

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

In the Matter of the Application of Prairie )  
Land Electric Cooperative, Inc. Seeking )  
Commission Approval to Update Its Local ) Docket No. 18-PLCE- 462 - TAR  
Access Delivery Service Tariff Pursuant to )  
the 34.5kV Formula Based Rate Plan )  
Approved in Docket No.16-MKEE-023- )  
TAR.

**PREFILED DIRECT TESTIMONY OF**

**ELENA E. LARSON**  
**RATE AND REGULATORY CONSULTANT**  
**POWER SYSTEM ENGINEERING, INC.**

**ON BEHALF OF**

**PRAIRIE LAND ELECTRIC COOPERATIVE, INC.**

April 20, 2018

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**PART I - QUALIFICATIONS**

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

A. My name is Elena E. Larson. My business address is 3321 Southwest 6<sup>th</sup> Avenue, Topeka, KS 66606.

**Q. What is your profession?**

A. I am a Rate and Regulatory Consultant in 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; Topeka, Kansas; Lexington, Kentucky; 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 work on a team of staff that provides 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 Washburn University in Topeka, Kansas in 2001 with a Bachelor of Science degree in Mathematics and a minor in Computer Science. In 2008, I received my Masters of Business Administration (“MBA”) degree from Ashford University in Clinton, Iowa.

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

A. Prior to advancing to graduate degree studies in 2006, I worked as a computer programmer for a private corporation and taught mathematics. After graduating with an MBA in September 2008, I began my employment with the Kansas Corporation Commission (“KCC” or “Commission”) in Topeka, Kansas in July 2009 as an Energy Analyst in the Energy Operations Section of the Utilities Division. My work responsibilities at KCC at that time included monitoring and assessing various periodic compliance reports (e.g., Quality of Service and Electric Reliability); providing technical analysis on informal and formal electric and gas customer complaints; and assisting in writing the rules and regulations when mandated by the Kansas legislature. In January 2012, I assumed the position of Senior Utility Rate Analyst in the Economics and Rates Section of the Utilities Division of KCC. In that capacity, my responsibilities expanded to filing recommendations and/or testimony addressing utility applications for various tariff modifications, including change of retail and wholesale rates.

1 In April 2013, I joined PSE, where I assumed a position of Rate and Financial Analyst in the  
2 Rates and Financial Planning Department. In January 2018, my title changed to Rate and  
3 Regulatory Consultant. My responsibilities include performing rate studies consisting of  
4 determination of revenue requirements, cost of service, and rate design; developing financial  
5 forecasting, special rates, and programs; and performing other financial analysis for various  
6 PSE clients. Additionally, I take a lead on assisting clients with regulatory filings.

7 **Q. Have you previously presented testimony before the KCC?**

8 A. Yes. I submitted testimony on behalf of KCC Staff in Docket Nos. 11-GBEE-624-COC, 11-  
9 MKEE-597-GIE, 12-WSEE-112-RTS, and 12-MKEE-380-RTS; on behalf of Prairie Land  
10 Electric Cooperative, Inc. (“Prairie Land” or “Cooperative”) in Docket Nos. 15-PLCE-176-  
11 TAR and 17-PLCE-478-TAR; on behalf of Victory Electric Cooperative Association, Inc.  
12 (“Victory”) in Docket No. 17-VICE-481-TAR; on behalf of Western Cooperative Electric  
13 Association, Inc. (“Western”) in Docket No. 17-WSTE-477-TAR; and on behalf of Midwest  
14 Energy in Docket No. 16-MDWE-324-TFR. I also helped prepare testimony on behalf of  
15 Southern Pioneer Electric Company (“Southern Pioneer”), Victory, Western, Prairie Land,  
16 and Mid-Kansas Electric Company, LLC (“Mid-Kansas”) in Docket Nos. 14-SPEE-507-RTS,  
17 15-SPEE-161-RTS, 15-SPEE-357-TAR, 15-SPEE-519-RTS, 16-MKEE-023-TAR, 16-PLCE-  
18 490-TAR, 16-VICE-494-TAR, 16-WSTE-496-TAR, 16-SPEE-497-RTS, and 16-SPEE-501-  
19 TAR. Additionally, I authored Report and Recommendations on behalf of KCC Staff in  
20 Docket Nos. 09-KGSG-927-COM, 10-BHCG-409-COM, 10-WSEE-507-TAR, 10-KGSG-  
21 535-COM, 10-KGSG-644-COM, 10-MDWE-733-TAR, 11-KCPE-031-COM, 11-WSEE-  
22 599-TAR, and 11-MDWE-763-TAR, as well as performed analysis filed with the Applications  
23 on behalf of Mid-Kansas, Prairie Land, and Southern Pioneer in Docket Nos. 14-MKEE-084-  
24 TAR, 14-PLCE-312-TAR, 15-SPEE-267-TAR, 16-SPEE-306-TAR, and 17-SPEE-263-TAR.

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

1 A. I have attended several industry seminars/courses on cost of service, rate design, pricing,  
2 distributed generation, financing transmission expansion, transmission cost allocation,  
3 renewable power project siting, etc. I have also presented at industry events on the topics of  
4 Revenue Requirement, Rate Design, and Net Metering.

5 **PART II - SUMMARY OF DIRECT TESTIMONY**

6 **R. What is the purpose of your testimony in this proceeding?**

7 A. The purpose of my testimony is to support the Application submitted in the instant Docket by  
8 Prairie Land for the approval of its 34.5kV Formula Based Rate (“FBR”) Annual Update filing  
9 for the 2017 Test Year.

10 **Q. Are there particular Exhibits to Prairie Land’s Application that you will be describing**  
11 **and explaining?**

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

14 Exhibit 5 - 34.5KV FBR Calculation for Test Year  
15 Exhibit 14 - Proposed Tariff Sheets Including Rate Adjustment

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

17 A. Yes.

18 **Q. Please briefly recap Prairie Land’s 34.5kV FBR.**

19 A. The 34.5KV FBR, as approved for Prairie Land by the Commission in Docket No. 16-MKEE-  
20 023-TAR (“16-023 Docket”), is a five-year ratemaking plan that provides a method for  
21 periodic adjustments to a demand rate assessed on the Cooperative’s wholesale customers  
22 taking the Local Access Delivery Service (“LADS”) over Prairie Land’s 34.5kV sub-  
23 transmission facilities in its acquired Mid-Kansas division territory. The details of the  
24 predetermined and agreed-upon calculations for the corresponding rate adjustments are  
25 outlined in Sections D and E of the Commission-approved Prairie Land’s 34.5kV FBR

1 Protocols (“Protocols”), attached as Exhibit B to the March 10, 2016 Commission Order  
2 Approving Settlement and April 29, 2016 Order Granting Petition for Clarification in the 16-  
3 023 Docket. The purpose of this formulaic ratemaking mechanism is to allow for timely  
4 adjustments to the aforementioned rate without incurring the substantial expense and/or  
5 experiencing regulatory lag typically associated with the preparation of a full rate case.

6 **Q. What data formed the basis for Prairie Land’s 2018 34.5KV FBR calculation?**

7 A. Consistent with the Protocols, the calculation was based upon a 2017 Historical Test Year. As  
8 such, it utilized historical figures from Prairie Land’s (Mid-Kansas division) December 2017  
9 Operating Income Statement, Balance Sheet, Payroll Journal, and 2017 Monthly Trial  
10 Balance.<sup>1</sup>

11 **Q. Please summarize the results of Prairie Land’s 2018 34.5KV FBR calculation.**

12 A. Completing the 34.5KV FBR template calculation consistent with the Protocols approved by  
13 the Commission in the 16-023 Docket results in the Total Revenue Requirement of \$2,697,166.  
14 Next, per Section E of the Protocols, a True-Up amount (under-recovery resulting from the  
15 prior Annual Updates) of \$12,171 was added to the Total Revenue Requirement, resulting in  
16 the Total Net Revenue Requirement of \$2,709,337. Lastly, in accordance with Section D.4 of  
17 the Protocols, the resultant total dollar amount was divided by the total billing demand for the  
18 Historical Test Year; and an applicable Property Tax Surcharge was subtracted out to arrive at  
19 the final rate of \$2.79/kW, a \$0.06/kW increase from Prairie Land’s currently effective rate for  
20 LADS of \$2.73/kW authorized by the Commission in Docket No. 17-PLCE-478-TAR.  
21 Translated into total dollars, this constitutes a \$55,174 increase.<sup>2</sup> Applying Prairie Land’s  
22 wholesale customers’ Load Ratio Share (“LRS”) of 40 percent indicates approximately  
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24 <sup>1</sup> Included in Prairie Land’s Application as part of Exhibits 4 (Comparative Operating Income Statements and  
25 Balance Sheets), 6 (Trial Balances), and 7 (Payroll Journals).

<sup>2</sup> Applied to Test Year total billing determinants as reported by Mid-Kansas.

\$22,100 of the overall increase will be collected from these customers on the combined basis.

The detailed 34.5KV FBR calculation for the Test Year is contained in Exhibit 5 attached to the Application filed in the instant Docket.

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

**Q. You stated that 2017 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 Prairie Land's actual 2017 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 2018 Budget Year were made to the following categories of costs:<sup>3</sup>

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

The projected amounts for the above expense categories are supported by the detail found in Exhibit 9 attached to the Application filed in the instant Docket.<sup>4</sup>

Further, per Sections D.1.b and D.1.e of the Protocols, and in recognition of the Commission policy adopted per K.S.A. 66-101f (a), Administrative and General ("A&G")

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<sup>3</sup> Protocols also allow adjustment to Interest Charged to Construction. However, Prairie Land did not have any amount booked in historical or budgeted for the projected Interest Charged to Construction. Therefore, that expense category was not adjusted in this Annual Filing.

<sup>4</sup> Although the Cooperative is also submitting its 2018 Budget in Exhibit 8, the amounts as shown and/or calculated in Exhibit 9 were used instead, where the latter followed the methodology specified in the Commission-approved Protocols. In some instances, such methodology may vary from how the Cooperative budgets internally; for example, the Cooperative may not budget depreciation for the plant additions by individual General Ledger ("GL") accounts. Instead, work order and cost estimate modeling may be used for the overall project amount estimates. The exact GL-specific detail (for example, number of wooden poles for a line buildout) is typically not known until the project is complete. In addition, the Cooperative Budget specifies total depreciation expense versus by plant category.



1 expense was adjusted to remove certain amounts associated with the dues, donations,  
2 charitable contributions, promotional advertising, penalties and fines, and entertainment  
3 expenses incurred during the Test Year.<sup>5</sup> The excluded amounts, as well as reasoning in  
4 support of inclusion or exclusion of the associated items, are noted on Page 7 of Exhibit 5.

5 Additionally, per Section D.1.e of the Protocols, the Acquisition Premium amortization  
6 portion was removed from the Other Deductions expense category.

7 Finally, Section D.2 of the Protocols mandates that certain revenue and expense categories  
8 be further allocated to remove the costs not associated with Prairie Land's 34.5kV facilities.

9 **Q. Please describe the adjustments made to the 2017 Test Year Depreciation Expense.**

10 A. Per Section D.1.c of the Protocols, depreciation expense allowed to be included in Prairie  
11 Land's 34.kV FBR should reflect "...projected depreciation expense that reasonably reflects  
12 the average monthly 34.5kV plant in service during the Budget Year using the Commission-  
13 approved depreciation rates." Furthermore, such projections are to be based upon the plant  
14 additions and retirements planned by the Cooperative in the Budget Year. To achieve this,  
15 Section D.2.b of the Protocols directs the Cooperative to apply Commission-approved  
16 depreciation rates to the projected monthly average plant for the Budget Year.<sup>6</sup> Accordingly,  
17 Pages 2 and 4 of Exhibit 9 detail the calculation of the projected Depreciation Expense for  
18 Transmission and General Plant for the Budget Year using Commission-approved depreciation  
19 rates. The projected average plant balances used in the calculations are shown on Page 1 of  
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22 <sup>5</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."

23 <sup>6</sup> Transmission Plant used in 34.5kV FBR is defined more broadly to also include General Plant allocated on  
24 Labor ratio, as well as any Distribution Plant used in the provision of the LADS, if applicable (see Section  
25 K of the Protocols). The latter does not apply in this instance. However, there was General Plant allocated  
to the 34.5kV FBR. Accordingly, per Section D.2.b. of the Protocols, the depreciation expense was  
calculated to recognize the portion corresponding with the allocated General Plant.

Exhibit 9. As a result, the projected Transmission and General Plant Depreciation Expense amounts, detailed on Exhibit 5, Page 1, Lines 13 and 14, Column (f), are \$581,453 and \$120,492, respectively. As evidenced by Exhibit 9, these amounts are the result of an approximately 4 percent projected net increase in transmission plant and an approximately 3 percent projected net increase in general plant expected to be in service at the end of the 2018 Budget Year.<sup>7</sup> In comparison, the 2017 historical amounts for the Transmission and General Plant Depreciation Expense were \$526,721 and \$109,271, respectively. Therefore, Exhibit 5, Page 1, Lines 13 and 14, Column (e), details the respective adjustments of \$54,731 and \$11,221 to the historical Transmission and General Plant Depreciation Expenses. The adjustments are calculated on Page 3 of Exhibit 5, Lines 13-21. It should be noted that in this third 34.5kV FBR Annual Update, the Revenue Requirement was established using the Modified Debt Service Coverage (“MDSC”) metric in accordance with the Protocols’ Section D.3.<sup>8</sup> Under the DSC rate-making, the depreciation expense amount becomes essentially immaterial, as it is removed as an offset to the margin requirement.

**Q. Please describe the adjustments made to the 2017 Test Year Interest on Long-Term Debt.**

A. The historical amount of Interest on Long-Term Debt for the 2017 Test Year was \$1,913,617, as reported on Prairie Land’s Operating Income Statement for 2017, included in Exhibit 4.<sup>9</sup> The Protocols, in Section D.1.d., specify that the actual amount be adjusted to reflect Prairie Land’s interest on long-term debt projected for the Budget Year. Prairie Land’s 2018 budgeted

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<sup>7</sup> Comparing End of Year (“EOY”) 2018 balances to the EOY 2017 balances and taking into account both planned additions and retirements. Comparing the Budget Year annual average balances to the EOY 2017, the net increase in transmission and general plant is 2 percent.

<sup>8</sup> Per Section D.3 of the Protocols, Cooperative may utilize either 1.8 Operating Times Interest Earned Ratio (“OTIER”) or 1.8 MDSC. The ratio resulting in greater net margins required will be used. For 2017 Historical Test Year/2018 Budget Year, MDSC metric was used as it produced greater net margins.

<sup>9</sup> Mid-Kansas division. Exhibit 9, Page 5, further details the reconciliation of that amount to the lender statements.

1 long-term interest expense is \$2,071,068, as evidenced on Page 6 of Exhibit 9 that details the  
2 budgeted amount by individual loans. Accordingly, an adjustment of \$157,452 was included  
3 in Exhibit 5, Page 1, Line 17, Column (e). The details of this adjustment are shown in Exhibit  
4 5, Page 3, Lines 23-26.

5 **Q. Please describe the adjustments made to the 2017 Test Year Interest Expense - Other.**

6 A. The historical amount of Other Interest Expense for the 2017 Test Year was \$66,016, as  
7 reported on Prairie Land's Operating Income Statement for 2017. Consistent with Section  
8 D.1.d of the Protocols, the amount has been adjusted to reflect Prairie Land's 2018 Budget for  
9 short-term interest expense of \$24,320, noted on Page 6 of Exhibit 9. To accomplish this, a  
10 reduction of \$41,696 was included as an adjustment. The details of the adjustment can be  
11 found in Exhibit 5, Page 3, Lines 33-36.

12 **Q. Please describe the adjustments made to the 2017 Test Year Debt Service Payments.**

13 A. Debt Service Payments are comprised of interest and principal payments on debt outstanding.  
14 Since I previously discussed the adjustments to interest expense, I will now focus on the  
15 adjustment to principal payments. The historical amount of Principal Payments for the 2017  
16 Test Year was \$1,603,225 (see Exhibit 9, Page 5, Line 41 for the reconciliation to the lender's  
17 statements). The Protocols, in Section D.1.f, require that the Test Year be adjusted to reflect  
18 Prairie Land's budgeted amount for 2018, where the latter is calculated using an amortization  
19 schedule at the expected borrowing rate(s) as specified in the Cooperative's agreements with  
20 its lender(s). Prairie Land's budget for 2018 principal payments, detailed on Page 6 of Exhibit  
21 9, is \$1,663,752. Accordingly, an adjustment in the amount of \$60,527 was included on Line  
22 24, Column (e) of Exhibit 5. This adjustment is further detailed in Exhibit 5 on Page 3, Lines  
23 46-49.

1 **Q. Please describe the adjustments made to the 2017 Test Year Operating Expenses in**  
2 **conjunction with the Protocols' Section D, sub-sections b and e, and the Commission's**  
3 **policy per K.S.A. 66-101f (a).**

4 A. A reduction in the amount of \$53,208 as evidenced on Page 1 of Exhibit 5, Line 10, Column  
5 (e), was applied to the historical amount of \$2,051,796 in A&G Expense in order to remove  
6 the amounts associated with promotional or image advertising and dues and donations; i.e.,  
7 activities traditionally disallowed by the Commission either as unnecessary to provide safe,  
8 efficient, reliable electric utility service, or consistent with the Commission policy adopted per  
9 K.S.A. 66-101f (a). Accordingly, historical amounts, as recorded in Prairie Land's applicable  
10 GL accounts, were adjusted as follows: promotional or image advertising items were excluded  
11 100 percent, and dues and donations items were excluded 50 percent. Note that advertising  
12 associated with items such as public safety announcements, annual meeting notices, and legal  
13 ads were not removed, as those activities are directed toward keeping the members well  
14 informed and thus align with the Commission-advocated goal of providing safe, efficient, and  
15 reliable electric utility service.<sup>10</sup> Additionally, dues associated with the Kansas Electric  
16 Cooperatives, Inc. ("KEC") statewide organization membership were not removed for similar  
17 reasons, as KEC functions for the mutual benefit of its member-cooperatives to promote rural  
18 electrification and provides essential services, such as safety programs and inspections,  
19 Occupational Safety and Health Administration ("OSHA") compliance, Cooperative staff and  
20 Board training, and administrative functions on a state-wide level.

21 Detailed listings of the aforementioned items by GL account and the corresponding  
22 adjustments performed can be found in Exhibit 10 attached to the Application in the instant  
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25 <sup>10</sup> Expenses related to both company image and safety-related messages were excluded 50 percent.

Docket. The summary of the adjustments by GL, as well as the methodology applied by Prairie Land, is included in Exhibit 5, Page 7. The adjustment was further reflected on Page 3 of Exhibit 5, Lines 9-11. The resultant adjusted A&G amount is \$1,998,587, as reflected on Page 1, Line 10, Column (f) of Exhibit 5.

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

A. Section D.2 of the Protocols specifies the methodology for allocating applicable total system-wide operating expenses and margin requirements to the 34.5kV system so as to arrive at the revenue requirement associated with Prairie Land's sub-transmission facilities used to provide LADS in the acquired Mid-Kansas service territory.<sup>11</sup> Following is an explanation of the allocations:

- Per Section D.2.a of the Protocols, the A&G expenses are to be allocated using a Labor ratio ("LAB"), where the latter is calculated as a ratio of Transmission Labor to Total Non-A&G Labor. The corresponding labor dollar amounts are found in the Labor Amount Column of the December 31, 2017 Payroll Journal, included with Exhibit 7 attached to the Application filed in the instant Docket. Next, Exhibit 5, Page 4, Lines 7-20 show how the resultant LAB ratio of 0.050642 is calculated. Applying LAB to

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<sup>11</sup> Again, to clarify, "system-wide," as used in this context, is intended to mean combined distribution and transmission.

the \$1,998,587 in Adjusted Historical Test Year A&G expense assigns \$101,212 to the 34.5kV FBR, as shown in Exhibit 5, Page 1, Line 10, Column (i).

- Depreciation and Amortization Expense is to be calculated directly (a.k.a. “direct-assignment”) in accordance with Section D.2.b of the Protocols. The calculation of the associated depreciation expense for the Budget Year was already discussed on Pages 7 and 8 previously. The only additional detail here is that the \$120,492 in Adjusted amount for the General Plant Depreciation Expense for the Budget Year is to be allocated on the LAB ratio, ultimately assigning \$6,102 to the 34.5kV FBR, as evidenced on Page 1, Line 14, Column (i) of Exhibit 5.
- For allocating Taxes - Other, Other Deductions, Interest on Long-Term Debt, Other Interest, Principal Payments, and Offsets to Margin Requirements, the Budget Year Net Transmission Plant Ratio (“NP”) is calculated. The Budget Year NP, as defined in Section D.2 of the Protocols, reflects the ratio of the average monthly Transmission Net Plant to the average monthly Total Net Plant for the Budget Year.<sup>12</sup> The calculation of the Budget Year NP allocation factor is detailed on Page 4, Lines 22-47 of Exhibit 5. The results of applying the calculated Budget Year NP of 0.289651 to the corresponding Adjusted Historical Test Year expenses are evidenced on Page 1, Lines 15-25, Column (i) of Exhibit 5.

It should also be noted that the Transmission Operation and Maintenance Expense is a category that is directly related to the provision of the LADS. Therefore, it was assigned 100 percent (i.e., using allocator of 1.0) to the 34.5kV FBR Revenue Requirement.

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<sup>12</sup> As noted in footnote 6 previously, per Section K of the Protocols, Net Transmission Plant includes a General Plant allocation based upon a LAB ratio.

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

**Q. How was Prairie Land's 34.5kV FBR Total Revenue Requirement for Year 2018 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 2017 actual operating expenses were adjusted to the budgeted levels, as allowed by the Protocols, and allocated to reflect the portion applicable to the Cooperative's sub-transmission facilities used in the provision of the LADS, the Total Cost of Service was quantified at \$1,969,220, as evidenced on Page 1, Line 21, Column (i) of Exhibit 5. Next, the Net Margin Requirement was calculated using 1.8 OTIER and 1.8 MDSC metrics, as contemplated in Section D.3 of the Protocols. The same Section dictates that the ratio resulting in greater net margins required will be used. An MDSC of 1.8 produced a greater margin (at \$727,946) than OTIER of 1.8 (at \$448,112), as evidenced on Page 1, Lines 23-30, Column (i) of Exhibit 5. Accordingly, applying the MDSC-produced \$727,946 in Net Margin Requirement to the \$1,969,220 in Total Cost of Service generates the 34.5kV FBR Total Revenue Requirement of \$2,697,166.

**Q. How was Prairie Land's 34.5kV FBR Total Net Revenue Requirement for Year 2018 calculated?**

A. Since this is the third Annual Update filing, per Section E of the Protocols, the True-Up amount has be applied to the Total Revenue Requirement to calculate the Total Net Revenue Requirement to be used to set the LADS rate. Pages 9-12 of the filing Exhibit 5 include the True-Up calculation prescribed by Section E of the Protocols, with the summary contained on Page 9, Lines 1 – 13 of Exhibit 5. Per Section E.7, the projected revenue requirement filed and approved for the Budget Years 2016 and 2017 (first and second Annual Update filings)

1 were weighted using the portion of a year each was in effect.<sup>13</sup> The resultant Weighted  
2 Projected FBR Revenue Requirement was \$2,455,555. Next, this amount was compared  
3 against the 2017 Actual Revenue Requirement of \$2,467,439 (as calculated on Page 10 of  
4 Exhibit 5 using 2017 historical actual costs). Subtracting the Weighted Projected FBR  
5 Revenue Requirement of \$2,455,555 from the Actual Revenue Requirement of \$2,467,439  
6 results in the under-recovery amount of \$11,885. Next, applying the interest per Section E.5.b,  
7 calculated at \$286, produces the True-Up amount of \$12,171. Adding the True-Up amount of  
8 \$12,171 to the \$2,697,166 results in the Net Revenue Requirement of \$2,709,337.

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

10 A. Section D.4 of the Protocols further directs that the 34.5kV FBR Total Net Revenue  
11 Requirement is to be divided by the Total Billing Demand for the Test Year. The latter is  
12 comprised of both retail and wholesale billing determinants, as reported by Mid-Kansas (a  
13 generation and transmission Company (“G&T”) who serves as Prairie Land’s power supplier,  
14 as well as metering and billing agent for the Cooperative’s wholesale LADS over its sub-  
15 transmission facilities), and then factoring in the appropriate losses percentages, as specified  
16 in Prairie Land’s Commission-approved LADS tariff. For 2017 Test Year, the Total Billing  
17 Demand for Prairie Land’s 34.5kV system was quantified at 919,563 kW, as reflected on Page  
18 1, Line 36, Column (i) of Exhibit 5 and further detailed on Page 6 of the same Exhibit. Dividing  
19 \$2,709,337 by 919,563 kW produces the unadjusted rate of \$2.95/kW. Further, subtracting  
20 the \$0.15688/kW in Prairie Land’s Property Tax Surcharge in effect, as approved by the  
21 Commission in Docket No. 18-PLCE-269-TAR, produces the final unit rate of \$2.79/kW.<sup>14</sup>

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23 <sup>13</sup> The Projected FBR Revenue Requirement amounts used are as filed and approved in Docket Nos. 16-PLCE-  
24 490-TAR and 17-PLCE-478-TAR, respectively.

25 <sup>14</sup> Even though the Order approving the Property Tax Surcharge in Docket No. 18-PLCE-269-TAR was not  
issued until February 2018, which is outside of the Test Year, it is appropriate to use this most recent PTS



1 When compared to Prairie Land's currently effective wholesale demand rate for LADS of  
2 \$2.73/kW, this represents a 2 percent increase.

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

4 A. My recommendation is to approve Prairie Land's Application in the instant Docket, as the  
5 resultant rate is reflective of the COS, which was calculated in accordance to the Commission-  
6 approved 34.5kV FBR Protocols, and therefore is just and reasonable and in the public interest.

7 **Q. Have the proposed tariffs as required in the Protocols in Section F.14 been provided?**

8 A. Yes, they are included as Exhibit 14 of the Application filed in the instant Docket.

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

10 A. Yes, it does.  
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24 approved by the Commission since it is set to recover the 2017 property tax expense incurred during the  
25 2017 Test Year. The PTS rate effective during the 2017 Test Year, which was approved in Docket No. 17-  
PLCE-274-TAR, was actually recovering the 2016 property tax expense.

**VERIFICATION**

STATE OF MINNESOTA   )  
  ) ss  
COUNTY OF ANOKA       )

The undersigned, Elena Larson, upon oath first duly sworn, states that she is an employee of Power System Engineering, Inc., and that the foregoing testimony was prepared by her or under her supervision, that she is familiar with the contents thereof, and that the statements contained therein are true and correct to the best of her knowledge and belief.

Elena Larson

Elena Larson

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Subscribed and sworn to before me this 20 day of April, 2018.

Marilyn M. Cuellar  
Notary Public

My appointment expires: 1/31/20

