

BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

APPLICATION OF PUBLIC SERVICE )  
COMPANY OF OKLAHOMA, AN )  
OKLAHOMA CORPORATION, FOR )  
AN ADJUSTMENT IN ITS RATES AND )  
CHARGES AND THE ELECTRIC )  
SERVICE RULES, REGULATIONS )  
AND CONDITIONS OF SERVICE FOR )  
ELECTRIC SERVICE IN THE STATE )  
OF OKLAHOMA )

CAUSE NO. PUD 202100055

**FILED**  
APR 30 2021

COURT CLERK'S OFFICE - OKC  
CORPORATION COMMISSION  
OF OKLAHOMA

DIRECT TESTIMONY OF  
  
CHAD M. BURNETT  
  
ON BEHALF OF  
  
PUBLIC SERVICE COMPANY OF OKLAHOMA

APRIL 2021

TESTIMONY INDEX

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1 I. INTRODUCTION

2 Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

3 A. My name is Chad Burnett, and I am the Director of Economic Forecasting for American  
4 Electric Power Service Corporation (AEPSC), the service company affiliate of Public  
5 Service Company of Oklahoma (PSO or the Company). My business address is 212  
6 East 6<sup>th</sup> Street, Tulsa, Oklahoma 74119.

7 Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND BUSINESS  
8 EXPERIENCE.

9 A. I earned a Bachelor of Science degree in Business Administration from the University of  
10 Tulsa in 1998 with a double major in Economics and Finance. In 2002, I earned a  
11 Master of Business Administration degree from the University of Tulsa. In 2005, I  
12 completed the Executive Strategic Leadership program at The Ohio State University.

13 I have worked in the utility industry as an economist since 1997 when I was  
14 employed by Central and South West Service Corporation, which later merged with  
15 AEP in June 2000. I became the Manager of Economic Forecasting in June 2007. In  
16 October 2013, I was promoted to Director of Economic Forecasting. In my current role,  
17 I am responsible for preparing customer, sales, peak demand, and revenue forecasts for  
18 each of the AEP operating companies in the eleven jurisdictions and three regional  
19 transmission organizations (RTOs) that cover the AEP service territory. In addition, I  
20 am responsible for weather normalization calculations and sales and revenue variance  
21 reports for each of the AEP operating companies including PSO.

1 I also work as an Adjunct Professor of Economics in the Graduate Business  
2 School at Southern Nazarene University where I have taught Managerial Economics,  
3 Health Care Economics, and the Survey of Economics since 2002.

4 Q. HAVE YOUR PREVIOUSLY SUBMITTED TESTIMONY AS A WITNESS BEFORE  
5 ANY REGULATORY COMMISSION?

6 A. Yes. I filed testimony before the Oklahoma Corporation Commission in 2008 in Cause  
7 No. 20080014 and Cause No. 201800097 in 2018. I have also testified before regulatory  
8 commissions in the states of Arkansas,<sup>1</sup> Indiana<sup>2</sup>, Kentucky<sup>3</sup>, Michigan<sup>4</sup>, Tennessee<sup>5</sup>,  
9 Texas<sup>6</sup> and Virginia<sup>7</sup>.

10 II. PURPOSE OF TESTIMONY

11 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

12 A. The purpose of my direct testimony is to present the weather normalization process used  
13 to adjust the Test Year billing determinants.<sup>8</sup> I will also explain the pro-forma customer  
14 and load adjustments made to the Test Year billing determinants to normalize for the  
15 impact of the COVID-19 pandemic. Finally, I will explain how the Company's  
16 proposed Economic Development Rider will benefit the customers and the communities  
17 served by PSO.

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<sup>1</sup> Docket No. 19-008-U in 2019.

<sup>2</sup> Cause No. 44967 in 2017, Cause No. 45235 in 2019 and Cause No. 45285 in 2020.

<sup>3</sup> Case No. 2019-00443 in 2020.

<sup>4</sup> Case No. U-20359 in 2019 and Case No. U-20591 in 2020.

<sup>5</sup> Docket No. 16-00001 in 2016.

<sup>6</sup> Docket No. 36966 in 2009, Docket No. 37364 in 2009, Docket No. 40443 in 2012, Docket No. 44701 in 2015, Docket No. 46449 in 2016, and Docket No 51415 in 2020.

<sup>7</sup> Case No. PUR-2017-00174 in 2018 and Case No. PUR-2018-00051 in 2018.

<sup>8</sup> The Test Year is the twelve-month period from April 1, 2019, through March 31, 2020.

1 III. WEATHER NORMALIZATION

2 Q. HOW DID WEATHER IMPACT THE COMPANY’S SALES DURING THE TEST  
3 YEAR?

4 A. Weather had an unfavorable effect on the Company’s sales during the Test Year,  
5 meaning PSO’s sales were approximately 302 GWh lower than they would have been  
6 under *normal* weather conditions.

7 Q. WHAT IS THE PURPOSE OF MAKING A WEATHER ADJUSTMENT TO  
8 NORMALIZE THE TEST YEAR BILLING DETERMINANTS?

9 A. Test year billing determinants are used to set rates in a rate proceeding. The authorized  
10 revenue requirement by class is divided by the test year billing determinants to come up  
11 with the new effective rates. If the test year billing determinants are too high because of  
12 a favorable impact of weather, then the new rates would be set too low for the utility to  
13 recover the authorized revenue requirement under normal conditions going forward.  
14 Likewise, if the test year billing determinants were too low due to unfavorable weather  
15 during the historical test year period, then the rates would essentially be set too high,  
16 enabling the utility to recover more than the authorized revenue requirement.

17 To address this issue, the Commission allows the utility to adjust the test year  
18 billing determinants for abnormal weather so that the ultimate rates that are set in a rate  
19 proceeding are normalized for the effect of weather.

20 Q. PLEASE DESCRIBE THE METHODOLOGY USED TO ESTIMATE THE IMPACT  
21 OF WEATHER ON KILOWATT HOUR SALES.

22 A. Weather adjustments to residential and commercial kilowatt hour (kWh) sales for PSO  
23 are computed by multiplying differences between actual and average degree days by the

1 weather coefficients from the forecast usage models and then multiplying by the number  
2 of actual customers for each month. The general equation takes the form:

3 
$$\text{Weather Impact}_t = [\beta_{\text{CDD}} \times (\text{CDD}_t - \text{NCDD}_t) + \beta_{\text{HDD}} \times (\text{HDD}_t - \text{NHDD}_t)] \times \text{Customers}_t.$$

4 Where:

5  $\beta_{\text{CDD}}$  and  $\beta_{\text{HDD}}$  are the kWh per customer per degree day parameter estimates  
6 from the regression model used to produce the company's monthly short-term  
7 forecast of energy sales.

8  $\text{CDD}_t$  and  $\text{NCDD}_t$  are the actual and average cooling degree days for month t.

9  $\text{HDD}_t$  and  $\text{NHDD}_t$  are the actual and average heating degree days for month t.

10  $\text{Customers}_t$  is the actual customer count for month t for the corresponding  
11 customer class.

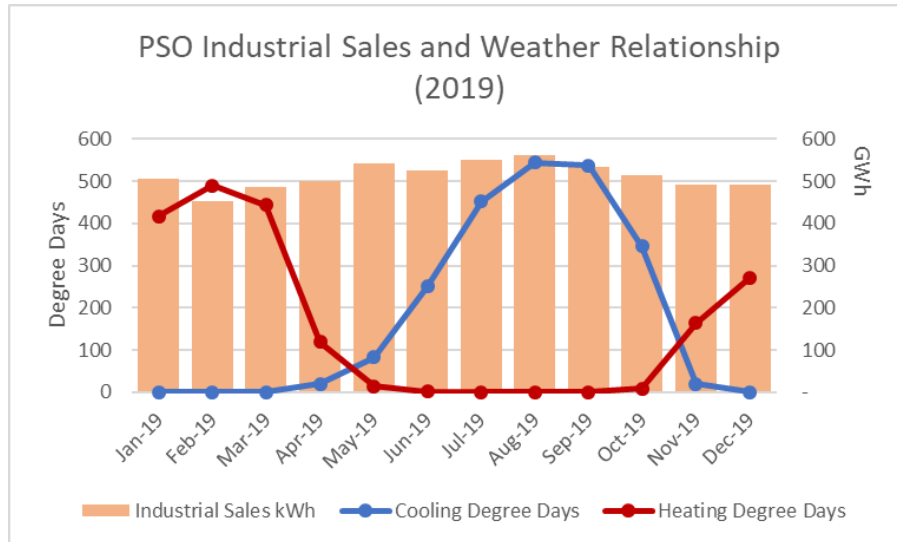
12 This exercise is done independently for the residential, commercial, and wholesale  
13 classes, although for the wholesale class, these computations are done on an individual  
14 customer basis.

15 Q. DOES THE COMPANY MAKE ANY WEATHER ADJUSTMENTS FOR THE  
16 INDUSTRIAL CLASS OF CUSTOMERS?

17 A. No. The Company does not compute a weather adjustment for the Industrial class  
18 because Industrial sales are generally not weather sensitive. Similarly, the Company  
19 does not compute a weather adjustment for the lighting classes. A weather adjustment is  
20 only computed for classes whose consumption patterns are impacted by weather. If a  
21 class is weather sensitive, the sales should increase during the winter and summer  
22 months (when heating and cooling loads are on), and a decrease during the spring and  
23 fall months when the heating and cooling loads are not utilized. The chart below (Figure  
24 CMB-1) illustrates why the Company does not compute a weather adjustment for the  
25 Industrial class. It shows that PSO's Industrial sales are relatively steady throughout the

1 year and do not exhibit the same seasonal consumption patterns as the other weather  
2 sensitive classes.

3 **Figure CMB-1**



4 Q. WHAT VARIABLES ARE INCLUDED IN THE FORECAST MODELS FROM  
5 WHICH THE WEATHER COEFFICIENTS ARE DERIVED?

6 A. The regression models are estimated using monthly billing-cycle weighted cooling and  
7 heating degree days, monthly average number of days billed, indicator variables as  
8 needed, as well as any auto-regressive integrated moving average (ARIMA) error  
9 structure deemed necessary to predict monthly kWh per customer values for each class  
10 of customers.

11 Q. DO THE ARIMA REGRESSION MODELS PROVIDE AN ESTIMATE OF MODEL  
12 FIT, SUCH AS THE R-SQUARED STATISTIC?

1 A. Yes. The ARIMA models do provide model fit statistics (e.g. AIC<sup>9</sup> and SBC<sup>10</sup>) in the  
 2 output as included in WP M-7, but not the r-squared statistic that is more common in  
 3 traditional linear regression models. However, an estimated r-squared statistic can be  
 4 computed from the non-linear ARIMA model output. Table CMB-1 below shows the  
 5 equivalent r-squared statistic for the ARIMA models that were used in PSO’s weather  
 6 normalization.

7 **Table CMB-1**

PSO Class Model	Total Sum of Squares	Error Sum of Squares	Estimated R-squared
Residential	12,734,795	81,105	<b>0.99363</b>
Commercial	117,376,197	1,709,628	<b>0.98543</b>
Small Industrial	55,114,716,000,000,000	14,435,300,000,000,000	<b>0.73809</b>
Other Retail	25,629,452,000,000,000	1,021,480,000,000,000	<b>0.96014</b>

8  
 9 Q. HOW DO YOU COME UP WITH THE MONTHLY BILLING-CYCLE WEIGHTED  
 10 COOLING AND HEATING DEGREE DAYS THAT GO INTO THE WEATHER  
 11 NORMALIZATION CALCULATION?

12 A. The monthly billing-cycle weighted degree days are computed using daily average  
 13 temperatures measured from three different weather stations: Tulsa, McAlester, and  
 14 Hobart, OK. These weather stations were selected to capture the weather and load  
 15 diversity across the PSO service territory. Each month’s degree day value is summed  
 16 using a simple “triangular” weighting scheme whereby the days of each month and its  
 17 previous month are given weights that increase linearly throughout the previous month’s  
 18 days and then decrease linearly over the current month’s days. These particular weights

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<sup>9</sup> Akaike Information Criteria

<sup>10</sup> Schwarz Bayesian Criteria



1 imply that equal shares of customers are billed in each billing cycle and that the last day  
2 of the previous month and the first day of the current month are included in the largest  
3 number of customers' bills. The corresponding average values are computed by taking  
4 average daily temperatures over the normalization period and adjusting them for billing  
5 cycles in the same manner.

6 Q. DESCRIBE THE WEATHER ASSUMPTIONS USED IN THE FORECAST  
7 MODELS.

8 A. The forecast model assumes normal weather during the entire forecast horizon. One of  
9 the primary reasons to use normal weather is to be able to make probability assessments  
10 regarding the test year billing determinants. In other words, when you have a normal  
11 distribution there is an equal chance that weather will be above the normal mean as there  
12 is that the temperatures will be below the normal mean. The Company uses a 30-year  
13 normal because it aligns with the statistical and meteorological science that says if you  
14 recognize that there are weather trends that prevent temperatures from being normally  
15 distributed, then you need at least 30 observations to be able to make the same normal  
16 probability assessments for the non-normal distribution of temperature data. As a result,  
17 the Company has used a rolling 30-year average of heating and cooling degree days to  
18 compute the projected *normal* degree days for this case.

19 IV. COVID-19 LOAD AND CUSTOMER ADJUSTMENTS

20 Q. WHAT IS THE PURPOSE OF MAKING PRO-FORMA LOAD AND CUSTOMER  
21 ADJUSTMENTS TO THE TEST YEAR?

1 A. Pro-forma load adjustments are used to ensure that the final billing determinants used to  
2 set rates represent a normalized annual level of sales and customer counts the Company  
3 will have prospectively to collect the final Commission authorized revenue requirement.  
4 According OAC 165:70, pro-forma adjustments are “adjustments made to the test year  
5 results and balances for known and measureable changes to obtain a normal or  
6 representative relationship between revenues, expenses, and rate base”<sup>11</sup>. Furthermore,  
7 OAC 165:70-3-3b states, “The pro forma test year shall reflect normalized operations,  
8 including pro forma adjustments.” Therefore, if the Company is aware of any “known  
9 and measureable” changes that occurred within the test year time horizon that would  
10 impact on-going revenues, expenses, or its rate base, the Company is instructed to  
11 include pro-forma adjustment to the test year data so that the rates can be designed to  
12 collect the intended revenue requirement authorized by the Commission.

13 Q. DID THE COMPANY MAKE ANY PRO-FORMA ADJUSTMENTS TO THE TEST  
14 YEAR BILLING DETERMINANTS IN ITS PREVIOUS BASE RATE CASE (CAUSE  
15 NO. PUD 201800097)?

16 A. Yes. In Cause No. PUD 201800097, the Company made pro-forma load adjustments for  
17 weather, customer growth, and some specific large customers whose operations changed  
18 during the test year.

19 Q. IS THE COMPANY MAKING THE SAME PRO-FORMA ADJUSTMENTS IN THIS  
20 PROCEEDING THAT IT MADE IN CAUSE NO. PUD 201800097?

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<sup>11</sup> Title 165 Oklahoma Corporation Commission Chapter 70. Minimum Standard Filing Requirements in Support of a Request by a Public Utility Doing Business in Oklahoma for a Proposed General Rate Change- Permanent Rules Updated, Effective 7/15/98.

1 A. Yes. The Company is still making pro-forma adjustments for weather, customer growth,  
2 and “known and measurable” changes that occurred within the test year that do not  
3 represent our ongoing operations. The only distinction here is that we are breaking out  
4 the third bucket into two distinct categories: 1) specific large customers whose  
5 operations materially changed during the test year as well as 2) the temporary changes to  
6 our load mix that occurred during the test year in response to the Covid-19 pandemic.

7 Q. ARE ALL OF THE PRO-FORMA ADJUSTMENTS INCLUDED IN THE TEST  
8 YEAR “KNOWN AND MEASUREABLE”?

9 A. Yes. Over the next several pages of testimony, I will show specifically how the pro-  
10 forma load adjustments were known and how the Company was able to measure the  
11 impacts individually.

12 Q. DO THE PRO-FORMA ADJUSTMENTS GET USED BY ANY OTHER COMPANY  
13 WITNESSES IN PREPARATION OF THE BASE RATE CASE FILING?

14 A. Yes. Company witness Earlyne Reynolds used the pro-forma test year load adjustments  
15 in her cost of service study and Company witness Jennifer Jackson used the results of  
16 the cost of service study in her rate design.

17 Q. HOW DID THE COVID-19 PANDEMIC IMPACT PSO’S SERVICE TERRITORY  
18 ECONOMY DURING THE TEST YEAR PERIOD OF 2020?

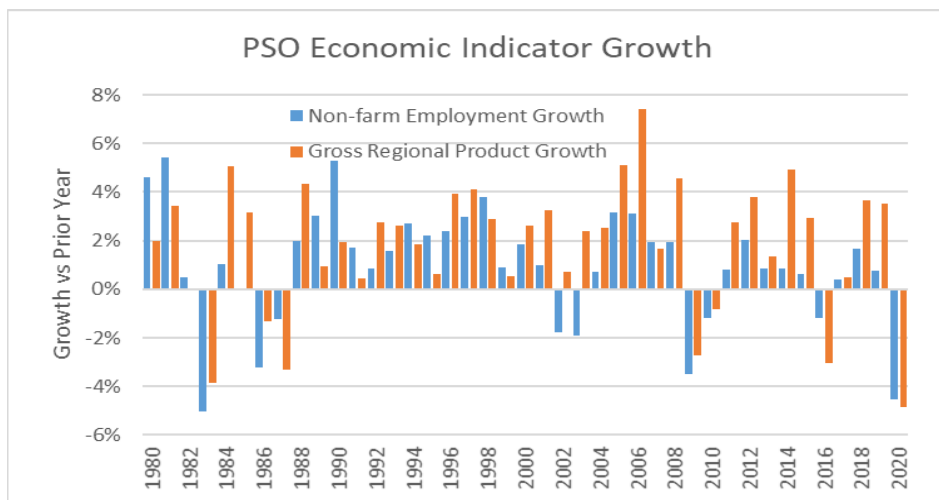
19 A. The pandemic, or more specifically, the measures implemented to manage the public  
20 health crisis, had a significant impact on PSO’s service territory economy. It started on  
21 March 6, 2020, when the Tulsa Health Department, in conjunction with the Oklahoma  
22 State Department of Health, confirmed the first positive case of the novel coronavirus  
23 (COVID-19) in Tulsa County. By March 24, 2020, Governor Stitt issued a statewide

1 “Safer at Home” order which limited gatherings to no more than 10 people, and closed  
2 all businesses not identified as being within a critical infrastructure sector to assist  
3 public health officials trying to slow the spread of the COVID-19 virus across the  
4 state<sup>12</sup>. This announcement came one week after former President Trump declared a  
5 national emergency in response to the pandemic.

6 Furthermore, the National Bureau of Economic Research (NBER), who is  
7 responsible for determining the start and end dates of US business cycles, has since  
8 announced that the US economy officially went into recession in February of 2020. We  
9 now know this recession has been the most severe recession since the Great Depression.  
10 As illustrated below in Figure CMB-2, PSO’s Gross Regional Product (GRP)  
11 experienced the biggest decline on record (-4.9%) in 2020. The decline in non-farm  
12 employment (-4.6%) was the second worst year on record. And the unemployment rate  
13 in PSO’s territory went from 3.5% in 2019 to 7.1% in 2020.

14

**Figure CMB-2**



<sup>12</sup> [https://www.governor.ok.gov/articles/press\\_releases/governor-stitt-announces-latest-covid-19-actions](https://www.governor.ok.gov/articles/press_releases/governor-stitt-announces-latest-covid-19-actions)

1           Then in April of 2020, in addition to dealing with the economic impact of  
2 COVID-19 restrictions and a recession, PSO's service territory experienced the  
3 aftermath of a temporary oil price war. In the wake of the pandemic, global demand for  
4 oil dropped significantly. However, Russia refused to cut production to provide price  
5 support for the OPEC nations. In response to Russia's position, Saudi Arabia decided to  
6 increase its oil production, which sent oil prices through the floor. The over-supply of  
7 oil created negative prices for West Texas Intermediate crude oil for the first time ever,  
8 which put significant pressure on domestic oil producers, including those located within  
9 PSO's footprint.

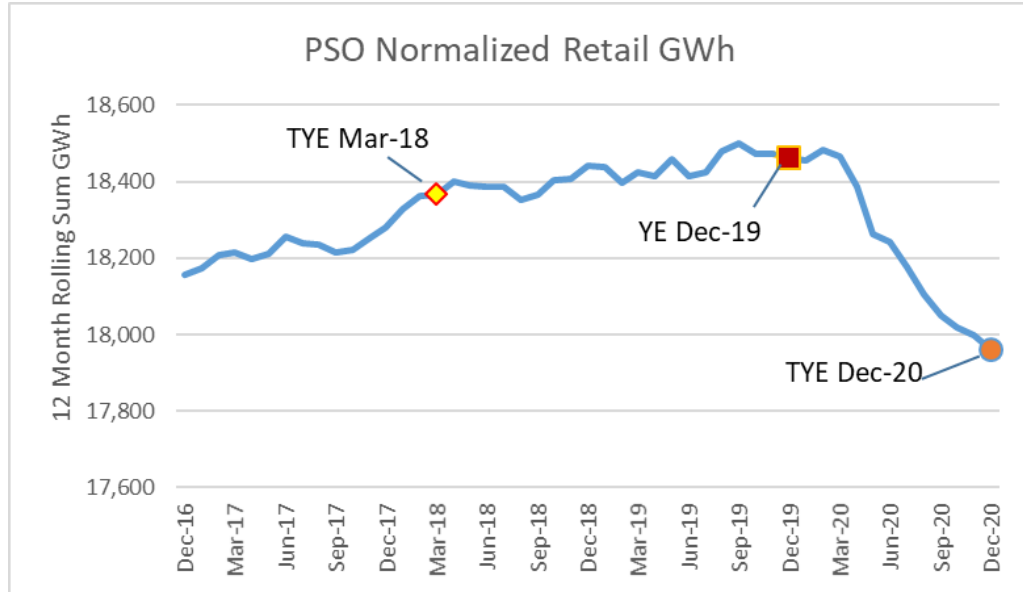
10           By April 24, 2020, the state of Oklahoma began a three-phased Open Up and  
11 Recover Safely (OURS) Plan to gradually reopen businesses that were shut down during  
12 the initial stage of the pandemic provided they still adhere to certain safety protocols  
13 recommended by public health departments. While the restrictions on businesses are  
14 much less than they were at the onset of the pandemic, life in Oklahoma by the end of  
15 the test year had not fully returned to its pre-pandemic 'normal'.

16 Q.   HOW DID THE RECESSION, PANDEMIC, AND OIL PRICE WAR IMPACT PSO'S  
17 LOAD DURING THE TEST YEAR?

18 A.   PSO's weather normalized retail load declined by 2.7% in 2020, which was the worst  
19 year for load growth since 2009. Figure CMB-3 shows how the pandemic and recession  
20 impacted PSO's normalized retail sales. It not only created a significant drop in overall  
21 load for PSO, but it also created a notable shift in the electricity sales mix as discussed  
22 in more detail below.

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**Figure CMB-3**



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Figure CMB-3 shows the 12-month rolling sum of weather normalized retail GWh for the PSO service territory. I've highlighted three data points in the series to illustrate how disruptive the pandemic was on PSO's normalized load growth. The first data point, identified by the yellow diamond, represents the 12 months ending March 2018, which was the date of the test year in PSO's last base rate case. The second data point, shown as a red box, represents PSO's normalized load as of the end of the calendar year 2019, prior to the pandemic and recession. It shows that PSO's normalized sales increased by approximately 0.5% over the 21 months since the end of the previous test year. The third data point, identified by the orange circle, represents PSO's normalized sales for the 12 months ending December 2020. Without making any pro-forma adjustments for COVID-19, PSO's normalized sales in the test year would be down 2.7% from the 2019 levels and down 2.2% from the previous rate case.

1 Q. IF THE PANDEMIC AND RECESSION LOWERED PSO'S TEST YEAR GWH  
2 SALES, WHY WOULD THE COMPANY MAKE A PRO-FORMA ADJUSTMENT  
3 FOR THAT?

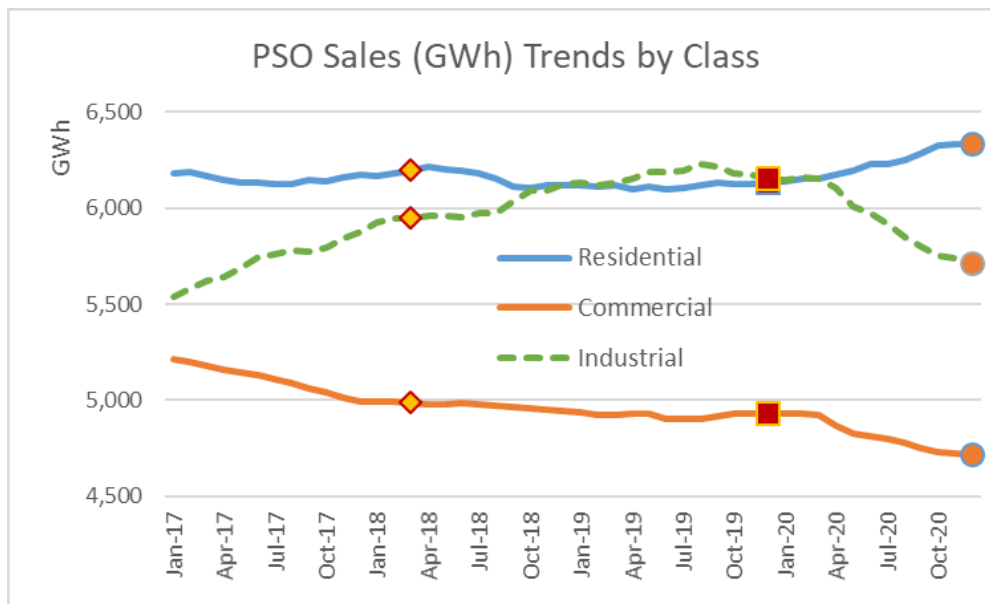
4 A. According to OAC 165:70, the test year is supposed to represent normalized operations  
5 including revenues, expenses, and rate base. The pandemic and recession that occurred  
6 during the test year were temporary events that are not expected to continue indefinitely.  
7 If no pro-forma adjustment was made for the impact of COVID-19, final rates in this  
8 proceeding would be set assuming the PSO service territory remains in a recession and  
9 under the restrictive health measures from the pandemic until its next base rate case.  
10 Given the pace of vaccinations and the economic recovery that has started to take shape,  
11 it is appropriate to make a pro-forma adjustment to the test year to reflect what PSO's  
12 normal operations will be when the new rates are implemented.

13 Q. HOW WAS PSO'S SALES MIX IMPACTED BY THE PUBLIC HEALTH  
14 MEASURES IMPLEMENTED IN RESPONSE TO THE COVID-19 PANDEMIC  
15 AND RECESSION?

16 A. It caused a dramatic decline in Commercial and Industrial class electricity sales that was  
17 partially offset by a significant increase in Residential sales. As expected, when the  
18 Governor's Safer at Home order was implemented, it forced non-essential businesses to  
19 temporarily close which lowered electricity consumption in the Commercial sector and  
20 increased consumption to the Residential sector as people were encouraged to spend  
21 more time in their own homes.

1 Figure CMB-4 below shows how the normalized sales trends for the three major  
2 retail classes (Residential, Commercial, and Industrial) were disrupted by the pandemic  
3 and recession.

4 **Figure CMB-4**



5  
6 Q. HOW DID THE PANDEMIC AND RECESSION IMPACT PSO'S SALES MIX?

7 A. As shown in Figure CMB-4 above, it temporarily increased the Residential share of  
8 PSO's sales and lowered the Commercial and Industrial share. This is an important  
9 issue that has class cost allocation implications.

10 Since the last base rate case, PSO's Industrial class became the largest class,  
11 eclipsing PSO's normalized Residential sales. However, once the pandemic and  
12 recession started, and businesses were temporarily restricted in their operations to help  
13 manage the public health crisis, the sales mix for the unadjusted test year showed a  
14 significant increase in Residential sales, with a corresponding decrease in Commercial  
15 and Industrial sales. Table CMB-2 below shows the share of weather normalized GWh



1 for the three key data points referenced throughout my testimony: Test Year Ending  
2 (TYE) March 2018 from PSO's last base case, the calendar year 2019, which shows the  
3 pre-pandemic sales mix since the last case, and the unadjusted TYE December 2020.

4 **Table CMB-2**

<u>Class Load (GWh) Shares</u>	<u>TYE 0318</u>	<u>2019</u>	<u>TYE 1220</u>
Residential	33.7%	33.2%	35.3%
Commercial	28.5%	26.7%	26.2%
Industrial	31.0%	33.3%	31.8%
Other Retail	6.8%	6.7%	6.7%
Wholesale	0.05%	0.05%	0.05%
Total	100.0%	100.0%	100.0%

5  
6 The Company's pro-forma adjustment for COVID-19 captures the change in sales mix  
7 that PSO expects moving forward once the pandemic and recession have officially  
8 ended.

9 Q. HOW DID THE COMPANY DEVELOP ITS COVID-19 PRO-FORMA  
10 ADJUSTMENT?

11 A. The Company's approach to developing its COVID-19 pro-forma load adjustment was  
12 to adjust the kWh upwards to the historical pre-pandemic levels. For the kWh sales, this  
13 meant adjusting the test year up to approximate its 2019 weather normalized levels.

14 Q. OTHER THAN REVENUES AND SALES, DID THE COMPANY MAKE ANY  
15 COVID-19 PRO-FORMA ADJUSTMENTS TO ANY OTHER OPERATING  
16 STATISTICS?

17 A. Yes. The Company also made a COVID-19 pro-forma adjustment to its reported  
18 customer counts as a result of the temporary increase in reported customer counts during  
19 the moratorium on disconnects in response to the COVID-19 pandemic.

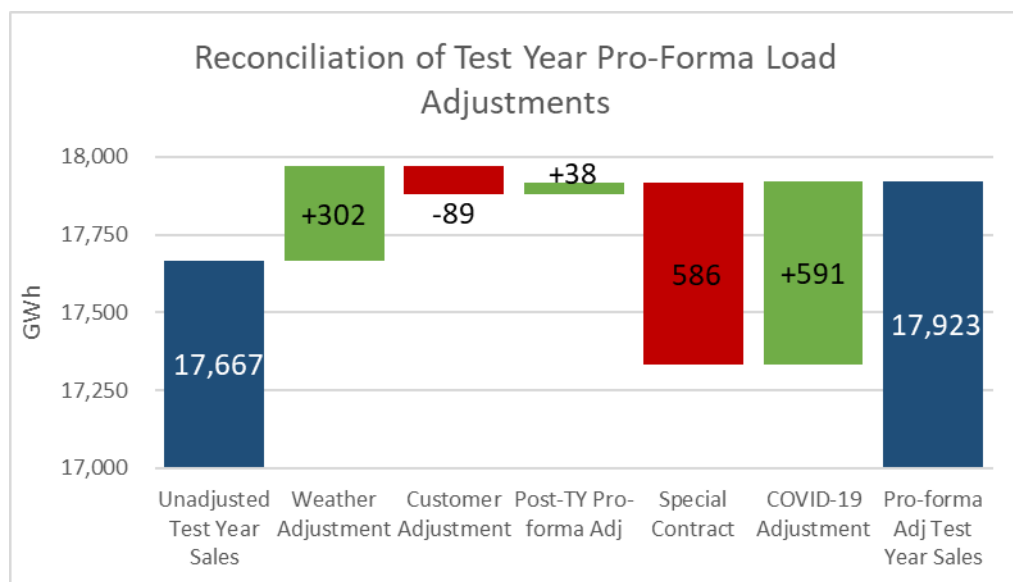
1 Q. HOW DID THE COMPANY DEVELOP THE PRO-FORMA ADJUSTMENT FOR  
2 CUSTOMERS?

3 A. The Company used a similar approach to adjust customers back to their pre-pandemic  
4 growth trend. Specifically, we computed the compound average growth rate (CAGR)  
5 for customer counts by class from the end of the previous test year (March 2018) to the  
6 last month before the moratorium on disconnects was implemented (March 2020). Then  
7 for the post-moratorium months, the customer counts were normalized to reflect the pre-  
8 pandemic customer growth throughout the test year.

9 Q. CAN YOU SUMMARIZE THE IMPACT OF ALL PRO-FORMA LOAD  
10 ADJUSTMENTS MADE TO THE TEST YEAR BILLING DETERMINANTS?

11 A. Absolutely. Figure CMB-5 below shows a reconciliation of the unadjusted GWh sales  
12 to the final adjusted test year GWh sales used by Company witness Earlyne Reynolds in  
13 her cost of service study.

14 **Figure CMB-5**



1 It shows that PSO's unadjusted GWh sales for the test year ending December 2020 was  
2 17,667 GWh. The Company's weather adjustment increased the billing determinants by  
3 302 GWh. The customer adjustment described above, resulted in an 89 GWh reduction  
4 to the test year billing determinants. From there, the specific customer pro-forma  
5 adjustments described in more detail in Company witness Earlyne Reynold's testimony  
6 resulted in a 38 GWh addition to the test-year sales. Next, a pro-forma adjustment was  
7 made to adjust for customers on special contracts which lowered the test year GWh by  
8 586 GWh. Finally, the Company's COVID-19 pro-forma adjustment added back 591  
9 GWh to the test year bringing the final pro-forma adjusted test year GWh to 17,923.

10 V. BENEFITS OF AN ECONOMIC DEVELOPMENT RATE

11 Q. THE COMPANY HAS PROPOSED AN ECONOMIC DEVELOPMENT RATE (EDR)  
12 IN THIS PROCEEDING. WHY WOULD THE COMPANY WANT TO PROMOTE  
13 ECONOMIC DEVELOPMENT WITHIN ITS SERVICE TERRITORY?

14 A. The Company supports economic development because it provides tangible benefits to  
15 everyone included in the service territory. Specifically, economic development: 1)  
16 strengthens our communities, 2) supports stable electricity rates and/or lowers rate  
17 burdens on the majority of our customers, 3) promotes diversification of the service  
18 territory economy, and 4) grows the local tax basis which is so important for many of  
19 the rural communities throughout the PSO service territory.

20 Q. WHY IS IT IMPORTANT THAT THE COMMISSION GRANT PSO ITS  
21 REQUESTED ECONOMIC DEVELOPMENT RATE?

22 A. Economic development is by nature, competitive. When a new business (or new  
23 location for an existing business) is considering where to locate, it considers many

1 factors including the local utility rates, labor force availability, local tax rates, and other  
2 factors that are important to a particular business.

3 If a prospect has narrowed their choice down to two options, and one of those  
4 locations offers an Economic Development Rate that the other does not, there is a  
5 greater likelihood that the service area that does offer an EDR will ultimately land the  
6 new employer to its service territory. The fact that PSO does not offer an EDR puts it at  
7 a competitive disadvantage when comparing to other locations in the region.

8 Q. DO YOU KNOW OF ANY OTHER UTILITIES IN THE REGION THAT  
9 CURRENTLY HAVE AN ECONOMIC DEVELOPMENT RATE OFFERING?

10 A. Yes. I understand that Oklahoma Gas & Electric (OG&E), Liberty Utilities, Entergy,  
11 and SWEPCO all have EDRs which covers areas in Oklahoma, Arkansas, Louisiana,  
12 Kansas, Missouri, and the regulated portion of Texas. The fact that all of these  
13 neighboring territories are currently able to offer an EDR that PSO does not have, puts  
14 PSO at a competitive disadvantage.

15 Q. HAS THE OKLAHOMA CORPORATION COMMISSION APPROVED ECONOMIC  
16 DEVELOPMENT RATES FOR ANY OTHER REGULATED UTILITIES IN  
17 OKLAHOMA?

18 A. Yes. In Cause No. PUD 201800070, the Commission approved OG&E's Economic  
19 Development Incentive Credit (EDIC).

20 Q. IS PSO'S PROPOSED ECONOMIC DEVELOPMENT RATE SIMILAR IN NATURE  
21 TO WHAT WAS APPROVED FOR OG&E IN CAUSE NO. PUD 201800070?

22 A. Yes. The Company took a similar approach as OG&E in structuring its proposed EDR.  
23 Essentially, the EDR would provide a limited term credit to its billing demand charges

1 during the first 36 months of operations as shown in the Table CMB-3 below. OG&E's  
2 EDIC consists of a descending credit off the base rate portion of the bill for each of the  
3 first three years of operations.

4 One minor distinction is that PSO's proposed EDR would provide a slightly  
5 larger incentive for larger employers (those that would bring 100 jobs or more to the  
6 service territory). This recognizes the overall economic benefits to our communities by  
7 incentivizing larger employers to the PSO service territory. Another distinction between  
8 PSO's proposed EDR and OG&E's EDIC is that the temporary credit in PSO's EDR  
9 would only apply to the demand charges, while OG&E's credit applies to the total base  
10 rate portion of the bill.

11 **Table CMB-3**

	OG&E EDIC Cause No. PUD 201800070	PSO Proposed EDR Tier 1 (15-99 jobs)	PSO Proposed EDR Tier 2 (> 99 jobs)
Year 1	35%	30%	35%
Year 2	25%	20%	25%
Year 3	15%	10%	15%
After Year 3	0%	0%	0%

12 Q. WHAT ARE THE REQUIREMENTS FOR A CUSTOMER TO PARTICIPATE IN  
13 THE COMPANY'S PROPOSED EDR?

14 A. PSO's Economic Development Rate is designed for customers whose operations will  
15 promote sustained economic development and job creation. The EDR is only available  
16 for customers who have already been offered and accepted an incentive by a local,  
17 regional, or state economic development agency to locate a new facility, or expand its

1 existing facilities. The EDR is available to commercial or industrial customers taking  
2 service from the Company under the Large Power and Light (LPL) tariffs under Service  
3 Levels 1, 2, or 3 or customers on the Power and Light Time of Day (PLTOD) or Power  
4 and Light (PL) tariffs for Service Levels 4 and 5 who agree to the following terms.

5 The customer must agree to a minimum of 7 years in its contract for electric  
6 service. The new customer must have a demand of 1,000 kW or more. An existing  
7 customer, must increase their demand by 1,000 kW or more to qualify. In addition, the  
8 new customer or expansion must result in the creation of at least 15 full-time equivalent  
9 (FTE) jobs maintained over the contract term. (As discussed above, there is an  
10 additional incentive credit for employers who add 100 FTE jobs or more). Finally, the  
11 customer must demonstrate to the Company that absent the availability of the EDR, the  
12 qualifying expansion or new load would be located outside of PSO's service territory or  
13 would not happen at all.

14 Q. HOW WOULD PSO'S PROPOSED EDR BE FUNDED?

15 A. The Company designed its proposed Economic Development Rate to be self-funded in  
16 between base rate cases. To illustrate this point, let's walk through an example of a  
17 hypothetical manufacturing company that qualifies under the conditions of service  
18 described above. Specifically, I will assume a 1 MW customer with an 80% load factor  
19 (7 GWh per year) who will be taking electric service under the Large Power & Light  
20 (LPL) Service Level 2 and will hire 20 new employees to locate within PSO's service  
21 territory. We assume the 20 new employees will become new Residential customers in  
22 PSO's service territory with similar usage as PSO's existing Residential customers (For  
23 this example, I will rely on the Company's existing tariff rates prior to this proceeding.)

1 Table CMB-4 below contains the computation of the LPL EDR credit with the  
 2 corresponding offset in Residential revenue collections.

3

**Table CMB-4**

<b>PSO LPL Service Level 2 (244)</b>				
	Year 1	Year 2	Year 3	Total EDR Impact
Base Service Charge	\$ 3,360	\$ 3,360	\$ 3,360	
Total kWh Charge	\$ 14,581	\$ 14,581	\$ 14,581	
EDR Credit	30%	20%	10%	
on peak period kW	\$ 45,192	\$ 51,648	\$ 58,104	
max kW	\$ 6,552	\$ 7,488	\$ 8,424	
excess kVAR	\$ -	\$ -	\$ -	
<b>Total Base Bill</b>	<b>\$ 69,685</b>	<b>\$ 77,077</b>	<b>\$ 84,469</b>	
<b>EDR Credit Impact</b>	<b>\$ (22,176)</b>	<b>\$ (14,784)</b>	<b>\$ (7,392)</b>	<b>\$ (44,352)</b>
<b>PSO Residential Service (15)</b>				
	Year 1	Year 2	Year 3	Total EDR Offset
Basic Service Charge	\$ 4,800	\$ 4,800	\$ 4,800	
		\$ -	\$ -	
Energy Charge		\$ -	\$ -	
on-peak (0-1,350 kWh)	\$ 5,921	\$ 5,921	\$ 5,921	
on-peak (>1,350 kWh)	\$ 544	\$ 544	\$ 544	
		\$ -	\$ -	
off-peak (0-475 kWh)	\$ 2,874	\$ 2,874	\$ 2,874	
off-peak (476-1,250 kWh)	\$ 1,883	\$ 1,883	\$ 1,883	
off-peak (>1,250 kWh)	\$ 7	\$ 7	\$ 7	
<b>Annual Total</b>	<b>\$ 16,029</b>	<b>\$ 16,029</b>	<b>\$ 16,029</b>	<b>\$ 48,087</b>

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For this example, the total amount of the EDR credit over the first three years is \$44,352. This credit is more than offset by the increased Residential collections of \$48,087. And this only captures the direct benefits of the 20 new employees. There





AFFIDAVIT OF CHAD M. BURNETT

STATE OF OKLAHOMA )

COUNTY OF TULSA )

On the 22 day of April 2021, before me appeared Chad M. Burnett, to me personally known, who, being by me first duly sworn, states that he is Director of Economic Forecasting for American Electric Power Service Corporation and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.

Chad Burnett

Chad M. Burnett

Subscribed and sworn to before me this 22 day of April, 2021.



Barbara A. Post oak

Notary Public

My commission expires: 11-12-2024