the Test Year. Southern Pioneer paid \$222,928 in cash taxes in 2015, as evidenced in the historical Test Year balances for the General Ledger ("GL") accounts 236.71 and 409.1. However, it is necessary to include the additional amount as described below:

The Debt Service Coverage ("DSC") FBR Annual Update filing, applicable to the Company's distribution system, is being submitted by Southern Pioneer coincidental with the instant Docket. The DSC-FBR mandates (per Commission-approved Protocols applicable to that rate adjusting mechanism in accordance with

the 13-MKEE-452-MIS Docket) an additional \$78,469 in incremental cash tax be recognized in conjunction with the applicable annualization of the retail rate revenues due to a mid-year rate change, approved by the Commission on July 30, 2015 in the Docket No. 15-SPEE-519-RTS. 8

The \$222,928 payments, combined with the DSC-FBR mandated \$78,469, result in the \$301,397 amount for the adjusted cash portion for Other Taxes for the Test Year. Accordingly, a downward adjustment of \$1,018,679 is applied to this expense category, as noted in Exhibit 3, page 4, lines 13-16.

**Q. Please describe the adjustments made to the 2015 Test Year Operating Expenses in conjunction with the Protocols' Section D.1, parts b and g, and the Commission's policy per K.S.A. 66-101f (a).**

A. The historical amounts of the following operating expenses, assignable to the 34.5kV FBR, were adjusted as shown:

- Administrative and General Expense of \$1,833,655 was reduced by \$25,328, resulting in the \$1,808,327 adjusted amount.
- Other Deductions of \$1,424,762 was reduced by \$38,610, resulting in the \$1,386,152 adjusted amount.

Overall, \$63,938 was removed from the 34.5kV FBR. The summary is shown in Exhibit 3, page 8. The detailed listings of the aforementioned items by GL account and the corresponding adjustments performed can be found in Exhibit 12 attached to the Application in the instant Docket.

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<sup>8</sup> See Exhibit 3, page 5 in the Southern Pioneer's 2016 DSC-FBR filing.

1 **Q. You have explained how the historical overall system (i.e., transmission and distribution)**  
2 **costs were adjusted in accordance with the 34.5kV FBR Protocols. Next, please describe**  
3 **how the adjusted system-wide financial results were allocated to the 34.5kV system to**  
4 **arrive at Southern Pioneer’s 34.5kV FBR Revenue Requirement that includes only those**  
5 **costs which are associated with the Company’s 34.5kV sub-transmission facilities used in**  
6 **the provision of LADS.**

7 A. Section D.2 of the Protocols specifies the methodology for allocating applicable total system-  
8 wide operating expenses and margin requirements to the 34.5kV system so as to arrive at the  
9 Revenue Requirement associated with Southern Pioneer’s 34.5kV sub-transmission facilities  
10 used to provide LADS.<sup>9</sup> Following is an explanation of the allocations:

- 11 • Per Section D.2.a of the Protocols, the A&G expenses are to be allocated using a Labor  
12 ratio (“LAB”), where the latter is calculated as a ratio of Transmission Labor to Total  
13 Non-A&G Labor. The corresponding labor dollar amounts are found in the Labor  
14 Amount Column of the December 31, 2015 Payroll Journal, included with Exhibit 5  
15 attached to the Application filed in the instant Docket. Next, Exhibit 3, page 5, lines  
16 7-20 show how the resultant LAB ratio of 0.045913 is calculated. Applying LAB to  
17 the \$1,808,328 in Adjusted Historical Test Year A&G expense assigns \$83,026 to the  
18 34.5kV FBR, as shown in Exhibit 3, page 1, Line 10, Column (i).
- 19 • Depreciation and Amortization Expense for Transmission plant is to be calculated  
20 directly (a.k.a. “direct-assignment”) in accordance with Section D.2.b of the Protocols.  
21 Therefore, the entire 2015 historical amount of \$609,836 in Transmission Depreciation  
22 Expense is assigned to the 34.5kV FBR. The same Section D.2.b directs to allocate  
23

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24  
25 <sup>9</sup> Again, to clarify, “system-wide,” as used in this context, is intended to mean combined distribution and transmission.

the historical amount of the General Plant Depreciation Expense on the LAB ratio, ultimately assigning \$25,389 to the 34.5kV FBR, as evidenced on Page 1, Line 14, Column (i) of Exhibit 3.

- Tax Expense – Other is to be allocated based on the percentage of calculated margin using the actual cash taxes paid during the Test Year. As mentioned above on pages 9-10, Southern Pioneer is also filing an Annual Update to its DSC-FBR, where the adjusted Test Year Tax Expense - Other, cash portion of \$301,397, is already allocated on the operating margins to the Southern Pioneer’s distribution system at 83.5 percent.<sup>10</sup> Accordingly, the remaining 16.46 percent is assignable to the 34.5kV system. The allocation results in the \$49,610 being assigned to the 34.5kV FBR, as evidenced in Exhibit 3, page 1, line 16, column (i).
- For allocating Other Deductions, Interest on Long-Term Debt, Other Interest, Principal Payments, and Offsets to Margin Requirements, the Net Transmission Plant Ratio (“NP”) is calculated. The NP, as defined in Section D.2 of the Protocols, reflects the ratio of Transmission Net Plant to Total Net Plant for the Test Year.<sup>11</sup> The calculation of the NP allocation factor is detailed on Page 5, Lines 22-47 of Exhibit 3. The results of applying the calculated Budget Year NP of 0.286309 to the corresponding Adjusted Historical Test Year expenses are evidenced on Page 1, Lines 15-26, Column (i) of Exhibit 3.<sup>12</sup>
- The Transmission Operation and Maintenance (“O&M”) Expense is a category that is directly related to the provision of the LADS. Therefore, \$1,123,753 in Transmission

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<sup>10</sup> See Exhibit 3, page 1, Line 16 in the Southern Pioneer’s 2016 DSC-FBR filing.

<sup>11</sup> Net Transmission Plant includes a General Plant allocation based upon a LAB ratio.

O&M was assigned 100 percent (i.e., using allocator of 1.0) to the 34.5kV FBR Revenue Requirement.

**PART IV - REVENUE REQUIREMENT AND RATE CALCULATION**

**Q. How was Southern Pioneer's 34.5kV FBR Revenue Requirement for Year 2016 calculated after performing all of the adjustments and allocations detailed above?**

A. Per Section D.4 of the Protocols, the Total 34.5kV FBR Revenue Requirement is a sum of all the applicable operating expenses and margin requirements. Specifically, after the 2015 actual operating expenses were adjusted to the budgeted levels, as allowed by the Protocols, and allocated to reflect the portion applicable to the Southern Pioneer's sub-transmission facilities used in the provision of the LADS, the Total Cost of Service was quantified at \$3,902,843, as evidenced on Page 1, Line 21, Column (i) of Exhibit 3. Next, the Net Margin Requirement was calculated using 1.75 OTIER MDSC metrics, as contemplated in Section D.3 of the Protocols. Applying the \$1,170,066 in Net Margin Requirement generates the 34.5kV FBR Total Revenue Requirement of \$5,072,909. Even though the True-Up does not apply in this first year's filing, as already noted on page 6, Southern Pioneer elected to apply a one-time \$480,914 offset to the 34.5kV Revenue Requirement in this year's filing to recognize KMEA payment as described above. The resultant Net Revenue Requirement is \$4,591,995.

**Q. Please explain how the resultant wholesale demand rate for LADS was determined.**

A. Section D.4 of the Protocols further directs that the 34.5kV FBR Revenue Requirement is to be divided by the Total Billing Demand for the Test Year. The latter is comprised of both retail and wholesale billing determinants (as provided by Mid-Kansas Electric Company, LLC - a Generation and Transmission Company who serves as Southern Pioneer's wholesale power supplier, as well as metering and billing agent for Southern Pioneer's wholesale LADS over its 34.5kV sub-transmission facilities), and then factoring in the appropriate losses percentages,

as specified in Southern Pioneer's Commission-approved LADS tariff. For the 2015 Test Year, the Total Billing Demand for Southern Pioneer's 34.5kV system was quantified at 972,414 kW, as reflected on Page 1, Line 37, Column (i) of Exhibit 3 and further detailed on Page 7 of the same Exhibit. As already noted on page 6, Dividing \$4,591,995 in Revenue Requirement by 972,414 kW produces the rate of \$4.41/kW, signaling a 10 cents per kW reduction compared to the current effective LADS rate. Southern Pioneer's wholesale customers taking LADS service on its 34.5kV sub-transmission facilities will be charged this resultant demand rate directly. For the retail customers taking service on its 34.5kV sub-transmission facilities, the resulting per kW decrease is converted to the total dollar amount of (\$57,803) using the respective LRS. Next, it is allocated to individual rate classes.

**PART V - ALLOCATION OF THE REVENUE ADJUSTMENT TO RETAIL RATE**  
**SCHEDULES**

**Q. Please describe how you allocated the \$57,803 revenue decrease to the individual rate schedules.**

A. Section D.5 of the Protocols details that any rate adjustment resulting from the 34.5kV FBR Plan is to be allocated to the applicable retail rate classes on the Test Year base revenues by rate schedule (including Energy Cost Adjustment, or ECA, less sum of power supply costs for the Test Year, determined by applying the average cost of power supply per kWh from the most recent Commission-approved COS).<sup>13</sup>

Consistent with the Protocols, the 2015 Test Year 34.5kV FBR Retail Rate Adjustment was apportioned accordingly:

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<sup>13</sup> The most recent class cost of service, or CCOS, for Southern Pioneer, was submitted in Docket No. 12-MKEE-380-RTS in Exhibit RJM-14 contained in the Rebuttal Testimony of Rich Macke filed on May 9, 2012.



- 1 1. First, all power costs recovered in rates were removed from the historical revenues recorded
- 2 for each schedule to arrive at the base revenues by rate schedule.
- 3 2. Next, the ratio (expressed in percentages) of base revenue by schedule to the total base
- 4 revenues was determined.
- 5 3. The base revenue ratios were then applied to the 34.5kV FBR determined revenue
- 6 adjustment to establish each rate schedule's apportioned revenue adjustment.
- 7 Table 2 on the following page summarizes the results of this process. Exhibit 3, page 2
- 8 provides further detail.<sup>14</sup>

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14 Note that the customers taking service under the Southern Pioneer's STR tariff will not be share in the 34.5kV FBR retail rate adjustment since these customers either take service at a higher 115kV voltage, or, if they take service at 34.5kV, they will pay the share of the 34.5kV system costs in their demand rate.

**Table 2**

<b>SOUTHERN PIONEER ELECTRIC COMPANY</b>			
<b>Allocation of 34.5kV FBR Retail Rate Adjustment to Rate Classes</b>			
	<b>Test Year Rate</b>		
	<b>Schedule</b>	<b>34.5kV FBR</b>	<b>Change</b>
<b>Rate Schedule</b>	<b>Revenue</b>	<b>Adjustment</b>	<b>As Percent *</b>
	<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>
Residential Service (RS)			
General Use	15,768,066	(23,759)	-0.2%
Space Heating	937,451	(1,334)	-0.1%
General Service Small (GSS)	1,787,831	(2,921)	-0.2%
General Service Large (GSL)	16,702,915	(21,627)	-0.1%
General Service Space Heating	596,672	(667)	-0.1%
Industrial Service (IS)	3,471,395	(3,485)	-0.1%
Interruptible Industrial Service (INT)	-	-	0.0%
Real - Time Pricing (RTP)	(5,467,259)	-	0.0%
Sub-transmission Level Service (STR)	23,263,116	-	0.0%
Municipal Power Service (M-I)	205,095	(287)	-0.1%
Water Pumping Service (WP)	640,798	(854)	-0.1%
Irrigation Service (IP-I)	308,410	(454)	-0.1%
Temporary Service (CS)	19,574	(35)	-0.2%
Lighting	1,039,269	(2,380)	-0.2%
<b>Total Retail Rates</b>	<b>59,273,330</b>	<b>(57,803)</b>	<b>-0.1%</b>

**Q. How do you recommend the resulting decreases by rate schedule be implemented?**

A. The Protocols do not specify how the rate schedule components (i.e. Customer Charge, Energy Charge, Demand Charge, etc.) should be revised to implement rate adjustments. I recommend that the decreases by rate schedule be implemented as a slight decrease to each rate schedule's energy charges only. This is easily determined by dividing the revenue adjustment for each schedule by the historical energy sales. The result is the amount that the current energy charges need to be decreased by class and is shown in Column (k) of Exhibit 3, page 2.

The one exception required is for lighting. Since the lighting rate schedules do not have an energy charge, the monthly charge must be adjusted. The lighting rate schedules do have an estimated energy use for the various sizes/types of lights, and so the energy adjustment can still be applied so as to affect the monthly charge in a way that is proportionate to usage. This approach then provides consistency between all the retail rates being adjusted.

1 **Q. Why do you recommend that the revenue decrease be implemented by increasing the**  
2 **current energy charges?**

3 A. Handling this type of adjustment as an energy adjustment is simple, common, reasonably  
4 accurate, and particularly appropriate given the relatively minor magnitude of the adjustment.  
5 Energy adjustments are an industry-accepted approach for flowing through cost changes that  
6 occur between full or “traditional” rate cases. For example, Southern Pioneer’s current ECA  
7 is an energy-based charge established to flow through not only energy cost but also demand  
8 cost changes from the amount embedded in rates during the last full rate case. Similarly,  
9 Southern Pioneer’s property tax surcharge rider is an energy adjustment established to pass  
10 through changes in property tax expense decreases since the last full rate case. Further, similar  
11 methodology was accepted by the Commission in Southern Pioneer’s DSC-FBR filing  
12 submitted and approved in Docket Nos. 14-SPEE-507-RTS and 15-SPEE-519-RTS. I would  
13 also point out that, especially given the results (i.e. decrease of around one tenth of one  
14 percent), the additional effort required to attempt a sort of proportionate change for each rate  
15 component is neither economical nor a good use of resources and defeats the intent to minimize  
16 consulting and regulatory cost. However, it is possible that this adjustment methodology could  
17 change in future years of the 34.5kV FBR Plan; but given the minor change being made, the  
18 benefits of an energy-based adjustment outweigh doing something more detailed, expensive,  
19 potentially controversial, and time consuming.

20 **Q. What is your final recommendation to the Commission?**

21 A. My recommendation is to approve Southern Pioneer’s Application in the instant Docket, as the  
22 resultant rate is reflective of the COS, which was calculated in accordance to the Commission-  
23 approved 34.5kV FBR Protocols, and therefore is just and reasonable and in the public interest.

24 **Q. Have the proposed tariffs as required in the Protocols in Section E.13 been provided?**

25 A. Yes, they are included as Exhibit 13 of the Application filed in the instant Docket.

1 **Q. Do you have any recommendation to the Commission concerning the implementation**  
2 **of the rates resulting from the DSC-FBR?**

3 A. Yes, I do. As noted above, coincident with the instant filing, Southern Pioneer is also  
4 submitting its annual update filing under its Commission-approved distribution DSC-FBR that  
5 also calculates a corresponding per kWh base rate change for its retail customers. Therefore,  
6 for logistical purposes and ease of billing, Commission, if at all possible, should attempt to  
7 sync the time frame for the approval of both filings so as to allow Southern Pioneer to combine  
8 the final approved adjustments in both 34.5kV FBR and the DSC-FBR in order to facilitate a  
9 single rate change for its retail customers.

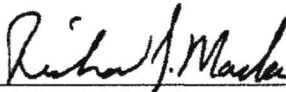
10 **Q. Does this conclude your prefiled Direct Testimony?**

11 A. Yes, it does.  
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**VERIFICATION**

STATE OF MINNESOTA   )  
  ) ss  
COUNTY OF ANOKA       )

The undersigned, Richard J. Macke, upon oath first duly sworn, states that he is an employee of Power System Engineering, Inc., and that the foregoing rebuttal 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.

  
\_\_\_\_\_  
Richard J. Macke

Subscribed and sworn to before me this 29<sup>th</sup> day of April, 2016.

  
\_\_\_\_\_  
Notary Public

My appointment expires: 1/31/20

