

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

APPLICATION FOR APPROVAL OF )  
EL PASO ELECTRIC COMPANY'S )  
2018 RENEWABLE ENERGY PLAN )  
PURSUANT TO THE RENEWABLE )  
ENERGY ACT AND 17.9.572 NMAC, )  
AND REVISED RATE NO. 38 – RPS )  
COST RIDER )  
)  
EL PASO ELECTRIC COMPANY, )  
Applicant. )  
\_\_\_\_\_ )

CASE NO. 18-00 109-UT

**DIRECT TESTIMONY**

**OF**

**MANUEL CARRASCO**

**MAY 1, 2018**

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## EXHIBITS

Exhibit MC-1	Plan Year Revenue Requirements and Calculated Reasonable Cost Threshold .
Exhibit MC-2	Large Non-Governmental Customer RPS Adjustment
Exhibit MC-3	Renewable Portfolio Standard Cost Rider
Exhibit MC-4	Alternative Plan Year Revenue Requirements and Calculated Reasonable Cost Threshold
Exhibit MC-5	EPE'S 2015 Rate Case Exhibits/Schedules With and Without RPS Facilities

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1                   **I.     INTRODUCTION AND QUALIFICATIONS**

2   **Q.   PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND**  
3       **OCCUPATION.**

4   **A.**   My name is Manuel Carrasco. My business address is 100 N. Stanton Street,  
5       El Paso, Texas, 79901. I am employed by El Paso Electric Company ("EPE" or  
6       the "Company") as the Supervisor of the Rates and Regulatory section of the  
7       Regulatory Affairs department.

8

9   **Q.   PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL**  
10       **QUALIFICATIONS.**

11   **A.**   I hold a Bachelor in Accounting and a Master in Economics from New Mexico  
12       State University ("NMSU"). I graduated from NMSU's Accounting program,  
13       with honors, in 1995 and from NMSU's Regulatory Economics program in 1999.  
14       In addition, I have attended professional development seminars sponsored by the  
15       National Economic Research Associates (NERA) Economic Consulting, Electric  
16       Utility Consultants Inc. (EUCI), The Brattle Group, NMSU's Center for Public  
17       Utilities, American Gas Association, Edison Electric Institute, and American  
18       Water Works Association.

19               My professional career began in 1993 as a rate analyst with the Utilities  
20       Department of the City of Las Cruces, New Mexico, where my responsibilities

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1 included performing cost of service and rate design studies; preparing fiscal  
2 budget and financial forecasts; and developing forecasts of customers,  
3 consumption, and revenues. During my tenure with the City of Las Cruces, I  
4 received increasing levels of responsibility culminating with a promotion to  
5 Manager of the Rate & Economic Analysis section. My experience also includes  
6 working as an Accountant/Analyst at Sierra Pacific Power Company and working  
7 as a Senior Pricing Analyst at Colorado Springs Utilities.

8 I began working for EPE in 2009 as a Rate Analyst Specialist. In 2011, I  
9 was then promoted to Senior Rate Analyst; and in 2015, I was promoted to my  
10 current position.

11  
12 **Q. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES WITH EPE.**

13 **A.** My responsibility is to supervise the preparation of economic, statistical, cost, and  
14 rate design studies; development of models and methodologies for cost of service,  
15 profitability and pricing studies; and performing annualization and cost of service  
16 studies, rate design and revenue forecasts.

17  
18 **Q. ARE YOU SPONSORING ANY EXHIBITS IN THIS FILING?**

19 **A.** Yes, I am sponsoring the following:

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1 Exhibit MC-1 Plan Year Revenue Requirements and Calculated Reasonable Cost  
2 Threshold;  
3 Exhibit MC-2 Large Non-Governmental Customer RPS Adjustment;  
4 Exhibit MC-3 Renewable Portfolio Standard Cost Rider;  
5 Exhibit MC-4 Alternative Plan Year Revenue Requirements and Calculated  
6 Reasonable Cost Threshold; and  
7 Exhibit MC-5 EPE'S 2015 Rate Case Exhibits/Schedules With and Without RPS  
8 Facilities.

9  
10 **Q. HAVE YOU PRESENTED TESTIMONY BEFORE UTILITY  
11 REGULATORY BODIES?**

12 **A.** Yes, I have filed testimony with, and testified before, the New Mexico Public  
13 Regulation Commission ("NMPRC" or "Commission"), and I have filed  
14 testimony with the Public Utility Commission of Texas.

15  
16 **II. PURPOSE OF TESTIMONY**

17 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

18 **A.** The purpose of my testimony is to present EPE's calculation of plan year revenue  
19 requirements, large non-governmental customer adjustment, and reasonable cost  
20 threshold ("RCT") in support of EPE's 2018 Renewable Energy Act plan ("2018

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1 Plan" or "Plan") presented by EPE witness Omar Gallegos. I also present EPE's  
2 calculation of its proposed Renewable Portfolio Standard ("RPS") Cost Rider for  
3 the 2019 Plan Year. Finally, I provide an alternative RCT analysis which reflects  
4 avoided jurisdictional allocation of costs for the Commission's consideration.

5  
6 **III. CALCULATION OF THE ANNUAL PLAN YEAR REVENUE**

7 **REQUIREMENTS**

8 **Q. HOW ARE PLAN YEAR REVENUE REQUIREMENTS TO BE**  
9 **DETERMINED?**

10 **A.** Section 14(C) of Rule 17.9.572 NMAC ("Rule") requires plan year revenue  
11 requirements for RCT purposes to include the estimated RPS procurement cost of  
12 all resources included in the plan. Revenue requirement adjustments should  
13 include:

14 Net avoided fuel and purchased power costs, cost savings resulting from  
15 environmental credits (if not already included in the net avoided fuel  
16 costs) pursuant to compliance rules in effect during the plan year, and cost  
17 savings or increases for capacity, generation, transmission or distribution,  
18 operation and maintenance expense, back-up and load following  
19 generation, off-system sales opportunity impacts, or other facilities and  
20 improvements or functions that may be required and that can be shown to  
21 result in actual reductions or increases in plan year revenue requirements  
22 to be collected from ratepayers. Avoided fuel costs are expected or  
23 modeled fuel savings that result from the procurement of renewable  
24 resources in the plan years.  
25

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1           The calculation of the estimated annual plan year revenue requirements is shown  
2           in Exhibit MC-1, page 1. The remainder of this section describes how these plan  
3           year revenue requirements were determined.

4

5   **Q.   WHAT METHODOLOGY DOES EPE USE TO CALCULATE PLAN**  
6   **YEAR REVENUE REQUIREMENTS AND HAS THE COMMISSION**  
7   **APPROVED THIS METHODOLOGY?**

8   **A.**   EPE uses the direct comparison methodology. This methodology was approved  
9           by the Commission in Case Nos. 15-00117-UT and 16-00109-UT.

10

11 **Q.   HOW DOES EPE CALCULATE PLAN YEAR REVENUE**  
12 **REQUIREMENTS UNDER THE DIRECT COMPARISON**  
13 **METHODOLOGY?**

14 **A.**   EPE uses its PROMOD<sup>®</sup> program, a standard planning and economic dispatch  
15           modeling tool, to conduct two plan year revenue requirement calculations: one  
16           calculation estimates the plan year revenue requirement for its total system  
17           (New Mexico, Texas, and Federal Energy Regulatory Commission jurisdictions)  
18           with plan year renewable energy procurements; the second calculation removes  
19           the renewable energy procurements. The first calculation establishes a base case  
20           system cost for generation, which is referred to as the "With Case." The second

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1 calculation is referred to as the "Without Case." The difference in total costs  
2 between the With Case and Without Case equals the net increase in generation  
3 costs attributable to the RPS portfolio. EPE witness Gallegos addresses EPE's  
4 PROMOD modeling process.

5  
6 **Q. WHAT RPS PROCUREMENT COSTS DOES EPE INCLUDE IN ITS  
7 PLAN YEAR REVENUE REQUIREMENTS?**

8 **A.** Please refer to Exhibit OG-3. EPE's plan year revenue requirements include the  
9 costs of purchasing renewable energy and renewable energy certificates ("RECs")  
10 from the Commission-approved long-term, RPS procurement actions, as described  
11 by EPE witness Gallegos in his direct testimony. These revenue requirements  
12 include the cost of RECs acquired under EPE's REC Programs. The Commission  
13 has also approved recovery of ongoing costs associated with Western Renewable  
14 Energy Generation Information System ("WREGIS") to register and track RECs.

15  
16 **Q. HOW HAS EPE ESTIMATED THE PROCUREMENT COST  
17 ASSOCIATED WITH MEETING THE RENEWABLE PORTFOLIO  
18 STANDARD REQUIREMENTS?**



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1   **A.**   In his direct testimony, EPE witness Gallegos calculates and presents the  
2           estimated 2019 and 2020 procurement costs of the 2018 Plan. EPE witness  
3           Gallegos provides an accounting of those costs in Exhibit OG-3.

4  
5   **Q.**   **DO PLAN YEAR REVENUE REQUIREMENTS REFLECT AVOIDED  
6           FUEL AND PURCHASED POWER COSTS?**

7   **A.**   Yes. For each plan year, the revenue requirement reflects modeled avoided fuel  
8           and purchased power cost savings (including cost savings from environmental  
9           credits) attributable to the RPS portfolio. Exhibit MC-1, page 1, line 10, shows  
10          the cost savings at \$2,816,971 and \$3,382,071 for 2019 and 2020, respectively.

11  
12   **Q.**   **HOW WERE AVOIDED FUEL AND PURCHASED POWER COST  
13          SAVINGS DETERMINED?**

14   **A.**   EPE estimates the avoided fuel and purchased power cost savings attributable to  
15          the 2018 Plan by subtracting the Net Plan Year Procurement Cost<sup>1</sup> from the  
16          difference between and the With and Without Cases.

17                   For example, Exhibit MC-1, page 1, line 7, shows the 2019 Net Plan  
18          Year Procurement Cost of renewable energy is \$14,062,913 while the difference  
19          between the With and Without Cases, in line 8, is \$11,245,941. The subtraction of

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<sup>1</sup> Net Plan Year Procurement Cost equals, from Exhibit OG-3, the total Procurement Plan Costs less the sum of CRLEF, DG REC, and WREGIS costs.

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1       \$14,062,913 from \$11,245,941 (as shown in Exhibit MC-1, page 1, line 10)  
2       results in \$2,816,971 in avoided fuel and purchased power cost savings. In other  
3       words, the addition of \$14.1 million in renewable energy costs results in a net  
4       increase of \$11.2 million in total energy costs because \$2.9 million in non-  
5       renewable fuel and purchased power energy costs were avoided by the incurrence  
6       of the renewable energy costs. A similar calculation is made for the 2020 plan  
7       year.

8  
9       **Q. DO PLAN YEAR REVENUE REQUIREMENTS REFLECT AN**  
10       **ADJUSTMENT FOR AVOIDED CAPACITY COSTS?**

11       **A.** No. According to the direct testimony of EPE witness Gallegos, the PROMOD  
12       model did not indicate a resource inadequacy without the RPS resources;  
13       therefore, no adjustment for avoided capacity costs is required.

14  
15       **Q. HOW IS DISTRIBUTED GENERATION ("DG") REFLECTED IN THE**  
16       **DETERMINATION OF PLAN YEAR REVENUE REQUIREMENTS**  
17       **UNDER THE DIRECT COMPARISON METHODOLOGY?**

18       **A.** As recommended by the Commission's Utility Division ("Staff") and reflected in  
19       EPE's prior RPS plan year filings, EPE reflects energy produced by DG systems  
20       as a reduction in customer load in both the With and Without cases, because DG

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1 systems provide energy which offsets customer usage behind the meter. EPE  
2 reduces load by the forecasted amount of DG production at the REC meter.

3

4 **Q. WERE OTHER ADJUSTMENTS MADE TO DERIVE THE PLAN YEAR**  
5 **REVENUE REQUIREMENT FOR AVOIDED TRANSMISSION OR**  
6 **DISTRIBUTION COSTS?**

7 **A.** No. Because EPE's 2018 Plan Year RPS procurement is from previously  
8 approved resources and would not result in direct reduction to existing  
9 transmission or distribution costs that would be realized in 2019 and 2020, it  
10 would be inconsistent with the Rule to reduce the plan year revenue requirements  
11 for avoided transmission or distribution costs. The Rule requires that in order to  
12 reduce the plan year revenue requirements, such avoided costs must be expected  
13 to result in actual reductions in costs to ratepayers in the plan year.

14

15 **Q. BASED ON THIS SECTION'S DESCRIPTION OF HOW THE PLAN**  
16 **YEAR REVENUE REQUIREMENTS WERE DETERMINED, WHAT ARE**  
17 **THE PLAN YEAR REQUIREMENTS FOR THE 2018 PLAN?**

18 **A.** EPE's estimated annual plan year revenue requirements, shown in Exhibit MC-1,  
19 page 1, line 13, are \$13,165,294 for 2019 and \$12,498,486 for 2020.

20

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1        **IV.    CALCULATION OF LARGE NON-GOVERNMENTAL CUSTOMER**

2    **ADJUSTMENT**

3        **Q.    DOES THE RENEWABLE ENERGY ACT, AND COMMISSION**  
4                                    **RULE 572, REQUIRE EPE TO CALCULATE THE RPS IMPACT TO**  
5                                    **LARGE NON-GOVERNMENTAL CUSTOMERS?**

6        **A.**    Yes. The Renewable Energy Act ("Act") and the Rule require EPE to reduce, as  
7                                    necessary, the kilowatt-hours ("kWh") of renewable energy procured for large  
8                                    non-governmental customers if the additional cost of the RPS obligation,  
9                                    inclusive of all interconnection and transmission costs, exceeds the lower of two  
10                                  percent of their annual bill or annual dollar cap of \$111,427 for 2019 or \$113,104  
11                                  for 2020<sup>2</sup>, as shown in Exhibit MC-2. The annual dollar cap for 2019 and 2020  
12                                  reflect the application of Rule 17.9.572.7 NMAC, which provides for the  
13                                  application of a change in the consumer price index, urban ("CPI-U") based upon  
14                                  the CPI-U for the 12-month period ended January 2018, as published by the U.S.  
15                                  Bureau of Labor Statistics.  
16

17        **Q.    HOW DID EPE DETERMINE WHETHER THE RPS PROCUREMENT**  
18                                  **COSTS FOR THESE CUSTOMERS WOULD EXCEED THE**  
19                                  **STATUTORY LIMITS?**

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<sup>2</sup> This statutory cost cap is applicable to customers with annual energy consumption in excess of 10 million kWh at a single location or facility, regardless of the number of meters at that location or facility.

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1    **A.**    To determine whether EPE's RPS procurement costs for individual large non-  
2           governmental customers exceeds the large customer cap imposed by the Act and  
3           Rule, EPE estimates individual customer bills assuming base rates in effect the  
4           day of the 2018 Plan filing, as required by Rule 572. For the purposes of EPE's  
5           2018 Plan, EPE's evaluation is based on EPE's current rates, together with the  
6           Fuel and Purchased Power Cost Adjustment Clause ("FPPCAC") factors and all  
7           other rider charges (not including rider charges for projected plan year renewable  
8           portfolio revenue requirements) that are projected to be applicable during 2018.  
9           EPE then calculates the revenue impact on an individual customer based on the  
10          applicable RPS requirement (15 percent in 2019 and 20 percent in 2020) for the  
11          customer and the per kWh compliance cost of the renewable resources in each  
12          plan year's portfolio. The cost to procure 15 and 20 percent of the individual  
13          customers total energy requirement for each plan year may not exceed the  
14          percentage of bill limit or total cost limit established in the Act and Rule.

15  
16    **Q.    BASED ON EPE'S CALCULATION, IS AN RPS ADJUSTMENT**  
17    **REQUIRED FOR LARGE NON-GOVERNMENTAL CUSTOMERS?**

18    **A.**    Yes. Exhibit MC-2 demonstrates that under the Rule and Act, the cost of the  
19           2018 Plan to procure RPS energy sufficient to satisfy 15 percent in 2019, and  
20           20 percent in 2020, of each of EPE's qualifying large non-governmental

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1 customers, would exceed the cap established in the Act in plan years 2019 or  
2 2020. As calculated in Exhibit MC-2, the RPS reduction pursuant to the large  
3 customer limit of 7,654,229 kWh and 10,560,042 kWh in the 2019 and 2020 plan  
4 years, respectively, is required for purposes of the 2018 Plan. The allowable RPS  
5 for EPE's qualifying large non-governmental customers is limited to 1,324,701  
6 kWh in 2019 and 1,411,865 kWh in 2020. EPE witness Gallegos uses these  
7 limited amounts for the large non-governmental customer adjustment to calculate  
8 EPE's Total RPS Requirement in Exhibit OG-1.

9  
10 **Q. HAS EPE OBSERVED FLUCTUATIONS IN THE NUMBER OF LARGE**  
11 **NON-GOVERNMENTAL CUSTOMERS THAT REQUIRE AN RPS**  
12 **ADJUSTMENT?**

13 **A.** No. EPE's analysis shows that the RPS adjustment in the current filing is for the  
14 same customers that an adjustment was made for in the recent prior RPS plan year  
15 filings.

16  
17 **Q. IS THE LARGE NON-GOVERNMENTAL CUSTOMER ADJUSTMENT**  
18 **CALCULATION BASED ON PROCUREMENT COST OR COMPLIANCE**  
19 **COST?**

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1    **A.**    The Large Customer Adjustment calculation uses the compliance cost. This  
2            approach is consistent with EPE's prior RPS plan year filings and EPE's RCT  
3            calculation.

4  
5    **Q.**    **CAN YOU DEFINE WHAT IS MEANT BY "COMPLIANCE COST"?**

6    **A.**    Yes. Compliance cost is the plan year RPS procurement cost adjusted for avoided  
7            fuel and purchased power cost. Compliance cost is synonymous to the annual  
8            plan year revenue requirements previously described in my testimony and is  
9            presented in Exhibit MC-1, page 1, line13.

10

11        **V.    CALCULATION OF THE REASONABLE COST THRESHOLD**

12    **Q.**    **WHAT IS THE CURRENT RCT ESTABLISHED BY NMPRC**  
13            **RULE 17.9.572 NMAC?**

14    **A.**    Under Rule 17.9.572.12 B NMAC, the RCT is set at 3 percent of plan year total  
15            revenues.

16

17    **Q.**    **HAS EPE CALCULATED WHETHER THE 2018 PLAN YEAR REVENUE**  
18            **REQUIREMENTS EXCEED THE 3 PERCENT RCT?**

19    **A.**    Yes. Exhibit MC-1, page 2, shows the RCT calculation.

20

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1   **Q.    IS EPE'S METHODOLOGY CONSISTENT WITH RULE 572?**

2   **A.**Yes. As I describe below, EPE's RCT calculation methodology is consistent with  
3           Rule 572.

4  
5   **Q.    HOW ARE PLAN YEAR TOTAL REVENUES DETERMINED?**

6   **A.**"Plan year total revenues" is defined in Section 7(K) of the Rule as follows:

7           Plan year projected total retail revenues including the sum of plan year  
8           total retail energy sales multiplied by the company's approved base and  
9           non-base fuel retail rates by rate class; projected fuel clause revenues; and  
10          all projected rider revenues, not including projected plan year renewable  
11          portfolio revenue requirements, and projected undergrounding rider  
12          contributions in aid of construction.

13  
14          Retail revenues are to be calculated using weather-adjusted retail energy  
15          sales projected for the plan year, and adjusted for projected energy efficiency  
16          reductions approved by the Commission in EPE's most recent energy efficiency  
17          proceeding (Case No. 16-00185-UT).

18  
19   **Q.    PLEASE SPECIFY THE COMPONENTS OF EPE'S PLAN YEAR TOTAL**  
20   **REVENUES.**

21   **A.**For the 2018 Plan, EPE calculated plan year total revenues for 2019 and 2020 to  
22          only include projected base revenues, an adjustment based on the 2018 projected  
23          FPPCAC monthly factors, and an adjustment based on the application of the  
24          Rate 17 - Efficient Use of Energy Recovery Factor currently in effect.



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1

2 **Q. WHAT IS EPE'S REASONABLE COST THRESHOLD FOR THE 2019**  
3 **AND 2020 PLAN YEARS?**

4 **A.** As shown in Exhibit MC-1, page 2, with the RCT set at 3 percent of plan year  
5 total revenues, the reasonable cost threshold for 2019 is \$4,965,797, based on plan  
6 year total revenues of \$165,526,570. The reasonable cost threshold for 2020 is  
7 \$4,988,395 based on plan year total revenues of \$166,279,833.

8

9 **Q. DOES EPE'S COMPLIANCE COST EXCEED THE RCT IN PLAN**  
10 **YEARS 2019 AND 2020?**

11 **A.** Yes. As shown in Exhibit MC-1, page 2, the plan year revenue requirements  
12 costs exceed the RCT of 3% in both plan years. The ratio of the compliance cost  
13 to plan year total revenues is 7.95% in 2019 and 7.52% in 2020.

14

15 **Q. WOULD EPE FURTHER EXCEED THE RCT IF THE COMPANY WAS**  
16 **TO INCUR ADDITIONAL NEW COSTS TO MEET ITS RPS**  
17 **OBLIGATIONS?**

18 **A.** Yes. Any additional new costs not already included in EPE's 2018 Plan will  
19 exacerbate the amount by which EPE already exceeds the RCT.

20

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1 **Q. HAVE YOU ESTIMATED THE IMPACT OF THE CAMINO REAL**  
2 **LANDFILL TO ENERGY FACILITY ("CRLEF") REC PROCUREMENT**  
3 **EXTENSION DISCUSSED BY EPE WITNESS GALLEGOS?**

4 **A.** Yes. The procurement cost for the CRLEF facility represents less than three  
5 quarters of 1 percent of total 2019 Plan Year total RPS procurement costs. The  
6 amended price for the REC procurement for this facility has minimal impact on  
7 the percentage in excess of the RCT. I have estimated the impact on that  
8 percentage at approximately 3 basis points.

9  
10 **Q. ARE EPE'S RPS PROCUREMENT COSTS, THAT ALREADY EXCEED**  
11 **THE RCT, CONSIDERED REASONABLE?**

12 **A.** Yes. As stated in EPE witness Gallegos' direct testimony, EPE's existing RPS  
13 procurement costs are reasonable because EPE's current portfolio of RPS  
14 resources were found to be reasonable and were approved by the Commission in  
15 EPE's prior RPS plan year filings. Additionally, the amended price of the  
16 proposed extension for the continued REC procurements from the existing  
17 CRLEF facility, a Commission-approved resource from prior RPS plan year  
18 filings, increases the RPS procurement costs by about one third of 1 percent, but it  
19 also provides for the continued viability and operation of an established operating

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1 facility. Please refer to EPE witness Gallegos' direct testimony for further  
2 discussion on CRLEF and the associated REC procurement cost.

3

4 **VI. CALCULATION OF THE RENEWABLE PORTFOLIO STANDARD**

5

**COST RIDER**

6 **Q. HOW IS EPE'S RENEWABLE PORTFOLIO STANDARD COST RIDER**  
7 **CALCULATED?**

8 **A.** EPE calculates the renewable portfolio standard cost rider by dividing the RPS  
9 procurement cost in each plan year, plus Commission-approved and deferred  
10 WREGIS costs in 2015 through 2018, and reduced by the capped contribution of  
11 qualifying large customers, by the total forecasted energy (kWh) for the plan year,  
12 excluding projected annual sales for qualifying large customers. The resulting  
13 \$/kWh rider will apply to energy sales (excluding those of qualifying large  
14 customers) on a monthly basis. Exhibit MC-3 presents the calculation of the  
15 proposed renewable portfolio standard cost rider which resulted in \$0.010154 per  
16 kWh in 2019 and \$0.010042 in 2020. Qualifying large customers are billed at  
17 2 percent of monthly pre-tax charges.

18

19 **Q. IS EPE PROVIDING RECONCILIATION FOR THE RPS RIDER IN THIS**  
20 **FILING?**

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1    **A.**    No. EPE's new RPS Rider was approved in late 2017 and first effective in  
2           customer bills on January 1, 2018, so a full plan year of cost recovery under the  
3           Rider is not yet completed.

4

5    **Q.    WHEN DOES EPE PLAN TO RECONCILE RPS COST RECOVERY**  
6           **UNDER ITS 2018 RPS RIDER?**

7    **A.**    Beginning with the 2019 RPS plan filing, and on an annual basis thereafter, EPE  
8           will provide a reconciliation of renewable rider revenues to actual RPS portfolio  
9           costs for the applicable prior annual period. The difference will then be reflected  
10          in the next plan year renewable cost rider.

11                 For example, in its 2019 RPS plan filing, EPE will compare actual 2018  
12           RPS costs, authorized to be included in the RPS Rider, with the 2018 revenues  
13           billed under the RPS Rider. Any difference (positive or negative) between actual  
14           costs and billed revenue will then be incorporated within EPE's proposed RPS  
15           Rider rate for billing in 2020.

16

17           **VII.    ALTERNATIVE PLAN YEAR REVENUE REQUIREMENTS AND**  
18                    **CALCULATED REASONABLE COST THRESHOLD**

19    **Q.    WHY HAS EPE PROPOSED AN ALTERNATIVE RCT ANALYSIS?**

20    **A.**    Please refer to the direct testimony of EPE witness James Schichtl for a  
21           discussion of why it would be reasonable to reflect avoided cost reductions in the

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1 RCT analysis due to the effect of the RPS resources in the Company's  
2 jurisdictional cost allocation studies. These avoided costs are theoretically  
3 "realized" in the plan year revenue requirements, which is consistent with the  
4 requirements of the RCT calculation in Section 14(C) of the Rule.

5  
6 **Q. PLEASE DESCRIBE HOW THE RPS FACILITIES PROVIDE AVOIDED**  
7 **JURISDICTIONAL COST SAVINGS TO EPE'S NEW MEXICO**  
8 **CUSTOMERS?**

9 **A.** EPE's last filed cost of service study shows that the energy production of the  
10 directly assigned RPS facilities was a factor in determining the amount of costs  
11 allocated to New Mexico. The jurisdictional allocation of EPE's system-wide  
12 costs was based on energy and demand amounts that were reduced for the  
13 capacity and production of the RPS facilities. Exhibit MC-5, page 1, replicates  
14 the exhibit that was filed with my direct testimony in EPE's 2015 rate case (Case  
15 No. 15-00127-UT), which presents the jurisdictional energy and demand and  
16 energy allocator adjustment for solar facilities. In theory, and all other things  
17 being equal, it can be expected that New Mexico customers would have benefitted  
18 from cost savings provided by these reduced allocation bases.

19

**EL PASO ELECTRIC COMPANY  
DIRECT TESTIMONY OF  
MANUEL CARRASCO**

1 **Q. HOW MUCH DO THE RPS FACILITIES PROVIDE IN AVOIDED**  
2 **JURISDICTIONAL COST SAVINGS TO EPE'S NEW MEXICO**  
3 **CUSTOMERS?**

4 **A.** Exhibit MC-5, page 2, replicates the Schedule A-1 that was included in the  
5 Commission's Final Order in Case No. 15-00127-UT and that provides the overall  
6 cost of service. The jurisdictional allocation of the overall cost of service in  
7 Schedule A-1 used the allocation factors from my exhibit, as described  
8 immediately above. The resulting revenue requirement for New Mexico from the  
9 Commission's Final Order in EPE's 2015 rate case was \$194,905,592.

10 To determine how the RPS resources provide avoided jurisdictional cost  
11 savings to EPE's New Mexico customers, I removed the jurisdictional energy and  
12 demand and energy allocator adjustment for these facilities; namely, Hatch, NRG,  
13 SunEdison<sup>3</sup>, and Southwest Environmental Center. The result is presented in  
14 Exhibit MC-5, page 3. In Exhibit MC-5, page 4, Schedule A-1 was reproduced  
15 with everything unchanged but for the revised allocation factors and it shows a  
16 New Mexico revenue requirement of \$200,941,084. The difference in the revenue  
17 requirements, \$6,035,492, is the avoided jurisdictional cost savings to EPE's  
18 New Mexico customers from the RPS facilities.

19

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<sup>3</sup> As discussed by EPE witness Gallegos, ownership of the SunEdison facilities recently transferred to two separate entities.

**EL PASO ELECTRIC COMPANY  
DIRECT TESTIMONY OF  
MANUEL CARRASCO**

1 **Q. THEN WHY DOES EPE NOT REDUCE PLAN YEAR REVENUE**  
2 **REQUIREMENTS FOR THE JURISDICTIONAL AVOIDED COST**  
3 **SAVINGS PROVIDED BY THE RPS FACILITIES?**

4 **A.** EPE did not do so because this method of identifying avoided costs has not yet  
5 been approved by the Commission. As I stated earlier, the Rule requires that  
6 avoided costs must be expected to result in actual reductions in costs to ratepayers  
7 in the plan year. Because this is a hypothetical analysis, there is no way to know  
8 with certainty whether the Commission would have approved rates for EPE that  
9 were designed based on a cost allocation methodology in which energy and  
10 demand amounts that were not reduced for the capacity and production of the  
11 RPS facilities. The Final Order in EPE's 2015 rate case approved a total revenue  
12 requirement of \$194,905,592. In a hypothetical situation in which the energy and  
13 demand allocator adjustment for the RPS facilities would not be made, the total  
14 revenue requirement is \$200,941,084. That means the Commission would have  
15 approved, in theory, an additional \$6,035,492 on top of the \$1,096,144 that it  
16 approved in the Final Order.

17

18 **Q. WHAT ALTERNATIVE PLAN YEAR REVENUE REQUIREMENTS AND**  
19 **CALCULATED RCT HAS EPE PROPOSED WITH THIS ALTERNATIVE**  
20 **PLAN?**

**EL PASO ELECTRIC COMPANY  
DIRECT TESTIMONY OF  
MANUEL CARRASCO**

1    **A.**    Exhibit MC-4 provides the plan year revenue requirements and calculated RCT  
2            under EPE's proposed alternative.  In Page 1, line 17, the plan year revenue  
3            requirements are \$7,129,802 for 2019 and \$6,462,994 for 2020.  Page 2, line 3, of  
4            that exhibit show the plan year revenue requirements costs exceed the RCT of 3%  
5            in both plan years.  The ratio of the compliance cost to plan year total revenues is  
6            4.31% in 2019 and 3.89% in 2020.  With the inclusion of the avoided  
7            jurisdictional cost savings in the plan year revenue requirements calculation, the  
8            compliance costs continue to exceed the 3%; indicating than any additional new  
9            costs not already included in the 2018 Plan will exacerbate the amount in which  
10           EPE already exceeds the RCT.  However, EPE has presented this alternative for  
11           the Commission's consideration as it may provide more favorable scenario for the  
12           procurement of additional renewable energy resources in the future.

**VIII. CONCLUSION**

15    **Q.**    **CAN YOU SUMMARIZE THE IMPACT OF THE RPS PORTFOLIO**  
16            **COSTS ASSOCIATED WITH EPE'S 2018 PLAN?**

17    **A.**    Yes.  Under the current Rule, EPE's RPS portfolio cost of meeting the Act's  
18            renewable energy requirements for 2019 and 2020 preclude EPE from incurring  
19            additional costs to meet its RPS obligations without further exceeding the RCT  
20            standard set by the Commission.



**EL PASO ELECTRIC COMPANY  
DIRECT TESTIMONY OF  
MANUEL CARRASCO**

1

2 **Q. HOW DOES EPE PROPOSE TO RECOVER THE RPS PROCUREMENT**  
3 **COSTS IN 2019?**

4 **A.** EPE proposes to continue to recover plan year procurement costs through the  
5 Renewable Portfolio Standard Cost Rider as discussed in the direct testimony of  
6 EPE witness Schichtl and as calculated in Exhibit MC-3. If approved by the  
7 Commission, the calculated factor of \$0.010154 per kWh will go into effect in  
8 2019<sup>4</sup>.

9

10 **Q. PLEASE SUMMARIZE EPE'S ALTERNATIVE PLAN PROPOSAL TO**  
11 **INCLUDE AVOIDED JURISDICTIONALLY ALLOCATED COSTS TO**  
12 **COMPUTE THE COMPLIANCE COSTS.**

13 **A.** EPE's proposal to include avoided jurisdictional allocated costs from its most  
14 recent rate case filing in computing the plan year procurement costs results in  
15 compliance cost exceeding the RCT, although at a much lower amount as  
16 compared to the primary proposal in this plan year filing. If the Commission  
17 approves this change in the formula, there is a greater chance that new  
18 procurement actions may be possible in future years.

19

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<sup>4</sup> The Renewable Portfolio Standard Cost Rider of \$0.010042 per kWh for 2020 shown in Exhibit MC-3 is provided for informational purposes only.

**EL PASO ELECTRIC COMPANY  
DIRECT TESTIMONY OF  
MANUEL CARRASCO**

1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

2 A. Yes.

El Paso Electric Company  
2018 Plan Filing  
Plan Year Revenue Requirements

Line No.	(a) Description	(b) Reference	(c) 2019	(d) 2020
1	Modeled Total System Fuel and Purchased Power Costs ("Without Case") Excluding RPS Portfolio Resources. Includes DG Load Reduction	PROMOD	\$ 110,215,859	\$ 126,672,359
2	Modeled Total System Fuel and Purchased Power Costs ("With Case") Includes RPS Portfolio Resources and DG Load Reduction	PROMOD	\$ 121,461,800	\$ 137,251,450
3	WREGIS and REC Only Procurement Costs Includes CRLEF, REC Purchase Programs, and WREGIS	Exhibit OG-3	\$ 1,919,353	\$ 1,919,395
4	Total System Fuel and Purchased Power Costs Including all RPS Costs	Line 2 + Line 3	\$ 123,381,153	\$ 139,170,845
Avoided Fuel and Purchased Power Cost				
5	Plan Year RPS Procurement Costs	Exhibit OG-3	\$ 15,982,266	\$ 15,880,557
6	Less: WREGIS and REC Only Procurement Costs	Line 3	\$ (1,919,353)	\$ (1,919,395)
7	Net Plan Year RPS Procurement Costs		\$ 14,062,913	\$ 13,961,162
8	With and Without Case Difference	Line 2 - Line 1	\$ 11,245,941	\$ 10,579,091
9	Less: Net Plan Year Portfolio Procurement Cost	Line 7	\$ (14,062,913)	\$ (13,961,162)
10	Net Avoided Fuel and Purchased Power Cost		\$ (2,816,971)	\$ (3,382,071)
Plan Year Revenue Requirements				
11	Plan Year Portfolio Procurement Cost	Exhibit OG-3	\$ 15,982,266	\$ 15,880,557
12	Less: Net Avoided Fuel and Purchased Power Cost	Line 10	\$ (2,816,971)	\$ (3,382,071)
13	Plan Year Revenue Requirements ("Compliance Cost")		\$ 13,165,294	\$ 12,498,486
14	Total Renewable Energy Produced in Portfolio (kWh)	Exhibit OG-3	203,637,534	206,043,899
15	Compliance Cost, per kWh	Line 13 / Line 14	\$ 0.06465	\$ 0.06066

El Paso Electric Company  
2018 Plan Filing  
Calculated Reasonable Cost Threshold

	(a)	(b)	(c)	(d)
Line No.	Description	Reference	2019	2020
1	Compliance Cost	Exhibit MC-1, Page 1 Line 13	\$ 13,165,294	\$ 12,498,486
2	Plan Year Total Revenues (Total Projected Revenues - All Customers)	Workpaper	\$ 165,526,570	\$ 166,279,833
3	Compliance Cost as a Percent of Plan Year Total Revenues	Line 1 / Line 2	7.95%	7.52%
4	Statutory Reasonable Cost Threshold (%)	NMAC 17.9.572.12 (B)	3.00%	3.00%
5	Statutory Reasonable Cost Threshold Revenue	Line 2 x Line 4	\$ 4,965,797	\$ 4,988,395

Notes:

(1) EPE's New Mexico jurisdictional retail energy sales are based on EPE's Economic Research Department's 2018 Long-Term Forecast, adjusted for weather and projected energy reductions attributed to energy efficiency and load management.

El Paso Electric Company  
2018 Plan Filing  
Large Non-Governmental Customer RPS Adjustment

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)		
2019 Plan Year										
Line No.	Customer	Service Voltage	Actual Annual kWh	Projected Annual Bill	Portfolio Impact Limit per Customer, 2% of Annual Bill or \$111,427	Applicable Portfolio Limit	Required RPS 15%	RPS @ Limit	Billed RPS Revenue	
1	Customer 1	Secondary	17,633,523	\$ 1,391,322	\$ 27,826	2.00%	2,645,028	427,660	\$ 172,103	
2	Customer 2	Secondary	14,410,613	\$ 1,060,409	\$ 21,208	2.00%	2,161,592	325,945	\$ 140,648	
3	Customer 3	Secondary	11,222,444	\$ 623,633	\$ 12,473	2.00%	1,683,367	191,690	\$ 109,531	
4	Customer 4 *	Primary/Secondary	16,592,954	\$ 1,220,413	\$ 24,408	2.00%	2,488,943	379,407	\$ 160,131	
5	Total		59,859,534	\$ 4,295,776	\$ 85,916		8,978,930	1,324,701	\$ 582,414	
6	* Customer 4 by Service Voltage									
7		Primary	10,954,950							
8		Secondary	5,638,004							
6	Large Customer Limit Applies -									
7	Customer 1	Secondary	17,633,523				427,660		\$ 27,826	
8	Customer 2	Secondary	14,410,613				325,945		\$ 21,208	
9	Customer 3	Secondary	11,222,444				191,690		\$ 12,473	
10	Customer 4 *	Primary/Secondary	16,592,954				379,407		\$ 24,408	
11	Total		59,859,534				1,324,701		\$ 85,916	
12	RPS Reduction Pursuant to the Large Customer Limit (kWh) -						7,654,229			

2020 Plan Year										
Line No.	Customer	Service Voltage	Actual Annual kWh	Projected Annual Bill	Portfolio Impact Limit per Customer, 2% of Annual Bill or \$113,104	Applicable Portfolio Limit	Required RPS 20%	RPS @ Limit	Billed RPS Revenue	
13	Customer 1	Secondary	17,633,523	\$ 1,391,322	\$ 27,826	2.00%	3,526,705	455,799	\$ 215,305	
14	Customer 2	Secondary	14,410,613	\$ 1,060,409	\$ 21,208	2.00%	2,882,123	347,391	\$ 175,953	
15	Customer 3	Secondary	11,222,444	\$ 623,633	\$ 12,473	2.00%	2,244,489	204,303	\$ 137,026	
16	Customer 4	Primary/Secondary	16,592,954	\$ 1,220,413	\$ 24,408	2.00%	3,318,591	404,371	\$ 199,157	
17	Total		59,859,534	\$ 4,295,776	\$ 85,916		11,971,907	1,411,865	\$ 727,440	
18	Large Customer Limit Applies -									
19	Customer 1	Secondary	17,633,523				455,799		\$ 27,826	
20	Customer 2	Secondary	14,410,613				347,391		\$ 21,208	
21	Customer 3	Secondary	11,222,444				204,303		\$ 12,473	
22	Customer 4	Primary/Secondary	16,592,954				404,371		\$ 24,408	
23	Total		59,859,534				1,411,865		\$ 85,916	
24	RPS Reduction Pursuant to the Large Customer Limit (kWh) -						10,560,042			

Worksheet Calculations and Notes:

[A]	NM System Incremental Charge for Renewable Resources \$/kWh Calculation:	2019	2020
	Total Renewable Energy Produced in Portfolio (kWh)	203,637,534	206,043,899
	Portfolio Compliance Cost	\$ 13,165,294	\$ 12,498,486
	Portfolio Compliance Cost, per kWh	\$ 0.06465	\$ 0.06066
	Loss Adjusted for Secondary Voltage Delivery	\$ 0.06507	\$ 0.06105
	Loss Adjusted for Primary Voltage Delivery	\$ 0.06396	\$ 0.06001
	Voltage Adjustment Factor:		
	Secondary Voltage	1.006437	1.006437
	Primary Voltage	0.983010	0.983010

[B]	CPI Adjusted Cap Limit Calculation:	2.000% or		
	Year	Cap Limit	CPI Factor	Inflation Growth
	2011	\$ 99,000	220.223	Base
	2012	\$ 101,896	226.665	2.925% actual
	2013	\$ 103,521	230.280	1.595% actual
	2014	\$ 105,156	233.916	1.579% actual
	2015	\$ 105,062	233.707	-0.089% actual
	2016	\$ 106,504	236.916	1.373% actual
	2017	\$ 109,167	242.839	2.500% actual
	2018	\$ 111,427	247.867	2.071% actual
	2019	\$ 113,104	251.597	1.505% estimate (average of actuals)
	2020	\$ 114,808	255.382	1.505% estimate (average of actuals)

CPI Factor source: Bureau of Labor Statistics, accessed 04/10/2018

[C] Customer Annual kWh is the most recent calendar year's billed kWh under assumption that the billed kWh does not vary significantly year to year

[D] 17.9.572.7(M) NMAC limits the large customer adjustment to the lower of 2% of a customer's annual electric charges or \$99,000. After 01/01/2012, the \$99,000 is adjusted for inflation (as shown in [B] above).

El Paso Electric Company  
2018 Plan Filing  
Renewable Portfolio Standard Cost Rider

Line No.	(a) Description	(b) Reference	(c) 2019	(d) 2020
1	Plan Year Portfolio Procurement Cost	Exhibit OG-2	\$ 15,982,266	\$ 15,880,557
2	Plus: Deferred Costs *	See detail below	\$ 8,336	\$ -
3	Less: Large Customer Portfolio Impact Limit	Exhibit MC-2	\$ (85,916)	\$ (85,916)
4	Net Plan Year Portfolio Procurement Cost		<u>\$ 15,904,686</u>	<u>\$ 15,794,641</u>
5	Forecasted New Mexico Jurisdictional kWh Sales	Exhibit OG-1	1,626,224,943	1,632,712,644
6	Less: Large Non-Governmental (LNG) Customers Energy Sales	Exhibit MC-2	<u>(59,859,534)</u>	<u>(59,859,534)</u>
7	Net Forecasted New Mexico Jurisdictional kWh Sales		<u>1,566,365,409</u>	<u>1,572,853,110</u>
8	Renewable Portfolio Standard Cost Rider, per kWh		\$ 0.010154	\$ 0.010042
9	* Deferred Costs Detail:			
10	Deferred RPS Costs (01/2015-03/2018)		\$ 5,679	
11	Est. Deferred RPS Costs (04/2018-12/2018)		\$ 2,657	
12	Total		<u>\$ 8,336</u>	

El Paso Electric Company  
2018 Plan Filing  
Plan Year Revenue Requirements

ALTERNATIVE

Line No.	(a) Description	(b) Reference	(c) (d)	
			2019	2020
Avoided Fuel and Purchased Power Cost				
1	Modeled Total System Fuel and Purchased Power Costs ("Without Case") Excluding RPS Portfolio Resources. Includes DG Load Reduction	PROMOD	\$ 110,215,859	\$ 126,672,359
2	Modeled Total System Fuel and Purchased Power Costs ("With Case") Includes RPS Portfolio Resources and DG Load Reduction	PROMOD	\$ 121,461,800	\$ 137,251,450
3	WREGIS and REC Only Procurement Costs Includes CRLEF, REC Purchase Programs, and WREGIS	Exhibit OG-3	\$ 1,919,353	\$ 1,919,395
4	Total System Fuel and Purchased Power Costs Including all RPS Costs	Line 2 + Line 3	\$ 123,381,153	\$ 139,170,845
5	Plan Year Portfolio Procurement Cost	Exhibit OG-3	\$ 15,982,266	\$ 15,880,557
6	Less: WREGIS and REC Only Procurement Costs	Line 3	<u>\$ (1,919,353)</u>	<u>\$ (1,919,395)</u>
7	Net Plan Year Portfolio Procurement Cost		<u>\$ 14,062,913</u>	<u>\$ 13,961,162</u>
8	With and Without Case Difference	Line 2 - Line 1	\$ 11,245,941	\$ 10,579,091
9	Less: Net Plan Year Portfolio Procurement Cost	Line 8	<u>\$ (14,062,913)</u>	<u>\$ (13,961,162)</u>
10	Net Avoided Fuel and Purchased Power Cost		<u>\$ (2,816,971)</u>	<u>\$ (3,382,071)</u>
Avoided Jurisdiction Cost of Service Allocated Cost				
11	Jurisdictional Cost of Service Revenue Requirement ("Without Case") Excludes Direct Assignment to New Mexico of RPS Portfolio Resource in Allocation Factors	Schedule A-1 (w/o RPS)	\$ 200,941,084	\$ 200,941,084
12	Jurisdictional Cost of Service Revenue Requirement ("Without Case") Includes Direct Assignment to New Mexico of RPS Portfolio Resource in Allocation Factors	Schedule A-1 (w/ RPS)	\$ 194,905,592	\$ 194,905,592
13	Avoided Jurisdictional Cost of Service Revenue Requirement	Line 12 - Line 11	\$ (6,035,492)	\$ (6,035,492)
Plan Year Revenue Requirements				
14	Plan Year Portfolio Procurement Cost	Exhibit OG-3	\$ 15,982,266	\$ 15,880,557
15	Less: Net Avoided Fuel and Purchased Power Cost	Line 10	\$ (2,816,971)	\$ (3,382,071)
16	Avoided Jurisdictional Cost of Service Revenue Requirement	Line 13	<u>\$ (6,035,492)</u>	<u>\$ (6,035,492)</u>
17	Plan Year Revenue Requirements ("Compliance Cost")		<u>\$ 7,129,802</u>	<u>\$ 6,462,994</u>
18	Total Renewable Energy Produced in Portfolio (kWh)	Exhibit OG-3	203,637,534	206,043,899
19	Compliance Cost, per kWh	Line 17 / Line 18	\$ 0.03501	\$ 0.03137

El Paso Electric Company  
2018 Plan Filing  
Calculated Reasonable Cost Threshold

ALTERNATIVE

Line No.	(a) Description	(b) Reference	(c) (d)	
			2019	2020
1	Compliance Cost	Exhibit MC-4, Pg 1, Line 17	\$ 7,129,802	\$ 6,462,994
2	Plan Year Total Revenues (Total Projected Revenues - All Customers)	Workpaper	\$ 165,526,570	\$ 166,279,833
3	Compliance Cost as a Percent of Plan Year Total Revenues	Line 1 / Line 2	4.31%	3.89%
4	Statutory Reasonable Cost Threshold (%)	NMAC 17.9.572.12 (B)	3.00%	3.00%
5	Statutory Reasonable Cost Threshold Revenue	Line 2 x Line 4	\$ 4,965,797	\$ 4,988,395

Notes:

(1) EPE's New Mexico jurisdictional retail energy sales are based on EPE's Economic Research Department's 2018 Long-Term Forecast, adjusted for weather and projected energy reductions attributed to energy efficiency and load management.



EL PASO ELECTRIC COMPANY  
2015 ELECTRIC RATE CASE FILING  
JURISDICTIONAL ENERGY AND DEMAND ALLOCATOR ADJUSTMENT FOR SOLAR

WITH RPS RESOURCE ADJUSTMENT

ENERGY ALLOCATOR ADJUSTMENT

Jurisdiction	Energy (MWH)	Solar Adjustment	Adjusted Energy	Energy Allocator
New Mexico	1,743,118	-127,403	1,615,715	20.9350%
Total Company	7,877,181	-159,405	7,717,776	100.0000%

DEMAND ALLOCATOR ADJUSTMENT

Jurisdiction	4-CP Average Demand (kW)	Solar Adjustment	Adjusted 4-CP Average Demand	Excess Demand	4-CP A&E Demand Allocator *	4-CP Demand Allocator
New Mexico	352,470	-35,330	317,140	133,695	20.0273%	20.0912%
Total Company	1,621,469	-42,970	1,578,499	704,398	100.0000%	100.0000%

\* System Load Factor: 56.05%

EPE JURISDICTION DEDICATED SOLAR RESOURCES

Jurisdiction	Energy Produced	Energy Loss Factor	Loss Adjusted Energy	System Capacity	4-CP Average	Demand Loss Factor	Loss Adjusted Demand
New Mexico							
Hatch Solar Energy Project	8,159	1.06116	8,659	5,000	3,500	1.07211	3,752
NRG Solar Energy Project	51,428	1.06116	54,573	20,000	14,000	1.07211	15,010
SunEdison Solar Energy Project	60,336	1.06116	64,026	22,000	15,400	1.07211	16,510
SWEC	9	1.08645	10	6	4	1.09135	5
PV Rio Grande	125	1.08645	136	64	45	1.09135	49
Total	120,057		127,403	47,070	32,949		35,326
Texas							
Wangler Project	108	1.08645	117	48	34	1.09135	37
Stanton Tower Project	67	1.08645	73	32	22	1.09135	24
EPCC Project	32	1.08645	35	15	11	1.09135	11
Van Horn Project	37	1.08645	40	17	12	1.09135	13
Newman 10	29,774	1.06116	31,595	10,000	7,000	1.07211	7,505
Newman Project	130	1.08645	141	64	45	1.09135	49
Total	30,148		32,001	10,176	7,123		7,639

\*\* Based on capacity attribution factor applied to system capacity: 0.7

WITH RPS RESOURCE ADJUSTMENT

EL PASO ELECTRIC COMPANY  
2015 NEW MEXICO RATE CASE FILING  
SCHEDULE A-1: SUMMARY OF THE OVERALL COST OF SERVICE AND THE CLAIMED REVENUE DEFICIENCY  
SPONSOR: MANUEL CARRASCO  
PREPARER: ADRIAN HERNANDEZ  
FOR THE TEST YEAR PERIOD ENDED DECEMBER 31, 2014

Line No.	(a) Description	(b) Base Period Per Book	(c) Adjustments	(d) As Adjusted Under Current Rates	(e) Adjustments at Proposed Rates	(f) Test Year Period As Requested
	<b>New Mexico</b>					
1	Operating Revenues	\$ 217,954,351	\$ (24,144,902)	\$ 193,809,449	\$ 1,096,143	\$ 194,905,592
	Operating Expenses					
2	Fuel & Purchased Power	91,155,768	(27,876,517)	63,279,251	0	63,279,251
3	Other O&M Excl Uncollectibles	58,157,604	2,639,212	60,796,815	0	60,796,815
4	Uncollectible Accounts Expense	1,008,444	(81,098)	927,346	5,763	933,109
5	Depreciation and Amortization	18,834,557	1,177,287	20,011,844	0	20,011,844
6	Taxes Other Than Income Taxes	6,796,686	562,955	7,359,641	(6,885)	7,352,756
7	Arizona Income Tax	67,082	89,538	156,620	4,924	161,545
8	New Mexico Income Tax	277,624	197,198	474,822	15,360	490,182
9	Texas Income Tax	(63,231)	585,841	522,610	5,566	528,176
10	Federal Income Tax	9,718,639	(531,532)	9,187,107	374,994	9,562,101
11	Other Expenses	17,465	857	18,322	0	18,322
12	Operating Expenses	185,970,637	(23,236,260)	162,734,378	399,723	163,134,101
13	Operating Income	\$ 31,983,714	(908,642)	31,075,071	696,419	\$ 31,771,491
14	Original Cost Rate Base	\$ 454,171,021	(39,708,012)	414,463,009	0	414,463,009
15	Rate of Return on Original Cost	7.04%		7.50%		7.67%

May not tie to other schedules due to rounding.

EL PASO ELECTRIC COMPANY  
2015 ELECTRIC RATE CASE FILING  
JURISDICTIONAL ENERGY AND DEMAND ALLOCATOR ADJUSTMENT FOR SOLAR

WITHOUT RPS RESOURCE ADJUSTMENT

ENERGY ALLOCATOR ADJUSTMENT

Jurisdiction	Energy (MWH)	Solar Adjustment	Adjusted Energy	Energy Allocator
New Mexico	1,743,118	-136	1,742,983	22.2176%
Total Company	7,877,181	-32,137	7,845,044	100.0000%

DEMAND ALLOCATOR ADJUSTMENT

Jurisdiction	4-CP Average Demand (kW)	Solar Adjustment	Adjusted 4-CP Average Demand	Excess Demand	4-CP A&E Demand Allocator *	4-CP Demand Allocator
New Mexico	352,470	-51	352,419	154,525	21.7642%	21.8381%
Total Company	1,621,469	-7,691	1,613,778	725,228	100.0000%	100.0000%

\* System Load Factor: 55.72%

EPE JURISDICTION DEDICATED SOLAR RESOURCES

Jurisdiction	Energy Produced	Energy Loss Factor	Loss Adjusted Energy	System Capacity	4-CP Average	Demand Loss Factor	Loss Adjusted Demand
New Mexico							
Hatch Solar Energy Project	0	1.06116	0	0	0	1.07211	0
NRG Solar Energy Project	0	1.06116	0	0	0	1.07211	0
SunEdison Solar Energy Project	0	1.06116	0	0	0	1.07211	0
SWEC	0	1.08645	0	0	0	1.09135	0
PV Rio Grande	125	1.08645	136	64	45	1.09135	49
Total	125		136	64	45		49
Texas							
Wrangler Project	108	1.08645	117	48	34	1.09135	37
Stanton Tower Project	67	1.08645	73	32	22	1.09135	24
EPCC Project	32	1.08645	35	15	11	1.09135	11
Van Horn Project	37	1.08645	40	17	12	1.09135	13
Newman 10	29,774	1.06116	31,595	10,000	7,000	1.07211	7,505
Newman Project	130	1.08645	141	64	45	1.09135	49
Total	30,148		32,001	10,176	7,123		7,639

\*\* Based on capacity attribution factor applied to system capacity: 0.7

WITHOUT RPS RESOURCE ADJUSTMENT

EL PASO ELECTRIC COMPANY  
2015 NEW/MEXICO RATE CASE FILING  
SCHEDULE A-1: SUMMARY OF THE OVERALL COST OF SERVICE AND THE CLAIMED REVENUE DEFICIENCY  
SPONSOR: MANUEL CARRASCO  
PREPARER: ADRIAN HERNANDEZ  
FOR THE TEST YEAR PERIOD ENDED DECEMBER 31, 2014

Line No.	(a) Description	(b) Base Period Per Book	(c) Adjustments	(d) As Adjusted Under Current Rates	(e) Adjustments at Proposed Rates	(f) Test Year Period As Requested
<b>New Mexico</b>						
1	Operating Revenues	\$ 217,954,351	\$ (23,766,473)	\$ 194,187,878	\$ 6,753,207	\$ 200,941,084
Operating Expenses						
2	Fuel & Purchased Power	91,155,768	(27,876,517)	63,279,251	0	63,279,251
3	Other O&M Excl Uncollectibles	58,157,604	5,489,215	63,646,818	0	63,646,818
4	Uncollectible Accounts Expense	1,008,444	(81,098)	927,346	35,505	962,851
5	Depreciation and Amortization	18,834,557	2,052,003	20,886,560	0	20,886,560
6	Taxes Other Than Income Taxes	6,796,686	867,164	7,663,851	(6,885)	7,656,966
7	Arizona Income Tax	67,082	78,215	145,297	30,179	175,476
8	New Mexico Income Tax	277,624	160,812	438,436	94,135	532,571
9	Texas Income Tax	(63,231)	586,297	523,066	34,113	557,179
10	Federal Income Tax	9,718,639	(2,032,370)	7,686,269	2,298,153	9,984,422
11	Other Expenses	17,465	857	18,322	0	18,322
12	Operating Expenses	185,970,637	(20,755,422)	165,215,215	2,485,201	167,700,416
13	Operating Income	\$ 31,983,714	(3,011,051)	28,972,662	4,268,006	\$ 33,240,668
14	Original Cost Rate Base	\$ 454,171,021	(20,542,418)	433,628,604	0	433,628,604
15	Rate of Return on Original Cost	7.04%		6.68%		7.67%

May not tie to other schedules due to rounding.

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

APPLICATION FOR APPROVAL OF )  
EL PASO ELECTRIC COMPANY'S )  
2018 RENEWABLE ENERGY PLAN )  
PURSUANT TO THE RENEWABLE )  
ENERGY ACT AND 17.9.572 NMAC, )  
AND REVISED RATE NO. 38 – RPS )  
COST RIDER )  
EL PASO ELECTRIC COMPANY, )  
Applicant. )  
\_\_\_\_\_ )

CASE NO. 18-00 \_\_\_\_-UT

**AFFIDAVIT**

STATE OF TEXAS )  
COUNTY OF EL PASO )

Manuel Carrasco hereby deposes and states under oath that the information contained in the foregoing Direct Testimony of Manuel Carrasco, together with all schedules sponsored therein and exhibits attached thereto, is true and accurate based on my personal knowledge and belief.

SIGNED this 30<sup>th</sup> day of April, 2018.

Manuel Carrasco  
MANUEL CARRASCO

Subscribed and sworn to before me this 30<sup>th</sup> day of April, 2018.

Julieta E. Cordero

My Commission expires:

October 2, 2018

