

**BEFORE THE KANSAS CORPORATION COMMISSION**

**OF THE STATE OF KANSAS**

In the Matter of the Application of Western )  
Cooperative Electric Association, Inc. )  
Seeking Commission Approval to Update ) Docket No. 18-WSTE- 473 - TAR  
Its Local 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**

**WESTERN COOPERATIVE ELECTRIC ASSOCIATION, INC.**

April 27, 2018

## **TABLE OF CONTENTS**

<b>PART I - QUALIFICATIONS .....</b>	<b>1</b>
<b>PART II - SUMMARY OF DIRECT TESTIMONY .....</b>	<b>4</b>
<b>PART III - ADJUSTMENTS TO THE ACTUAL TEST YEAR RESULTS.....</b>	<b>6</b>
<b>PART IV - REVENUE REQUIREMENT AND RATE CALCULATION.....</b>	<b>13</b>

**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  
2 the 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 Kansas Corporation Commission**  
8 **(“KCC” or “Commission”)?**

9 A. Yes. I submitted testimony on behalf of KCC Staff in Docket Nos. 11-GBEE-624-COC, 11-  
10 MKEE-597-GIE, 12-WSEE-112-RTS, and 12-MKEE-380-RTS; on behalf of Prairie Land  
11 Electric Cooperative, Inc. (“Prairie Land”) in Docket Nos. 15-PLCE-176-TAR and 17-PLCE-  
12 478-TAR; on behalf of Victory Electric Cooperative Association, Inc. (“Victory”) in Docket  
13 No. 17-VICE-481-TAR; on behalf of Western Cooperative Electric Association, Inc.  
14 (“Western” or “Cooperative”) in Docket No. 17-WSTE-477-TAR; and on behalf of Midwest  
15 Energy in Docket No. 16-MDWE-324-TFR. I also helped prepare testimony on behalf of  
16 Southern Pioneer Electric Company (“Southern Pioneer”), Victory, Western, Prairie Land,  
17 and Mid-Kansas Electric Company, LLC (“Mid-Kansas”) in Docket Nos. 14-SPEE-507-RTS,  
18 15-SPEE-161-RTS, 15-SPEE-357-TAR, 15-SPEE-519-RTS, 16-MKEE-023-TAR, 16-PLCE-  
19 490-TAR, 16-VICE-494-TAR, 16-WSTE-496-TAR, 16-SPEE-497-RTS, 16-SPEE-501-TAR,  
20 and 17-SPEE-476-TAR. Additionally, I authored Report and Recommendations on behalf of  
21 KCC Staff in Docket Nos. 09-KGSG-927-COM, 10-BHCG-409-COM, 10-WSEE-507-TAR,  
22 10-KGSG-535-COM, 10-KGSG-644-COM, 10-MDWE-733-TAR, 11-KCPE-031-COM, 11-  
23 WSEE-599-TAR, and 11-MDWE-763-TAR, as well as performed analysis filed with the  
24 Applications on behalf of Mid-Kansas, Prairie Land, and Southern Pioneer in Docket Nos. 14-  
25

1 MKEE-084-TAR, 14-PLCE-312-TAR, 15-SPEE-267-TAR, 16-SPEE-306-TAR, 17-SPEE-  
2 263-TAR, and 18-SPEE-270-TAR.

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

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

8  
9 **PART II - SUMMARY OF DIRECT TESTIMONY**

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

11 A. The purpose of my testimony is to support the Application submitted in the instant Docket by  
12 Western Cooperative Electric Association, Inc. (“Western” or Cooperative”) for the approval  
13 of its 34.5kV Formula Based Rate (“FBR”) third Annual Update filing for the 2017 Test Year.

14 **Q. Are there particular Exhibits to Western’s Application that you will be describing and  
15 explaining?**

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

18 Exhibit 5 - 34.5kV FBR Calculation for Test Year  
19 Exhibit 14 - Proposed Tariff Sheets Including Rate Adjustment

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

21 A. Yes.

22 **Q. Please briefly recap Western’s 34.5kV FBR.**

23 A. The 34.5kV FBR, as approved for Western by the Commission in Docket No. 16-MKEE-023-  
24 TAR (“16-023 Docket”), is a five-year ratemaking plan that provides a method for periodic  
25 adjustments to a demand rate assessed on the Cooperative’s wholesale customers taking the

1 Local Access Delivery Service (“LADS”) over Western’s 34.5kV sub-transmission facilities  
2 in its acquired Mid-Kansas division territory. The details of the predetermined and agreed-  
3 upon calculations for the corresponding rate adjustments are outlined in Sections D and E of  
4 the Commission-approved Western’s 34.5kV FBR Protocols (“Protocols”), attached as Exhibit  
5 D to the March 10, 2016 Commission Order Approving Settlement and April 26, 2016 Order  
6 Granting Petition for Clarification in the 16-023 Docket.<sup>1</sup> The purpose of this formulaic  
7 ratemaking mechanism is to allow for timely adjustments to the aforementioned rate without  
8 incurring the substantial expense and/or experiencing regulatory lag typically associated with  
9 the preparation of a full rate case.

10 **Q. What data formed the basis for Western’s 2018 34.5kV FBR calculation?**

11 A. Consistent with the Protocols, the calculation was based upon a 2017 Historical Test Year. As  
12 such, it utilized historical figures from Western’s (Mid-Kansas division) December 2017  
13 Operating Income Statement, Balance Sheet, Payroll Journal, and 2017 Monthly Trial  
14 Balance.<sup>2</sup>

15 **Q. Please summarize the results of Western’s 2018 34.5kV FBR calculation.**

16 A. Completing the 34.5kV FBR template calculation consistent with the Protocols approved by  
17 the Commission in the 16-023 Docket results in the Total Revenue Requirement of \$1,191,920.  
18 Next, per Section E of the Protocols, a True-Up amount (under-recovery resulting from the  
19 prior Annual Updates) of \$93,807 was applied to the Total Revenue Requirement, resulting in  
20 the Total Net Revenue Requirement of \$1,285,727. Lastly, in accordance with Section D.4 of  
21 the Protocols, the resultant amount was divided by the total billing demand for the Historical  
22

---

23 <sup>1</sup> The corrected pagination and section numbering, as contained in the April 26 Commission’s Order Granting  
24 Petition for Clarification, is used throughout this document.

25 <sup>2</sup> Included in Western’s Application as part of Exhibits 4 (Comparative Operating Income Statements and  
Balance Sheets), 6 (Trial Balances), and 7 (Payroll Journals).

1 Test Year to arrive at the final rate of \$1.73/kW, a \$0.03/kW increase from Western's currently  
2 effective rate for LADS authorized by the Commission in Docket No. 17-WSTE-477-TAR.  
3 Translated into total dollars, this constitutes a \$22,305 increase.<sup>3</sup> Applying Western's  
4 wholesale customers' Load Ratio Share ("LRS") of around 55 percent indicates approximately  
5 \$12,200 of the overall increase will be collected from these customers on the combined basis.  
6 The detailed 34.5kV FBR calculation for the Test Year is contained in Exhibit 5 attached to  
7 the Application filed in the instant Docket.

8  
9 **PART III - ADJUSTMENTS TO THE ACTUAL TEST YEAR RESULTS**

10 **Q. You stated that 2017 actual results formed the basis for the 34.5kV FBR calculation. The**  
11 **Protocols specify a limited number of adjustments to be made. What adjustments did**  
12 **you make to Western's actual 2017 financial results in completing the 34.5kV FBR**  
13 **template?**

14 A. Consistent with Section D.1 of the Protocols, adjustments to reflect the projected amounts for  
15 the Budget Year were made to the following categories of costs<sup>4</sup>:

- 16 • Depreciation Expense - Other
  - 17 • Interest on Long-Term Debt
  - 18 • Debt Service Payments
- 19  
20  
21  
22

---

23 <sup>3</sup> Applied to Test Year total billing determinants.

24 <sup>4</sup> Protocols also allow adjustment to Interest - Other and Interest Charged to Construction. However, Western  
25 did not have any amount booked in historical or budgeted for the projected Interest - Other and Interest  
Charged to Construction. Therefore, these expense categories were not adjusted in this Annual Filing.



1 The projected amounts for the above expense categories are supported by the detail found  
2 in Exhibit 9 attached to the Application filed in the instant Docket.<sup>5</sup>

3 Further, per Sections D.1.b and D.1.e of the Protocols, and in recognition of the  
4 Commission policy adopted per K.S.A. 66-101f (a), Administrative and General (“A&G”)  
5 expense was adjusted to remove certain amounts associated with the dues, donations,  
6 charitable contributions, promotional advertising, penalties and fines, and entertainment  
7 expenses incurred during the Test Year.<sup>6</sup> The excluded amounts, as well as reasoning in  
8 support of inclusion or exclusion of the associated items, are noted on Page 7 of Exhibit 5.

9 Finally, Section D.2 of the Protocols mandates that certain revenue and expense categories  
10 be further allocated to remove the costs not associated with Western’s 34.5kV facilities.

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

12 A. Per Section D.1.c of the Protocols, depreciation expense allowed to be included in Western’s  
13 34.5kV FBR should reflect “...projected depreciation expense that reasonably reflects the  
14 average monthly 34.5kV plant in service during the Budget Year using the Commission-  
15 approved depreciation rates.” Furthermore, such projections are to be based upon the plant  
16 additions and retirements planned by the Cooperative in the Budget Year. To achieve this,

---

18  
19 <sup>5</sup> Although the Cooperative is also submitting its 2018 Budget in Exhibit 8, the amounts as shown and/or  
20 calculated in Exhibit 9 were used instead, where the latter followed the methodology specified in the  
21 Commission-approved Protocols. In some instances, such methodology may vary from how the Cooperative  
22 budgets internally; for example, the Cooperative may not always budget depreciation for the plant additions  
23 by each individual General Ledger (“GL”) accounts. Instead, work order and cost estimate modeling may  
24 be used for the overall project amount estimates. The exact GL-specific detail (for example, number of  
25 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. The same principal is  
true for debt service projections; i.e., Budget may deviate from how Protocols direct the Cooperative to  
apply projections for interest and principal. Western followed Commission-prescribed Protocols  
methodology for calculating and applying projected amounts in its 34.5kV FBR Annual Update filed in the  
instant Docket.

<sup>6</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.”

1 Section D.2.b of the Protocols directs the Cooperative to apply Commission-approved  
2 depreciation rates to the projected monthly average plant for the Budget Year.<sup>7</sup> Accordingly,  
3 Pages 3 and 5 of Exhibit 9 detail the calculation of the projected Depreciation Expense for  
4 Transmission and General Plant for the Budget Year using Commission-approved depreciation  
5 rates. The projected average plant balances used in the calculations are shown on Page 1 of  
6 Exhibit 9. As a result, the projected Transmission and General Plant Depreciation Expense  
7 amounts, detailed on Exhibit 5, Page 1, Lines 13 and 14, Column (f), are \$258,210 and  
8 \$155,864, respectively. These amounts are the result of an approximate 1 percent projected  
9 net increase in transmission plant and an approximately 8 percent projected net increase in  
10 general plant expected to be in service for the 2018 Budget Year.<sup>8</sup> In comparison, the 2017  
11 historical amounts for the Transmission and General Plant Depreciation Expense were  
12 \$255,474 and \$123,110, respectively. Therefore, Exhibit 5, Page 1, Lines 13 and 14, Column  
13 (e) details the respective adjustments of \$2,737 and \$32,754 to the historical Transmission and  
14 General Plant Depreciation Expenses. The adjustments are calculated on Page 3 of Exhibit 5,  
15 Lines 13-21. It should be noted that in this third 34.5kV FBR Annual Update, the Revenue  
16 Requirement was established using the Modified Debt Service Coverage (“MDSC”) metric in  
17 accordance with the Protocols’ Section D.3.<sup>9</sup> Under the DSC rate-making, the depreciation  
18  
19

---

20  
21 <sup>7</sup> Transmission Plant used in 34.5kV FBR is defined more broadly to also include General Plant allocated on  
22 Labor ratio, as well as any Distribution Plant used in the provision of the LADS, if applicable (see Section  
23 K of the Protocols). Since the records for the latter were not readily available and/or did not contain detail  
24 required in the Protocols, Western chose to forgo including any such facilities at this time. However, there  
25 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.

<sup>8</sup> Taking into account both planned additions and retirements, and comparing 2017 end of year plant balances  
to the 12 month average plant balances for the 2018.

<sup>9</sup> Per Section D.3 of the Protocols, Cooperative may utilize either 1.8 Operating Times Interest Earned Ratio  
 (“OTIER”) or 1.8 MDSC metrics. 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.

1 expense amount becomes essentially immaterial, as it is removed as an offset to the margin  
2 requirement.

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

5 A. The historical amount of Interest on Long-Term Debt for the 2017 Test Year was \$800,594, as  
6 reported on Western's Operating Income Statement for 2017, included in Exhibit 4.<sup>10</sup> The  
7 Protocols, in Section D.1.d., specify that the actual amount be adjusted to reflect Western's  
8 interest on long-term debt projected for the Budget Year. Western's 2018 budgeted long-term  
9 interest expense is \$790,051, as evidenced on Page 7 of Exhibit 9 that details the budgeted  
10 amount by individual loans. Accordingly, a downward adjustment of \$10,543 was included in  
11 Exhibit 5, Page 1, Line 17, Column (e). The details of this adjustment are shown in Exhibit 5,  
12 Page 3, Lines 23-26.

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

14 A. Debt Service Payments are comprised of interest and principal payments on debt outstanding.  
15 Since I previously discussed the adjustments to interest expense, I will now focus on the  
16 adjustment to principal payments. The historical amount of Principal Payments for the 2017  
17 Test Year was \$1,030,983 (see Exhibit 9, Page 6 for the reconciliation to the lender's  
18 statements). The Protocols, in Section D.1.f, require that the Test Year be adjusted to reflect  
19 Western's budgeted amount for 2018, where the latter is calculated using an amortization  
20 schedule at the expected borrowing rate(s) as specified in the Cooperative's agreements with  
21 its lender(s). Western's budget for 2018 principal payments, detailed on Page 7 of Exhibit 9,  
22 is \$1,074,581. Accordingly, an adjustment in the amount of \$43,598 was included on Page 1,  
23  
24

---

25 <sup>10</sup> Mid-Kansas division.

1 Line 24, Column (e) of Exhibit 5. This adjustment is further detailed in Exhibit 5 on Page 3,  
2 Lines 46-49.

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

6 A. A reduction in the amount of \$18,610, as evidenced on Page 1 of Exhibit 5, Line 10, Column  
7 (e), was applied to the historical amount of \$1,201,888 in A&G Expense in order to remove  
8 the amounts associated with promotional or image advertising and dues and donations; i.e.,  
9 activities traditionally disallowed by the Commission either as unnecessary to provide safe,  
10 efficient, reliable electric utility service, or consistent with the Commission policy adopted per  
11 K.S.A. 66-101f (a). Accordingly, historical amounts, as recorded in Western's applicable GL  
12 accounts, were adjusted as follows: promotional or image advertising items were excluded  
13 100 percent, and dues and donations items were excluded 50 percent. Note that advertising  
14 associated with items such as public safety announcements, annual meeting notices, and legal  
15 ads were not removed, as those activities are directed toward keeping the members well  
16 informed and thus align with the Commission-advocated goal of providing safe, efficient, and  
17 reliable electric utility service. Additionally, dues associated with the Kansas Electric  
18 Cooperatives, Inc. ("KEC") statewide organization membership were not removed for similar  
19 reasons, as KEC functions for the mutual benefit of its member-cooperatives to promote rural  
20 electrification and provides essential services, such as safety programs and inspections,  
21 Occupational Safety and Health Administration ("OSHA") compliance, Cooperative staff and  
22 Board training, and administrative functions on a state-wide level.

23 The summary of the aforementioned items by GL account and the corresponding  
24 adjustments performed can be found in Exhibit 5, Page 7; and the detailed listings are included  
25 in Exhibit 10 filed with the Application in the instant Docket. The resultant adjusted A&G

1 amount is \$1,183,278, as reflected on Page 1, Line 10, Column (f) of Exhibit 5. The  
2 adjustments were further reflected on Page 3 of Exhibit 5, Lines 9-11.

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

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

- 14 • Per Section D.2.a of the Protocols, the A&G expenses are to be allocated using a Labor  
15 ratio (“LAB”), where the latter is calculated as a ratio of Transmission Labor to Total  
16 Non-A&G Labor. The corresponding labor dollar amounts are found in the Labor  
17 Amount Column of the December 31, 2017 Payroll Journal, included with Exhibit 7  
18 attached to the Application filed in the instant Docket. Next, Exhibit 5, Page 4, Lines  
19 7-20 show how the resultant LAB ratio of 0.026610 is calculated. Applying LAB to  
20 the \$1,183,278 in Adjusted Historical Test Year A&G expense assigns \$31,487 to the  
21 34.5kV FBR, as shown in Exhibit 5, page 1, Line 10, Column (i).

---

22  
23  
24  
25 <sup>11</sup> Again, to clarify, “system-wide,” as used in this context, is intended to mean combined distribution and transmission.

- 1 • Depreciation and Amortization Expense is to be calculated directly (a.k.a. “direct-  
2 assignment”) in accordance with Section D.2.b of the Protocols. The calculation of the  
3 associated depreciation expense for the Budget Year was already discussed on pages 7  
4 and 8 previously. The only additional detail here is that the \$155,864 in Adjusted  
5 amount for the General Plant Depreciation Expense for the Budget Year is to be  
6 allocated on the LAB ratio, ultimately assigning \$4,148 to the 34.5kV FBR, as  
7 evidenced on Page 1, Line 14, Column (i) of Exhibit 5.
- 8 • For allocating Taxes - Other, Other Deductions, Interest on Long-Term Debt, Other  
9 Interest, Principal Payments, and Offsets to Margin Requirements, the Budget Year  
10 Net Transmission Plant Ratio (“NP”) is calculated. The Budget Year NP, as defined  
11 in Section D.2. of the Protocols, reflects the ratio of the average monthly Transmission  
12 Net Plant to the average monthly Total Net Plant for the Budget Year.<sup>12</sup> The calculation  
13 of the Budget Year NP allocation factor is detailed on Page 4, Lines 22-47 of Exhibit  
14 5. The results of applying the calculated Budget Year NP of 0.264923 to the  
15 corresponding Adjusted Historical Test Year expenses are evidenced on Page 1, Lines  
16 15-25, Column (i) of Exhibit 5.

17 It should also be noted that the Transmission Operation and Maintenance (“O&M”)  
18 Expense is a category that is directly related to the provision of the LADS. Therefore,  
19 \$271,261 in Transmission O&M was assigned 100 percent (i.e., using allocator of 1.0) to  
20 the 34.5kV FBR Revenue Requirement, as shown on Page 1, Line 4, Column (i) of Exhibit  
21 5.

---

22  
23  
24  
25 <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 Western’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 \$774,409, 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 \$417,511) than an OTIER of 1.8 (at \$167,442), as evidenced on Page 1, Lines 23-30, Column (i) of Exhibit 5. Applying the MDSC-produced \$417,511 in Net Margin Requirement to the \$774,409 in Total Cost of Service generates the 34.5kV FBR Total Revenue Requirement of \$1,191,920.<sup>13</sup>

**Q. How was Western’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

---

<sup>13</sup> See Footnote 9.

1 and approved for the Budget Years 2016 and 2017 (first and second Annual Update filings)  
2 were weighted using the portion of a year each was in effect.<sup>14</sup> The resultant Weighted  
3 Projected FBR Revenue Requirement was \$1,181,746. Next, this amount was compared  
4 against the 2017 Actual Revenue Requirement of \$1,272,080 (as calculated on Page 10 of  
5 Exhibit 5 using 2017 historical actual costs). Subtracting the Weighted Projected FBR  
6 Revenue Requirement of \$1,181,746 from the Actual Revenue Requirement of \$1,272,080  
7 results in the under-recovery amount of \$90,334, as shown on Page 9 of Exhibit 5. Next,  
8 applying the interest per Section E.5.b, calculated at \$3,473, produces the True-Up amount of  
9 \$93,807. Adding the True-Up amount of \$93,807 to the \$1,191,920 results in the Net Revenue  
10 Requirement of \$1,285,727, as shown on Page 1, Line 35, Column (i) of Exhibit 5.

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

12 A. Section D.4 of the Protocols further directs that the 34.5kV FBR Total Net Revenue  
13 Requirement is to be divided by the Total Billing Demand for the Test Year. The latter is  
14 comprised of both retail and wholesale billing determinants and then factoring in the  
15 appropriate losses' percentages, as specified in Western's Commission-approved LADS  
16 tariff.<sup>15</sup> For 2017 Test Year, the Total Billing Demand for Western's 34.5kV system was  
17 quantified at 743,499 kW, as reflected on Page 1, Line 36, Column (i) of Exhibit 5 and further  
18 detailed on Page 6 of the same Exhibit. Dividing \$1,285,727 in Revenue Requirement by  
19 743,499 kW produces the rate of \$1.73/kW. When compared to Western's currently effective  
20 wholesale demand rate for LADS of \$1.70/kW, this represents a 2 percent increase.

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

---

22  
23  
24 <sup>14</sup> The Projected FBR Revenue Requirement amounts used are as filed and approved in Docket Nos. 16-  
WSTE-496-TAR and 17-WSTE-477-TAR, respectively.

25 <sup>15</sup> Western's 34.5kV system billing determinants are provided by Mid-Kansas, its Generation and  
Transmission company who serves as Western's power supplier, as well as metering and billing agent for  
the Cooperative's wholesale LADS over its sub-transmission facilities.



1 A. My recommendation is to approve Western's Application in the instant Docket, as the resultant  
2 rate is reflective of the COS, which was calculated in accordance to the Commission-approved  
3 34.5kV FBR Protocols, and therefore is just and reasonable and in the public interest.

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

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

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

7 A. Yes, it does.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

**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

*H*

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

*Marilyn M. Cuellar*  
Notary Public

My appointment expires: 1/31/20

