

DOCKET NO. \_\_\_\_\_

APPLICATION OF SOUTHWESTERN § PUBLIC UTILITY COMMISSION  
PUBLIC SERVICE COMPANY FOR §  
AUTHORITY TO CHANGE RATES § OF TEXAS

DIRECT TESTIMONY  
*of*  
RICHARD D. STARKWEATHER

*on behalf of*

SOUTHWESTERN PUBLIC SERVICE COMPANY

(Filename: StarkweatherRRDirect.docx)

Table of Contents

GLOSSARY OF ACRONYMS AND DEFINED TERMS.....	2
LIST OF ATTACHMENTS .....	3
I. WITNESS IDENTIFICATION AND QUALIFICATIONS .....	4
II. ASSIGNMENT AND SUMMARY OF TESTIMONY AND CONCLUSIONS.....	7
III. ANALYTICAL APPROACH FOR THE BENCHMARKING STUDY.....	14
IV. RETAIL PRICING BENCHMARK RESULTS .....	24
V. O&M BENCHMARK RESULTS .....	30
A. TOTAL COMPANY AND PRODUCTION BENCHMARKS.....	34
B. TRANSMISSION O&M EXPENSE BENCHMARKS.....	36
C. DISTRIBUTION O&M EXPENSE BENCHMARKS.....	39
D. CUSTOMER OPERATIONS O&M EXPENSE BENCHMARKS.....	42
E. A&G O&M EXPENSE BENCHMARKS.....	44
F. O&M VERSUS TOTAL PLANT BENCHMARKS.....	49
VI. CAPITAL INVESTMENT BENCHMARK RESULTS .....	53
VII. AVIATION STUDY SHOWING COMMERCIAL AIRLINE COSTS .....	68
AFFIDAVIT .....	72

## **GLOSSARY OF ACRONYMS AND DEFINED TERMS**

<b><u>Acronym/Defined Term</u></b>	<b><u>Meaning</u></b>
A&G	Administrative and General
Commission	Public Utility Commission of Texas
ERCOT	Electric Reliability Council of Texas
FERC	Federal Energy Regulatory Commission
kWh	kilowatt-hour
MWh	megawatt-hour
O&M	Operation and Maintenance
Operating Companies	Northern States Power Company – Minnesota; Northern States Power Company – Wisconsin; Public Service Company of Colorado; SPS
PNM	Public Service Company of New Mexico
ScottMadden	ScottMadden, Inc.
S&P	S&P Global, Inc.
SPS	Southwestern Public Service Company, a New Mexico corporation
Test Year	October 1, 2019 through September 30, 2020
Total Company or total company	Total SPS (before jurisdictional allocation)
Update Period	October 1, 2020 through December 31, 2020
Updated Test Year	January 1, 2020 through December 31, 2020
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

## LIST OF ATTACHMENTS

<b><u>Attachment</u></b>	<b><u>Description</u></b>
RDS-RR-1	Resume of Richard D. Starkweather ( <i>Filename: Attachment RDS-RR-1.docx</i> )
RDS-RR-2	Listing of National Peer Group Companies ( <i>Filename: Attachment RDS-RR-2.xlsx</i> )
RDS-RR-3(CD)	Retail Pricing and O&M Benchmarking Analysis (Provided in Native Format on CD Only) ( <i>Filename: Attachment RDS-RR-3(CD).xlsx</i> )
RDS-RR-4(CD)	Capital Additions Benchmarking Analysis (Provided in Native Format on CD Only) ( <i>Filename: Attachment RDS-RR-4(CD).xlsx</i> )
RDS-RR-5	Equivalent Commercial Airfare Costs – Test Year ( <i>Non-native format</i> )
RDS-RR-6	Equivalent Commercial Airfare Costs – Updated Test Year ( <i>Non-native format</i> )
RDS-RR-7(CD)	ScottMadden Analysis of Aviation Operations (Provided in Native Format on CD Only) ( <i>Filename: Attachment RDS-RR-7(CD).xlsx</i> )

**DIRECT TESTIMONY  
OF  
RICHARD D. STARKWEATHER**

1           **I.       WITNESS IDENTIFICATION AND QUALIFICATIONS**

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

3   A.       My name is Richard D. Starkweather. My business address is 2626 Glenwood  
4           Avenue, Suite 480, Raleigh, North Carolina 27608.

5   **Q.       On whose behalf are you testifying in this proceeding?**

6   A.       I am filing testimony on behalf of Southwestern Public Service Company, a New  
7           Mexico corporation (“SPS”), which is a wholly-owned electric utility subsidiary of  
8           Xcel Energy Inc. (“Xcel Energy”).

9   **Q.       By whom are you employed and in what position?**

10  A.       I am a Partner with ScottMadden, Inc. (“ScottMadden”) and a leader in the firm’s  
11           Rates & Regulation practice.

12  **Q.       Please briefly outline your responsibilities as a Partner.**

13  A.       As a Partner with ScottMadden, I provide direction for the work conducted by  
14           ScottMadden consultants, and I am accountable for the overall quality of analyses  
15           and deliverables developed on behalf of clients such as SPS.

16  **Q.       Please describe ScottMadden’s consulting practice and the services it provides.**

17  A.       Founded in 1983, ScottMadden is a management consulting firm with three practice  
18           areas: Energy; Rates & Regulation; and Corporate and Shared Services. Since  
19           1983, we have served hundreds of clients, including the top 20 energy utilities in  
20           the United States. We have performed projects across every energy utility business  
21           unit and every function.

1   **Q.     Please summarize your educational background.**

2   A.     I graduated from Northwestern University with a Bachelor of Science degree in  
3           Mechanical Engineering in 1978, and then earned my Master of Business  
4           Administration degree from the University of Chicago Booth School of Business  
5           in 1980.

6   **Q.     Please summarize your professional experience.**

7   A.     I began my career with Exxon Chemical Americas as a Forecast Coordinator for  
8           the Bayway Chemical Plant in Linden, New Jersey. My responsibilities included  
9           the coordination of the annual operating budget for all of the departments at the  
10          plant. I began my consulting career in 1982, and other than three years in the  
11          managed healthcare industry and three years working for Edison International, I  
12          have been a management consultant for my entire professional career. I started  
13          working for Touche Ross & Co. in 1982, which then became Deloitte & Touche  
14          after the merger with Deloitte, Haskins & Sells in 1989, and joined ScottMadden  
15          in 1999.

16                 Since the early 1990s, I have specialized in the public utility industry and  
17                 have completed numerous consulting engagements for electric and gas utilities. My  
18                 areas of expertise include strategic and business planning, benchmarking,  
19                 regulatory strategy and rate case support, program management, and organizational  
20                 and operations improvement. Additional details regarding my educational  
21                 background and professional experience can be found in Attachment RDS-RR-1.

1   **Q.    Do you have prior experience in performing benchmarking comparisons of**  
2       **utility operations and costs?**

3    A.    Yes. I have performed numerous benchmarking comparisons of financial and  
4       operational performance metrics, capital additions, and Operation and Maintenance  
5       (“O&M”) expense for both electric and gas utilities.

6   **Q.    Have you testified before any regulatory authorities?**

7    A.    Yes. I testified before the Public Utility Commission of Texas (“Commission”) in  
8       Docket No. 43695, and filed testimony in Docket Nos. 40824, 42004, 45524,  
9       47527, and 49831, on topics similar to those I address in this testimony. I filed  
10       testimony at the North Dakota Public Service Commission in Case Nos.  
11       PU-12-813, PU-13-706, PU-13-707, PU-13-708, PU-13-742, PU-13-743,  
12       PU-13-194, and PU-13-195, on behalf of Northern States Power Company, a  
13       Minnesota corporation, regarding its proposed Resource Treatment Framework. I  
14       also testified before the New Mexico Public Regulation Commission, on behalf of  
15       Public Service Company of New Mexico (“PNM”), in Case No. 18-00261-UT  
16       regarding the estimated costs and benefits of PNM’s participation in the Western  
17       Energy Imbalance Market, and filed testimony in Case No. 10-00086-UT regarding  
18       PNM’s capital and O&M budgeting processes.

1                   **II.    ASSIGNMENT AND SUMMARY OF TESTIMONY**  
2   **AND CONCLUSIONS**

3    **Q.    What is your assignment in this proceeding?**

4    A.    I provide benchmark data that demonstrates the reasonableness of SPS's affiliate  
5           costs. It has been SPS's practice to supply affiliate information and benchmark  
6           data in past base rate cases, similar to the practice of Electric Reliability Council of  
7           Texas ("ERCOT") transmission and distribution utilities. Because of the difficulty  
8           in gathering detailed benchmark data for each category of affiliate expense, the  
9           benchmark data typically provided by SPS in the past has been based on total SPS  
10          costs, which include affiliate costs.

11               Xcel Energy's service company subsidiary, Xcel Energy Services Inc.  
12          ("XES"), provides a variety of services to the operating company subsidiaries,  
13          including SPS. In general, any services that are provided to more than one  
14          subsidiary are provided through XES. These services include, for example,  
15          corporate communications, human resources, accounting and financial reporting,  
16          information technology, property services, environmental, safety, and security.  
17          The affiliate costs incurred in providing these services are directly assigned or  
18          allocated to Xcel Energy's subsidiaries on a cost-causative basis—i.e., allocation  
19          factors that closely track the drivers of the service company costs incurred are used  
20          to allocate the costs to subsidiaries. For example, for billing, payment, and  
21          reporting services, XES uses an allocation method that is based on the number of  
22          invoices. When billing overall corporate governance services (such as accounting  
23          and financial reporting), XES uses an allocation method that is based on a  
24          three-factor formula of total revenues, total assets, and number of employees. More

1 details regarding the company's cost allocation bases are provided in the direct  
2 testimony of SPS witness Ross L. Baumgarten.

3 The purpose of my direct testimony is to describe the benchmarking  
4 analysis completed by ScottMadden on behalf of SPS. Based on this analysis, I  
5 also provide my perspectives on SPS's relative performance compared to other  
6 utilities in Texas and across the United States on a variety of retail pricing, O&M  
7 expense, and capital additions metrics for different areas of utility operations. My  
8 analysis uses publicly available data taken from Form 1 reports filed by individual  
9 utilities with the Federal Energy Regulatory Commission ("FERC"), with one  
10 exception that I discuss later in my testimony.

11 In addition, ScottMadden completed an analysis of commercial airfares for  
12 trips flown between Amarillo, Denver, and Minneapolis/St. Paul during the period  
13 October 1, 2019 through September 30, 2020 (the "Test Year"), as well as the  
14 period January 1, 2020 through December 31, 2020 (the "Updated Test Year").  
15 XES uses two leased aircraft for business travel purposes, and the costs incurred in  
16 operating the aircraft are allocated to the Xcel Energy subsidiaries, including SPS.  
17 I prepared an analysis of the costs that would have been incurred during the Test  
18 Year and Updated Test Year had commercial airline service been utilized for  
19 business travel rather than the XES corporate aircraft. Section VII of my testimony  
20 describes this analysis.

21 **Q. Will your testimony be updated for costs incurred during the period October**  
22 **1, 2020 through December 31, 2020 ("Update Period")?**

23 **A.** No. Estimated commercial airfares for the Update Period are already included in  
24 my testimony.



1   **Q.     In your benchmarking analysis and throughout this testimony, you often refer**  
2       **to peer group quartiles. Please describe and explain the use of these quartiles.**

3   A.    When conducting this type of benchmarking analysis, I typically compare the  
4        relative performance of the company under review (in this case SPS) with the peer  
5        group quartiles of the various benchmark metrics (i.e., first quartile, median, and  
6        third quartile). In this testimony, I focus on the comparisons of SPS to the first  
7        quartile, the median, and the third quartile within both the national and Texas peer  
8        groups. With regard to the retail pricing and O&M benchmarking analyses, lower  
9        is generally better, meaning lower rates for customers and lower costs to provide  
10       electric service. The first quartile is the lowest-rate or the lowest-cost quartile, and  
11       thus reflects the best performers within a particular metric. Therefore, SPS's results  
12       are more favorable the closer its prices and costs are to those of the first quartile in  
13       each group – with the best result being prices or costs that are lower than those at  
14       the first quartile. If the prices or costs are at or lower than the median, SPS's  
15       performance is consistent with the top half of performers within the peer group for  
16       that metric.

17               As I discuss later in this testimony, capital additions being above or below  
18       a particular quartile are not necessarily a good or bad result.

19   **Q.     Please summarize the conclusions you reach as a result of your analyses.**

20   A.    Based on my benchmarking analysis, I conclude that during the five-year period of  
21        2015 through 2019,<sup>1</sup> SPS's retail price, O&M expense, and capital additions

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<sup>1</sup> FERC Form 1s for the previous calendar year must be filed on or before April 18<sup>th</sup> of the following year. For example, the FERC Form 1s for 2019 were filed on or before April 18, 2020. Thus, 2019 data was the most recent FERC Form 1 data available for the purposes of this analysis.

1 metrics have generally been consistent with, and better in many areas, than the  
2 national and Texas peer group company averages. In particular:

- 3 a. SPS's overall average retail prices, and average prices for the residential,  
4 commercial, and industrial customer classes, were consistently at or lower  
5 than the average prices of the first quartile (the lowest-rate quartile) for the  
6 national peer group throughout the 2015 to 2019 period. SPS's overall  
7 average retail prices and average industrial retail prices were consistently  
8 lower than the average prices of the Texas peer group's first quartile over  
9 the same period. Average prices for the commercial customer class were at  
10 or near the average prices of the Texas peer group's first quartile, and  
11 average prices for the residential customer class were at or higher than the  
12 median average prices of the Texas peer group from 2015 through 2019.
- 13 b. On nearly every O&M expense measure, SPS's O&M costs were at or lower  
14 than the median costs for both the national and Texas peer groups and in  
15 some cases lower than the costs of the first quartile (the lowest-cost quartile)  
16 during the 2015 to 2019 period. SPS's O&M costs were lower than the  
17 median costs for 15 out of 17 metrics compared to the national peer group  
18 and 13 out of 17 metrics compared to the Texas peer group.
- 19 c. There were four exceptions in comparison to the Texas peer group for: (1)  
20 Customer Accounts, Customer Service and Informational Expense, and  
21 Sales Expense O&M \$ per Retail Customer; (2) Administrative and General  
22 ("A&G") O&M \$ per Retail Customer; (3) A&G O&M \$ per Retail  
23 megawatt-hour ("MWh") Sold; and (4) A&G O&M (net of FERC Account  
24 926) \$ per Retail MWh Sold. The Customer Accounts, Customer Service  
25 and Informational Expense, and Sales Expense and A&G O&M \$ per Retail  
26 Customer results are primarily due to differences in SPS's customer class  
27 energy usage versus that of its peers as explained further in my testimony.  
28 The A&G O&M \$ per Retail MWh Sold result is due to the relative mix of  
29 SPS's retail sales to total sales versus that of the other Texas utilities. On a  
30 total MWh sold basis, SPS A&G costs have been at the Texas peer group  
31 median throughout the 2015 to 2019 period. On a total revenue basis (A&G  
32 O&M as a percent of total revenues), SPS A&G costs have been between  
33 the costs of the Texas peer group median and the first quartile throughout  
34 the 2015 to 2019 period. If one excludes pension and benefits expense for  
35 all of the companies in the peer group (for reasons explained later in my  
36 testimony), SPS's A&G O&M \$ per Retail MWh Sold have generally been  
37 between the costs of the Texas peer group median and the third quartile  
38 throughout the 2015 to 2019 period. On a total MWh sold basis, SPS A&G  
39 costs, excluding pension and benefits expense, have been between the costs  
40 of the Texas peer group median and the first quartile throughout the 2015  
41 to 2019 period.

- 1 d. There were two exceptions in comparison to the national peer group for: (1)  
2 Transmission O&M \$ per MWh Transmitted; and (2) A&G O&M \$ per  
3 Retail Customer. For the transmission result, if one excludes wheeling  
4 expense for all of the companies in the peer group, SPS's costs are lower  
5 than the median costs of the national peer group. The A&G result is again  
6 likely due to differences in SPS's customer class energy usage versus that  
7 of its peers in the national peer group. SPS's costs are lower than the median  
8 costs of the national peer group with regard to A&G O&M \$ per Retail  
9 MWh Sold.
- 10 e. SPS O&M costs per dollar of plant investment have generally been trending  
11 downwards, or improving, over the 2015 to 2019 period. SPS's non-fuel  
12 production and transmission O&M costs versus total plant investment levels  
13 fall between the costs of the median and third quartile of the national peer  
14 group, and between the costs of the median and first quartile of the Texas  
15 peer group. SPS distribution O&M costs versus total plant investments fall  
16 between the costs of the median and first quartile of the national peer group,  
17 and between the costs of the median and third quartile of the Texas peer  
18 group. SPS's A&G O&M costs versus total plant investments fall between  
19 the costs of the median and the first quartile of both the national and the  
20 Texas peer groups.
- 21 f. SPS's production plant capital additions have generally been lower than the  
22 national and Texas peer group medians since 2015, with the exception of  
23 2019. The significant increase in 2019 is largely due to the Hale Wind  
24 Project, which came online in June 2019. In addition, there were some  
25 generator and compressor projects completed in 2019 at the Cunningham  
26 Generating Station.
- 27 g. SPS's transmission capital additions have been fairly constant over the 2016  
28 to 2019 time period (representing about 8% to 12% of total transmission  
29 plant), after declining from 2015 levels. On a rolling three-year average  
30 basis, investment levels have generally been decreasing steadily. The level  
31 of SPS's transmission plant capital additions has been higher than the  
32 national peer group median since 2015, and at or near the Texas peer group  
33 median since 2016. The investments in transmission plant additions  
34 primarily reflect transmission and substation capital additions for the  
35 expansion, upgrading, and refurbishment of transmission system  
36 infrastructure to: (1) interconnect new generation resources; (2) maintain  
37 reliability; and (3) improve load-serving capability. SPS's transmission  
38 plant additions have significantly exceeded annual depreciation expense  
39 every year since 2015. The national peer group median levels have been  
40 about 300% of depreciation, consistent with the continued industry focus  
41 on transmission expansion. In Texas, the peer group median has been about  
42 400% to 500% of depreciation over the 2015 to 2019 time period, reflecting  
43 the active transmission expansion in the state.

- 1 h. SPS's distribution capital additions have also stabilized in recent years,  
2 although they were higher than the national peer group median from 2015  
3 through 2019. In comparison to the Texas peer group, distribution capital  
4 additions were higher than the median in 2015, 2017, and 2018, and at or  
5 near the median in 2016 and 2019.
- 6 i. SPS's general plant additions decreased from 2015 levels in 2016, increased  
7 again in 2017, and then decreased to about 10% to 11% of general plant  
8 balances in 2018 and 2019. SPS additions during the 2015 to 2019 period  
9 have generally been higher than the national and Texas peer group medians.  
10 The spending levels in 2015 were primarily due to: (1) the consolidation of  
11 the customer office and service center into one building at the existing  
12 Borger service center; (2) projects required due to the failure of mechanical  
13 equipment; and (3) replacement of equipment that had reached the end of  
14 its useful lifespan. The increase in 2017 was primarily due to the new SAP  
15 work and asset management system. The slight increase in 2019 is driven  
16 by the new Canyon Service Center, as well as various hardware, network  
17 equipment, and office furniture/equipment additions. On a three-year  
18 rolling average basis, SPS general plant additions as a percent of total  
19 general plant were higher than the national and Texas peer group medians  
20 from 2015 through 2019.
- 21 j. If the flights that occurred on the corporate aircraft during the Updated Test  
22 Year had instead been taken on commercial airlines, the equivalent airfare  
23 costs would have been approximately \$112,000. Equivalent commercial  
24 airfare costs for flights that occurred on the corporate aircraft during the  
25 Test Year would have been approximately \$258,000.

26 **Q. What can you conclude about SPS's affiliate costs as a result of your O&M**  
27 **benchmark analysis?**

28 A. Affiliate costs are one component of SPS's overall O&M costs. As described  
29 earlier in my testimony, Xcel Energy chooses to provide certain services to its  
30 subsidiaries through XES. By providing these services to multiple subsidiaries on  
31 a centralized basis through a service company, corporate oversight and governance  
32 can be improved and overall costs can be reduced. Comparing SPS's O&M costs  
33 to those of other utilities, either on a national basis or to other Texas utilities, can  
34 help assess SPS's ability to manage O&M costs in general, and affiliate costs  
35 specifically. As shown in the benchmarking analysis in my testimony below, SPS's

1 total O&M expense per Retail MWh Sold has performed at or near the national peer  
2 roup median since 2015 but improved significantly in 2019 to better (lower) than  
3 the national peer group first quartile. Relative to other Texas utilities, SPS's total  
4 O&M costs have been between the peer group median and the first quartile since  
5 2015, and at the first quartile in 2019.

6 A large portion of affiliate costs for many utilities are allocated to FERC  
7 A&G accounts. Evaluating SPS's A&G cost performance relative to other utilities  
8 provides additional insights regarding affiliate costs. On a national basis, SPS's  
9 A&G O&M per retail MWh Sold has performed well, with results between the  
10 median and the first quartile of the national peer group since 2015. Compared with  
11 the Texas peer group, the expenses were between the median and the third quartile  
12 between 2015 and 2017, and higher than the third quartile in 2018 and 2019.  
13 However, on a total MWh sold basis, which captures the full scope of SPS's utility  
14 operations, A&G O&M per total MWh sold has been lower than the national peer  
15 group first quartile, and at the peer group median for Texas utilities, throughout the  
16 2015 to 2019 period. If one excludes employee pension and benefits expense for  
17 all of the companies in the peer groups (for reasons explained later in my  
18 testimony), SPS's A&G O&M costs per total MWh Sold have been well below the  
19 costs of the national peer group first quartile, and at or very near the costs of the  
20 Texas peer group first quartile during the 2015 to 2018 period, increasing to the  
21 Texas peer group median in 2019.

22 **Q. Were Attachments RDS-RR-1 through RDS-RR-7(CD) prepared by you or**  
23 **under your direct supervision and control?**

24 A. Yes.

1       **III. ANALYTICAL APPROACH FOR THE BENCHMARKING STUDY**

2       **Q.     Please describe the nature of the analysis that you performed in your**  
3       **benchmarking study.**

4       A.     I evaluated a number of retail pricing, O&M expense, and capital additions metrics  
5             for different areas of SPS's operations to assess the efficiency of SPS's operations  
6             and quality of management. For each metric, I benchmarked SPS's relative  
7             performance to other utilities in Texas and the United States.

8       **Q.     Please describe what you mean by "benchmarking."**

9       A.     Benchmarking is a commonly used methodology for comparing a utility's  
10            performance in a specific area (e.g., costs or reliability) to that of other similar  
11            utilities or peers. Process benchmarking is often used by companies to evaluate  
12            various aspects of their operational or management processes in relation to best  
13            practices, usually within their own industry sector. Performance benchmarking is  
14            used to quantitatively compare a company's results for a particular financial or  
15            operational measure against the results for a group of peers.

16      **Q.     How should the results of this benchmarking study be interpreted?**

17      A.     Favorable benchmarking results for a utility, particularly over time, can be an  
18            indicator that the utility's underlying management processes and actions regarding  
19            the area being analyzed have been effective. Where benchmarking results indicate  
20            that performance levels are unfavorable, additional analysis can also be conducted  
21            to help determine the causes of the performance gaps.

22      **Q.     What are the typical sources of benchmarking data?**

23      A.     Data used for benchmarking usually comes from publicly available data sources or  
24            through proprietary surveys and research. For utilities, publicly available data can

1 be obtained through required regulatory filings with the FERC (e.g., FERC Form 1  
2 reports). This data can be gathered individually or through service providers that  
3 compile and sell this information in a variety of formats. The benefit of FERC  
4 Form 1 data is that the information can be traced back to a specific filing and  
5 company. This provides for a consistent, objective, and independent data source  
6 that allows for the inclusion of specific companies in a peer group by compiling the  
7 associated data from each company.

8 Factors that can impact the validity of a benchmarking analysis include the  
9 comparability of the data inputs used in the benchmark calculations and the  
10 comparability of the companies used in the peer groups. It is not uncommon for  
11 different utilities to track and report operating statistics and/or costs in different  
12 ways—or to interpret reporting requirements differently—even when complying  
13 with standardized reporting formats such as those required by the FERC Uniform  
14 System of Accounts. As a result, care must be exercised when selecting data  
15 sources for benchmarking analyses and when interpreting the results of those  
16 analyses.

17 **Q. What was the source for the data used in this benchmarking analysis?**

18 A. The operational and financial data used in my benchmarking analysis was obtained  
19 from publicly available FERC Form 1 filings made by regulated energy and utility  
20 companies for the period 2015 through 2019 (although it was necessary to compile  
21 data back to 2013 for parts of this analysis), and company websites.<sup>2</sup> FERC Form

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<sup>2</sup> AEP Texas Inc. customer data was not available in the FERC Form 1 information. As a proxy, ScottMadden used the total number of meters for 2017 and 2019 in certain parts of the analysis. This information was included in fact sheets on the company's web site.

1 reports are among the most complete data sources on financial and operating statistics available to the public concerning individual electric utilities.

The data source utilized for FERC Form 1 data is S&P Global, Inc. (“S&P”), a well-respected industry information and research firm covering a number of business sectors including electric utilities. S&P collects, standardizes, and disseminates a wide variety of electric utility operating and financial statistics including FERC Form 1 data. S&P replicates all of the major schedules of the FERC Form 1 for every filer, and provides query tools to easily pull the information into spreadsheets for analysis, comparison, and benchmarking purposes.

**Q. Did you have to adjust any of the S&P data to complete your analysis?**

A. The S&P FERC Form 1 data was adjusted in one area. SPS utilizes distribution business area personnel to perform: (1) “shut offs” and “turn ons” of electric service (also referred to as “credit work”) due to non-payment of bills; and (2) meter readings when customers move in or out of residences. In conversations with SPS personnel, it was discovered that the work orders charged by the distribution personnel for these activities were assigned to distribution operation expense and not customer operations FERC accounts during the 2013 to 2015 time period. The costs associated with these activities in 2015 (approximately \$3 million) were transferred from the distribution FERC accounts to the customer operations accounts for SPS for the purposes of this benchmarking analysis.

**Q. What criteria did you utilize to select the companies making up the national and Texas peer groups?**

A. As described earlier, the quality, or relevance, of any particular benchmarking study is dependent on the characteristics, or similarities, of the companies populating the



1 peer groups. When conducting a benchmarking analysis, one wants the peer groups  
2 populated with companies with similar characteristics to ensure reliable results.  
3 Restructuring of the industry has resulted in a variety of operating models (e.g.,  
4 generation-only companies, transmission-only companies, etc.), ownership models  
5 (e.g., municipals, cooperatives, investor-owned utilities, etc.), and corporate  
6 structures (e.g., holding companies, service company affiliates, etc.). SPS is a  
7 vertically integrated, investor-owned utility with generation, transmission, and  
8 distribution assets serving a predominantly retail end-use customer base. Given  
9 these challenges, ScottMadden employed the following process in the selection of  
10 peer group companies to help ensure similarities in characteristics of the national  
11 and Texas peer groups to SPS:

- 12 1. A list of all companies filing FERC Form 1 reports over the period 2013  
13 through 2019 was obtained by querying the current S&P FERC Form 1  
14 dataset.<sup>3</sup>
- 15 2. This list formed the basis for the FERC Form 1 data query from S&P.  
16 Electric plant, operating data, O&M expense, and system peak and  
17 transmission line data were compiled for diversified utilities and electric  
18 utilities for each of the years 2013 through 2019.
- 19 3. Peer group selection criteria were defined for the national and Texas  
20 peer groups. Criteria for inclusion in the SPS national and Texas peer  
21 groups included:
  - 22 a. The company must be of sufficient size to warrant comparison. For  
23 the purposes of this effort, companies with less than 10,000  
24 customers were eliminated.
  - 25 b. The company must be regulated and provide electric service  
26 (directly or indirectly) to retail end-use customers. This criterion  
27 eliminated generation-only companies, transmission-only  
28 companies, and generation and transmission-only companies;  
29 however, distribution-only and transmission and distribution  
30 companies are included in the peer groups.

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<sup>3</sup> Information from FERC Form 1 reports over the period 2013 through 2019 was necessary because, as discussed below, a three-year rolling average is used in the capital investment benchmarking analysis.

1 c. The company must have comparative FERC Form 1 data to enable  
2 the development of the metrics used in the benchmarking analysis.

3 **Q. What Texas peer group and national peer group companies were identified as**  
4 **a result of your analysis?**

5 A. The Texas peer group companies are as follows:

- 6 • AEP Texas, Inc. (including the former AEP Texas Central Company and  
7 AEP Texas North Company);
- 8 • CenterPoint Energy Houston Electric, LLC;
- 9 • El Paso Electric Company;
- 10 • Entergy Texas, Inc.;
- 11 • Oncor Electric Delivery Company LLC;
- 12 • Sharyland Utilities, L.L.C.<sup>4</sup>;
- 13 • Southwestern Electric Power Company;
- 14 • Southwestern Public Service Company; and
- 15 • Texas-New Mexico Power Company.

16 There were 136 utility companies included in the national peer group (see  
17 Attachment RDS-RR-2 for a list of these companies).

18 **Q. What performance metrics were evaluated in your analysis?**

19 A. SPS performance was benchmarked from four perspectives: average retail  
20 electricity prices, O&M expense, asset performance, and capital additions. Industry  
21 standard benchmarks were utilized within each of these categories.<sup>5</sup>

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<sup>4</sup> Sharyland Utilities, L.L.C. became a transmission-only company at the end of 2017 and so is included in the Texas peer group for the period 2015 through 2017 only.

<sup>5</sup> The native format of my Retail Pricing and O&M Benchmarking Analysis is provided on a CD as Attachment RDS-RR-3(CD). The native format of my Capital Additions Benchmarking Analysis is provided on a CD as Attachment RDS-RR-4(CD).

1       Average Retail Electricity Prices

2       Retail pricing benchmarks (overall and by customer class for industrial,  
3       commercial, and residential customers) show the average price received by a utility  
4       for every kilowatt-hour (“kWh”) sold. Over time, such measures are good  
5       indicators of revenue stability and can also highlight year-to-year changes in  
6       customer mix and energy usage patterns. The specific pricing benchmarks included  
7       in my analysis are as follows:

- 8           • Total Retail Revenues Cents per kWh Sold;
- 9           • Residential Revenues Cents per kWh Sold;
- 10          • Commercial Revenues Cents per kWh Sold; and
- 11          • Industrial Revenues Cents per kWh Sold.

12       O&M Expense

13       O&M expense benchmarks are good indicators of relative process and cost  
14       efficiencies between peer group companies, including labor productivity. The  
15       specific O&M expense benchmarks included in my analysis are as follows:

- 16          • Total O&M \$ per Retail MWh Sold;
- 17          • Total Non-Fuel O&M \$ per Retail MWh Sold;
- 18          • Non-Fuel Production O&M \$ per MWh Generated;
- 19          • Transmission O&M \$ per MWh Transmitted (with and without FERC  
20             Account 565 costs);
- 21          • Transmission O&M \$ per Line Mile (with and without FERC Account 565  
22             costs);
- 23          • Distribution O&M \$ per Retail MWh Sold;
- 24          • Distribution O&M \$ per Retail Customer;

- 1 • Customer Accounts, Customer Service and Informational Expense, and  
2 Sales Expense O&M \$ per Retail MWh Sold;
- 3 • Customer Accounts, Customer Service and Informational Expense, and  
4 Sales Expense O&M \$ per Retail Customer;
- 5 • A&G O&M \$ per Retail MWh Sold (with and without FERC Account 926  
6 costs);
- 7 • A&G O&M \$ per Retail Customer;
- 8 • A&G O&M \$ as a Percent of Total Revenues; and
- 9 • A&G O&M \$ per Total MWh Sold (with and without FERC Account 926  
10 costs).

11 O&M Expense per Total Plant

12 To evaluate how SPS and the other peer group utilities are managing their  
13 functional O&M expense versus the total invested capital in their utility operations,  
14 four additional benchmarks were analyzed on an annual basis, as follows:

- 15 • Non-fuel Production O&M \$ per Total Production Plant;
- 16 • Transmission O&M \$ per Total Transmission Plant (with and without  
17 FERC Account 565 costs);
- 18 • Distribution O&M \$ per Total Distribution Plant; and
- 19 • A&G O&M \$ per Total Electric Plant.

20 Capital Additions

21 Capital additions benchmarks for each peer group were analyzed on an annual and  
22 three-year rolling average basis to moderate the effects of individual years where  
23 extraordinary capital additions may have occurred. The specific capital  
24 benchmarks included in my analysis are as follows:

- 25 • Total Additions as a Percent of Total Plant;
- 26 • Three-year Average Additions as a Percent of Total Plant;

- 1           • Total Additions as a Percent of Annual Depreciation;
- 2           • Production Additions as a Percent of Production Plant;
- 3           • Three-year Average Production Additions as a Percent of Production Plant;
- 4           • Production Additions as a Percent of Annual Depreciation;
- 5           • Transmission Additions as a Percent of Transmission Plant;
- 6           • Three-year Average Transmission Additions as a Percent of Transmission
- 7           Plant;
- 8           • Transmission Additions as a Percent of Annual Depreciation;
- 9           • Distribution Additions as a Percent of Distribution Plant;
- 10          • Three-year Average Distribution Additions as a Percent of Distribution
- 11          Plant;
- 12          • Distribution Additions as a Percent of Annual Depreciation;
- 13          • General Plant Additions as a Percent of General Plant;
- 14          • Three-year Average General Plant Additions as a Percent of General Plant;
- 15          and
- 16          • General Plant Additions as a Percent of Annual Depreciation.

17   **Q.    Are these generally the same metrics included in the previous benchmarking**  
18       **analyses you conducted for SPS?**

19   A.    Yes.

20   **Q.    Above you stated that retail pricing benchmarks by customer class were some**  
21       **of the metrics you used in your analysis. Can you explain the reference to**  
22       **customer classes further?**

23   A.    As I noted above, the operational and financial data used in my benchmarking  
24       analysis was obtained from publicly available FERC Form 1 filings made by  
25       regulated energy and utility companies. The sales data provided in the FERC Form

1 filings is grouped by customer type or class. I am not, however, using the term  
2 “customer class” in the sense that this term is used by other witnesses in this  
3 proceeding for the purposes of cost allocation, revenue distribution, and rate design.  
4 Thus, my use of the term “customer class” should not be viewed as SPS’s position  
5 or the position of any other SPS witness regarding any cost allocation, revenue  
6 distribution, or rate design issue in this case.

7 **Q. Before you provide the results of your benchmarking analysis, can you provide**  
8 **general guidance as to how the results should be interpreted?**

9 A. Yes. As I discussed above, I will typically compare the relative performance of the  
10 company under review (in this case SPS) with the peer group quartiles of the  
11 various benchmark metrics (i.e., top quartile, median, third quartile, and bottom  
12 quartile). For revenue and O&M expense measures, lower is generally better,  
13 meaning lower rates for customers or lower costs to provide electric service. In this  
14 analysis, being closer to (or lower than) the first quartile, which is the lowest-rate  
15 or lowest-cost quartile, is more favorable.

16 However, for capital additions, being above or below a particular quartile is  
17 not necessarily a good or bad result. It may simply indicate that a particular utility  
18 is making investments in facilities at a particular point in time, when other members  
19 of the peer group are planning such investments at another point in time. I discuss  
20 the results in greater detail later in my testimony, but having this framework in mind  
21 should allow the reader to more easily understand the relevance of the  
22 benchmarking results for SPS.

23 As a final note, and as I noted above, this benchmarking analysis can help  
24 assess SPS’s management of O&M costs and capital investments. This analysis,

1           along with the other testimony and evidence SPS provides in this proceeding,  
2           should inform the Commission of the reasonableness of SPS's retail pricing, O&M  
3           expense levels, and capital additions, and thus supports the proposed revenue  
4           requirement of SPS in this rate case.

1                   **IV.     RETAIL PRICING BENCHMARK RESULTS**

2     **Q.     Why did you benchmark SPS's average annual retail price per kWh to the**  
3           **national and Texas peer groups?**

4     A.     The average price paid (or received) per kWh for electric service is an often-used  
5           benchmarking metric and reflects three primary factors: (1) actual fixed and  
6           variable prices; (2) customer energy usage patterns; and (3) customer mix. The  
7           average price paid per kWh is therefore a good measure of the overall cost  
8           effectiveness of a company in delivering electric service.

9     **Q.     What pricing metrics did you evaluate in your analysis?**

10    A.     I compared the average prices paid by residential, commercial, and industrial  
11           customers with the median value of the Texas and national peer groups. For  
12           purposes of this analysis, the average price paid per kWh equals annual retail  
13           revenues (from sales to ultimate consumers) divided by kWh sales, both in total  
14           and for each customer class. The pricing comparisons are reflected in Figures  
15           RDS-RR-1 through RDS-RR-6 described in the paragraphs that follow.

16    **Q.     What overall conclusions do you draw from your analysis of SPS's average**  
17           **pricing?**

18    A.     SPS's overall average retail prices, and average prices for the residential,  
19           commercial, and industrial customer classes, were consistently at or lower than the  
20           average prices of the first quartile (the lowest-rate quartile) for the national peer  
21           group throughout the 2015 to 2019 period. SPS's overall average retail prices and  
22           average industrial retail prices were consistently lower than the average prices of  
23           the Texas peer group's first quartile over the same period. Average prices for the



1 commercial customer class were at or near the average prices of the Texas peer  
2 group's first quartile, and average prices for the residential customer class were at  
3 or higher than the median average prices of the Texas peer group from 2015 through  
4 2019.

5 **Q. Please describe the results of your pricing analysis.**

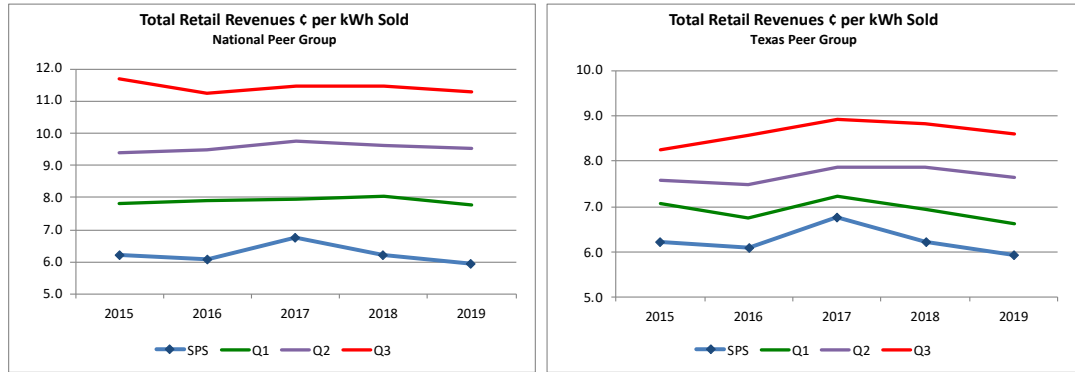
6 A. It should first be noted that the investor-owned utilities that operate in ERCOT have  
7 transmission and distribution assets only and provide "wires" service directly to  
8 end-use retail customers of deregulated retail companies operating in Texas. As a  
9 result, the average retail prices paid for electricity for these transmission and  
10 distribution utilities do not fully reflect the cost of providing retail electric services  
11 to customers. These companies<sup>6</sup> were therefore excluded from the Texas and  
12 national peer groups for the purposes of the retail pricing benchmarking analysis.

13 As shown in Figures RDS-RR-1 and RDS-RR-2 below, in 2019, SPS's total  
14 average price for electricity sold to retail customers was 5.92 cents per kWh. This  
15 is 37.7% lower than the national median average price (9.51 cents per kWh) and  
16 22.7% lower than the Texas median average price (7.66 cents per kWh). SPS's  
17 total average price for retail electricity has remained consistently in the first quartile  
18 of average prices for the national and Texas peer groups throughout the 2015 to  
19 2019 time period.

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<sup>6</sup> AEP Texas, Inc.; CenterPoint Energy Houston Electric, LLC; Oncor Electric Delivery Company LLC; Sharyland Utilities, L.L.C.; and Texas-New Mexico Power Company.

**Figure RDS-RR-1: Total Retail Revenues ¢ per kWh Sold**



I also compared SPS's 2019 average price per kWh for each major customer class relative to the total average retail price. Figure RDS-RR-2 depicts the results of this analysis.

**Figure RDS-RR-2: Average Price per kWh by Customer Class**

2019 Average Price per kWh (cents per kWh)	SPS	Texas Median	National Median
Total Retail Sales	5.92	7.66	9.51
Residential Sales	10.04	10.12	12.01
Commercial Sales	7.17	7.81	9.52
Industrial Sales	4.01	4.45	6.35

As shown in Figure RDS-RR-3 below, the residential class was the largest of SPS's customer groups in 2019 in terms of customers (78.7%) but represented only 17.4% of SPS's retail energy sales in 2019. Industrial and commercial energy usage, with their associated lower prices, represented about 80.0% of SPS's retail energy sales in 2019, causing the relatively low total average retail price for SPS.

1

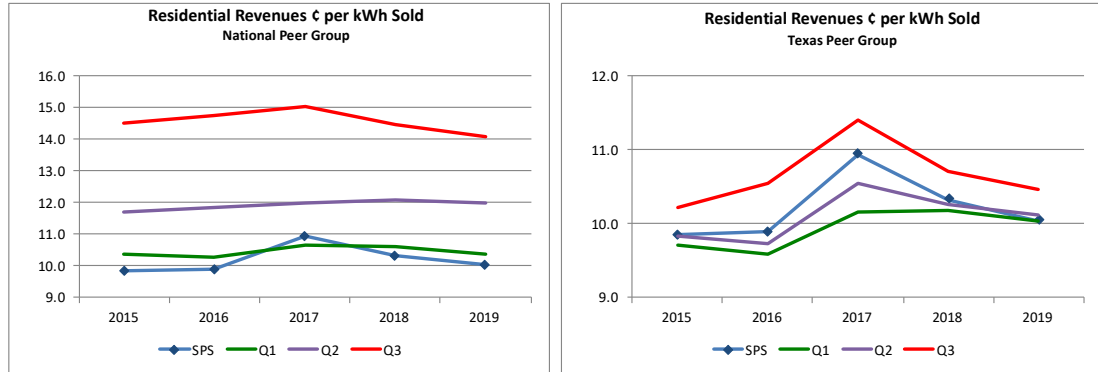
**Figure RDS-RR-3: SPS Customer Class Characteristics**

	<b>2019</b>	<b>Percent of Total</b>
<b>Annual Operating Revenues – \$000</b>		
Residential	367,171	29.5%
Commercial	365,353	29.3%
Industrial	470,101	37.7%
Total Other Sales	42,960	3.4%
Total Retail Revenues	1,245,585	100.0%
<b>Annual Usage – MWh Sold</b>		
Residential	3,656,212	17.4%
Commercial	5,095,598	24.2%
Industrial	11,732,482	55.8%
Total Other Sales	542,768	2.6%
Total Retail MWh Sales	21,027,060	100.0%
<b>Average Customers Per Month</b>		
Residential	310,514	78.7%
Commercial	77,585	19.7%
Industrial	246	0.1%
Total Other Sales	6,324	1.6%
Total Number of Customers	394,669	100.0%

2    **Q.    Please describe the results of your pricing analysis for Residential customers.**

3    A.    As shown in Figure RDS-RR-2 above, in 2019, SPS’s total average residential retail  
4    rate was 10.04 cents per kWh. As shown in Figure RDS-RR-4 below, SPS’s  
5    average residential retail prices have generally been lower than the average prices  
6    of the first quartile for the national peer group and at or higher than the median  
7    average prices for the Texas peer group over the 2015 through 2019 time period.  
8    This means that SPS provides service to the residential segment at an average price  
9    that is among the lowest when compared to the national peer group and on par with  
10   the Texas peer group.

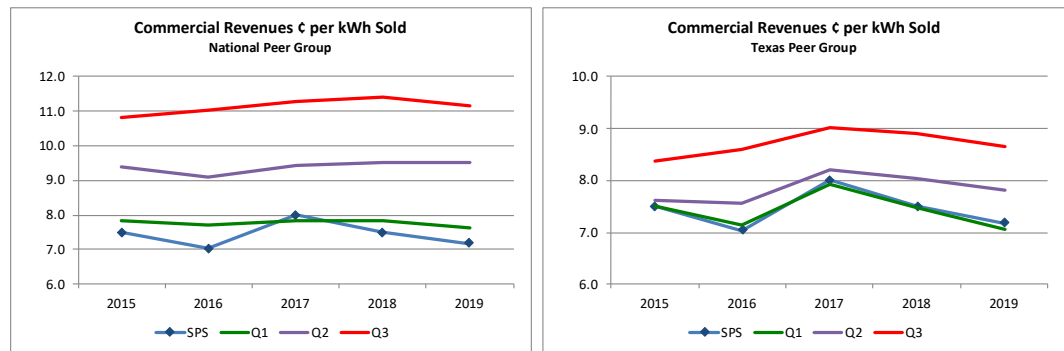
**Figure RDS-RR-4: Residential Revenues ¢ per kWh Sold**



**Q. Please describe the results of your pricing analysis for Commercial customers.**

A. As shown in Figure RDS-RR-2 above, in 2019, SPS's total average commercial retail rate, on a cents per kWh basis, was 7.17 cents per kWh. As shown in Figure RDS-RR-5 below, SPS's average commercial electricity prices have essentially been lower than the average prices of the first quartile for the national peer group, and at or near the average prices for the first quartile for the Texas peer group, since 2015.

**Figure RDS-RR-5: Commercial Revenues ¢ per kWh Sold**

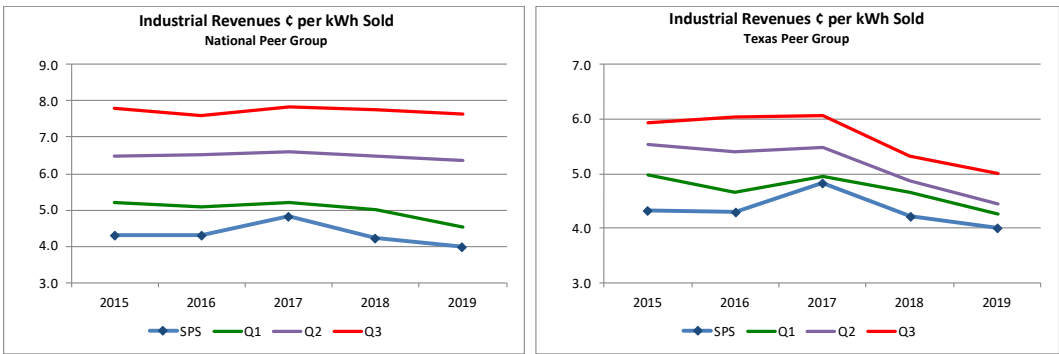


**Q. Please describe the results of your pricing analysis for Industrial customers.**

A. As shown in Figure RDS-RR-2 above, in 2019, SPS's total average industrial rate, on a cents per kWh basis, was 4.01 cents per kWh. As shown in Figure RDS-RR-6

below, SPS’s average industrial rates have been well below the average prices of the first quartile (the lowest-rate quartile) for the national peer group and the Texas peer group since 2015.

**Figure RDS-RR-6: Industrial Revenues ¢ per kWh Sold**



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3

A. I analyzed the following key measures of O&M expenses across both national and Texas peer groups:

- Production, transmission, distribution, customer accounts, customer service and information, sales, and A&G expenses, when compared to generation output, transmission throughput, transmission line miles, sales volume, average number of customers, or total plant balances provide measures commonly used to evaluate the performance of different utilities.

The investor-owned utilities that operate in ERCOT have divested their generating assets and retail operations (specifically, AEP Texas, Inc.; CenterPoint Energy Houston Electric, LLC; Oncor Electric Delivery Company LLC; Sharyland

1 Utilities, L.L.C.<sup>7</sup>; and Texas-New Mexico Power Company). As a result, only  
2 certain O&M metrics apply for these companies in the national and Texas peer  
3 group comparisons.

4 **Q. Can you provide examples of where these companies were excluded from the**  
5 **analysis?**

6 A. Yes. For the customer operations metrics, only SPS, El Paso Electric Company,  
7 Entergy Texas, Inc., and Southwestern Electric Power Company were included in  
8 the analysis. AEP Texas, Inc.; CenterPoint Energy Houston Electric, LLC; Oncor  
9 Electric Delivery Company LLC; Sharyland Utilities, L.L.C.; and Texas-New  
10 Mexico Power Company were excluded from the customer operations measures.

11 **Q. Why were only four utilities included in the Texas peer group for the customer**  
12 **operations benchmarking analysis?**

13 A. As I stated earlier in my testimony, the five investor-owned utilities that operate in  
14 ERCOT are “wires only” utilities and have divested their generating assets and  
15 retail operations. As a result, some of the activities associated with customer  
16 operations, for example billing, are performed by the retail electric providers, not  
17 the utilities. Therefore, the scope of customer operations for these five utilities is  
18 not consistent with that of the four companies included in the benchmarking  
19 analysis (SPS, El Paso Electric Company, Entergy Texas, Inc., and Southwestern  
20 Electric Power Company). Including these wires-only companies in the analysis  
21 would skew the benchmarking results.

---

<sup>7</sup> Sharyland Utilities, L.L.C. became a transmission-only company at the end of 2017 and so is included in the Texas peer group for the period 2015 through 2017 only.

1   **Q.    Can you still draw reliable conclusions from the benchmarking analysis of**  
2       **customer operations when only four utilities are included in the Texas peer**  
3       **group?**

4    A.   Yes. There were many more utilities included in the national peer group for the  
5       customer operations benchmarks. So even though the conclusions that can be  
6       drawn in comparison to the Texas utilities are more limited, one can still determine  
7       the cost efficiency of SPS relative to many other utilities around the country.

8   **Q.    What overall conclusions did you draw from your analysis of SPS's O&M**  
9       **expenses?**

10   A.   On nearly every O&M expense measure, SPS's O&M costs were at or lower than  
11       the median costs for both the national and Texas peer groups, and in some cases  
12       lower than the costs of the first quartile (the lowest-cost quartile) during the 2015  
13       to 2019 period. SPS's O&M costs were lower than the median costs for 15 out of  
14       17 metrics compared to the national peer group and 13 out of 17 metrics compared  
15       to the Texas peer group.

16               There were four exceptions in comparison to the Texas peer group for: (1)  
17       Customer Accounts, Customer Service and Informational Expense, and Sales  
18       Expense O&M \$ per Retail Customer; (2) A&G O&M \$ per Retail Customer; (3)  
19       A&G O&M \$ per Retail MWh Sold; and (4) A&G O&M (net of FERC Account  
20       926) \$ per Retail MWh Sold. The Customer Accounts, Customer Service and  
21       Informational Expense, and Sales Expense and A&G O&M \$ per Retail Customer  
22       results are primarily due to differences in SPS's customer class energy usage versus  
23       that of its peers, as explained further in my testimony. The A&G O&M \$ per Retail



1 MWh Sold result is due to the relative mix of SPS's retail sales to total sales versus  
2 that of the other Texas utilities. On a total MWh sold basis, SPS A&G costs have  
3 been at the Texas peer group median throughout the 2015 to 2019 period. On a  
4 total revenue basis (A&G O&M as a percent of total revenues), SPS A&G costs  
5 have been between the costs of the Texas peer group median and the first quartile  
6 throughout the 2015 to 2019 period. If one excludes pension and benefits expense  
7 for all of the companies in the peer group (for reasons explained later in my  
8 testimony), SPS's A&G O&M \$ per Retail MWh Sold have generally been between  
9 the costs of the Texas peer group median and the third quartile throughout the 2015  
10 to 2019 period. On a total MWh sold basis, SPS A&G costs, excluding pension  
11 and benefits expense, have been between the costs of the Texas peer group median  
12 and the first quartile throughout the 2015 to 2019 period.

13 There were two exceptions in comparison to the national peer group for: (1)  
14 Transmission O&M \$ per MWh Transmitted; and (2) A&G O&M \$ per Retail  
15 Customer. For the transmission result, if one excludes wheeling expense for all of  
16 the companies in the peer group, SPS's Transmission O&M costs per MWh  
17 Transmitted are lower than the median costs of the national peer group. The A&G  
18 result is again likely due to differences in SPS's customer class energy usage versus  
19 that of its peers in the national peer group. SPS's A&G O&M costs per Retail  
20 MWh Sold are lower than the median costs of the national peer group.

21 Below I provide further results of my analysis of SPS's O&M expenses.

**A. Total Company and Production Benchmarks**

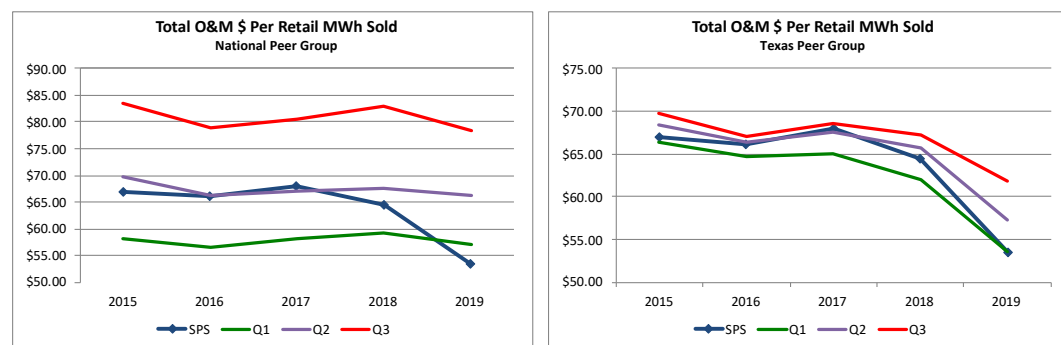
**Q. Please describe your analysis of SPS's total company O&M and production O&M expense.**

A. I developed three charts depicting total O&M costs: (1) total O&M per Retail MWh sold; (2) total non-fuel O&M per Retail MWh sold; and (3) non-fuel production O&M per MWh generated. These are depicted below in Figures RDS-RR-7 through RDS-RR-9.

**Q. Please describe the results of your analysis of SPS's total O&M costs per MWh sold with those of its Texas and national peer groups.**

A. As shown in Figure RDS-RR-7 below, SPS's total O&M expense per Retail MWh sold has been at or near the national median for this metric since 2015, but improved significantly in 2019 to lower than the first quartile (the lowest cost quartile). SPS has also performed well relative to other Texas utilities, as SPS's total O&M expense per Retail MWh sold has been between the median for this metric and the first quartile since 2015, and at the first quartile in 2019. SPS witness David A. Low's direct testimony addresses these O&M costs, including both native and affiliate expenses, and the efforts undertaken to keep those costs at reasonable levels.

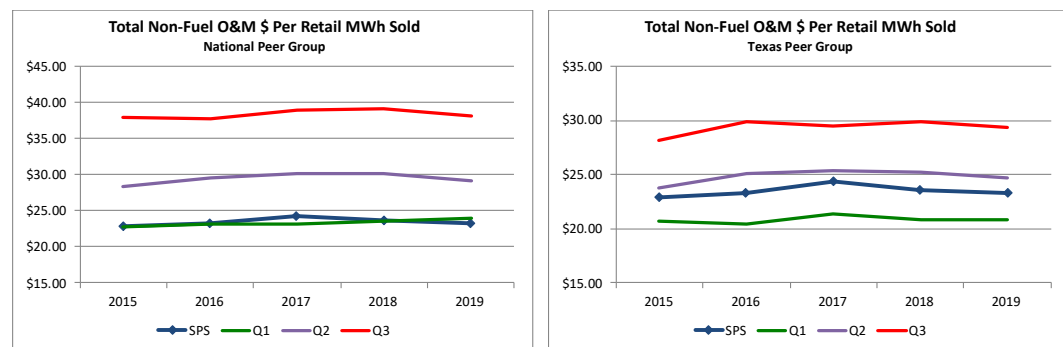
**Figure RDS-RR-7: Total O&M \$ per Retail MWh Sold**



1     **Q.     Please describe the results of your analysis of SPS’s total O&M less fuel and**  
2     **purchased power costs with those of its Texas and national peer groups.**

3     A.     As shown in Figure RDS-RR-8 below, SPS’s total non-fuel O&M expenses per  
4     Retail MWh sold have been at or near the costs of the national peer group first  
5     quartile since 2015 and lower than the Texas peer group median costs during the  
6     2015 to 2019 period. Total non-fuel O&M costs are a good representation of how  
7     efficiently a utility operates, and as Figure RDS-RR-8 shows, SPS performs well  
8     in this regard.

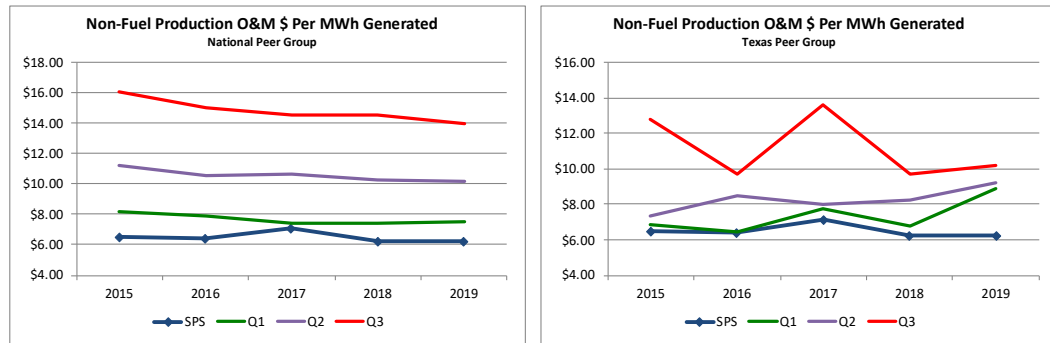
9                     **Figure RDS-RR-8: Total Non-Fuel O&M \$ per Retail MWh Sold**



10    **Q.     Please describe the results of your analysis of SPS’s non-fuel production O&M**  
11    **expense with those of its Texas and national peer groups.**

12    A.     As shown in Figure RDS-RR-9 below, SPS’s non-fuel production costs have been  
13    lower than the costs of the first quartiles for both the national and Texas peer groups  
14    throughout the 2015 to 2019 time period. Similar to total non-fuel O&M costs,  
15    non-fuel production O&M costs are a good representation of how efficiently a  
16    utility operates, and SPS performs very well in this regard. Mr. Low’s direct  
17    testimony addresses the efficiency of SPS’s generation fleet.

**Figure RDS-RR-9: Non-Fuel Production O&M \$ per MWh Generated**



**B. Transmission O&M Expense Benchmarks**

**Q. Please describe your overall analysis of SPS’s transmission O&M expense.**

A. I developed four charts depicting the benchmarking of transmission O&M expenses: (1) total transmission expense per MWh transmitted, with and without the inclusion of FERC Account 565; and (2) total transmission expense per line mile, with and without the inclusion of FERC Account 565. The results are depicted below in Figures RDS-RR-10 through RDS-RR-13.

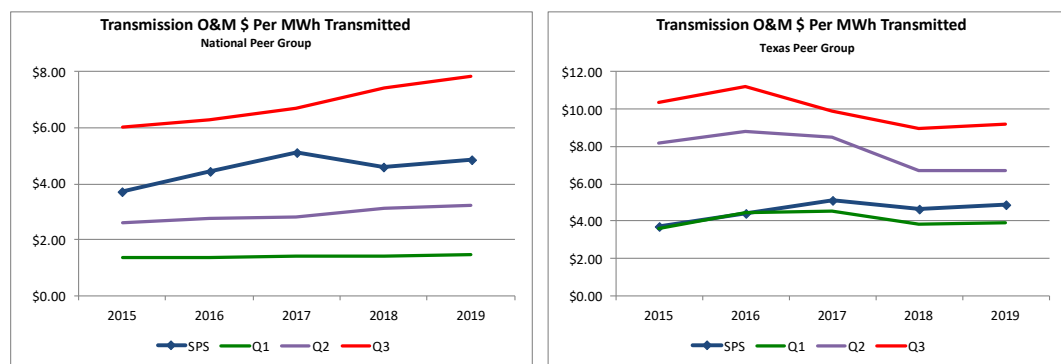
**Q. Why did you consider transmission O&M expenses with and without the inclusion of FERC Account 565?**

A. FERC Account 565 is titled “Transmission of electricity by others (Major only).” This account includes amounts payable to others for the transmission of electricity over transmission facilities owned by others. The costs—also referred to as “wheeling expenses”—included in FERC Account 565 can vary widely by utility depending on the amount of wholesale purchases and sales of electricity by that utility. When benchmarking transmission O&M expenses, I often exclude FERC Account 565 from my analysis, as elimination of this account from total transmission O&M expense provides a better measure of the utilities’ internal transmission-related costs.

1 **Q. Please describe the results of your analysis of SPS's transmission expense on a**  
2 **MWh transmitted basis.**

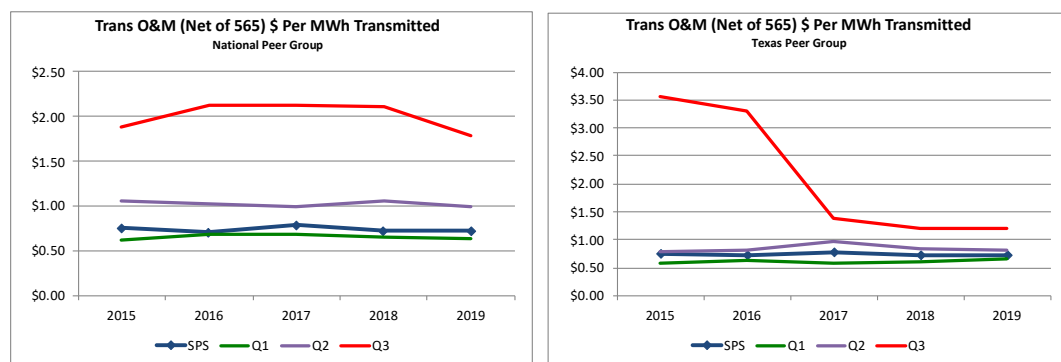
3 **A.** As shown in Figure RDS-RR-10 below, SPS's transmission O&M costs per MWh  
4 transmitted has been higher than the national group median costs since 2015, and  
5 at or slightly higher than the costs of the Texas peer group's first quartile (the  
6 lowest-cost quartile) over the same time period.

7 **Figure RDS-RR-10: Transmission O&M \$ per MWh Transmitted**



8 As shown in Figure RDS-RR-11 below, net of FERC Account 565, SPS's  
9 transmission O&M costs per MWh transmitted has been between the costs of the  
10 median and the first quartile for both the national and Texas peer groups throughout  
11 the 2015 through 2019 period.

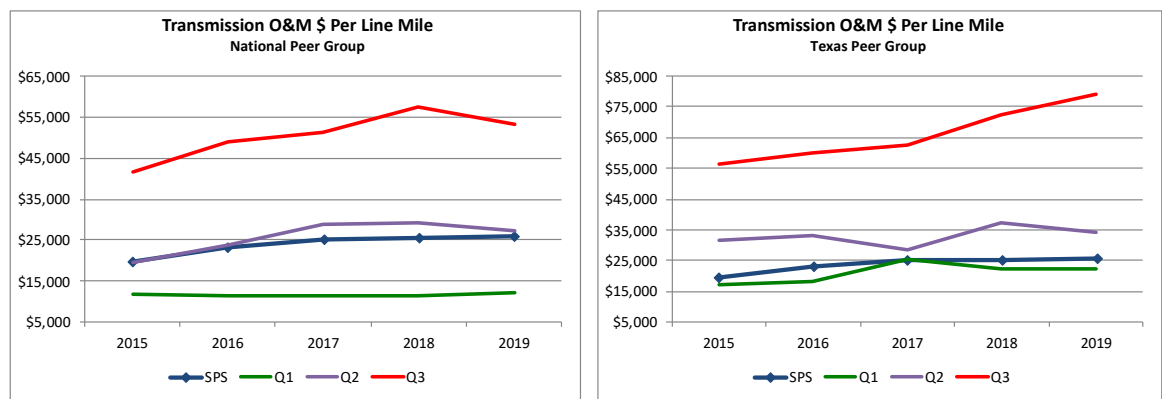
12 **Figure RDS-RR-11: Transmission O&M (Net of 565) \$ per MWh Transmitted**



1 **Q. Please describe the results of your analysis of SPS's transmission O&M**  
2 **expense on a per line mile basis.**

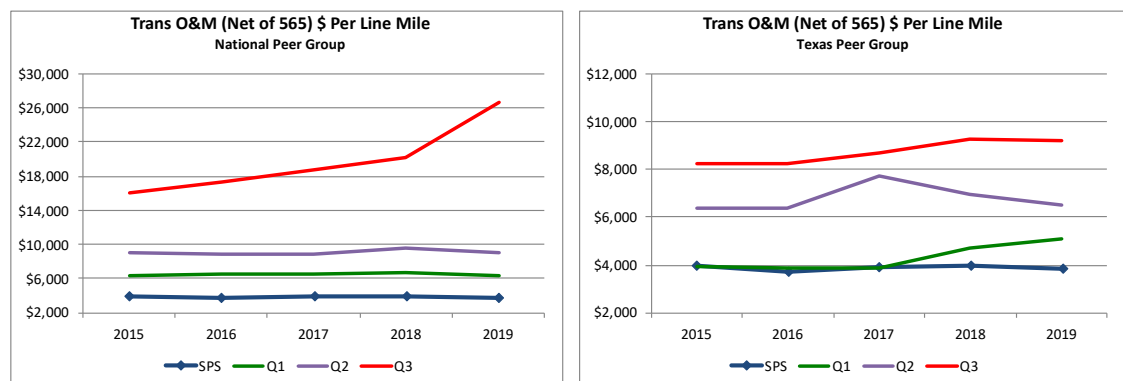
3 **A.** As shown in Figure RDS-RR-12 below, SPS's transmission O&M expense per line  
4 mile has been at or near the median expense per line mile for the national peer  
5 group, and between the median and first quartile expense per line mile for the Texas  
6 peer group, between 2015 and 2019.

7 **Figure RDS-RR-12: Transmission O&M \$ per Line Mile**



8 As shown in Figure RDS-RR-13 below, net of FERC Account 565, SPS's  
9 transmission O&M cost per line mile has been lower than the first quartile expense  
10 per line mile of the national peer group throughout the 2015 to 2019 period, and at  
11 or lower than the first quartile expense per line mile of the Texas peer group for the  
12 same period.

13 **Figure RDS-RR-13: Transmission O&M (Net of 565) \$ per Line Mile**



1     **C.     Distribution O&M Expense Benchmarks**

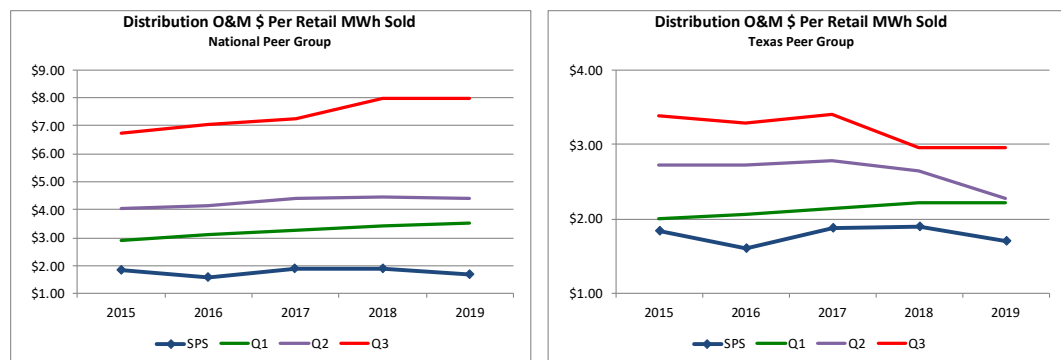
2     **Q.     Please describe your analysis of SPS's distribution O&M expense.**

3     A.     I developed two charts depicting the benchmarking of distribution O&M expenses:  
4           (1) total distribution O&M expense per MWh sold; and (2) total distribution O&M  
5           expense per retail customer. These are depicted below in Figures RDS-RR-14 and  
6           RDS-RR-15.

7     **Q.     Please describe the results of your analysis of SPS's distribution O&M expense**  
8           **on the basis of MWh sales.**

9     A.     As shown in Figure RDS-RR-14 below, SPS's distribution O&M expense on the  
10           basis of MWh sales has been lower than the costs of the first quartile (the lowest-  
11           cost quartile) of both the national and Texas peer groups during the 2015 to 2019  
12           period.

13                   **Figure RDS-RR-14: Distribution O&M \$ per Retail MWh Sold**

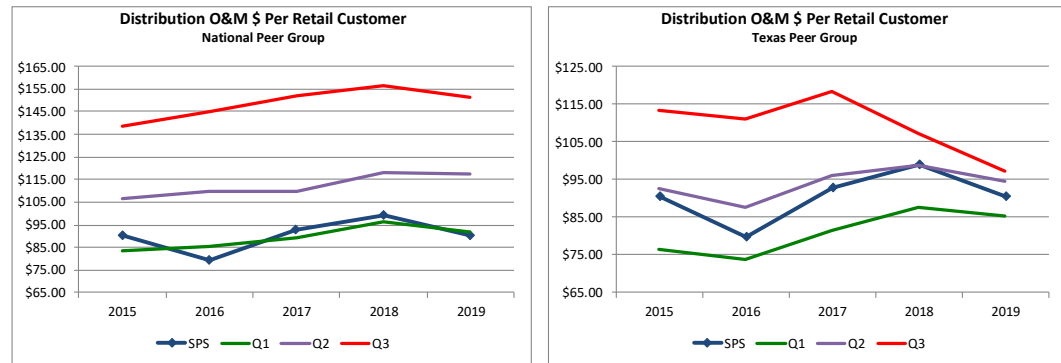


14    **Q.     Please describe the results of your analysis of SPS's distribution O&M expense**  
15           **on the basis of number of customers.**

16    A.     As shown in Figure RDS-RR-15 below, SPS's distribution O&M expense per retail  
17           customer has consistently been at or near the costs of the first quartile of the national

peer group, and between the costs of the first quartile and the median of the Texas peer group, during the 2015 through 2019 time period.

**Figure RDS-RR-15: Distribution O&M \$ per Retail Customer**



**Q. Why are SPS's Distribution O&M Expense per Retail MWh Sold benchmark results versus the Texas peer group so different from the Distribution O&M Expense per Retail Customer results?**

**A.** The average energy consumption of SPS's customers differs substantially from the average energy consumption of customers of the other utilities in the Texas peer group. As shown below in Figure RDS-RR-16, SPS's industrial customers as a class, on average, consume more electricity than the industrial classes of the other utilities in Texas included in this analysis. In contrast, with the exception of El Paso Electric Company, SPS's residential customers as a class consume less electricity than the residential class of the other Texas utilities included in this analysis.



**Figure RDS-RR-16: 2019 Average Energy Consumption by Class**

Utility	Residential Sales per Customer (MWh)	Commercial Sales per Customer (MWh)	Industrial Sales per Customer (MWh)
AEP Texas, Inc.	N/A	N/A	N/A
CenterPoint Energy Houston Electric, LLC	13.7	88.2	16,892.4
El Paso Electric Company	7.9	56.4	21,420.0
Entergy Texas, Inc.	15.0	94.0	1,409.3
Oncor Electric Delivery Company, LLC	14.7	100.9	3,668.2
Sharyland Utilities, L.L.C. <sup>8</sup>	14.9	109.4	N/A
Southwestern Electric Power Company	13.8	78.9	729.6
Southwestern Public Service Company	11.8	65.7	47,693.0
Texas-New Mexico Power Company	14.3	83.3	2,069.6

These differences in customer class usage result in the costs per customer benchmarks being skewed for SPS when compared to the Texas peer group.

**Q. Were any costs adjusted in the Distribution O&M analysis you addressed above?**

A. Yes. As described earlier in my testimony, the costs for “credit work” due to non-payment of bills and the move-in and move-out meter reading activities were removed, as the costs should be recorded to FERC Account 903. This is how these costs are recorded for the other Xcel Energy operating companies.

For SPS, these costs were recorded to FERC Account 586. FERC Account 586 is used for recording costs associated with new service, or relocating, inspecting, and testing meters. The application of these costs by SPS to FERC Account 586 was an error that was discovered while preparing my testimony for

<sup>8</sup> 2017 data. 2018 and 2019 information not available.

Docket No. 45524. The costs were removed from the distribution analyses but included in the Customer Operations benchmarking analyses. It should be noted that SPS implemented work order changes at the end of 2015 so that effective January 1, 2016, these costs are correctly being charged to FERC Account 903.

**D. Customer Operations O&M Expense Benchmarks**

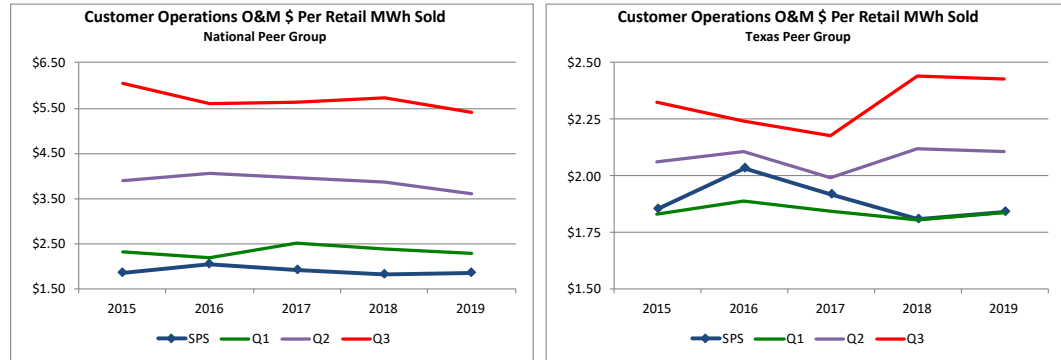
**Q. Please describe your analysis of SPS's customer operations O&M expense.**

A. In my analysis, I defined "customer operations" expenses to include: Customer Accounts; Customer Service and Informational Expense; and Sales Expense, as defined by the FERC Uniform System of Accounts. I developed two charts depicting the benchmarking of customer operations O&M expenses: (1) total customer operations O&M expense per MWh sold; and (2) total customer operations expense per retail customer. These are depicted below in Figures RDS-RR-17 and RDS-RR-18.

**Q. Please describe the results of your analysis of SPS's customer operations O&M expense on the basis of MWh sales.**

A. As shown in Figure RDS-RR-17 below, SPS's costs were lower than the costs of the first quartile (the lowest-cost quartile) of the national peer group between 2015 and 2019. Compared to the Texas peer group, SPS's costs per MWh sold were between the costs of the first quartile and the median from 2015 through 2017 and at the first quartile in 2018 and 2019.

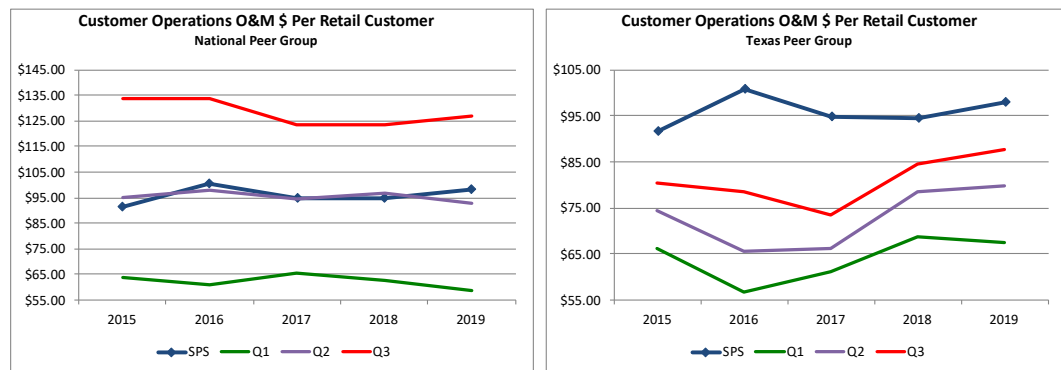
**Figure RDS-RR-17: Customer Operations O&M \$ per Retail MWh Sold**



**Q. Please describe the results of your analysis of SPS’s customer operations O&M expense on a per customer basis.**

**A.** As shown in Figure RDS-RR-18 below, SPS’s customer operations O&M expense per customer was at or near the national peer group median costs between 2015 and 2019. Relative to the Texas peer group, SPS’s costs were higher than the costs of the third quartile over the 2015 through 2019 time period.

**Figure RDS-RR-18: Customer Operations O&M \$ per Retail Customer**



**Q. Why are SPS’s Customer Operations O&M Expense per MWh Sold benchmark results versus the Texas peer group so different from the Customers Operations O&M Expense per Retail Customer results?**

**A.** As described earlier in my testimony, the average energy consumption of SPS’s customers differs substantially from the average energy consumption of customers

of the other utilities in the Texas peer group (see Figure RDS-RR-16). These differences in customer class usage result in the costs per customer benchmarks being skewed when compared to the Texas peer group.

**E. A&G O&M Expense Benchmarks**

**Q. Please describe your analysis of SPS's A&G O&M expense.**

A. I developed six charts depicting the benchmarking of A&G O&M expenses: (1) A&G O&M expense per retail MWh sold, with and without the inclusion of FERC Account 926; (2) A&G O&M expense per retail customer; (3) A&G O&M expense as a percent of revenues; and (4) A&G O&M expense per total MWh sold, with and without the inclusion of FERC Account 926. These are depicted below in Figures RDS-RR-19 through RDS-RR-24.

**Q. What are some of the factors driving the A&G costs for SPS?**

A. A large portion of SPS's A&G costs are driven by: (1) pension costs, whose costs are determined under Financial Accounting Standards Board Statement No. 87, Employers' Accounting for Pensions, and by actuarial or other similar studies in accordance with generally accepted accounting principles; and (2) active health care expenses.

**Q. Why did you consider A&G O&M expenses with and without the inclusion of FERC Account 926?**

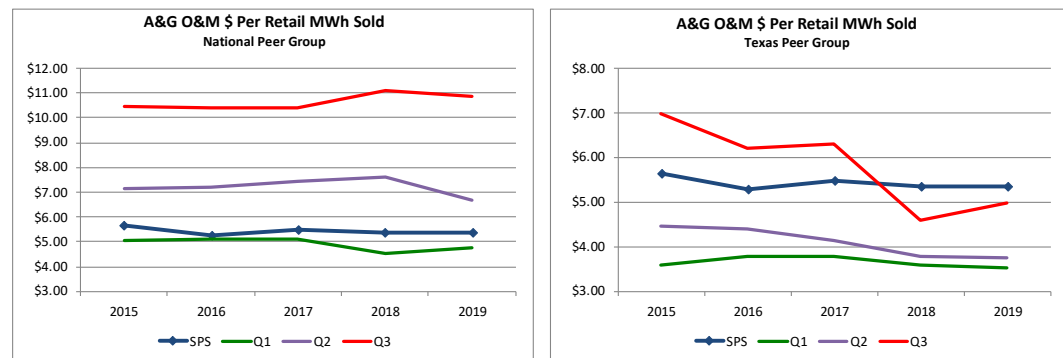
A. FERC Account 926 is titled "Employee pensions and benefits." This account includes amounts for: (1) pensions paid to or on behalf of retired employees; (2) payments for employee accident, sickness, hospital, and death benefits, including insurance plans; (3) expenses incurred in medical, educational, or recreational

activities for the benefit of employees; and (4) administrative expenses in connection with employee pensions and benefits. When benchmarking A&G O&M expenses, I sometimes exclude FERC Account 926 from my analysis, as elimination of this account from total A&G O&M expense can provide additional insights regarding the utilities' relative A&G costs.

**Q. Please describe the results of your analysis of SPS's A&G O&M expense per retail MWh sold.**

A. As shown in Figure RDS-RR-19 below, SPS's A&G O&M expense per retail MWh sold was between the costs of the median and the first quartile (the lowest-cost quartile) of the national peer group from 2015 through 2019. Compared to the Texas peer group, the SPS's expenses were between the costs of the median and the third quartile between 2015 and 2017, and higher than the costs of the third quartile in 2018 and 2019.

**Figure RDS-RR-19: A&G O&M \$ per Retail MWh Sold**

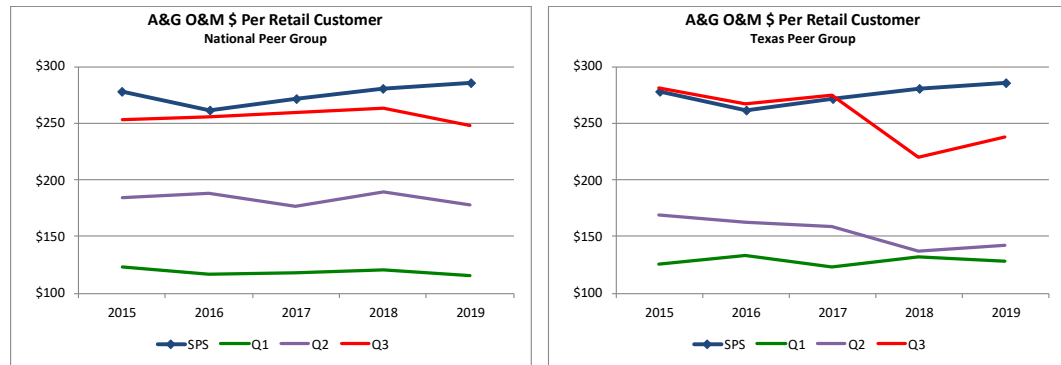


**Q. Please describe the results of your analysis of SPS's A&G O&M expense on the basis of retail customers.**

A. As shown in Figure RDS-RR-20 below, SPS's A&G O&M expense on the basis of retail customers has been higher than the costs of the third quartile of the national

peer group between 2015 and 2019. As compared to the Texas peer group, SPS's costs have been at or near the costs of the third quartile between 2015 and 2017 and higher than the third quartile in 2018 and 2019.

**Figure RDS-RR-20: A&G O&M \$ per Retail Customer**



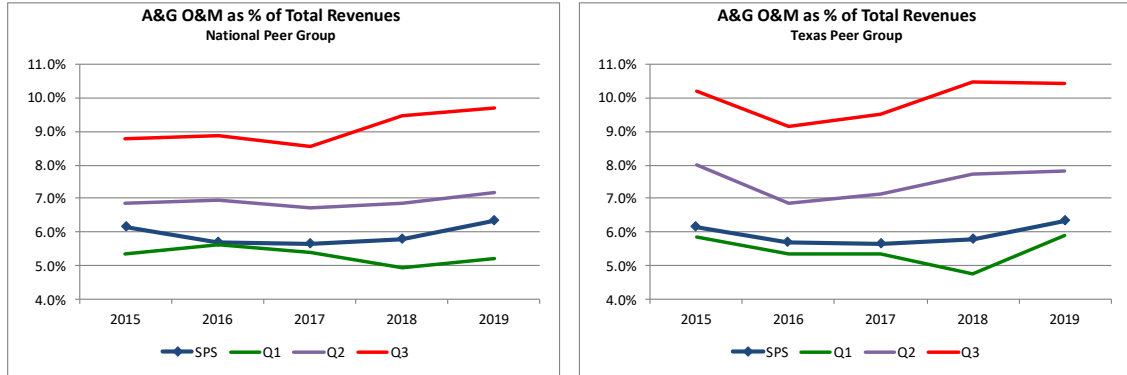
**Q. Why are SPS's A&G costs performances so different between its costs per retail MWh sold and its costs per retail customer?**

The reasons for the difference between the costs per retail MWh sold results versus the costs per retail customer results relate to: (1) the relatively low usage of electricity by SPS's largest customer group (i.e., the Residential class); and (2) the substantial difference in average energy consumption of SPS's customers versus the average consumption of customers of the other Texas utilities included in this analysis (see Figure RDS-RR-16).

**Q. Please describe the results of your analysis of SPS's A&G O&M expense as a percent of revenues.**

**A.** As shown in Figure RDS-RR-21 below, in general, SPS's A&G costs as a percent of revenues were between the costs of the median and the first quartile for both peer groups over the 2015 through 2019 period.

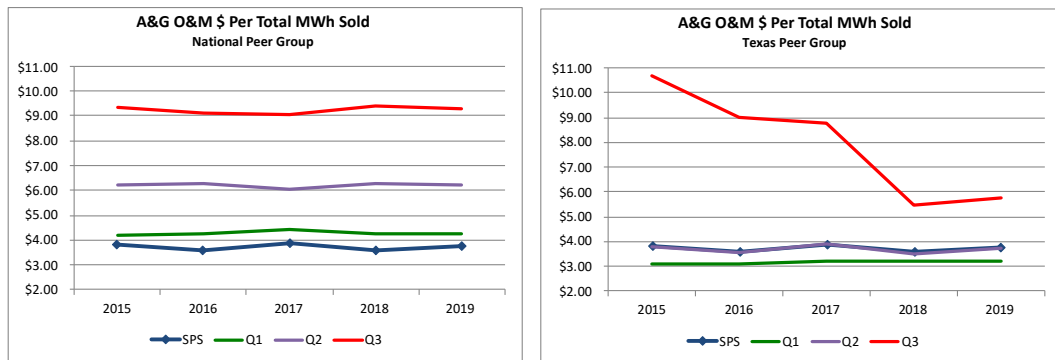
**Figure RDS-RR-21: A&G O&M as a Percent of Total Revenues**



**Q. Please describe the results of your analysis of SPS's A&G O&M costs per total MWh sold with those of its Texas and national peer groups.**

**A.** As shown in Figure RDS-RR-22 below, SPS's A&G O&M per total MWh Sold has been lower than the costs of the first quartile of the national peer group since 2015. Relative to other Texas utilities, SPS's total A&G O&M costs per total MWh sold have been at the peer group median costs throughout the 2015 to 2019 period.

**Figure RDS-RR-22: A&G O&M \$ per Total MWh Sold**

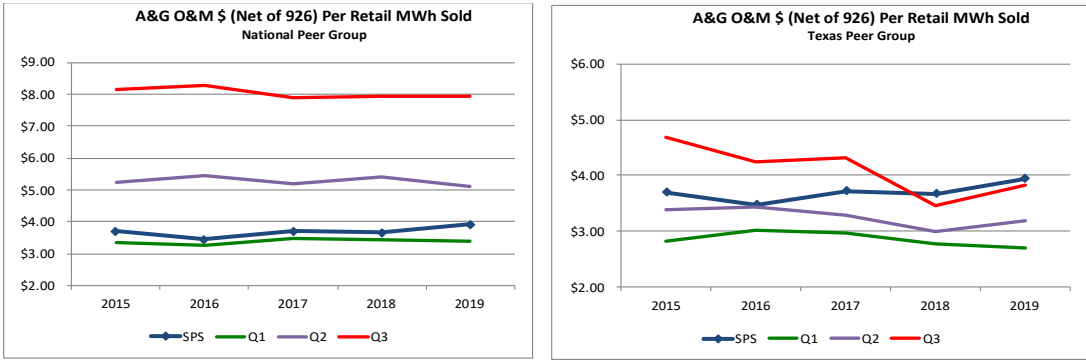


**Q. Please describe the results of your analysis of SPS's A&G O&M costs per retail MWh sold, excluding pension and benefits expense, with those of its Texas and national peer groups.**

**A.** As shown in Figure RDS-RR-23 below, net of FERC Account 926, SPS's A&G costs per retail MWh sold have been between the costs of the national peer group

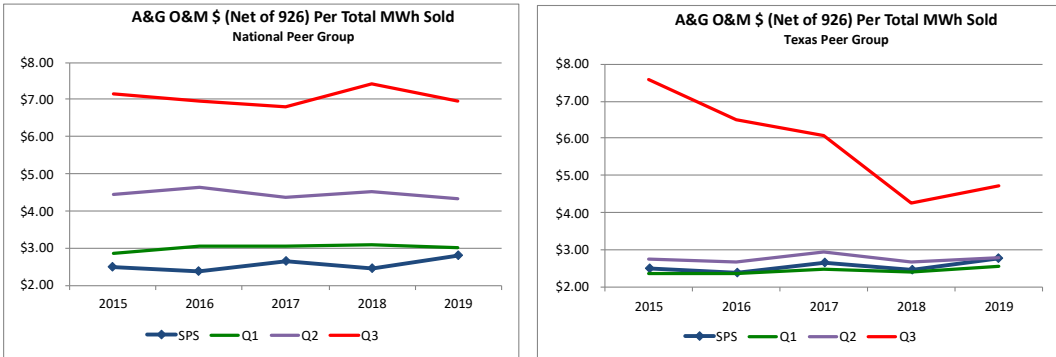
median and the first quartile over the 2015 to 2019 period. As compared to the Texas peer group, those costs were between the costs of the median and the third quartile from 2015 through 2017 and higher than the third quartile costs in 2018 and 2019.

**Figure RDS-RR-23: A&G O&M \$ (Net of 926) per Retail MWh Sold**



On a total MWh sold basis, SPS's A&G costs, net of FERC Account 926, have been well below the costs of the first quartile of the national peer group throughout the 2015 to 2019 period. Those costs were at or very near the costs of the first quartile of the Texas peer group during the 2015 to 2018 period, increasing to the Texas peer group median cost levels in 2019 (see Figure RDS-RR-24 below).

**Figure RDS-RR-24: A&G O&M \$ (Net of 926) per Total MWh Sold**





1 **F. O&M versus Total Plant Benchmarks**

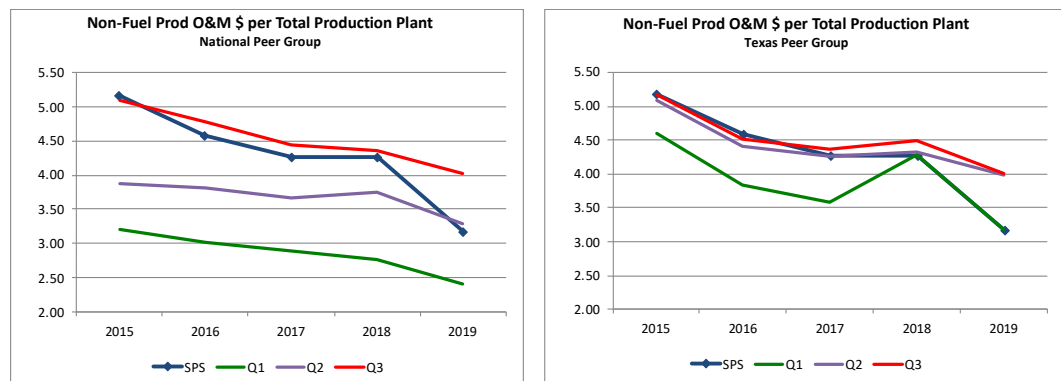
2 **Q. Please describe your analysis of SPS's functional O&M expense levels versus**  
3 **total plant balances.**

4 A. I developed five charts depicting O&M expense per total plant on a cents per dollar  
5 basis: (1) non-fuel production O&M \$ per total production plant; (2) transmission  
6 O&M \$ per total transmission plant; (3) transmission O&M \$ excluding FERC  
7 Account 565 per total transmission plant; (4) distribution O&M \$ per total  
8 distribution plant; and (5) A&G O&M \$ per total electric plant. These are depicted  
9 in Figures RDS-RR-25 through RDS-RR-29.

10 **Q. Please describe the results of your analysis of SPS's Non-Fuel Production**  
11 **O&M \$ per Total Production Plant with those of its Texas and national peer**  
12 **groups.**

13 A. As shown in Figure RDS-RR-25 below, SPS's non-fuel production O&M \$ per  
14 total production plant was at or lower than the costs of the national peer group's  
15 third quartile from 2015 through 2018, improving to lower than the peer group  
16 median costs in 2019. On a Texas peer group basis, SPS's costs were at the median  
17 costs or between the costs of the median and the third quartile from 2015 to 2018,  
18 improving to the first quartile (the lowest-cost quartile) in 2019.

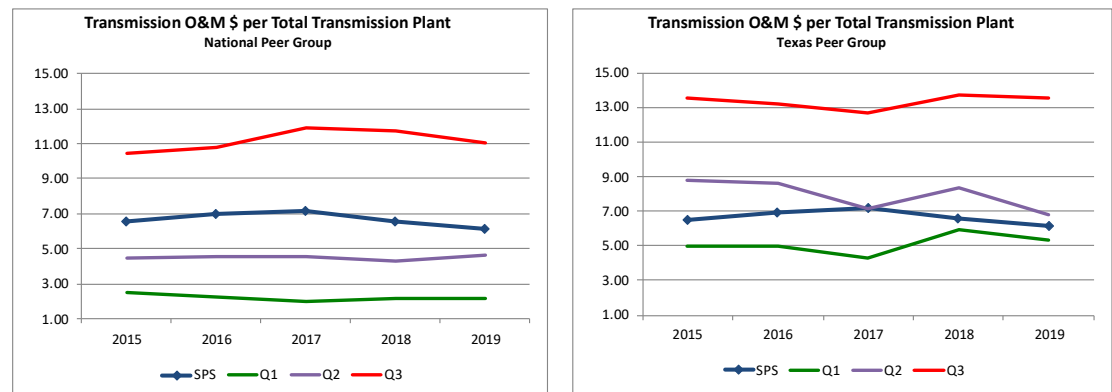
19 **Figure RDS-RR-25: Non-Fuel Production O&M \$ per Total Production Plant**



1 **Q. Please describe the results of your analysis of SPS's Transmission O&M \$ per**  
2 **Total Transmission Plant with those of its Texas and national peer groups.**

3 A. As shown in Figure RDS-RR-26 below, SPS's transmission O&M \$ per total  
4 transmission plant were between the costs of the median and the third quartile of  
5 the national peer group from 2015 through 2019. In comparison to the Texas peer  
6 group, SPS's costs have been between the first quartile and median costs over the  
7 2015 to 2019 time period.

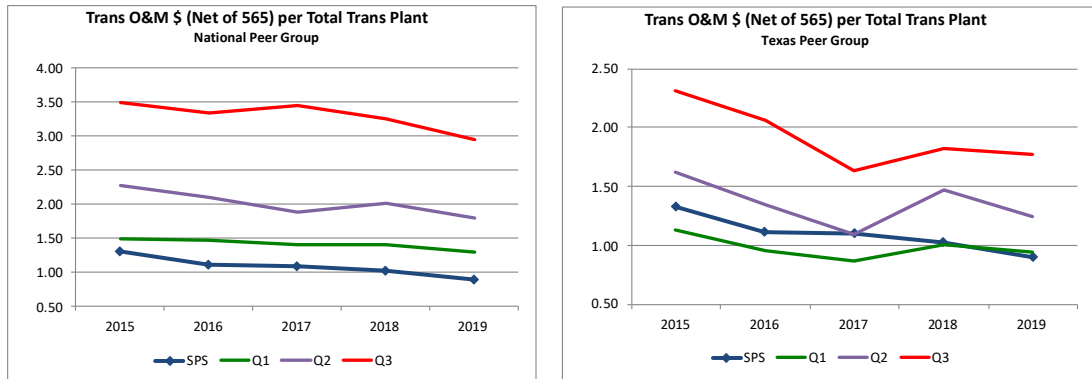
8 **Figure RDS-RR-26: Transmission O&M \$ per Total Transmission Plant**



9 **Q. Please describe the results of your analysis of SPS's Transmission O&M \$ Less**  
10 **FERC Account 565 per Total Transmission Plant with those of its Texas and**  
11 **national peer groups.**

12 A. As shown in Figure RDS-RR-27 below, SPS's transmission O&M costs, less FERC  
13 Account 565, per total transmission plant were lower than the costs of the first  
14 quartile of the national peer group from 2015 to 2019. On a Texas peer group basis,  
15 those costs were between the first quartile and median costs in 2015 through 2018,  
16 improving to first quartile (the lowest-cost quartile) performance in 2019.

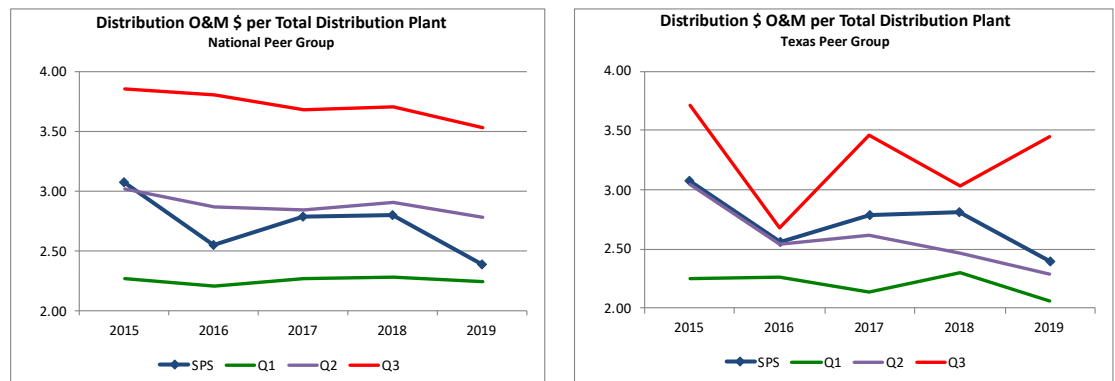
**Figure RDS-RR-27:  
Transmission O&M \$ (Net of 565) per Total Transmission Plant**



**Q. Please describe the results of your analysis of SPS's Distribution O&M \$ per Total Distribution Plant with those of its Texas and national peer groups.**

**A.** As shown in Figure RDS-RR-28 below, SPS's distribution O&M \$ per total distribution plant has been between the costs of the median and the first quartile of the national peer group between 2016 and 2019, and between the costs of the median and the third quartile of the Texas peer group over the 2015 to 2019 time period.

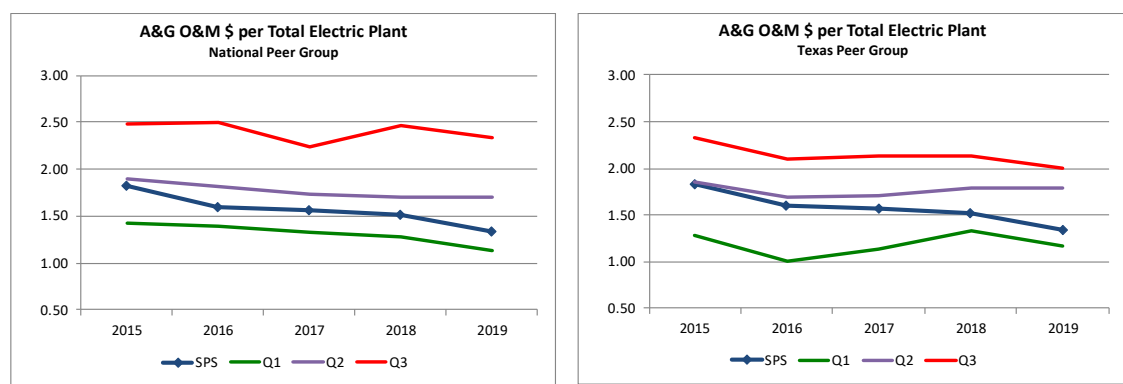
**Figure RDS-RR-28: Distribution O&M \$ per Total Distribution Plant**



1 **Q. Please describe the results of your analysis of SPS's A&G O&M \$ per Total**  
2 **Electric Plant with those of its Texas and national peer groups.**

3 A. As shown in Figure RDS-RR-29 below, SPS's A&G O&M \$ per total electric plant  
4 has been at or lower than the national and Texas peer group median costs since  
5 2015. Overall, this metric has been trending downward, or improving, for both SPS  
6 and the Texas and national peer groups from 2015 through 2019.

7 **Figure RDS-RR-29: A&G O&M \$ per Total Electric Plant**



8 **Q. Please summarize your conclusions regarding the O&M versus total plant**  
9 **benchmarking analysis.**

10 A. SPS's O&M costs per dollar of plant investment have generally been trending  
11 downwards, or improving, over the 2015 to 2019 period. SPS's non-fuel  
12 production and transmission O&M costs versus total plant investment levels fall  
13 between the costs of the median and third quartile of the national peer group, and  
14 between the costs of the median and first quartile of the Texas peer group. SPS  
15 distribution O&M costs versus total plant investments fall between the costs of the  
16 median and first quartile of the national peer group, and between the costs of the  
17 median and third quartile of the Texas peer group. SPS's A&G O&M costs versus  
18 total plant investments fall between the costs of the median and the first quartile of  
19 both the national and the Texas peer groups.

1                   **VI.     CAPITAL INVESTMENT BENCHMARK RESULTS**

2     **Q.     Please describe the analysis and metrics you used to benchmark SPS’s capital**  
3           **additions against those of its Texas and national peers.**

4     A.     For total plant and each major plant category (production, transmission,  
5           distribution, and general plant), I analyzed annual plant additions as a percentage  
6           of total plant and as a percentage of annual depreciation expense. The capital  
7           additions analysis as a percentage of total plant provides insights into a utility’s  
8           investment levels in plant replacements and system expansion over time. The  
9           analysis of capital additions as a percentage of depreciation expense highlights  
10          areas where companies may or may not be replacing assets at a level that “keeps  
11          up” with annual wear and tear—though it should be noted that for most utilities,  
12          annual capital additions will fluctuate year to year due to the timing of new  
13          additions as well as changes in the mix of capital projects between functional areas.

14                I also analyzed plant additions as a percentage of total plant, averaged over  
15          a three-year period of time. When analyzing capital additions, particularly for a  
16          single utility, it is normal to see significant changes in capital additions year to year.  
17          To “smooth” these annual fluctuations, and to help identify investment trends, I  
18          typically analyze capital additions by looking at a rolling three-year average of  
19          capital additions by functional area. The three-year average effectively smooths  
20          out the normal fluctuations in plant additions from year to year.

21     **Q.     Why did you compare SPS’s capital additions to the median levels for the**  
22           **national and Texas peer groups?**

23     A.     As I noted earlier in my testimony, when conducting benchmarking analyses, for  
24           revenue and O&M expense measures, lower is generally better, meaning lower

1 rates for customers or lower costs to provide electric service. However, for capital  
2 additions, being above or below a particular quartile is not necessarily a good or  
3 bad result. It may simply indicate that a particular utility is making investments in  
4 facilities at a particular point in time, where other members of the peer group are  
5 planning to pursue similar investments at another point in time. Therefore, for the  
6 purposes of this capital addition benchmarking analysis, I simply compared SPS to  
7 the median peer group benchmark results.

8 **Q. What overall conclusions do you draw from your analysis of SPS's capital**  
9 **additions?**

10 A. SPS's production plant capital additions have generally been lower than the  
11 national and Texas peer group medians since 2015, with the exception of 2019.  
12 The significant increase in 2019 is largely due to the Hale Wind Project, which  
13 came online in June 2019. In addition, there were some generator and compressor  
14 projects completed in 2019 at the Cunningham Generating Station.

15 SPS's transmission capital additions have been fairly constant over the 2016  
16 to 2019 time period (representing about 8% to 12% of total transmission plant),  
17 after declining from 2015 levels. On a rolling three-year average basis, investment  
18 levels have generally been decreasing steadily. The level of SPS's transmission  
19 plant capital additions has been higher than the national per group median since  
20 2015, and at or near the Texas peer group median since 2016. The investments in  
21 transmission plant additions primarily reflect transmission and substation capital  
22 additions for the expansion, upgrading, and refurbishment of transmission system  
23 infrastructure to: (1) interconnect new generation resources; (2) maintain

1 reliability; and (3) improve load-serving capability. SPS's transmission plant  
2 additions have significantly exceeded annual depreciation expense every year since  
3 2015. The national peer group median levels with respect to plant additions have  
4 been about 300% of depreciation, consistent with the continued industry focus on  
5 transmission expansion. In Texas, the peer group median has been about 400% to  
6 500% of depreciation over the 2015 to 2019 time period, reflecting the active  
7 transmission expansion in the state.

8 SPS's distribution capital additions have also stabilized in recent years,  
9 although they were higher than the national peer group median from 2015 through  
10 2019. In comparison to the Texas peer group, distribution capital additions were  
11 higher than the median in 2015, 2017, and 2018, and at or near the median in 2016  
12 and 2019.

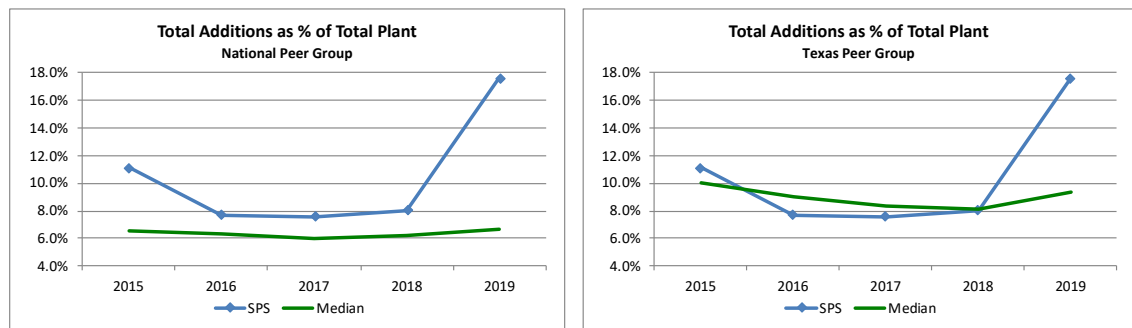
13 SPS's general plant additions decreased from 2015 levels in 2016, increased  
14 again in 2017, and then decreased to about 10% to 11% of general plant balances  
15 in 2018 and 2019. SPS's additions during the 2015 to 2019 period have generally  
16 been higher than the national and Texas peer group medians. The spending levels  
17 in 2015 were primarily due to: (1) the consolidation of the customer office and  
18 service center into one building at the existing Borger service center; (2) projects  
19 required due to the failure of mechanical equipment; and (3) replacement of  
20 equipment that had reached the end of its useful lifespan. The increase in 2017 was  
21 primarily due to the new SAP work and asset management system. The slight  
22 increase in 2019 is driven by the new Canyon Service Center, as well as various

1 hardware, network equipment, and office furniture/equipment additions. On a  
2 three-year rolling average basis, SPS's general plant additions as a percent of total  
3 general plant were higher than the national and Texas peer group medians from  
4 2015 through 2019.

5 **Q. Please describe the results of your analysis of SPS's annual plant additions for**  
6 **the period 2015 to 2019 as compared to those of its Texas and national peers.**

7 A. As shown in Figure RDS-RR-30 below, SPS's total capital additions as a percent  
8 of total plant investment decreased between 2015 and 2016, and held steady  
9 through 2018. Overall investment levels from 2015 to 2018 have also been in line  
10 with the Texas peer group median and slightly higher than the national peer group  
11 median. The significant increase in 2019 is largely due to the Hale Wind Project,  
12 which came online in June 2019.

13 **Figure RDS-RR-30 Total Additions as a Percent of Total Plant**

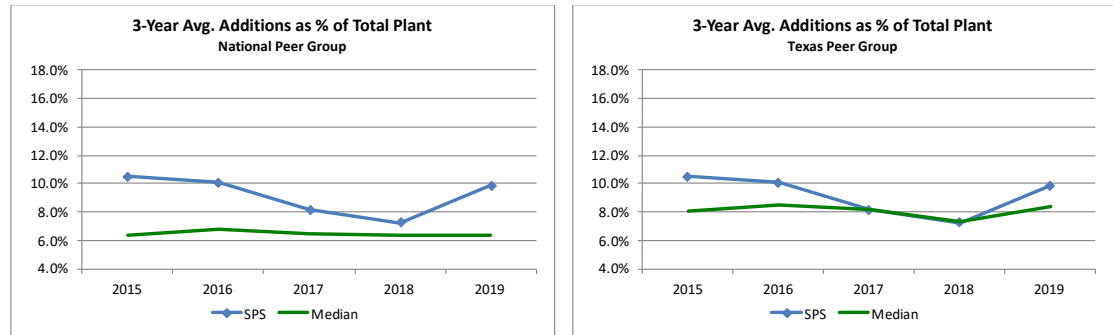


14 To help identify overall investment trends, I employed a three-year rolling average  
15 analysis, as I described earlier in my testimony. Figure RDS-RR-31 below shows  
16 that SPS's three-year average total capital additions as a percent of total plant  
17 investment trended downwards from 2015 through 2018, increasing in 2019 due to



the Hale Wind Project. Both the Texas peer group and national peer group trends have remained essentially flat over the 2015 through 2019 period.

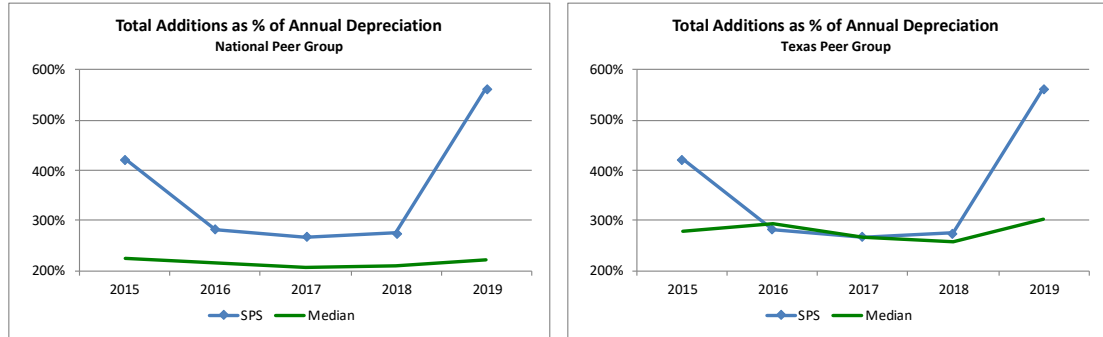
**Figure RDS-RR-31: 3-Year Average Additions as a Percent of Total Plant**



**Q. Please describe the results of your analysis of SPS's annual plant additions relative to total depreciation expense.**

A. As shown in Figure RDS-RR-32 below, the level of annual capital additions for the national peer group (approximately 200% of annual depreciation) and Texas peer group (approximately 250% to 300% of annual depreciation) indicates that utility companies in general are adding to their infrastructure at a rate faster than would be required to simply replace aging assets. Historically, SPS's capital additions levels have generally been higher than national and Texas peer group trends. SPS decreased the rate of capital spending on plant additions from 2015 to 2016, with steady investment levels through 2018. During the period 2016 through 2018, SPS investment levels have been at the Texas peer group median, and higher than the national peer group median. As described earlier, the increase in 2019 is largely due to the Hale Wind Project

**Figure RDS-RR-32: Total Additions as a Percent of Annual Depreciation**



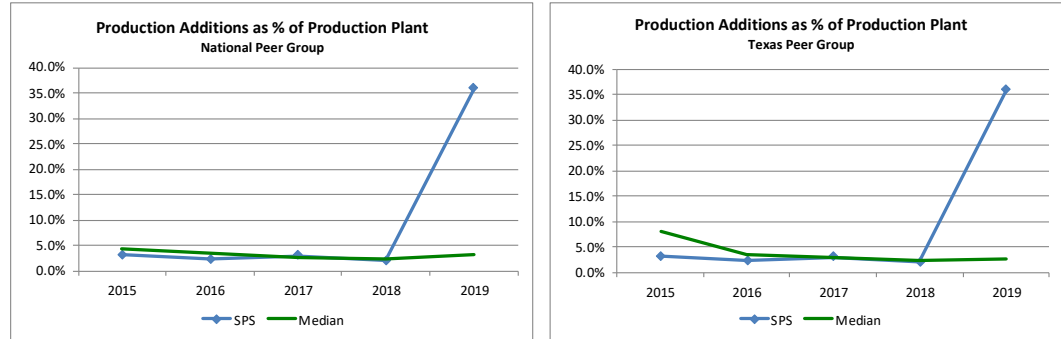
**Q. Please describe your analysis of SPS’s production investment additions relative to those of the Texas and national peer groups.**

A. I developed three charts depicting my analysis of SPS’s annual production plant investments: (1) production plant additions as a percentage of total production plant; (2) annual plant additions averaged over three years as percentage of production plant; and (3) production plant additions as a percentage of depreciation expense. These are depicted below in Figures RDS-RR-33 through RDS-RR-35.

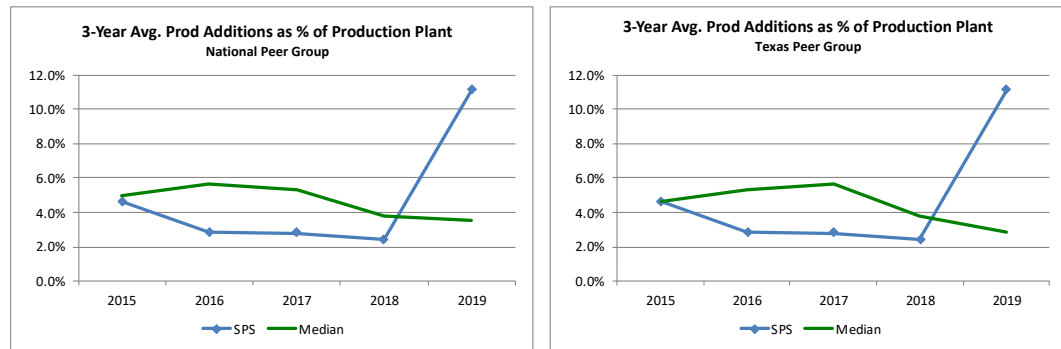
**Q. Please describe the results of your analysis of SPS’s production plant additions for the period 2015 to 2019 as compared to those of its Texas and national peers.**

A. As shown in Figures RDS-RR-33 and RDS-RR-34 below, the level of SPS production plant capital additions has generally been below the national and Texas peer group medians since 2015, with the exception of 2019. The significant increase in 2019 is due to the Hale Wind Project, as discussed above.

1 **Figure RDS-RR-33: Production Additions as a Percent of Production Plant**



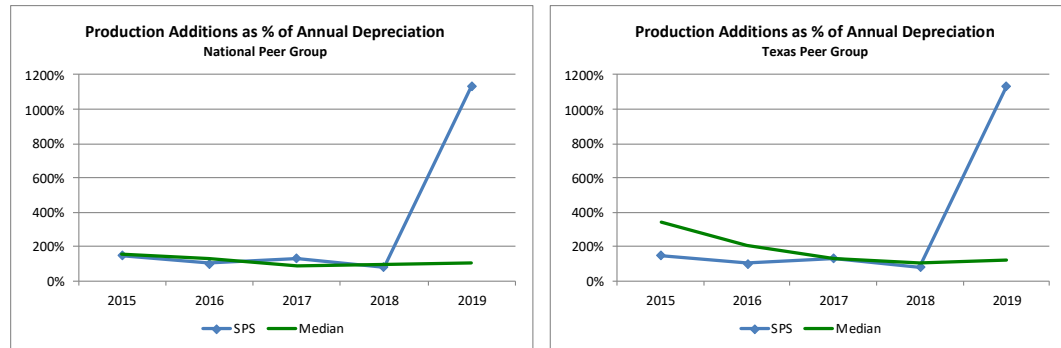
2 **Figure RDS-RR-34:**  
3 **3-Year Average Production Additions as a Percent of Production Plant**



4 **Q. Please describe the results of your analysis of SPS’s production plant additions**  
5 **relative to total production depreciation expense.**

6 A. As shown in Figure RDS-RR-35 below, the level of SPS’s production plant  
7 additions has been approximately 100% to 150% of annual depreciation expense  
8 since 2015. This seems to indicate a stable asset replacement strategy—in other  
9 words, the investment of sufficient capital to cover annual depreciation expense  
10 every year. This level of investment is consistent with the national peer group  
11 median, and less than the Texas peer group median, over the 2015 to 2018 time  
12 period. Again, the increase in 2019 is largely due to the Hale Wind Project.

**Figure RDS-RR-35:  
Production Additions as a Percent of Annual Depreciation**



**Q. Please describe your analysis of SPS’s transmission plant investment additions relative to those of the Texas and national peer groups.**

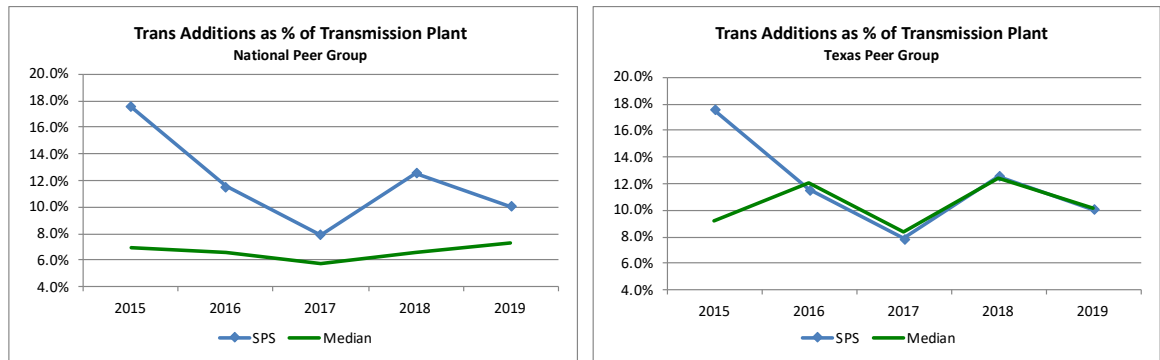
A. I developed three charts depicting my analysis of SPS’s annual transmission plant investments: (1) transmission plant additions as a percentage of total transmission plant; (2) annual plant additions averaged over three years as a percentage of transmission plant; and (3) transmission plant additions as a percentage of depreciation expense. These are depicted below in Figures RDS-RR-36 through RDS-RR-38.

**Q. Please describe the results of your analysis of SPS’s transmission plant additions for the period 2015 to 2019 as compared to those of the Texas and national peers.**

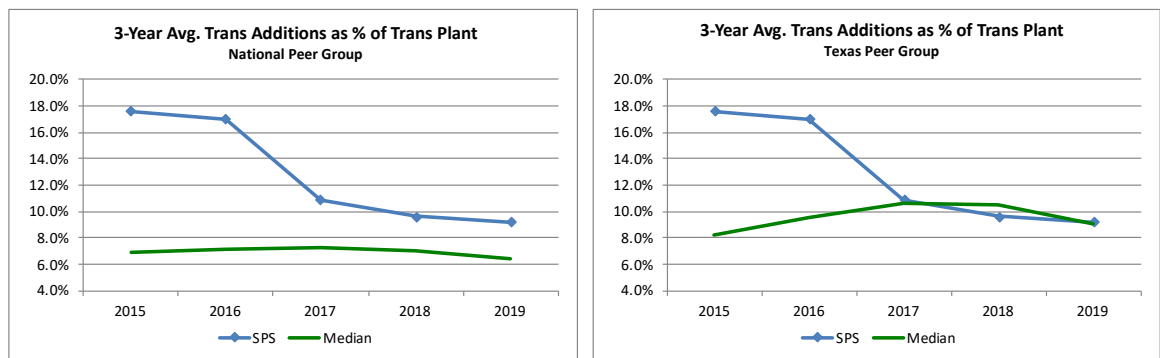
A. As shown in Figure RDS-RR-36, SPS’s transmission capital additions have been fairly constant over the 2016 to 2019 time period (representing about 8% to 12% of total transmission plant), after declining from 2015 levels. On a rolling three-year average basis (see Figure RDS-RR-37), investment levels have generally been decreasing steadily. The level of SPS’s transmission plant capital additions has been higher than the national peer group median since 2015, and at or near the

Texas peer group median since 2016. The investments in transmission plant additions primarily reflect transmission and substation capital additions for the expansion, upgrading, and refurbishment of transmission system infrastructure to: (1) interconnect new generation resources; (2) maintain reliability; and (3) improve load-serving capability.

**Figure RDS-RR-36: Transmission Additions as a Percent of Transmission Plant**



**Figure RDS-RR-37: 3-Year Average Transmission Additions as a Percent of Transmission Plant**

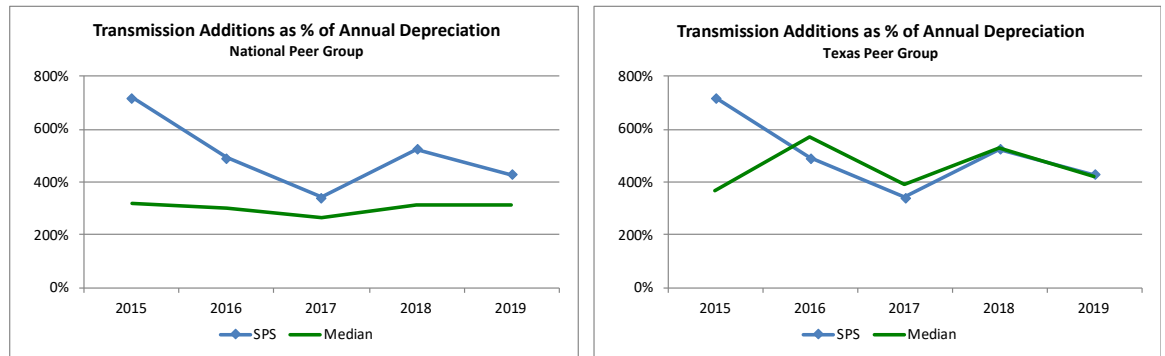


**Q. Please describe the results of your analysis of SPS's transmission plant additions relative to transmission depreciation expense.**

**A.** As shown in Figure RDS-RR-38 below, the level of SPS's transmission plant additions has significantly exceeded annual depreciation expense every year since 2015. The national peer group median levels have been between about 300% of

depreciation, consistent with the continued industry focus on transmission expansion. In Texas, the peer group median has been about 400% to 500% of depreciation over the 2015 to 2019 time period, reflecting the active transmission expansion in the state.

**Figure RDS-RR-38:  
Transmission Additions as a Percent of Annual Depreciation**



**Q. Please describe your analysis of SPS’s distribution plant investment additions relative to those of the Texas and national peer groups.**

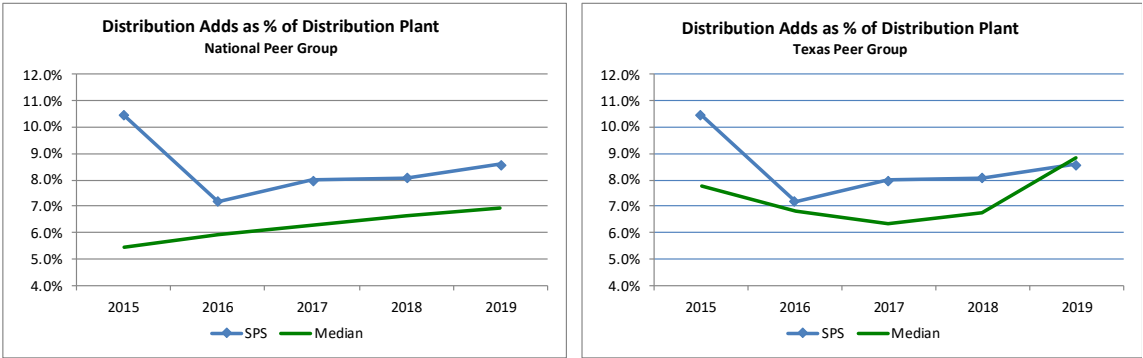
A. I developed three charts depicting my analysis of SPS’s annual distribution plant investments: (1) distribution plant additions as a percentage of total distribution plant; (2) annual plant additions averaged over three years as a percentage of distribution plant; and (3) distribution plant additions as a percentage of depreciation expense. These are depicted below in Figures RDS-RR-39 through RDS-RR-41.

**Q. Please describe the results of your analysis of SPS’s distribution plant additions for the period 2015 to 2019 as compared to those of its Texas and national peers.**

A. As shown in Figure RDS-RR-39 below, SPS’s distribution capital additions have also stabilized in recent years, although they were higher than the national peer

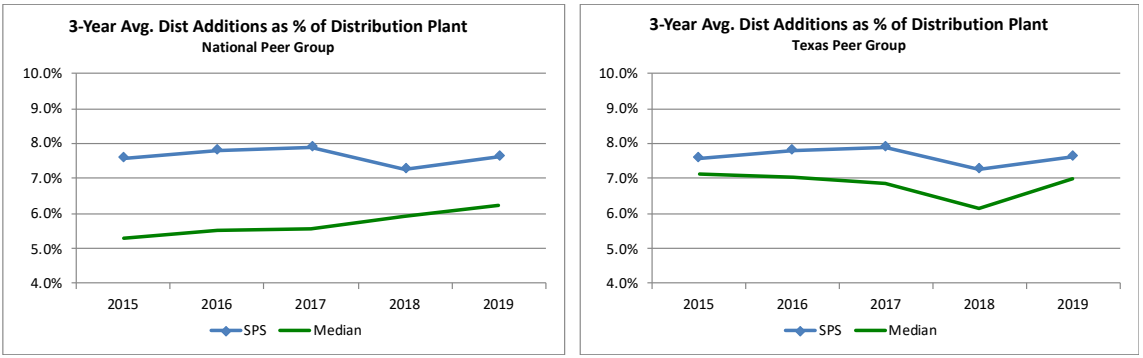
group median from 2015 through 2019. In comparison to the Texas peer group, distribution capital additions were higher than the median in 2015, 2017, and 2018, and at or near the median in 2016 and 2019.

**Figure RDS-RR-39:**  
**Distribution Additions as a Percent of Distribution Plant**



As shown in Figure RDS-RR-40 below, on a three-year rolling average basis, SPS’s distribution capital additions as a percent of total distribution plant have been higher than the national and Texas peer group medians since 2015. This is primarily due to upgrades to SPS’s electric distribution system to connect new customers, maintain reliability, increase feeder and substation capacity, and improve load serving capability.

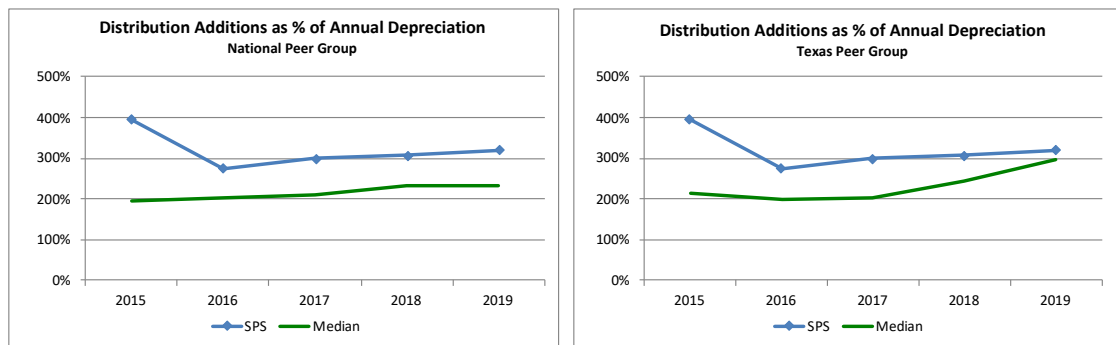
**Figure RDS-RR-40:**  
**3-Year Average Distribution Additions as a Percent of Distribution Plant**



1 **Q. Please describe the results of your analysis of SPS's distribution plant**  
2 **additions relative to distribution depreciation expense.**

3 A. As shown in Figure RDS-RR-41 below, SPS reduced its rate of capital spending on  
4 distribution plant additions from 2015 to 2016, with consistent levels of spending  
5 from 2016 through 2019. The level of annual capital additions for the peer groups  
6 (about 200% of annual depreciation) indicates that utility companies, in general,  
7 are adding to their infrastructure at a rate faster than would be required to simply  
8 replace aging assets. SPS's distribution capital additions levels have been generally  
9 higher than the national and Texas peer group trends during the 2015 through 2019  
10 time period. The increased spending in 2015 was due to: (1) an increase in storm  
11 damage-related restoration; (2) capacity work related to, among other items, the  
12 completion of new substations; and (3) meter and transformer purchases to serve  
13 new customers.

14 **Figure RDS-RR-41:**  
15 **Distribution Additions as a Percent of Annual Depreciation**



16 **Q. Please describe your analysis of SPS's general plant investment additions**  
17 **relative to those of the Texas and national peer groups.**

18 A. I developed three charts depicting my analysis of SPS's annual general plant  
19 investments: (1) general plant additions as a percentage of total general plant; (2)

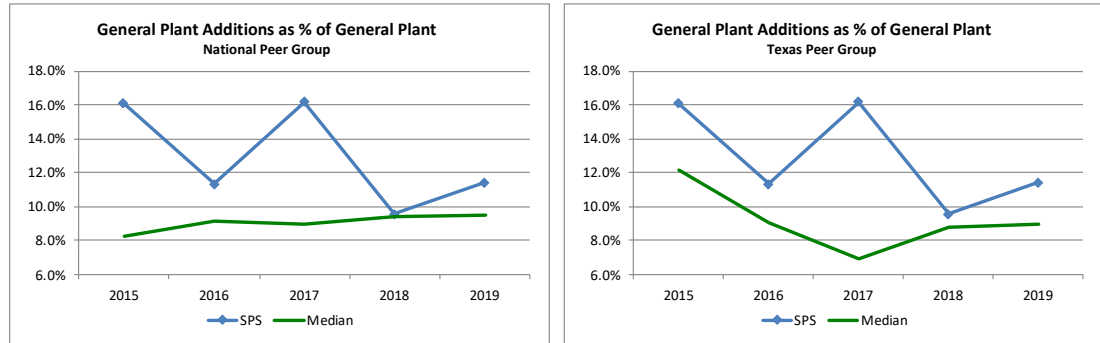


1 annual plant additions averaged over three years as a percentage of general plant;  
2 and (3) general plant additions as a percentage of depreciation expense. These are  
3 depicted below in Figures RDS-RR-42 through RDS-RR-44.

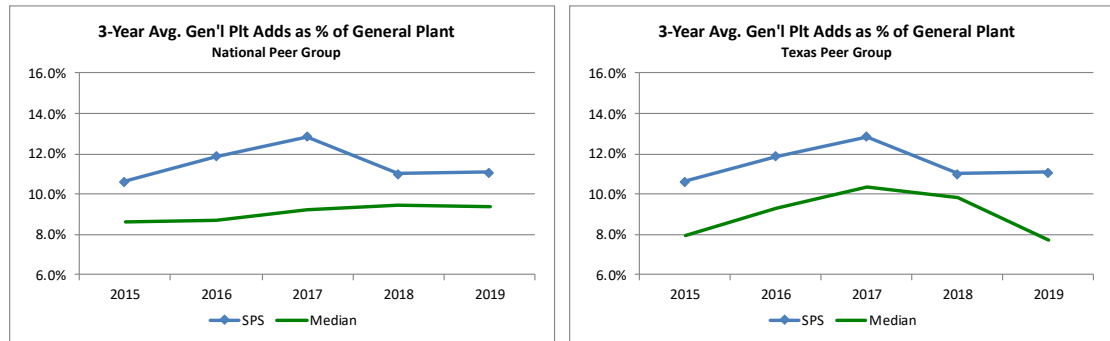
4 **Q. Please describe the results of your analysis of SPS's general plant additions for**  
5 **the period 2015 to 2019 as a percentage of total general plant as compared to**  
6 **those of its Texas and national peers.**

7 A. As shown in Figures RDS-RR-42 and RDS-RR-43 below, SPS's general plant  
8 additions decreased from 2015 levels in 2016, increased again in 2017, and then  
9 decreased to about 10% to 11% of general plant balances in 2018 and 2019. SPS's  
10 additions during the 2015 to 2019 period have generally been higher than the  
11 national and Texas peer group medians. The spending levels in 2015 were  
12 primarily due to: (1) the consolidation of the customer office and service center  
13 into one building at the existing Borger service center; (2) projects required due to  
14 the failure of mechanical equipment; and (3) replacement of equipment that had  
15 reached the end of its useful lifespan. The increase in 2017 was primarily due to  
16 the new SAP work and asset management system. The slight increase in 2019 is  
17 driven by the new Canyon Service Center, as well as various hardware, network  
18 equipment, and office furniture/equipment additions. On a three-year rolling  
19 average basis, SPS's general plant additions as a percent of total general plant were  
20 above the national and Texas peer group medians from 2015 through 2019.

**Figure RDS-RR-42:  
General Plant Additions as a Percent of General Plant**



**Figure RDS-RR-43:  
3-Year Average General Plant Additions as a Percent of General Plant**

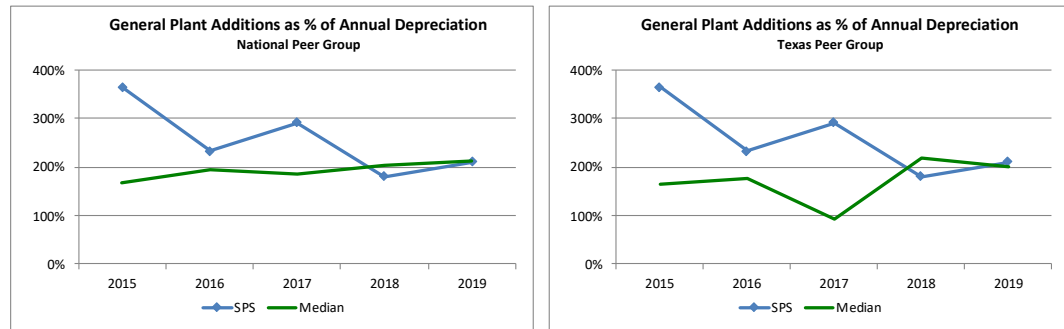


**Q. Please describe the results of your analysis of SPS's general plant additions relative to general plant depreciation expense.**

**A.** As shown in Figure RDS-RR-44 below, the level of annual capital additions for the peer groups (generally between 150% and 200% of annual depreciation between 2015 and 2019) shows utility general plant investment levels greater than would be required to simply replace aging assets. SPS's general plant additions have historically been higher than the national and Texas peer group median trends, but decreased to median levels in 2018 and 2019.

1  
2

**Figure RDS-RR-44:**  
**General Plant Additions as a Percent of Annual Depreciation**



1       **VII.     AVIATION STUDY SHOWING COMMERCIAL AIRLINE COSTS**

2       **Q.     Please describe your analysis of commercial airline costs.**

3       A.     XES leases and operates two jet aircraft for business travel by Xcel Energy<sup>9</sup>  
4             executives and employees. The costs that are incurred in leasing, operating, and  
5             maintaining the aircraft are shared among the affiliates, including SPS. For my  
6             analysis, I estimated the costs that would have been incurred in purchasing  
7             commercial airline tickets had the business trips made on the corporate aircraft  
8             instead been made on commercial airlines. I then provided those costs to SPS  
9             witness Lawrence A. Bick so that the Test Year and Updated Test Year revenue  
10            requirements for SPS could be adjusted.

11      **Q.     How did you complete your analysis?**

12      A.     XES's Aviation Services department provided the flight log information that  
13             allowed us to compile the number of passenger trips taken by Xcel Energy  
14             personnel on the corporate aircraft during the Test Year and the Update Period.  
15             Carlson Wagonlit Travel and Executive Travel, Xcel Energy's travel agents that  
16             handle commercial air travel booking and ticketing, provided a summary of the  
17             average airfare paid for all commercial air travel by Xcel Energy employees  
18             between various city pairs on a quarterly basis over the same time periods. For  
19             each quarterly period during October 1, 2019 through September 30, 2020, I applied  
20             the average ticket prices from Carlson Wagonlit Travel and Executive Travel to the  
21             number of passengers that flew between Amarillo, Denver, and Minneapolis/St.  
22             Paul on the corporate aircraft during that same time period to compute the

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<sup>9</sup> In this section of my testimony, my references to Xcel Energy encompass both Xcel Energy and its subsidiaries.

1 equivalent commercial airfare costs. A summary of the results of my aviation study  
2 for the Test Year is provided as Attachment RDS-RR-5.

3 **Q. Why is it important to conduct this type of analysis on a quarterly basis?**

4 A. Commercial airfares fluctuate considerably month to month, due to changes in  
5 market demand, changes in carrier schedules, etc. Thus, conducting the analysis  
6 on a quarterly basis provides a more accurate picture of the equivalent commercial  
7 airfare costs.

8 **Q. Why is your assessment limited to the commercial airfare costs for the trips**  
9 **made on the corporate aircraft between Amarillo, Denver, and**  
10 **Minneapolis/St. Paul?**

11 A. Over 87% of the business trips flown on the corporate aircraft during the period  
12 October 1, 2019 through September 30, 2020 were between the two-city  
13 combinations of Amarillo, Denver, and Minneapolis/St. Paul. To simplify the  
14 analysis, only those trips between these city pairs were included in the analysis.  
15 Thus, my assessment of the costs that would have been incurred in purchasing  
16 commercial airline tickets can be viewed as conservative as almost 13% of the  
17 overall corporate aircraft travel has not been included.

18 **Q. Why do you say that assessing the costs for flights to and between Amarillo,**  
19 **Denver, and Minneapolis/St. Paul was a conservative approach?**

20 A. The corporate aircraft were used for other trips in addition to these three city pairs.  
21 If the analysis had considered the commercial airfare costs of all trips taken during  
22 the Test Year, then the total equivalent commercial airfare costs would have been  
23 greater.

1    **Q.     Did you exclude any other flights in your analysis?**

2    A.     Yes. Trips for personal travel, legislative meetings, and for corporate aircraft  
3           maintenance were also excluded.

4    **Q.     Does your analysis take into account all costs related to commercial air travel?**

5    A.     No. Our analysis took into account only airfares and related taxes and ticketing  
6           fees. I have not made any adjustments to account for any additional expenses that  
7           likely would have been incurred if commercial travel had been undertaken, such as  
8           expenses for hotels, taxis, parking, meals, etc. For example, while it is possible to  
9           fly back and forth between Minneapolis and Amarillo in one day on the corporate  
10          aircraft, it is generally not feasible to fly commercial aviation to Amarillo, attend  
11          meetings or conduct other business, and then fly back to Minneapolis on the same  
12          day. As a result, additional costs for hotel stays, meals, parking, etc. would likely  
13          be incurred by using commercial travel. In this way, my analysis continues to be  
14          conservative.

15   **Q.     Please describe the results of your analysis.**

16   A.     There were 1,416 flights between Amarillo, Denver, and Minneapolis/St. Paul on  
17          corporate aircraft during the October 1, 2019 through September 30, 2020 time  
18          period. Based on the Carlson Wagonlit Travel average fares, if the flights taken on  
19          the corporate aircraft during the period during October 1, 2019 through September  
20          30, 2020 had instead been taken on commercial airlines, the airfare costs would  
21          have been \$257,608. A summary of the results of my aviation study for this period  
22          is provided as Attachment RDS-RR-5. A fully executable version of the Microsoft  
23          Excel spreadsheet model is provided as Attachment RDS-RR-7(CD).

1    **Q.     Did you update your analysis for the Updated Test Year?**

2    A.     Yes. There were only 610 flights between Amarillo, Denver, and Minneapolis/St.  
3           Paul on corporate aircraft during the Updated Test Year. Based on the Carlson  
4           Wagonlit Travel average fares, if the flights taken on the corporate aircraft during  
5           the period during January 1, 2020 through December 31, 2020 had instead been  
6           taken on commercial airlines, the airfare costs would have been \$112,035. A  
7           summary of the results of my aviation study for this period is provided as  
8           Attachment RDS-RR-6.

9    **Q.     Please summarize the conclusions you reached as a result of your analysis of**  
10           **commercial airline costs.**

11   A.     I conclude that if the flights that occurred on the corporate aircraft during the  
12           Updated Test Year had instead been taken on commercial airlines, the equivalent  
13           airfare costs would have been approximately \$112,000. Equivalent commercial  
14           airfare costs for flights that occurred on the corporate aircraft during the Test Year  
15           would have been approximately \$258,000.

16   **Q.     Does this conclude your pre-filed direct testimony?**

17   A.     Yes.

# AFFIDAVIT

STATE OF NORTH CAROLINA    )  
  )  
COUNTY OF WAKE                    )

RICHARD D. STARKWEATHER, first being sworn on his oath, states:

I am the witness identified in the preceding testimony. I have read the testimony and the accompanying attachment(s) and am familiar with the contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.



RICHARD D. STARKWEATHER

Subscribed and sworn to before me this 29 day of January, 2021 by RICHARD D. STARKWEATHER.



Notary Public, State of North Carolina

My Commission Expires: 03/25/2024





*Resume of:*  
**Richard D. Starkweather**  
**Partner**

### *Summary*

Rick Starkweather has been a management consultant for over 30 years and is a leader in ScottMadden's Rates & Regulation practice. His areas of expertise include strategic and business planning, budgeting and forecasting, regulatory compliance and rate case support, and organizational and operations improvement. Prior to joining ScottMadden, Rick was a consultant with Deloitte Consulting. He also has experience in the healthcare and chemical industries and helped lead the start-up of two companies. Rick received a B.S. in mechanical engineering from Northwestern University and an M.B.A. from the University of Chicago Booth School of Business.

### *Areas of Specialization*

Regulatory strategy and rate case support  
 Strategic and business planning  
 Process improvement

Benchmarking  
 Program design/implementation  
 Organizational design and staffing

### *Representative Assignments*

- Directed a project for a western combination utility to improve the speed and accuracy of the rate making process by identifying improvements to the development of revenue requirements and billing determinants by improving underlying reporting processes and analyses, and more efficient sequencing of key activities
- Developed enhancements to capital and O&M budgeting processes for an electric and gas utility to support a multi-year rate plan filing. Additional documentation templates were developed to support the new filing requirements
- Conducted a review of a utility's transmission cost recovery, mercury emissions, environmental, and conservation improvement rate riders. Scope of review included the processes for budgeting and forecasting cash flows for eligible projects and the tracking of projected cash flows for each project through the company's budgeting and fixed asset accounting systems, and the revenue requirements calculations supporting the riders
- Developed statistical sampling methodologies to test gas main extension and new service capital projects for a Midwestern gas utility. Defined the population of all projects, identified sample projects, compiled necessary documentation to assess tariff compliance for these projects, and developed rate base adjustments to address uncollected contributions in aid of construction based on sample results
- Directed several projects providing project management and technical support for retail electric and gas rate cases for several utilities, including the completion of various analyses to support anticipated intervenor data requests, as well as the development of direct and rebuttal testimony. Also developed several capital and O&M filing and work paper templates as part of the filings to improve transparency
- Completed an assessment of a new general ledger system for a regional electric and gas utility in light of a pending rate case. Analyses included historical O&M trends and a detailed year-to-year FERC account variance analysis to support pre-filed testimony
- Conducted an assessment of the capital budgeting and reporting processes of a combination gas/electric utility that was migrating to a future test year in several jurisdictions. Developed recommendations and process improvement initiatives to improve accuracy of in-service dates and overall forecast accuracy, resulting in better rate case assumptions, improved budget and forecast data, and more accurate accounting data
- Directed a project for a southeastern utility to improve the speed and accuracy of the rate making process by identifying improvements to the development of revenues and billing determinants by enhancing information reporting and analytics, and automating the process through potential technology solutions
- Assessed a utility's supporting documentation for a transmission and distribution loss study. Work included a review of previous studies, analysis of intervenor issues/concerns and an evaluation of company assumptions and analyses. Results were used in the development of billing determinants
- Analyzed the affiliate costs assigned and allocated to operating company capital projects for a southwestern electric utility to support the development of rebuttal testimony for a retail rate cases



*Resume of:*  
**Richard D. Starkweather**  
**Partner**

***Representative Assignments (Cont'd)***

- Validated the achievement of annual merger synergies targets for a combination utility to support its retail rate case filings. Quantified savings levels by line item consistent with original multi-year savings model and drafted supporting direct testimony
- Assessed business transactions between the regulated and non-regulated affiliates of a Western electric and gas utility to ensure compliance with state regulatory requirements
- Developed enhancements to capital and O&M budgeting processes for an electric utility to support a potential future test year rate case filing. Additional documentation templates were also developed to support the required financial schedules
- Directed an assessment of a southwestern utility's capital and O&M budgeting processes to support a future test year filing. Additional documentation templates were also developed to support the filing
- Completed a risk assessment of various components of an electric utility's rate case filing, including capital additions and capital estimating standards. Also analyzed year-to-year O&M variances to identify significant test period revenue drivers
- Assisted a utility in the Midwest in its response to commission inquiries about affiliate interest issues, cost separation methodologies, and the rationale for proposed increases in the company's cost of service. Developed documentation and supporting work paper templates for capital and O&M budgets, facilitated template completion by the business units, sample-tested capital budget items to ensure adequate separation of regulated and non-regulated projects, and assisted with the new filing
- Developed an audit plan and project management protocols for a Midwestern combination electric and gas utility to guide the development of all regulatory filings in the Company's various jurisdictions. Scope included the development of detailed process maps for each rate filing process, the identification of data input, consistency, and reliability risks, and the identification of appropriate preventive and detective audit controls

***Professional History***

- SCOTTMADDEN, INC., Raleigh, North Carolina  
Partner (2004–Present)  
Director (1999–2004)
- DELOITTE CONSULTING, Los Angeles, California  
Senior Manager (1997–1999)
- EDISON EV, Los Angeles, California, a Subsidiary of EDISON INTERNATIONAL  
Senior Manager/Director, Finance and Administration (1996–1997)
- EDISON INTERNATIONAL (formerly SCEcorp), Rosemead, California  
Strategic Projects Manager, Corporate Development (1994–1995)
- DELOITTE & TOUCHE, Dallas, Texas  
Senior Manager (1990–1994)  
Manager (1989–1990)
- HEALTH ECONOMICS CORPORATION, Dallas, Texas, a Subsidiary of HALLIBURTON COMPANY  
Vice President (1986–1989)
- TOUCHE ROSS & CO., Detroit, Michigan  
Senior Consultant (1985–1986)  
Associate Consultant (1982–1985)
- EXXON CHEMICAL AMERICAS, Linden, New Jersey  
Plant Analyst (1982–1982)  
Forecast Coordinator (1980–1982)

**List of National Peer Group Companies**

<b>No.</b>	<b>Company ID</b>	<b>Company Name</b>
1	4056979	AEP Texas Central Company
2	4056935	AEP Texas Inc.
3	4057034	AEP Texas North Company
4	4014956	Alabama Power Company
5	4058371	Alaska Electric Light and Power Company
6	4061513	ALLETE (Minnesota Power)
7	4272394	Ameren Illinois Company
8	4056972	Appalachian Power Company
9	4056974	Arizona Public Service Company
10	4056975	Atlantic City Electric Company
11	4057075	Avista Corporation
12	4007784	Baltimore Gas and Electric Company
13	4215172	Black Hills Colorado Electric, Inc.
14	4065694	Black Hills Power, Inc.
15	4057059	CenterPoint Energy Houston Electric, LLC
16	4057076	Central Hudson Gas & Electric Corporation
17	4056978	Central Maine Power Company
18	4059189	Cheyenne Light, Fuel and Power Company
19	4056982	Cleco Power LLC
20	4056983	Cleveland Electric Illuminating Company
21	4000672	Commonwealth Edison Company
22	4056992	Connecticut Light and Power Company
23	4057080	Consolidated Edison Company of New York, Inc.
24	4057081	Consumers Energy Company
25	4017451	Dayton Power and Light Company
26	4057082	Delmarva Power & Light Company
27	4057099	Dominion Energy South Carolina, Inc.
28	4057083	DTE Electric Company
29	4004320	Duke Energy Carolinas, LLC
30	4056998	Duke Energy Florida, LLC
31	4062444	Duke Energy Indiana, LLC
32	4057103	Duke Energy Kentucky, Inc.
33	4057079	Duke Energy Ohio, Inc.
34	4004192	Duke Energy Progress, LLC
35	4004307	Duquesne Light Company
36	4056994	El Paso Electric Company
37	3005475	Empire District Electric Company
38	4056995	Entergy Arkansas, LLC
39	4057084	Entergy Gulf States Louisiana, L.L.C.
40	4112564	Entergy Louisiana, LLC
41	4008616	Entergy Mississippi, LLC
42	4057085	Entergy New Orleans, LLC
43	4199135	Entergy Texas, Inc.
44	4057089	Evergy Kansas South, Inc.
45	4072456	Evergy Metro, Inc.
46	4000843	Evergy Missouri West, Inc.
47	4060026	Fitchburg Gas and Electric Light Company

**List of National Peer Group Companies**

<b>No.</b>	<b>Company ID</b>	<b>Company Name</b>
48	4056997	Florida Power & Light Company
49	4057086	Florida Public Utilities Company
50	4004152	Georgia Power Company
51	4063057	Golden State Water Company
52	4056999	Green Mountain Power Corporation
53	4057000	Gulf Power Company
54	4060446	Hawaii Electric Light Company, Inc.
55	4057001	Hawaiian Electric Company, Inc.
56	4057002	Idaho Power Company
57	4057003	Indiana Michigan Power Company
58	4024697	Indianapolis Power & Light Company
59	4057087	Interstate Power and Light Company
60	4057004	Jersey Central Power & Light Company
61	4057006	Kentucky Power Company
62	4042397	Kentucky Utilities Company
63	4060895	Kingsport Power Company
64	4232403	Liberty Utilities (CalPeco Electric) LLC
65	4060294	Liberty Utilities (Granite State Electric) Corp.
66	4057090	Louisville Gas and Electric Company
67	4008754	Madison Gas and Electric Company
68	4057008	Massachusetts Electric Company
69	4061329	Maui Electric Company, Limited
70	4010692	MDU Resources Group Inc.
71	4057009	Metropolitan Edison Company
72	4057091	MidAmerican Energy Company
73	4057010	Mississippi Power Company
74	4057011	Monongahela Power Company
75	4057012	Narragansett Electric Company
76	4008408	National Grid USA
77	4061726	Nevada Power Company
78	4004389	New York State Electric & Gas Corporation
79	4057014	Niagara Mohawk Power Corporation
80	4012860	Northern Indiana Public Service Company
81	4057754	Northern States Power Company - MN
82	4061925	Northern States Power Company - WI
83	4057053	NorthWestern Corporation
84	4061951	Northwestern Wisconsin Electric Company
85	4008369	NSTAR Electric Company
86	4014480	Ohio Edison Company
87	4057015	Ohio Power Company
88	4057016	Oklahoma Gas and Electric Company
89	4080589	Oncor Electric Delivery Company LLC
90	4057093	Orange and Rockland Utilities, Inc.
91	4147257	Otter Tail Power Company
92	4004218	Pacific Gas and Electric Company
93	4001587	PacifiCorp

**List of National Peer Group Companies**

No.	Company ID	Company Name
94	4062222	PECO Energy Co.
95	4057018	Pennsylvania Electric Company
96	4018463	Pennsylvania Power Company
97	4057019	Portland General Electric Company
98	4057020	Potomac Edison Company
99	4044391	Potomac Electric Power Company
100	4057021	PPL Electric Utilities Corporation
101	4057094	Public Service Company of Colorado
102	4057022	Public Service Company of New Hampshire
103	4073320	Public Service Company of New Mexico
104	4057023	Public Service Company of Oklahoma
105	4057095	Public Service Electric and Gas Company
106	4062485	Puget Sound Energy, Inc.
107	4057096	Rochester Gas and Electric Corporation
108	4062660	Rockland Electric Company
109	4057097	San Diego Gas & Electric Company
110	4082747	Sharyland Utilities, LLC
111	4057098	Sierra Pacific Power Company
112	4009083	Southern California Edison Company
113	4057100	Southern Indiana Gas and Electric Company
114	4057026	Southwestern Electric Power Company
115	4057027	Southwestern Public Service Company
116	4063281	Superior Water, Light and Power Company
117	3010781	Tampa Electric Company
118	4057028	Texas-New Mexico Power Company
119	4057029	Toledo Edison Company
120	4057030	Tucson Electric Power Company
121	4057538	UGI Utilities, Inc.
122	4057102	Union Electric Company
123	3004222	United Illuminating Company
124	4059391	Unitil Energy Systems, Inc.
125	4092733	UNS Electric, Inc.
126	4887639	Upper Michigan Energy Resources Corporation
127	4081463	Upper Peninsula Power Company
128	3001167	Versant Power
129	4057032	Virginia Electric and Power Company
130	4057033	West Penn Power Company
131	4082573	Westar Energy (KPL)
132	4057035	Western Massachusetts Electric Company
133	4063994	Wheeling Power Company
134	4057105	Wisconsin Electric Power Company
135	4008669	Wisconsin Power and Light Company
136	4057106	Wisconsin Public Service Corporation

**Southwestern Public Service Company**

**Retail Pricing and O&M Benchmarking Analysis**

**Richard D. Starkweather**

**2021 TX Rate Case**

**APPLICATION OF  
SOUTHWESTERN PUBLIC SERVICE COMPANY  
FOR AUTHORITY TO CHANGE RATES**

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**Southwestern Public Service Company**

**Capital Additions Benchmarking Analysis**

**Richard D. Starkweather**

**2021 TX Rate Case**

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**Equivalent Commercial Airfare Costs****October 1, 2019 Through September 30, 2020 (Test Year)**Calculation of Equivalent Commercial Airfare Costs

Leg	Number of One-Way Trips on Corporate Aircraft				
	4Q2019	1Q2020	2Q2020	3Q2020	Total
MSP > Denver	352	266	0	0	618
Denver > MSP	342	275	0	0	617
MSP > Amarillo	40	23	0	0	63
Amarillo > MSP	51	25	0	0	76
Denver > Amarillo	17	10	0	0	27
Amarillo > Denver	4	11	0	0	15
<b>Totals</b>	<b>806</b>	<b>610</b>	<b>0</b>	<b>0</b>	<b>1,416</b>

Leg	One-Way Average Commercial Fare				CWT Ticketing Fee (1)	ET Ticketing Fee (2)
	Xcel Energy Actuals					
	2019 (Oct - Dec)	2020 (Jan - Mar)	2020 (Apr - Jun)	2020 (Jul - Sep)		
MSP > Denver	\$ 160.30	\$ 166.28	\$ -	\$ -	\$ 5.50	\$ 4.50
Denver > MSP	\$ 160.30	\$ 166.28	\$ -	\$ -	\$ 5.50	\$ 4.50
MSP > Amarillo	\$ 266.45	\$ 275.51	\$ -	\$ -	\$ 5.50	\$ 4.50
Amarillo > MSP	\$ 266.45	\$ 275.51	\$ -	\$ -	\$ 5.50	\$ 4.50
Denver > Amarillo	\$ 268.79	\$ 261.83	\$ -	\$ -	\$ 5.50	\$ 4.50
Amarillo > Denver	\$ 268.79	\$ 261.83	\$ -	\$ -	\$ 5.50	\$ 4.50

(1) 4Q 2019/1Q 2020: Ticketing service fee from Carlson Wagonlit Travel of \$11.00 for online ticketing based on roundtrip fares. Service fees are higher for travel agent supported ticketing. For conservatism, assumed \$5.50 online ticketing fee for

(2) 2Q 2020/3Q 2020: Ticketing service fee from Executive Travel of \$9.00 for online ticketing based on roundtrip fares. Service fees are higher for travel agent supported ticketing. For conservatism, assumed \$4.50 online ticketing fee for each trip.

Leg	Equivalent Commercial Airfare Costs				
	2019 (Oct - Dec)	2020 (Jan - Mar)	2020 (Apr - Jun)	2020 (Jul - Sep)	Total
MSP > Denver	\$58,361.60	\$45,693.48	\$0.00	\$0.00	\$104,055.08
Denver > MSP	\$56,703.60	\$47,239.50	\$0.00	\$0.00	\$103,943.10
MSP > Amarillo	\$10,878.00	\$6,463.23	\$0.00	\$0.00	\$17,341.23
Amarillo > MSP	\$13,869.45	\$7,025.25	\$0.00	\$0.00	\$20,894.70
Denver > Amarillo	\$4,662.93	\$2,673.30	\$0.00	\$0.00	\$7,336.23
Amarillo > Denver	\$1,097.16	\$2,940.63	\$0.00	\$0.00	\$4,037.79
<b>Totals</b>	<b>\$145,572.74</b>	<b>\$112,035.39</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$257,608.13</b>

 = Inputs



**Equivalent Commercial Airfare Costs****January 1, 2020 Through December 31, 2020 (Updated Test Year)**Calculation of Equivalent Commercial Airfare Costs

Leg	Number of One-Way Trips on Corporate Aircraft				
	1Q2020	2Q2020	3Q2020	4Q2020	Total
MSP > Denver	266	0	0	0	266
Denver > MSP	275	0	0	0	275
MSP > Amarillo	23	0	0	0	23
Amarillo > MSP	25	0	0	0	25
Denver > Amarillo	10	0	0	0	10
Amarillo > Denver	11	0	0	0	11
<b>Totals</b>	<b>610</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>610</b>

Leg	One-Way Average Commercial Fare				CWT Ticketing Fee (1)	ET Ticketing Fee (2)
	Xcel Energy Actuals					
	2020 (Jan - Mar)	2020 (Apr - Jun)	2020 (Jul - Sep)	2020 (Oct - Dec)		
MSP > Denver	\$ 166.28	\$ -	\$ -	\$ -	\$ 5.50	\$ 4.50
Denver > MSP	\$ 166.28	\$ -	\$ -	\$ -	\$ 5.50	\$ 4.50
MSP > Amarillo	\$ 275.51	\$ -	\$ -	\$ -	\$ 5.50	\$ 4.50
Amarillo > MSP	\$ 275.51	\$ -	\$ -	\$ -	\$ 5.50	\$ 4.50
Denver > Amarillo	\$ 261.83	\$ -	\$ -	\$ -	\$ 5.50	\$ 4.50
Amarillo > Denver	\$ 261.83	\$ -	\$ -	\$ -	\$ 5.50	\$ 4.50

(1) 1Q 2020: Ticketing service fee from Carlson Wagonlit Travel of \$11.00 for online ticketing based on roundtrip fares. Service fees are higher for travel agent supported ticketing. For conservatism, assumed \$5.50 online ticketing fee for each trip.

(2) 2Q 2020 through 4Q 2020: Ticketing service fee from Executive Travel of \$9.00 for online ticketing based on roundtrip fares. Service fees are higher for travel agent supported ticketing. For conservatism, assumed \$4.50 online ticketing fee for each trip.

Leg	Equivalent Commercial Airfare Costs				
	2019 (Oct - Dec)	2020 (Jan - Mar)	2020 (Apr - Jun)	2020 (Jul - Sep)	Total
MSP > Denver	\$45,693.48	\$0.00	\$0.00	\$0.00	\$45,693.48
Denver > MSP	\$47,239.50	\$0.00	\$0.00	\$0.00	\$47,239.50
MSP > Amarillo	\$6,463.23	\$0.00	\$0.00	\$0.00	\$6,463.23
Amarillo > MSP	\$7,025.25	\$0.00	\$0.00	\$0.00	\$7,025.25
Denver > Amarillo	\$2,673.30	\$0.00	\$0.00	\$0.00	\$2,673.30
Amarillo > Denver	\$2,940.63	\$0.00	\$0.00	\$0.00	\$2,940.63
<b>Totals</b>	<b>\$112,035.39</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$112,035.39</b>

 = Inputs

**Southwestern Public Service Company**

**ScottMadden Analysis of Aviation Operations**

**Richard D. Starkweather**

**2021 TX Rate Case**

**APPLICATION OF  
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