El Paso Electric

300 Galisteo Street, Suite 206
Santa Fe, New Mexico 87501
(505) 982-7391

HAND-DELIVERED
July 2, 2018

Ms. Melanie Sandoval
Records Bureau
New Mexico Public Regulation Commission
1120 Paseo de Peralta
Santa Fe, NM 87501

Re: NMPRC Case No. 18-00116-UT
El Paso Electric Company's Application for Approval of 2019-2021 Plan, 2019-2021 Utility Incentive and Revised Rate No. 17- Efficient Use of Energy Recovery Factor rate rider ("Rate No. 17 EUERF") Advice Notice No. 260

Dear Ms. Sandoval:

Enclosed please find the original and five (5) copies of **El Paso Electric Company's Application for Approval of its proposed Energy Efficiency and Load Management Plan for new and modified Energy Efficiency Programs and Program budgets for plan years 2019-2021, Utility Incentive and Revisions to Rate No. 17 EUERF, Advice Notice No. 260 (Attachment B to Application) and Supporting Direct Testimonies of Araceli G. Perea, Amy D. Martin, and Adrian Hernandez.**

Also enclosed please find the required filing fees of $25 for the application and $1.00 for the advice notice. Please return the two (2) copies to our messenger. Thank you for your assistance in this matter.

Very truly yours,

Nancy B. Burns, Esq.

Enclosures
cc: Service List

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17- EFFICIENT USE OF ENERGY RECOVERY FACTOR	)	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	)	

EXECUTIVE SUMMARY

El Paso Electric Company's ("EPE") *Application for Approval of Its 2019-2021 Energy Efficiency and Load Management Plan, Utility Incentive and Revised Rate No. 17-Efficient Use of Energy Recovery Factor* seeks approval of EPE's proposed 2019-2021 Energy Efficiency and Load Management Plan ("EE/LM Plan") for new and modified Energy Efficiency Programs ("Programs") and Program budgets for plans year 2019-2021; 2019-2021 utility incentive; and revisions to Rate No. 17-Efficient Use of Energy Recovery Factor rate rider ("EUERF"). EPE files its Application pursuant to the New Mexico Efficient Use of Energy Act ("EUEA"), NMSA 1978, Sections 62-17-1 et seq. and the New Mexico Public Regulation Commission's ("NMPRC" or "Commission") Energy Efficiency Rule, 17.7.2 NMAC ("Rule").

EPE requests recovery of the proposed EE/LM Plan annual budgets, based on three percent of EPE's historical 2017 revenues. For 2019, the proposed program budget is $5,723,226, which includes a 2017 plan year underage in the amount of $609,580. For 2020 and 2021, EPE proposes a budget of $5,113,646 for each program year, based on three percent of historical 2017 revenues and requests approval to modify its 2020 and 2021 Program budgets

based on actual 2018 and 2019 revenues, respectively, and to account for any overage or underage consistent with the Rule.

EPE determined the cost-effectiveness of the EE/LM Plan based on the utility cost test ("UCT"), which is a standard that is met if the monetary costs that are borne by the public utility and that are incurred to develop, acquire and operate energy efficiency or load management resources on a life-cycle basis are less than the avoided monetary costs associated with developing, acquiring and operating the associated supply-side resources. EPE's 2019 EE/LM Plan Program portfolio meets the UCT with an overall UCT ratio of 1.29. Each new and existing Program included in the 2019 EE/LM Plan has an individual UCT greater than 1.0.

EPE's seven existing EE/LM Programs were approved by the Commission in NMPRC Case No. 16-00185-UT. EPE selected its proposed portfolio of new and modified programs after investigating cost effective and achievable energy efficiency and load management resources available in its New Mexico service territory through issuance of a 2017 request for proposal for EE/LM programs and evaluation of bids received. EPE requests approval to add the NM Appliance Recycling Program and the Commercial Load Management Program, as well as approval to terminate the CFL & LED Program. EPE also proposes to modify the Small Commercial Comprehensive Program to become a turn-key program administered by a third-party implementer and to rename it the Commercial Comprehensive Program. EPE also request to continue the remaining existing Programs with revised budgets and participation levels. EPE's proposed 2019 EE/LM Plan includes the following eight EE/LM Programs:

- **Residential**
    1. LivingWise® Program;
    2. Residential Comprehensive Program;
    3. NM Appliance Recycling Program;
    4. ENERGY STAR® New Homes Program; and

5. NM EnergySaver Program.

- **Commercial**
  1. Commercial Comprehensive Program;
  2. School and Business Assistance (SCORE Plus) Program; and
  3. Commercial Load Management Program.

EPE additionally requests approval to continue the utility incentive mechanism approved in Case No. 16-00185-UT, without modification, and requests a baseline utility incentive of 7.1 percent of program expenditures for 2019 through 2021. The proposed utility incentive is $363,069 annually. The annual utility incentive will be subject to a true-up based on actual expenses and savings achieved each year. Finally, EPE proposes a revised EUERF of 3.0793 percent to recover the three percent funding for the proposed EE/LM Plan and the utility incentive.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17- EFFICIENT USE OF ENERGY RECOVERY FACTOR	)	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	)	

EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF 2019-2021 PLAN, 2019-2021 UTILITY INCENTIVE AND REVISED RATE NO. 17 - EUERF

El Paso Electric Company ("EPE") hereby files its Application for approval of its proposed Energy Efficiency and Load Management ("EE/LM") Plan for new and modified Energy Efficiency Programs ("Programs") and Program budgets for plans year 2019-2021 ("EE/LM Plan"), 2019-2021 utility incentive, and revisions to Rate No. 17 - Efficient Use of Energy Recovery Factor rate rider ("Rate No. 17 - EUERF"). EPE files its Application pursuant to the New Mexico Efficient Use of Energy Act ("EUEA"), NMSA 1978, Sections 62-17-1 et seq. and the New Mexico Public Regulation Commission's ("NMPRC" or "Commission") Energy Efficiency Rule, 17.7.2 NMAC ("Rule"). EPE's EE/LM Plan is supported by the Direct Testimonies of EPE witnesses Araceli G. Perea, Amy D. Martin, and Adrian Hernandez. EPE's Advice Notice No. 260, requesting approval of its Revised Rate No. 17 - EUERF effective January 1, 2019, is being filed concurrently with this Application. EPE requests approval by the Commission of its Application together with all other approvals, authorization, and

actions that may be required for implementation thereof in accordance with the EUEA, the Rule, and the New Mexico Public Utility Act ("PUA"), NMSA 1978, Section 62-3-1 et seq.

In support of this Application, EPE states the following:

1. EPE is certified and authorized to conduct the business of providing public utility service within the State of New Mexico, and is a public utility subject to the jurisdiction of the Commission under the PUA.

2. EPE generates, transmits and distributes electricity through an interconnected system to customers in southern New Mexico and Texas. EPE owns, operates, leases or controls the plant, property and facilities used by it for the generation, transmission, distribution, sale or furnishing of electricity to or for the public within New Mexico and Texas. EPE provides retail electric service to approximately 98,700 retail customers (primarily residential) within its New Mexico service area.

3. EPE's principal business address and telephone number for its New Mexico service area are:

El Paso Electric Company
100 N. Stanton Street
El Paso, Texas 79901
(915) 543-5711

4. Service of all notices, pleadings and other documents related to this Application should be made as follows:

Curtis Hutcheson
Regulatory Case Manager
El Paso Electric Company
100 N. Stanton Street
El Paso, Texas 79901
(915) 543-4354

Nancy B. Burns
Senior Attorney
El Paso Electric Company
300 Galisteo Street, Suite 206
Santa Fe, New Mexico 87501
(505) 982-7391

In addition, pleadings and other documents should be emailed to the following electronic addresses:

araceli.parea@epelectric.com
curtis.hutcheson@epelectric.com
james.schichtl@epelectric.com
nancy.burns@epelectric.com
patricia.griego@epelectric.com
Carol@thejonesfirm.com

5. EPE's current portfolio of Programs and budgets was approved by the Commission in NMPRC Case No. 16-00185-UT.[1]

6. Concurrent with the filing of this Application and in accordance with the Rule, EPE has filed its 2017 Annual Report for Energy Efficiency Programs ("2017 Annual Report") in NMPRC Case No. 16-00185-UT, the docket in which the 2017 Programs were approved. The 2017 Annual Report includes the statewide independent evaluator's report, *Evaluation of the 2017 El Paso Electric Energy Efficiency Programs,* prepared by Evergreen Economics.

7. EPE proposes to include in its EE/LM Plan the following cost-effective Programs:

Educational
LivingWise® Program
Residential
Residential Comprehensive Program
NM Appliance Recycling Program
ENERGY STAR® New Homes Program
Low Income
NM EnergySaver Program
Commercial
Commercial Comprehensive Program
SCORE Plus Program
Commercial Load Management Program

The EUEA requires public utilities to obtain Commission approval of proposed Programs

prior to implementation. NMSA 1978, Section 62-17-5. EPE seeks approval to implement the proposed Programs, together with the proposed Program budgets. EPE also offers assistance in accordance with Rule 17.7.2 NMAC to Large Customers choosing to pursue their own energy efficiency efforts.

8. In accordance with the EUEA and the Commission's Final Order in Case No. 16-00185-UT[2], EPE selected its proposed portfolio of new and modified programs after investigating cost effective and achievable energy efficiency and load management resources available in its New Mexico service territory through issuance of a 2017 request for proposal for EE/LM programs and evaluation of bids received.

9. EPE also developed the proposed EE/LM Plan after soliciting input from interested parties, including, among others, the Attorney General of New Mexico ("AG"), the Energy, Minerals and Natural Resources Department ("EMNRD"), Coalition for Clean Affordable Energy ("CCAE"), the City of Las Cruces, and Commission Staff.

10. The EUEA Section 62-17-5 provides public utilities an opportunity to earn a profit on cost-effective energy efficiency and load management resource development that is financially more attractive to the utility than supply-side utility resources.

11. EPE is seeking approval to continue to recover the performance-based utility incentive approved by the Commission in Case No. 16-00185-UT for the EE/LM Plan. Specifically, EPE requests recovery of a baseline utility incentive of $363,069 for

---

[1] NMPRC Case No. 18-00185-UT, Final Order Adopting Recommended Decision (Feb. 22, 2017) (hereinafter "Final Order").

[2] NMPRC Case No. 18-00185-UT, Recommended Decision ¶ L (Jan. 12, 2017) adopted by Final Order ¶¶ A, B (Feb. 22, 2017) (hereinafter "Recommended Decision") ("[b]efore filing its annual EE/LM application, EPE shall investigate achievable EE/LM programs available in its New Mexico service territory and shall analyze the cost-effectiveness of any such programs. If any such programs are cost effective, EPE shall analyze whether to propose including any such programs in its EE/LM application. EPE shall file testimony with its annual EE/LM plan applications showing how its complied with these requirements.")

each year of the EE/LM Plan (2019-2021) which will be subject to true-up based on actual expenses and savings achieved for the EE/LM Plan. EPE's utility incentive request is consistent with Rule 17.7.2.8(L) NMAC and Section 62-17-5 (F).

12. EPE has reconciled its 2017 Plan Year Expenditures and Collections, including 2017 utility incentive. EPE seeks approval of this reconciliation which resulted in the following:

(a) an underage of $609,580, which EPE proposes to add to its 2018 Program budget, as addressed below;

(b) a 2017 plan year utility incentive in the amount of $326,027 based on actual verified 2017 program costs and achieved savings; and

(c) $227,942 of base rate administration costs not recovered through Rate No. 17-EUERF.

13. The total funding amount for an electric utility's Programs is set at three percent of customers' monthly bills revenues (excluding franchise fees and taxes) in excess of $75,000 per customer per plan year and any customer's self-directed program credit or exemptions. Section 62-17-6(A) and Rule 17.7.2.8(C)(1) NMAC.

14. EPE anticipates exceeding its statutory energy savings targets based on those funding levels in accordance with the Commission's Final Order in Case No. 16-00185-UT which requires EPE to set Program budgets based on historic annual actual revenues from two plan years prior,[3] as follows:

(a) EPE's proposed, annual Program budgets for the EE/LM Plan is set at three percent of historic annual actual revenues from 2017 (excluding franchise fees

[3] Final Order ¶ H ("[i]n future EE/LM applications, EPE shall use historic annual actual revenues from two years before the PY [plan year], adjusted as appropriate, to calculate its PY budgets.").

and taxes) for a base annual funding level of $5,113,646.

(b) Because EPE incurred a 2017 underage of $609,580, this amount has been added to EPE's 2019 Program budgets for a total 2019 Program budget of $5,723,226. No under/overages have been added to 2020 or 2021 budgets.

(c) Because the current Rule sets a three-year cycle for EUEA plan application filing, EPE will modify its 2020 and 2021 Program budgets based on actual 2018 and 2019 revenues[4], respectively, and to account for any overage or underage consistent with the Rule.

(d) Within each plan year of the approved 2019-2021 EE/LM Plan, EPE will shift funding among Programs and will adjust plan year expenditures within the ten percent authorized by the Rule, thereby modifying approved EE/LM budgets to align plan year expenditures with required plan year funding requirements.

(e) Consistent with the EUEA and the Rule, EPE will reconcile authorized EE/LM Plan collections and expenditures, including utility incentive amounts, on an annual basis. EPE will report this annual reconciliation, as well as plan year and expected next plan year budget adjustments, in its Annual Report filed with the Commission.

(f) EPE will monitor its authorized EE/LM Plan expenditures and collections, as well as annual revenues and required funding levels. If required, EPE will take appropriate action to revise its Rate No. 17 - EUERF and/or to request any variances or approvals under the Rule to modify approved Programs and budgets before its next scheduled plan application filing in 2022.

15. The EUEA in Section 62-17-6 authorizes cost recovery of all Program

costs and incentives through a tariff rider set forth in EPE's Rate No. 17 - EUERF. EPE seeks approval to change its current rate rider factor through an advice notice filing, consistent with the Commission's approvals for EPE's EE/LM Plan program budgets and incentives, as adjusted for any necessary true-ups.

16. EPE's current monthly percentage-of-bill rate rider under Rate No. 17 - EUERF is 3.0750 percent for affected customer classes, not to exceed $75,000 per year for any customer. If EPE's EE/LM Plan program budgets and incentives are approved for the initial 12-month recovery period, EPE has estimated that its Rate No. 17 - EUERF percentage-of-bill rate factor, including reconciliation amounts, would increase to approximately 3.0793 percent. EPE's proposed Rate No. 17 - EUERF rate rider will result in EPE collecting costs within the cost caps and funding requirements contained in the EUEA.

17. The proposed Rate No. 17 - EUERF of 3.0793 percent is not materially different than the current Rate No. 17 - EUERF of 3.0750 percent. If EPE's Application is approved, for a typical residential customer using a monthly average of 700 kilowatt-hours, a Rate No. 17 - EUERF of 3.0793 percent of pre-tax bills would represent $2.52 of the monthly bill. This is an increase of $0.01 over the current EUERF charge of $2.51, or a 0.01 percent increase relative to the current bill.

18. EPE's proposed form of Notice contains a statement of typical bill impacts for the affected rate classes based on EPE's requested Program budgets and incentives. EPE's proposed Notice is attached hereto (Attachment A).

14. EPE is filing the Direct Testimonies and Exhibits of Araceli G. Perea, Amy D. Martin, and Adrian Hernandez in support of its EE/LM Plan and related budgets;

---

[4] *See* footnote 3 above.

proposed incentives, and proposed changes to Rate No. 17 - EUERF rate rider. The Direct Testimonies and Exhibits explain how EPE has met the Rule's applicable criteria and requirements, as well as the requirements of the Commission's Final Order in Case No. 16-00185-UT.

20. As indicated on the Certificate of Service attached hereto, EPE has mailed a copy of its Application and supporting Direct Testimonies and Exhibits to the AG, EMNRD, CCAE, parties to EPE's most recent general rate case (NMPRC Case No. 15-00127-UT), and other interested parties.

21. Pursuant to the requirements of 17.1.2.10 NMAC, Applications for New Rates, EPE is attaching to the following documents to the Application:

(a) EPE's Proposed Notice to Customers, which will be published in newspaper(s) of general circulation in EPE's service territory and mailed to all EPE New Mexico retail customers (Attachment A); and

(b) a copy of EPE's Advice Notice No. 260, Table of Contents, and Rate No. 17 - EUERF (Attachment B).

22. Pursuant to 17.1.2.10(B)(2)(d) NMAC, EPE has fully complied with all Commission final orders in each of EPE's cases decided during the preceding five years, as evidence by EPE's annual informational filing dated April 30, 2018.

WHEREFORE, EPE respectfully requests that the Commission, after such notice and hearing as it deems necessary, issue a Final Order in this case that:

1) Approves EPE's reconciliation of its 2017 Plan Year expenditures and collections including:

a) a 2017 underage in the amount of $609,580;

b) a 2017 plan year utility incentive in the amount of $326,027; and

c) a 2017 base rate administration costs of $227,942 not recovered through Rate No. 17 - EUERF;

2) Approves EPE's proposed EE/LM Plan and budgets for the 2019-2021 plan years including:

a) authority to modify 2020 and 2021 budgets based upon actual 2019 and 2020 revenues, respectively, and any overage/underage pursuant to the Rule; and

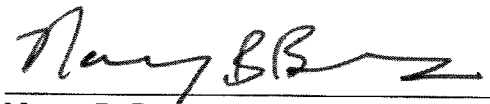
b) authority, within each plan year, to shift funding among Programs and to adjust plan year expenditure within the ten percent authorized by the Rule, to align plan year expenditures with the required plan year funding requirements;

3) Approves EPE's proposed utility incentive for the 2019-2021 plan years;

4) Approves EPE's proposed revisions to Rate No. 17 - EUERF to increase EPE's uniform percentage-of-bill rate rider factor; and,

5) Grants such other approvals as may be necessary or appropriate in accordance with the EUEA and Commission Rule.

Respectfully submitted,



Nancy B. Burns
Senior Attorney
New Mexico Bar No. 7538
El Paso Electric Company
300 Galisteo Street, Suite 206
Santa Fe, New Mexico 87501
(505) 982-7391
nancy.burns@epelectric.com

ATTORNEY FOR EL PASO ELECTRIC COMPANY

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17- EFFICIENT USE OF ENERGY RECOVERY FACTOR	)	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	)	

NOTICE TO EPE CUSTOMERS

Notice is hereby given of the following matters pertaining to the above captioned case pending before the New Mexico Public Regulation Commission ("NMPRC" or "Commission"):

On July 2, 2018, El Paso Electric Company ("EPE") filed its Application for proposed 2019-2021 Energy Efficiency and Load Management Programs ("EE/LM Programs"), 2019-2021 utility incentive, and revisions to EPE's Rate No. 17 - Efficient Use of Energy Recovery Factor ("EUERF") rate rider, pursuant to the New Mexico Efficient Use of Energy Act ("EUEA"), NMSA 1978, Sections 62-17-1 et seq. (2005) and the NMPRC Energy Efficiency Rule ("Rule"), 17.7.2 NMAC. If the proposed Program budgets and incentives were to be approved by the Commission, EPE estimates the proposed uniform percentage of bill rate rider under its Rate No. 17 - EUERF would be approximately 3.0793 percent. EPE requests that the Commission approve its Application and proposed tariff revisions together with all other approvals, authorization and actions that may be required for implementation.

Along with changes to various Program budgets and rebates for its existing

residential and commercial Programs, EPE seeks approval for the continuation, addition or modification of the following energy efficiency programs:

Educational
LivingWise® Program
Residential
Residential Comprehensive Program
New Mexico Appliance Recycling Program
ENERGY STAR® New Homes Program
Low Income
New Mexico EnergySaver Program
Commercial
Commercial Comprehensive Program
SCORE Plus Program
Commercial Load Management Program

The proposed 2019 program budget is $5,723,226 and results in monthly charges that represent approximately 3.0793 percent of the average bill for each customer in the eligible customer classes. The EUERF charge would be paid in addition to the current charges that the customer is paying and will be collected through a line item charge on the customer's bill. EPE's average residential customer uses approximately 700 kilowatt-hours ("kWh") per month, and for that average use, a customer would pay approximately $2.52 per month for the EUERF charge, $0.01 over the current EUERF charge of $2.51. EPE's proposed EUERF factor is subject to the statutory dollar cap of $75,000 per year for a customer, contained in the EUEA and Rule. If approved by the Commission, Rate No. 17 - EUERF would apply to those EPE service customer classes that are eligible to participate in the energy efficiency programs.

For informational purposes only, the following table shows typical EUERF bill impacts by rate class. These impacts are subject to change by the Commission based upon its findings in this case.

EL PASO ELECTRIC COMPANY
Analysis of EUERF Impacts on
Typical Bills by Rate Class

kWh	kW	Load Factor	Total Pre-Tax Bill	Current EUERF Chrg	Current Bill	Proposed EUERF Chrg	Proposed Bill	Bill Impact
RATE NO. 01 - RESIDENTIAL SERVICE								
0			$ 6.73	$ 0.21	$ 6.94	$ 0.21	$ 6.94	0.00%
100			$ 17.16	$ 0.53	$ 17.69	$ 0.53	$ 17.69	0.00%
250			$ 32.82	$ 1.01	$ 33.83	$ 1.01	$ 33.83	0.00%
500			$ 59.25	$ 1.82	$ 61.07	$ 1.82	$ 61.07	0.00%
700			$ 81.73	$ 2.51	$ 84.24	$ 2.52	$ 84.25	0.01%
1,000			$ 116.02	$ 3.57	$ 119.59	$ 3.57	$ 119.59	0.00%
2,000			$ 230.55	$ 7.09	$ 237.64	$ 7.10	$ 237.65	0.00%
RATE NO. 03 - SMALL COMMERCIAL SERVICE (0 to 50 kW)								
730	5	20%	$ 135.77	$ 4.17	$ 139.94	$ 4.18	$ 139.95	0.01%
1,460	5	40%	$ 183.87	$ 5.65	$ 189.52	$ 5.66	$ 189.53	0.01%
2,190	5	60%	$ 231.98	$ 7.13	$ 239.11	$ 7.14	$ 239.12	0.00%
2,920	5	80%	$ 280.08	$ 8.61	$ 288.69	$ 8.62	$ 288.70	0.00%
2,190	15	20%	$ 380.39	$ 11.70	$ 392.09	$ 11.71	$ 392.10	0.00%
4,380	15	40%	$ 524.70	$ 16.13	$ 540.83	$ 16.16	$ 540.86	0.01%
6,570	15	60%	$ 669.01	$ 20.57	$ 689.58	$ 20.60	$ 689.61	0.00%
8,760	15	80%	$ 813.32	$ 25.01	$ 838.33	$ 25.04	$ 838.36	0.00%
3,650	25	20%	$ 625.00	$ 19.22	$ 644.22	$ 19.25	$ 644.25	0.00%
7,300	25	40%	$ 865.52	$ 26.61	$ 892.13	$ 26.65	$ 892.17	0.00%
10,950	25	60%	$ 1,106.04	$ 34.01	$ 1,140.05	$ 34.06	$ 1,140.10	0.00%
14,600	25	80%	$ 1,346.56	$ 41.41	$ 1,387.97	$ 41.46	$ 1,388.02	0.00%
5,840	40	20%	$ 991.93	$ 30.50	$ 1,022.43	$ 30.54	$ 1,022.47	0.00%
11,680	40	40%	$ 1,376.76	$ 42.34	$ 1,419.10	$ 42.39	$ 1,419.15	0.00%
17,520	40	60%	$ 1,761.59	$ 54.17	$ 1,815.76	$ 54.24	$ 1,815.83	0.00%
23,360	40	80%	$ 2,146.42	$ 66.00	$ 2,212.42	$ 66.09	$ 2,212.51	0.00%
RATE NO. 03 - SMALL COMMERCIAL ALTERNATE (0 to 50 kW)								
1,000			$ 142.21	$ 4.37	$ 146.58	$ 4.38	$ 146.59	0.01%
2,000			$ 270.95	$ 8.33	$ 279.28	$ 8.34	$ 279.29	0.00%
4,000			$ 528.45	$ 16.25	$ 544.70	$ 16.27	$ 544.72	0.00%
6,000			$ 785.94	$ 24.17	$ 810.11	$ 24.20	$ 810.14	0.00%
RATE NO. 04 - GENERAL SERVICE RATE (secondary rate, 50 to 800 kW)								
7,300	50	20%	$ 1,197.37	$ 36.82	$ 1,234.19	$ 36.87	$ 1,234.24	0.00%
14,600	50	40%	$ 1,573.56	$ 48.39	$ 1,621.95	$ 48.45	$ 1,622.01	0.00%
21,900	50	60%	$ 1,949.75	$ 59.95	$ 2,009.70	$ 60.04	$ 2,009.79	0.00%
29,200	50	80%	$ 2,325.94	$ 71.52	$ 2,397.46	$ 71.62	$ 2,397.56	0.00%
43,800	300	20%	$ 7,059.24	$ 217.07	$ 7,276.31	$ 217.38	$ 7,276.62	0.00%
87,600	300	40%	$ 9,316.40	$ 286.48	$ 9,602.88	$ 286.88	$ 9,603.28	0.00%
131,400	300	60%	$ 11,573.56	$ 355.89	$ 11,929.45	$ 356.38	$ 11,929.94	0.00%
175,200	300	80%	$ 13,830.71	$ 425.29	$ 14,256.00	$ 425.89	$ 14,256.60	0.00%
73,000	500	20%	$ 11,748.74	$ 361.27	$ 12,110.01	$ 361.78	$ 12,110.52	0.00%
146,000	500	40%	$ 15,510.67	$ 476.95	$ 15,987.62	$ 477.62	$ 15,988.29	0.00%

219,000	500	60%	$ 19,272.60	$ 592.63	$ 19,865.23	$ 593.46	$ 19,866.06	0.00%
292,000	500	80%	$ 23,034.53	$ 708.31	$ 23,742.84	$ 709.30	$ 23,743.83	0.00%
RATE NO. 04 - GENERAL SERVICE RATE (primary rate, 50 to 800 kW)								
7,300	50	20%	$ 1,053.59	$ 32.40	$ 1,085.99	$ 32.44	$ 1,086.03	0.00%
14,600	50	40%	$ 1,421.63	$ 43.72	$ 1,465.35	$ 43.78	$ 1,465.41	0.00%
21,900	50	60%	$ 1,789.67	$ 55.03	$ 1,844.70	$ 55.11	$ 1,844.78	0.00%
29,200	50	80%	$ 2,157.71	$ 66.35	$ 2,224.06	$ 66.44	$ 2,224.15	0.00%
43,800	300	20%	$ 6,196.60	$ 190.55	$ 6,387.15	$ 190.81	$ 6,387.41	0.00%
87,600	300	40%	$ 8,404.84	$ 258.45	$ 8,663.29	$ 258.81	$ 8,663.65	0.00%
131,400	300	60%	$ 10,613.07	$ 326.35	$ 10,939.42	$ 326.81	$ 10,939.88	0.00%
175,200	300	80%	$ 12,821.30	$ 394.25	$ 13,215.55	$ 394.81	$ 13,216.11	0.00%
73,000	500	20%	$ 10,311.01	$ 317.06	$ 10,628.07	$ 317.51	$ 10,628.52	0.00%
146,000	500	40%	$ 13,991.40	$ 430.24	$ 14,421.64	$ 430.84	$ 14,422.24	0.00%
219,000	500	60%	$ 17,671.79	$ 543.41	$ 18,215.20	$ 544.17	$ 18,215.96	0.00%
292,000	500	80%	$ 21,352.17	$ 656.58	$ 22,008.75	$ 657.50	$ 22,009.67	0.00%
RATE NO. 05 - IRRIGATION SERVICE RATE								
1,000			$ 124.63	$ 3.83	$ 128.46	$ 3.84	$ 128.47	0.01%
5,000			$ 546.28	$ 16.80	$ 563.08	$ 16.82	$ 563.10	0.00%
10,000			$ 1,073.35	$ 33.01	$ 1,106.36	$ 33.05	$ 1,106.40	0.00%
15,000			$ 1,600.41	$ 49.21	$ 1,649.62	$ 49.28	$ 1,649.69	0.00%
Rate NO. 07 - CITY AND COUNTY SERVICE								
1,460	10	20%	$ 219.47	$ 6.75	$ 226.22	$ 6.76	$ 226.23	0.00%
2,920	10	40%	$ 313.77	$ 9.65	$ 323.42	$ 9.66	$ 323.43	0.00%
4,380	10	60%	$ 408.07	$ 12.55	$ 420.62	$ 12.57	$ 420.64	0.00%
5,840	10	80%	$ 502.38	$ 15.45	$ 517.83	$ 15.47	$ 517.85	0.00%
14,600	100	20%	$ 2,043.30	$ 62.83	$ 2,106.13	$ 62.92	$ 2,106.22	0.00%
29,200	100	40%	$ 2,986.33	$ 91.83	$ 3,078.16	$ 91.96	$ 3,078.29	0.00%
43,800	100	60%	$ 3,929.36	$ 120.83	$ 4,050.19	$ 121.00	$ 4,050.36	0.00%
58,400	100	80%	$ 4,872.39	$ 149.83	$ 5,022.22	$ 150.04	$ 5,022.43	0.00%
43,800	300	20%	$ 6,096.26	$ 187.46	$ 6,283.72	$ 187.72	$ 6,283.98	0.00%
87,600	300	40%	$ 8,925.36	$ 274.45	$ 9,199.81	$ 274.84	$ 9,200.20	0.00%
131,400	300	60%	$ 11,754.45	$ 361.45	$ 12,115.90	$ 361.95	$ 12,116.40	0.00%
175,200	300	80%	$ 14,583.54	$ 448.44	$ 15,031.98	$ 449.07	$ 15,032.61	0.00%
73,000	500	20%	$ 10,149.22	$ 312.09	$ 10,461.31	$ 312.52	$ 10,461.74	0.00%
146,000	500	40%	$ 14,864.38	$ 457.08	$ 15,321.46	$ 457.72	$ 15,322.10	0.00%
219,000	500	60%	$ 19,579.54	$ 602.07	$ 20,181.61	$ 602.91	$ 20,182.45	0.00%
292,000	500	80%	$ 24,294.69	$ 747.06	$ 25,041.75	$ 748.11	$ 25,042.80	0.00%
RATE NO. 08 - MUNICIPAL WATER, SEWAGE, AND PUMPING (Secondary)								
1,000			$ 110.36	$ 3.39	$ 113.75	$ 3.40	$ 113.76	0.01%
10,000			$ 930.59	$ 28.62	$ 959.21	$ 28.66	$ 959.25	0.00%
50,000			$ 4,576.09	$ 140.71	$ 4,716.80	$ 140.91	$ 4,717.00	0.00%
100,000			$ 9,132.97	$ 280.84	$ 9,413.81	$ 281.23	$ 9,414.20	0.00%
250,000			$ 22,803.59	$ 701.21	$ 23,504.80	$ 702.19	$ 23,505.78	0.00%
500,000			$ 45,587.96	$ 1,401.83	$ 46,989.79	$ 1,403.79	$ 46,991.75	0.00%
RATE NO. 08 - MUNICIPAL WATER, SEWAGE, AND PUMPING (Primary)								

1,000			$ 106.83	$ 3.29	$ 110.12	$ 3.29	$ 110.12	0.00%
10,000			$ 895.37	$ 27.53	$ 922.90	$ 27.57	$ 922.94	0.00%
50,000			$ 4,399.95	$ 135.30	$ 4,535.25	$ 135.49	$ 4,535.44	0.00%
100,000			$ 8,780.68	$ 270.01	$ 9,050.69	$ 270.38	$ 9,051.06	0.00%
250,000			$ 21,922.88	$ 674.13	$ 22,597.01	$ 675.07	$ 22,597.95	0.00%
500,000			$ 43,826.53	$ 1,347.67	$ 45,174.20	$ 1,349.55	$ 45,176.08	0.00%
RATE NO. 09 - LARGE POWER SERVICE (secondary, above 800 kW)								
146,000	1,000	20%	$ 22,937.78	$ 705.34	$ 23,643.12	$ 706.32	$ 23,644.10	0.00%
292,000	1,000	40%	$ 29,202.85	$ 897.99	$ 30,100.84	$ 899.24	$ 30,102.09	0.00%
438,000	1,000	60%	$ 35,467.91	$ 1,090.64	$ 36,558.55	$ 1,092.16	$ 36,560.07	0.00%
584,000	1,000	80%	$ 41,732.98	$ 1,283.29	$ 43,016.27	$ 1,285.08	$ 43,018.06	0.00%
292,000	2,000	20%	$ 45,753.48	$ 1,406.92	$ 47,160.40	$ 1,408.89	$ 47,162.37	0.00%
584,000	2,000	40%	$ 58,283.62	$ 1,792.22	$ 60,075.84	$ 1,794.73	$ 60,078.35	0.00%
876,000	2,000	60%	$ 70,813.75	$ 2,177.52	$ 72,991.27	$ 2,180.57	$ 72,994.32	0.00%
1,168,000	2,000	80%	$ 83,343.88	$ 2,562.82	$ 85,906.70	$ 2,566.41	$ 85,910.29	0.00%
438,000	3,000	20%	$ 68,569.19	$ 2,108.50	$ 70,677.69	$ 2,111.45	$ 70,680.64	0.00%
876,000	3,000	40%	$ 87,364.38	$ 2,686.45	$ 90,050.83	$ 2,690.21	$ 90,054.59	0.00%
1,314,000	3,000	60%	$ 106,159.58	$ 3,264.41	$ 109,423.99	$ 3,268.97	$ 109,428.55	0.00%
1,752,000	3,000	80%	$ 124,954.78	$ 3,842.36	$ 128,797.14	$ 3,847.73	$ 128,802.51	0.00%
RATE NO. 09 - LARGE POWER SERVICE (primary, above 800 kW)								
146,000	1,000	20%	$ 22,217.78	$ 683.20	$ 22,900.98	$ 684.15	$ 22,901.93	0.00%
292,000	1,000	40%	$ 28,339.92	$ 871.45	$ 29,211.37	$ 872.67	$ 29,212.59	0.00%
438,000	1,000	60%	$ 34,462.07	$ 1,059.71	$ 35,521.78	$ 1,061.19	$ 35,523.26	0.00%
584,000	1,000	80%	$ 40,584.21	$ 1,247.96	$ 41,832.17	$ 1,249.71	$ 41,833.92	0.00%
292,000	2,000	20%	$ 44,313.48	$ 1,362.64	$ 45,676.12	$ 1,364.55	$ 45,678.03	0.00%
584,000	2,000	40%	$ 56,557.77	$ 1,739.15	$ 58,296.92	$ 1,741.58	$ 58,299.35	0.00%
876,000	2,000	60%	$ 68,802.06	$ 2,115.66	$ 70,917.72	$ 2,118.62	$ 70,920.68	0.00%
1,168,000	2,000	80%	$ 81,046.34	$ 2,492.18	$ 83,538.52	$ 2,495.66	$ 83,542.00	0.00%
438,000	3,000	20%	$ 66,409.18	$ 2,042.08	$ 68,451.26	$ 2,044.94	$ 68,454.12	0.00%
876,000	3,000	40%	$ 84,775.61	$ 2,606.85	$ 87,382.46	$ 2,610.50	$ 87,386.11	0.00%
1,314,000	3,000	60%	$ 103,142.04	$ 3,171.62	$ 106,313.66	$ 3,176.05	$ 106,318.09	0.00%
1,752,000	3,000	80%	$ 121,508.47	$ 3,736.39	$ 125,244.86	$ 3,741.61	$ 125,250.08	0.00%
RATE NO. 11 - STREET LIGHTING SERVICE								
O.H. Wiring System Wood								
175W MV 7,000 L - 195 Watts			$ 13.70	$ 0.42	$ 14.12	$ 0.42	$ 14.12	0.00%
250W MV 11,000 L - 275 Watts			$ 15.46	$ 0.48	$ 15.94	$ 0.48	$ 15.94	0.00%
400W MV 20,000 L - 450 Watts			$ 19.29	$ 0.59	$ 19.88	$ 0.59	$ 19.88	0.00%
150W HPS 14,400 L - 193 Watts			$ 13.73	$ 0.42	$ 14.15	$ 0.42	$ 14.15	0.00%
250W HPS 23,200 L - 313 Watts			$ 16.28	$ 0.50	$ 16.78	$ 0.50	$ 16.78	0.00%
400W HPS 45,000 L - 485 Watts			$ 20.52	$ 0.63	$ 21.15	$ 0.63	$ 21.15	0.00%
O.H. Wiring Sys Met Poles Co.Owned								
150W HPS 14,400 L - 193 Watts			$ 23.36	$ 0.72	$ 24.08	$ 0.72	$ 24.08	0.00%
250W HPS 23,200 L - 313 Watts			$ 26.48	$ 0.81	$ 27.29	$ 0.82	$ 27.30	0.04%
400W HPS 45,000 L - 485 Watts			$ 36.27	$ 1.12	$ 37.39	$ 1.12	$ 37.39	0.00%
U.G. Wiring Sys Met Poles Co Owned								
150W HPS 14,400 L - 193 Watts			$ 30.20	$ 0.93	$ 31.13	$ 0.93	$ 31.13	0.00%
250W HPS 23,200 L - 313 Watts			$ 28.94	$ 0.89	$ 29.83	$ 0.89	$ 29.83	0.00%
400W HPS 45,000 L - 485 Watts			$ 39.09	$ 1.20	$ 40.29	$ 1.20	$ 40.29	0.00%
U.G. Wiring System on Wood Poles								

150W HPS 14,400 L - 193 Watts			$ 16.52	$ 0.51	$ 17.03	$ 0.51	$ 17.03	0.00%
250W HPS 23,200 L - 313 Watts			$ 23.36	$ 0.72	$ 24.08	$ 0.72	$ 24.08	0.00%
400W HPS 45,000 L - 485 Watts			$ 28.55	$ 0.88	$ 29.43	$ 0.88	$ 29.43	0.00%
U.G. Wiring System City Owned								
175W MV 7,000 L - 195 Watts			$ 6.76	$ 0.21	$ 6.97	$ 0.21	$ 6.97	0.00%
400W MV 20,000 L - 450 Watts			$ 19.73	$ 0.61	$ 20.34	$ 0.61	$ 20.34	0.00%
150W HPS 14,400 L - 175 Watts			$ 6.08	$ 0.19	$ 6.27	$ 0.19	$ 6.27	0.00%
180W LPS 19,800 L - 250 Watts			$ 10.47	$ 0.32	$ 10.79	$ 0.32	$ 10.79	0.00%
250W HPS 23,200 L - 313 Watts			$ 10.02	$ 0.31	$ 10.33	$ 0.31	$ 10.33	0.00%
250W LPS 33,000L - 365 Watts			$ 15.09	$ 0.46	$ 15.55	$ 0.46	$ 15.55	0.00%
400W HPS 45,000 L - 485 Watts			$ 15.61	$ 0.48	$ 16.09	$ 0.48	$ 16.09	0.00%
31W-40W LED			$ 1.24	$ 0.04	$ 1.28	$ 0.04	$ 1.28	0.00%
41W-50W LED			$ 1.58	$ 0.05	$ 1.63	$ 0.05	$ 1.63	0.00%
51W-60W LED			$ 1.92	$ 0.06	$ 1.98	$ 0.06	$ 1.98	0.00%
61W-70W LED			$ 2.27	$ 0.07	$ 2.34	$ 0.07	$ 2.34	0.00%
71W-80W LED			$ 2.61	$ 0.08	$ 2.69	$ 0.08	$ 2.69	0.00%
81W-90W LED			$ 2.96	$ 0.09	$ 3.05	$ 0.09	$ 3.05	0.00%
91W-100W LED			$ 3.30	$ 0.10	$ 3.40	$ 0.10	$ 3.40	0.00%
101W-110W LED			$ 3.65	$ 0.11	$ 3.76	$ 0.11	$ 3.76	0.00%
111W-130W LED			$ 4.17	$ 0.13	$ 4.30	$ 0.13	$ 4.30	0.00%
131W-150W LED			$ 4.85	$ 0.15	$ 5.00	$ 0.15	$ 5.00	0.00%
151W-170W LED			$ 5.54	$ 0.17	$ 5.71	$ 0.17	$ 5.71	0.00%
171W-190W LED			$ 6.23	$ 0.19	$ 6.42	$ 0.19	$ 6.42	0.00%
191W-210W LED			$ 6.93	$ 0.21	$ 7.14	$ 0.21	$ 7.14	0.00%
211W-230W LED			$ 7.61	$ 0.23	$ 7.84	$ 0.23	$ 7.84	0.00%
231W-250W LED			$ 8.30	$ 0.26	$ 8.56	$ 0.26	$ 8.56	0.00%
RATE NO. 19 - SEASONAL AGRICULTURAL PROCESSING SERVICE								
1,460	10	20%	$ 221.90	$ 6.82	$ 228.72	$ 6.83	$ 228.73	0.00%
2,920	10	40%	$ 424.58	$ 13.06	$ 437.64	$ 13.07	$ 437.65	0.00%
4,380	10	60%	$ 627.26	$ 19.29	$ 646.55	$ 19.32	$ 646.58	0.00%
5,840	10	80%	$ 829.94	$ 25.52	$ 855.46	$ 25.56	$ 855.50	0.00%
7,300	50	20%	$ 1,032.62	$ 31.75	$ 1,064.37	$ 31.80	$ 1,064.42	0.00%
14,600	50	40%	$ 2,046.01	$ 62.91	$ 2,108.92	$ 63.00	$ 2,109.01	0.00%
21,900	50	60%	$ 3,059.41	$ 94.08	$ 3,153.49	$ 94.21	$ 3,153.62	0.00%
29,200	50	80%	$ 4,072.81	$ 125.24	$ 4,198.05	$ 125.41	$ 4,198.22	0.00%
14,600	100	20%	$ 2,046.01	$ 62.91	$ 2,108.92	$ 63.00	$ 2,109.01	0.00%
29,200	100	40%	$ 4,072.81	$ 125.24	$ 4,198.05	$ 125.41	$ 4,198.22	0.00%
43,800	100	60%	$ 6,099.60	$ 187.56	$ 6,287.16	$ 187.82	$ 6,287.42	0.00%
58,400	100	80%	$ 8,126.39	$ 249.89	$ 8,376.28	$ 250.24	$ 8,376.63	0.00%
43,800	300	20%	$ 6,099.60	$ 187.56	$ 6,287.16	$ 187.82	$ 6,287.42	0.00%
87,600	300	40%	$ 12,179.98	$ 374.53	$ 12,554.51	$ 375.06	$ 12,555.04	0.00%
131,400	300	60%	$ 18,260.36	$ 561.51	$ 18,821.87	$ 562.29	$ 18,822.65	0.00%
175,200	300	80%	$ 24,340.74	$ 748.48	$ 25,089.22	$ 749.52	$ 25,090.26	0.00%
RATE NO. 25 - OUTDOOR RECREATIONAL LIGHTING								
0			$ 17.30	$ 0.53	$ 17.83	$ 0.53	$ 17.83	0.00%
100			$ 29.31	$ 0.90	$ 30.21	$ 0.90	$ 30.21	0.00%
500			$ 77.33	$ 2.38	$ 79.71	$ 2.38	$ 79.71	0.00%
1,000			$ 137.35	$ 4.22	$ 141.57	$ 4.23	$ 141.58	0.01%
5,000			$ 617.56	$ 18.99	$ 636.55	$ 19.02	$ 636.58	0.00%
10,000			$ 1,217.81	$ 37.45	$ 1,255.26	$ 37.50	$ 1,255.31	0.00%
20,000			$ 2,418.32	$ 74.36	$ 2,492.68	$ 74.47	$ 2,492.79	0.00%
RATE NO. 26 - STATE UNIVERSITY SERVICE								

1,460,000	10,000	20%	$ 164,570.57	$ 5,060.55	$ 169,631.12	$ 5,067.62	$ 169,638.19	0.00%
2,920,000	10,000	40%	$ 231,672.96	$ 7,123.94	$ 238,796.90	$ 7,133.91	$ 238,806.87	0.00%
4,380,000	10,000	60%	$ 298,775.34	$ 9,187.34	$ 307,962.68	$ 9,200.19	$ 307,975.53	0.00%
5,840,000	10,000	80%	$ 365,877.72	$ 11,250.74	$ 377,128.46	$ 11,266.47	$ 377,144.19	0.00%

Further information regarding this case may be obtained by contacting EPE or the Commission at the addresses and telephone numbers provided below. The Commission has assigned Case No. 18-00116-UT to this proceeding, and all inquiries or written comments concerning this matter should refer to that case number.

The present procedural schedule established by the Commission for this proceeding is as follows:

1. Any person who desires to intervene to become a party to this case must file a Motion for Leave to Intervene, pursuant to 17.1.2.26(A) NMAC and 17.1.2.26(B) NMAC, on or before _____, 2018.

2. The Commission Staff shall and Interveners may file any direct testimony on or before _____, 2018.

3. Any rebuttal testimony by EPE, Staff or Intervenors must be filed on or before _____, 2018.

A public hearing will be held beginning at 9:30 A.M. on _____, 2018, at the Commission's offices, PERA Building, 1120 Paseo de Peralta, Santa Fe, New Mexico, for the purpose of hearing and receiving evidence, arguments and any other appropriate matters in order to determine whether EPE's proposed rate, programs and budgets, and incentives, should be approved by the Commission.

Any interested person should contact the Commission at (505) 827-6956 for confirmation of the hearing date, time and place since hearings are on occasion rescheduled.

Any interested person may examine EPE's filing in this case together with any exhibits and related papers that may be filed in this case at EPE's office, 201 N. Water Street, Las Cruces, New Mexico 88001, telephone (575) 526-5551, or at the Commission's offices, PERA Building,1120 Paseo de Peralta Santa Fe, New Mexico 87501, telephone: (505) 827-6941.

The Commission's Utility Division Procedures (Rule 17.1.2 NMAC) apply to this proceeding except as modified by order of the Commission or Hearing Examiner. A copy of the rules may be obtained from the offices of the Commission.

Any interested person may appear at the time of hearing and make a written or oral comment without becoming an intervener, but the comment will not be considered as evidence in this proceeding. Interested persons may also send written comments, which shall reference NMPRC Case No. 18-00116-UT, to the Commission at the address set out above.

Anyone filing pleadings or testimony will serve copies upon all parties of record the Commission Staff, and the Hearing Examiner by first class mail or hand-delivery and by e-mail. Any person whose testimony has been pre-filed will attend the hearing and submit to examination under oath.

Any person with a disability requiring special assistance in order to participate in this proceeding should contact the offices of the Commission at least 24 hours prior to the commencement of the hearing.

I S S U E D at Santa Fe, New Mexico this ____ day of July 2018.

NEW MEXICO PUBLIC REGULATION COMMISSION

_____

Hearing Examiner

EL PASO ELECTRIC COMPANY

ADVICE NOTICE NO. 260

NEW MEXICO PUBLIC REGULATION COMMISSION
OF THE STATE OF NEW MEXICO

El Paso Electric Company (EPE) hereby gives notice to the public and the Commission of the filing and publishing of the following changes in its Rates, which are attached hereto:

RATES

Rate Number	Title of Rate	Cancelling Rate Number	Date Effective
10th Revised Rate No. 17	Efficient Use of Energy Recovery Factor (EUERF)	9th Revised Rate No. 17	01/01/2019

x

Advice Notice No. 260

Signature/Title James Schichtl
Vice President-Regulatory Affairs

EL PASO ELECTRIC COMPANY

REVISED TABLE OF CONTENTS

RATE SCHEDULES

Rate Schedule Number	Title	
11th Revised Rate 1	Residential Service Rate	
13th Revised Rate 3	Small General Service Rate	
13th Revised Rate 4	General Service Rate	
14th Revised Rate 5	Irrigation Service Rate	
10th Revised Rate 7	City and County Service Rate	
11th Revised Rate 8	Water, Sewage, Storm Sewage Pumping or Sewage Disposal Rate	
11th Revised Rate 9	Large Power Service Rate	
13th Revised Rate 10	Military Research and Development Power Rate	
12th Revised Rate 11	Street Lighting Service Rate	
12th Revised Rate 12	Private Area Lighting Rate	
8th Revised Rate 15	Miscellaneous Service Charges	
36th Revised Rate 16	Purchased Power Service	
10th Revised Rate 17	Efficient Use of Energy Recovery Factor (EUERF)	X
19th Revised Rate 18	FPPCAC	
10th Revised Rate 19	Seasonal Agriculture Processing Service Rate	
10th Revised Rate 21	Supplementary Power Service Cogeneration and Small Power Production Facilities	
10th Revised Rate 22	Backup Power Service Cogeneration and Small Power Production Facilities	

Advice Notice No. 260

Signature/Title

James Schichtl
Vice President – Regulatory Affairs

EL PASO ELECTRIC COMPANY

REVISED TABLE OF CONTENTS

RATE SCHEDULES

PAGE 2 OF 2

10th Revised Rate 23	Maintenance Power Service Cogeneration and Small Power Production Facilities
10th Revised Rate 24	Curtailable Power Service Cogeneration and Small Power Production Facilities
8th Revised Rate 25	Outdoor Recreational Lighting Service Rate
7th Revised Rate 26	State University Service Rate
5th Revised Rate 29	Noticed Interruptible Service for Rate Large Power Service
6th Revised Rate 30	Load Retention Rate
3rd Revised Rate 32	Voluntary Renewable Energy Rate
5th Revised Rate 33	Small System Renewable Energy Certificate Purchase
4th Revised Rate 34	Medium System Renewable Energy Certificate Purchase
2nd Revised Rate 35	Large System Renewable Energy Certificate Purchase
Original Rate 37	eSmart Thermostat Program Rate
1st Revised Rate 38	Renewable Portfolio Standard (RPS) Cost Rider
Original Rate 39	Economic Development Rate
Original Rate 41	Federal Tax Credit Factor (FTCF)

Advice Notice No. 260

Signature/Title

James Schichtl
Vice President – Regulatory Affairs

EL PASO ELECTRIC COMPANY
TENTH REVISED RATE NO. 17
CANCELLING NINTH REVISED RATE NO. 17

EFFICIENT USE OF ENERGY RECOVERY FACTOR (EUERF)

APPLICABILITY:

Electric service billed under rate schedules having an Efficient Use of Energy Recovery Factor Clause shall be subject to an Efficient Use of Energy Recovery Factor ("EUERF"). The EUERF is not applicable for private area, military, and cogeneration classes, as indicated below.

Pursuant to the New Mexico Public Regulation Commission Rule 17.7.2, the EUERF allows the Company to recover the cost of energy efficiency programs from the customer classes with an opportunity to participate under such programs.

TERRITORY:

Areas served by the Company in Dona Ana, Sierra, Otero and Luna Counties.

EUERF MONTHLY FACTOR:

The monthly charge for the EUERF hereunder shall be comprised of the following rate charges, not to exceed $75,000 per customer per year.

Rate No.	Description	Total EUERF per Pre-Tax Charges
1	Residential Service Rate	3.0793%
3	Small Commercial Service Rate	3.0793%
4	General Service Rate	3.0793%
5	Irrigation Service Rate	3.0793%
7	City and County Service Rate	3.0793%
8	Water, Sewage, Storm Sewage Pumping or Sewage Disposal Rate	3.0793%

Advice Notice No. 260

Signature/Title

James Schichtl
Vice President-Regulatory Affairs

EL PASO ELECTRIC COMPANY
TENTH REVISED RATE NO. 17
CANCELLING NINTH REVISED RATE NO. 17

X
X

EFFICIENT USE OF ENERGY RECOVERY FACTOR (EUERF)

9	Large Power Service Rate	3.0793%	X
10	Military Research & Development Rate	N/A	
11	Street Lighting Service Rate	3.0793%	X
12	Private Area Lighting Rate	N/A	
19	Seasonal Agriculture Processing Service Rate	3.0793%	X
21	Supplementary Power Service Cogeneration and Small Power Production Facilities	N/A	
22	Backup Power Service Cogeneration and Small Power Production Facilities	N/A	
23	Maintenance Power Service Cogeneration and Small Power Production Facilities	N/A	
24	Curtailable Power Service Cogeneration and Small Power Production Facilities	N/A	
25	Outdoor Recreational Lighting Service Rate	3.0793%	X
26	State University Service Rate	3.0793%	X
28	Instantaneous Interruptible Service Rate for Large Power Service	3.0793%	X
29	Noticed Interruptible Service Rate for Large Power Service	3.0793%	X
30	Load Retention Rate	3.0793%	X

Advice Notice No. 260

Signature/Title

James Schichtl
Vice President-Regulatory Affairs

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17 –EFFICIENT USE OF ENERGY RECOVERY FACTOR	)	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	)	

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that **El Paso Electric Company's Application for Approval of 2019-2021 Plan, 2019-2021 Utility Incentive and Revised Rate No. 17-EUERF and Supporting Direct Testimonies of Araceli G. Perea, Amy D. Martin, and Adrian Hernandez** was emailed, mailed first class, or hand-delivered on July 2, 2018, to each of the following:

Nancy B. Burns
El Paso Electric Company
300 Galisteo St. Suite 206
Santa Fe, NM 87501
nancy.burns@epelectric.com;
patricia.griego@epelectric.com;

Curtis Hutcheson
Case Manager
El Paso Electric Company
100 North Stanton
El Paso, TX 79901
curtis.hutcheson@epelectric.com;

Carol Clifford, Esq.
Jones, Snead, Wertheim & Clifford, P.A.
PO Box 2228
Santa Fe, NM 87504-2228
carol@thejonesfirm.com;

Anastasia S. Stevens, Esq.
Stevens Law LLC
P.O. Box2528
Santa Fe, NM 87501
astevens.law@gmail.com

Jennifer Vega-Brown, Esq.
Marcia B. Driggers, Esq.
City of Las Cruces
P.O. Box 20000
Las Cruces, NM 88004-9002
jvega-brown@las-cruces.org;
marcyd@las-cruces.org;

Joan E. Drake, Esq.
Attorney for NMSU
Modrall Sperling
P.O. Box 2168
Albuquerque, NM 87103-2168
jdrake@modrall.com;

Nann M. Winter, Esq.
Attorney for Doña Ana County
Stelzner, Winter, Warburton,
Flores, Sanchez & Dawes, P.A.
P.O. Box 528
Albuquerque, NM 87103
nwinter@stelznerlaw.com;

Andrea Crane
Consultant for NMAG
The Columbia Group, Inc.
2805 East Oakland Park Blvd. #401
Ft. Lauderdale, FL 33006
ctcolumbia@aol.com;

Kyle J. Smith, Esq.
U.S. Army Legal Services Agency
9275 Gunston Road
ATTN: Jals-RL/IP
Fort Belvoir, VA 22060-4446
kyle.j.smith124.civ@mail.mil;

Steve Michel, Esq.
Western Resource Advocates
409 East Palace Ave. Unit #2
Santa Fe, NM 87501
smichel@westernresources.org;

Charles Noble, Esq.
Attorney for CCAE
409 East Palace Ave. Unit #2
Santa Fe, NM 87501
noble.ccae@gmail.com;

Joseph Yar, Esq.
Office of the Attorney General
P.O. Drawer 1508
Santa Fe, NM 87504-1508
jyar@nmag.gov;
eheltman@nmag.gov;

Jason Marks, Esq.
Jason Marks Law, LLC
1011 Third St. NW
Albuquerque, NM 87102
lawoffice@jasonmarks.com;

Joshua L. Smith, Esq.
Attorney for City of Anthony
Watson Law Office, LLC
P.O. Box 2183
Mesilla Park, NM 88047
jsmith.watsonlawlc@gmail.com;
mayortrujillo@cityofanthonynm.org;

Merrie Lee Soules, *Pro Se*
6760 Bright View Rd.
Las Cruces, NM 88007
mlsoules@hotmail.com;

Bruce Throne, Esq.
Attorney for The Alliance for Solar Choice
1440-B South St. Francis Dr.
Santa Fe, NM 87505
bthroneatty@newmexico.com;

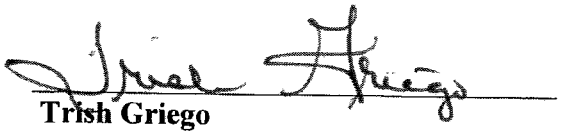
Tom Figart, Esq.
Doña Ana County
P.O. Box 2528
Las Cruces, NM 88004
tomf@donaanacounty.org;

Hand-Delivered
Bradford Borman
NMPRC Legal Division
1120 Paseo de Peralta
Santa Fe, NM 87501
bradford.borman@state.nm.us;

Hand-Delivered
Milo Chavez
NMPRC Utility Division
1120 Paseo de Peralta
Santa Fe, NM 87501
milo.chavez@state.nm.us;
jack.sidler@state.nm.us; (email only)

Hand-Delivered
Russell Fisk
Office of General Counsel
1120 Paseo de Peralta
Santa Fe, NM 87501
russell.fisk@state.nm.us;

DATED this 2nd day of July, 2018.



Trish Griego
Legal Assistant

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17- EFFICIENT USE OF ENERGY RECOVERY FACTOR	)	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	)	

DIRECT TESTIMONY

OF

ARACELI G. PEREA

ON BEHALF OF

EL PASO ELECTRIC COMPANY

JULY 2, 2018

TABLE OF CONTENTS

Subject	Page
I. INTRODUCTION AND QUALIFICATIONS	1
II. PURPOSE OF DIRECT TESTIMONY	2
III. SUMMARY OF APPLICATION	4
IV. SUMMARY OF EPE'S ENERGY EFFICIENCY SAVINGS GOALS AND EPE'S PROGRESS TOWARDS THOSE GOALS	6
V. OVERVIEW OF EPE'S 2017 ACHIEVEMENTS AND 2018 ENERGY EFFICIENCY PROGRAMS	8
VI. EPE'S PROPOSED 2019, 2020, AND 2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN	10
VII. PREFILING REQUIREMENT FOR STAKEHOLDER INPUT	24
VIII. COMPLIANCE REQUIREMENTS	26
IX. CONCLUSION	28

EXHIBITS

Exhibit AGP-1	EPE's 2018 Existing Program Portfolio Budget
Exhibit AGP-2	EPE's 2019-2021 Proposed Program Portfolio Budget
Exhibit AGP-3	Public Advisory Meetings – Official Service List
Exhibit AGP-4	Public Advisory Meeting – List of Attendees
Exhibit AGP-5	Energy Efficiency and Load Management Rule Requirements
Exhibit AGP-6	Case No. 16-00185-UT Recommended Decision Compliance List

EL PASO ELECTRIC COMPANY
DIRECT TESTIMONY OF
ARACELI G. PEREA

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Araceli G. Perea. My business address is 100 N. Stanton, El Paso, Texas 79901.

Q. HOW ARE YOU EMPLOYED?

A. I am employed by El Paso Electric Company ("EPE" or "Company") as the Supervisor of Energy Efficiency.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND AND EXPERIENCE.

A. I graduated from Saginaw Valley State University with a Bachelor of Science Degree in Mechanical Engineering. In December 1990, I was employed by General Motors, Saginaw, Michigan, as a Manufacturing Engineer, responsible for two departments. In 1996, I transferred to the Delphi Mexico Technical Center, in Cd. Juarez, Mexico, as an Industrial Engineering Supervisor, responsible for several departments. In March 2008, I was employed by EPE as a Program Coordinator in the Energy Efficiency Department for several Energy Efficiency Programs. On May 14, 2018, I was promoted to Supervisor of the Energy Efficiency Department. I currently hold the following certifications from the Association of Energy Engineers: Certified Energy Manager and Certified Demand-Side Management Professional. I also hold a Professional Energy Manager certification from the Institute of Energy Professionals.

I recently attained a Graduate Certificate in Public Utility Regulation and Economics from New Mexico State University.

Q. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES WITH EPE.

A. As Supervisor of the Energy Efficiency Department, my primary responsibilities include the oversight of the energy efficiency personnel as well as managing the development, implementation, and administration of EPE's energy efficiency programs. I am also responsible for the New Mexico and Texas regulatory aspects of the Department.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE UTILITY REGULATORY BODIES?

A. Yes, I have previously filed testimony before the Public Utility Commission of Texas.

II. PURPOSE OF DIRECT TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my direct testimony is to support EPE's application for New Mexico Public Regulation Commission ("Commission" or "NMPRC") approval of its 2019-2021 Energy Efficiency and Load Management Plan ("EE/LM Plan"), utility incentives, and revised Rate No. 17 - Efficient Use of Energy Recovery Factor ("EUERF"). Specifically, my direct testimony:

1. Introduces EPE's other witnesses that are presenting direct testimony in this case;

2. Summarizes EPE's Application;
3. Summarizes the statutory goals of EPE's programs and EPE's progress toward meeting those goals;
4. Provides an overview of EPE's 2017 Program Achievements and 2018 existing programs;
5. Supports the proposed EE/LM Plan, including EE/LM Plan budgets and utility incentive;
6. Discusses EPE's Request for Proposal ("RFP") process;
7. Addresses pre-filing requirements for stakeholder input; and
8. Addresses compliance requirements from the Final Order in Case No. 16-00185-UT.

Q. WHO ARE EPE'S OTHER WITNESSES PROVIDING DIRECT TESTIMONY IN THIS CASE?

A. EPE witness Amy D. Martin, Vice President of Consulting and Engineering at Frontier Energy ("Frontier"), presents the details of to EPE's EE/LM Plan, which is set forth in Exhibit ADM-1. EPE witness Martin's direct testimony addresses the program cost-effectiveness and validation analysis undertaken to arrive at EPE's EE/LM Plan proposal. EPE witness Martin also addresses certain non-binding recommendations EPE solicited and received regarding its proposed plan.

EPE witness Adrian Hernandez, Senior Rate Analyst – Rates & Regulatory Affairs, addresses the discount rate EPE used to calculate the Utility Cost Test ("UCT"), and presents two alternative discount rates for Commission consideration.

He reconciles EPE's 2017 plan year EE/LM program activities, including Commission approved EUERF collections, expenditures, and utility incentive. EPE witness Hernandez supports EPE's requested variance from 17.7.2.15.D NMAC to authorize EPE to continue to collect measurement and verification ("M&V") expenses through EPE's EUERF, and supports EPE's proposed revisions to the EUERF. EPE witness Hernandez also addresses the rate classes that are not charged the EUERF and explains why they are excluded, as per the Final Order in Case No. 16-00185-UT.

III. SUMMARY OF APPLICATION

Q. PLEASE SUMMARIZE EPE'S APPLICATION IN THIS CASE.

A. EPE is seeking Commission approval of its proposed EE/LM Plan, the EE/LM Plan annual budgets, the EE/LM Plan annual utility incentives, and revisions to the EUERF designed to recover EE/LM Plan and utility incentive costs. The EE/LM Plan requests approval of the following proposed portfolio of new and modified programs and associated budgets:

- LivingWise® Program,
- Residential Comprehensive Program,
- New Mexico ("NM") Appliance Recycling Program,
- ENERGY STAR® New Homes Program,
- NM EnergySaver Program,
- Commercial Comprehensive Program,
- SCORE Plus Program, and

- Commercial Load Management Program.

All of the programs in EPE's proposed EE/LM Plan pass the UCT for cost-effectiveness, thus producing a cost effective portfolio as required by the Efficient Use of Energy Act ("EUEA"), as shown in EPE witness Martin's direct testimony and Exhibit ADM-1.

With the exception of the proposed NM Appliance Recycling Program, EPE selected its proposed portfolio of new and modified programs through issuance of the 2017 RFP for EE/LM programs, and an evaluation of bids received. EPE also carefully considered non-binding recommendations it received related to its proposed EE/LM Plan, which it solicited through email communications and discussions at the two EPE-hosted public meetings. EPE did not include the proposed NM Appliance Recycling Program in the RFP process. Based on the proposed program's third-party implementation in Texas, the close proximity of a recycling facility to EPE's New Mexico service territory, and the associated economies of scale, EPE is proposing to use the same third-party implementer that is currently handling the program in Texas.

EPE also requests approval to recover the proposed EE/LM Plan annual budgets, based on three percent of EPE's historical 2017 revenues. For 2019, the proposed program budget is $5,723,226, which includes a 2017 plan year underage in the amount of $609,580. For 2020 and 2021, EPE proposes a budget of $5,113,646 for each program year, based on three percent of historical 2017 revenues, and also requests approval to modify its proposed budgets for plan years 2020 and 2021 based on actual 2018 and 2019 revenues, respectively, and to account for any overage or

underage per the Rule. EPE additionally requests approval to continue the utility incentive mechanism approved in Case No. 16-00185-UT, without modification, and requests a baseline utility incentive of 7.1 percent of program expenditures for 2019 through 2021. The proposed utility incentive is $363,069 annually. The annual utility incentive will be subject to a true-up based on actual expenses and savings achieved each year. Finally, EPE proposes a revised EUERF of 3.0793 percent to recover the three percent funding for the proposed EE/LM Plan and the utility incentive as calculated in Exhibit AH-4 of EPE witness Hernandez and as shown in Exhibit AH-5 of EPE witness Hernandez.

IV. SUMMARY OF EPE'S ENERGY EFFICIENCY SAVINGS GOALS AND EPE'S PROGRESS TOWARDS THOSE GOALS

Q. WHAT ARE THE ENERGY EFFICIENCY SAVINGS GOALS THAT EPE MUST OBTAIN?

A. The EUEA requires investor-owned electric utilities to achieve a cumulative energy savings of five percent of 2005 retail kilowatt-hour ("kWh") sales by 2014, and eight percent of 2005 retail sales by 2020. EPE's energy savings goal for 2014 ("2014 Goal") was 65,815,596 kWh, and the goal for 2020 ("2020 Goal") is 105,304,953 kWh.

Q. WHAT PROGRESS HAS EPE MADE TOWARD ACHIEVING ITS ENERGY SAVINGS GOALS?

A. In 2014, EPE achieved a verified, cumulative energy savings of 72,485,216 kWh, or approximately 110 percent of the 2014 Goal. As of 2017, EPE has achieved a verified, cumulative energy savings of 118,301,310 kWh, which is 112.3 percent of the 2020 Goal. Please see Table 1 for the annual and cumulative energy savings for each year.

Table 1

Year	Annual kWh Savings	Annual Expired Portfolio kWh	Cumulative kWh Savings
2008	**855,912**		855,912
2009	4,667,928		5,523,840
2010	5,169,908		10,693,748
2011	14,728,590		25,422,338
2012	13,537,655		38,959,993
2013	12,832,995		51,792,988
2014	20,692,228		72,485,216
2015	15,729,342		88,214,558
2008 Exp.		**(855,912)**	87,358,646
2016	18,213,422		105,572,068
2017	12,729,242		118,301,310

Q. WHAT IS EPE'S ANTICIPATED ANNUAL AND CUMULATIVE ENERGY SAVINGS AT THE END OF 2018?

A. EPE anticipates that, by the end of 2018, the cumulative energy savings for EPE's EE/LM programs will be 131,548,093 kWh. The realized 2018 energy savings will be dependent upon achievements and the net-to-gross ratio applied by the statewide

M&V evaluator during its annual review of EPE's 2018 EE/LM plan year. If realized, the cumulative savings will be 125 percent of the 2020 Goal.

V. OVERVIEW OF EPE'S 2017 ACHIEVEMENTS AND 2018 ENERGY EFFICIENCY PROGRAMS

Q. HAS EPE FILED ITS 2017 ANNUAL REPORT FOR ENERGY EFFICIENCY PROGRAMS ("2017 ANNUAL REPORT") WITH THE COMMISSION?

A. Yes. EPE's 2017 EE/LM plan was approved by the NMPRC in Case No. 16-00185-UT. In accordance with 17.7.2.8.A NMAC, EPE filed its 2017 Annual Report in that docket and the report includes the statewide evaluator's report on the Evaluation of the 2017 El Paso Electric Energy Efficiency Programs ("M&V Report").

Q. WHAT WERE THE ENERGY SAVINGS EPE ACHIEVED FOR THE 2017 PROGRAM YEAR?

A. EPE achieved a total of 12,729,242 kWh of energy reduction through its 2017 EE/LM plan programs. A complete accounting of EPE's 2017 EE/LM programs is provided in EPE's 2017 Annual Report. EPE's energy reduction achievements were verified by the statewide M&V evaluator, Evergreen Economics.

Q. PLEASE SUMMARIZE EPE'S 2018 EXISTING EE/LM PROGRAMS.

A. EPE's existing EE/LM programs were approved by the Commission in Case No. 16-00185-UT and continued for 2018 in accordance with 17.7.2.8.A NMAC.

These programs are available to customers in participating rate classes, as discussed further in EPE witness Hernandez's direct testimony.

A detailed description of these programs can be found in EPE's 2017 Annual Report. Please see Exhibit AGP-1 for the 2018 program portfolio and the budget. For New Mexico residential customers, EPE currently offers the following programs:

- LivingWise® Program;
- Residential Comprehensive Program;
- CFL & LED Program;
- ENERGY STAR® New Homes Program; and
- NM EnergySaver Program.

For New Mexico commercial and industrial customers, EPE currently offers the following programs:

- SCORE Plus Program; and,
- Small Commercial Comprehensive Program.

In addition, large commercial customers who choose not to participate in any of EPE's commercial EE/LM programs have the option of pursuing their own energy efficiency efforts through the Large Customer Self-Direct Program under 17.7.2.10-11 NMAC. To date, no EPE customer has sought to pursue this option.

Q. WHY IS EPE'S DEMAND RESPONSE PILOT PROGRAM ("DRPP") NOT INCLUDED IN EPE'S 2018 EXISTING PROGRAMS?

A. EPE's DRPP was approved by Commission Final Order in Case No. 17-00016-UT as a three year pilot program and was implemented in 2017. The DRPP is not included

in EPE's 2018 existing EE/LM Programs because it is not currently cost-effective. EPE is continuing to gather data on the DRPP response results and is in the process of evaluating its cost effectiveness. Assuming the program becomes successful and is determined to be cost effective under the UCT, EPE would then propose incorporating the DRPP within its EE/LM portfolio in a future filing.

VI. EPE'S PROPOSED 2019, 2020, AND 2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN

EE/LM Plan Overview

Q. WHAT PERIOD OF TIME DOES THE PROPOSED EE/LM PLAN COVER?

A. In accordance with the recent amendments to 17.7.2 NMAC ("Rule"), EPE's EE/LM Plan contains a proposed portfolio of programs and budgets for calendar year 2019 through 2021. Once approved, the portfolio of programs will continue in effect until modified by the Commission. In accordance with the Rule, EPE will file its next new programs filing in 2021.

Q. WERE THERE ANY SIGNIFICANT CHANGES COMPARED TO THE EXISTING PORTFOLIO IN THE 2019-2021 EE/LM PLAN?

A. Yes. EPE requests approval to add the NM Appliance Recycling Program and the Commercial Load Management Program, as well as approval to terminate the CFL & LED Program. I describe the new programs in further detail on page 19 of my direct testimony.

Q. WHY DOES EPE PROPOSE TO TERMINATE THE CFL & LED PROGRAM?

A. EPE is proposing to remove its standalone CFL & LED Program from its energy efficiency portfolio due to reduced savings potential stemming from the Energy Independence and Security Act ("EISA") 2020 backstop, decreasing measure costs, and increasing market saturation. Because each of these factors has the potential to negatively impact the CFL & LED Program's cost-effectiveness, EPE proposes to remove the standalone program while still maintaining high efficiency lighting measures in programs with a more diverse measure mix.

Q. ARE THERE ANY OTHER SIGNIFICANT CHANGES TO THE EXISTING PROGRAMS?

A. Yes. EPE proposes to modify the Small Commercial Comprehensive Program to become a turn-key program administered by a third-party implementer and to rename it the Commercial Comprehensive Program. Currently, the program is administered by EPE with contractors installing approved measures. As a turn-key program, a third party implementer will both administer and implement the program through eligible contractors. All of EPE's commercial direct rebates are included in this program, and large commercial customers will also be eligible to participate in the rebates offered. I describe the proposed modifications to this program in more detail below.

Q. WHAT TYPES OF PROGRAMS IS EPE PROPOSING IN THE EE/LM PLAN?

A. The EE/LM Plan has five residential programs, which include one educational program and one low income program, along with three commercial programs, as shown in Exhibit AGP-2, and in Exhibit ADM-1 of EPE witness Martin's direct testimony.

Q. DO ALL OF EPE'S PROGRAMS IN THE EE/LM PLAN MEET THE UTILITY COST TEST?

A. Yes, as stated earlier, all of the programs in the EE/LM Plan pass the UCT for cost-effectiveness. Please refer to the direct testimony of EPE witness Martin and Exhibit ADM-1 for more details.

2019-2021 EE/LM Plan Budgets

Q. HOW DID EPE CALCULATE THE THREE PERCENT FUNDING LEVEL FOR THE PROPOSED 2019-2021 EE/LM PLAN YEAR BUDGETS?

A. In accordance with the Commission's Final Order in Case No. 16-00185-UT, EPE is required in future plan year applications to use historical annual actual revenues from the two years prior to a plan year, adjusted as appropriate, to calculate its plan year budgets[1]. EPE witness Hernandez calculated the three percent funding level for the proposed EE/LM Plan budgets based on historical 2017 revenues for all customer classes that are be subject to the EUERF for program years 2019 through 2021. Annual budgets were then set at three percent of the 2017 revenues for all three years

[1] NMPRC Case No. 16-00185-UT, Recommended Decision, ¶ H (Jan. 12, 2017).

as required by the EUEA and Rule. This resulted in a base annual funding level of $5,113,646. Please refer to EPE witness Hernandez's Exhibit AH-4.

Q. WERE ADJUSTMENTS MADE TO THE BASE ANNUAL FUNDING LEVEL?

A. Yes. An adjustment was made to the base annual funding level for the 2019 budget for the addition of an underage of $609,580 from program year 2017 as calculated in EPE witness Hernandez's Exhibit AH-3. This adjustment increases the total program budget for 2019 to $5,723,226. No adjustments have been made to the 2020 or 2021 base annual funding level budgets.

Q. HOW DOES EPE PROPOSE TO ADJUST ITS 2020 AND 2021 EE/LM PLAN'S BUDGETS?

A. EPE requests approval to modify its proposed budgets for plan years 2020 and 2021 based on actual 2018 and 2019 revenues, respectively, and to account for any overage or underage per the Rule. Within each plan year of the approved EE/LM Plan, EPE proposes to shift funding among Programs and to adjust plan year expenditures within the ten percent authorized by the Rule, thereby modifying approved EE/LM budgets to align plan year expenditures with required plan year funding requirements. Consistent with the EUEA and the Rule, EPE will reconcile authorized EE/LM Plan collections and expenditures, including utility incentive amounts, on an annual basis. EPE will report this annual reconciliation, as well as plan year and expected next plan year budget adjustments, in its Annual Report filed with the Commission.

Q. HOW DID EPE BUDGET FOR EACH PROGRAM?

A. Once EPE established its overall portfolio budget, based on the Rule's three percent funding requirement, EPE then refined the budget to the program level. The proposed budgets were developed based on past experience, anticipated participation levels by measure, and the associated measure incentive levels that were necessary to encourage participation. Each program was then reviewed to ensure that it met the cost effectiveness test as addressed in the direct testimony of EPE witness Martin.

Q. WHAT EXPENSES ARE INCLUDED IN THE 2019-2021 EE/LM PLAN BUDGETS AND HOW ARE THESE EXPENSES ALLOCATED TO INDIVIDUAL PROGRAM BUDGETS?

A. The EE/LM Plan budgets include programs expenses, marketing, general administration expenses, research and development, and internal administration costs. These expenses were allocated to the individual program budgets, as shown in Exhibit AGP-2.

Q. HOW ARE THE INTERNAL ADMINISTRATION COSTS RECOVERED?

A. The internal administration costs are recovered through base rates. These costs are not recovered in the EUERF, as shown in EPE witness Hernandez's Exhibit AH-4.

Q. DOES EPE'S EE/LM PLAN MEET THE REQUIREMENT UNDER THE EUEA THAT AT LEAST FIVE PERCENT OF THE TOTAL EXPENDITURES MUST BE DIRECTED TOWARDS LOW INCOME CUSTOMERS?

A. Yes. The NM EnergySaver Program, which is EPE's low income residential program, has a proposed budget that is approximately 9.7 percent for 2019, 10.5 percent for 2020, and 10.5 percent for 2021 of the overall annual budget for that year.

2019-2021 EE/LM Plan Utility Incentive

Q. IS EPE REQUESTING RECOVERY OF A UTILITY INCENTIVE FOR ITS EE/LM PLAN?

A. Yes. EPE is proposing the continuation of the incentive mechanism approved in Case No. 16-00185-UT for its EE/LM Plan utility incentive. In Case No. 16-00185-UT, EPE agreed with Staff's proposed utility incentive mechanism. EPE's approved baseline incentive was 7.1 percent for verified annual savings of 9 gigawatt-hours ("GWh"), with an adder incentive of 0.075 percent for each 1.0 GWh of additional energy savings, up to a maximum of 7.6657 percent. Consistent with that approved approach, EPE requests a baseline incentive of 7.1 percent of plan year program costs for verified annual savings of 9 GWh, with an adder incentive of 0.075 percent for each 1.0 GWh of additional energy savings up to a maximum of 7.6657 percent as addressed in EPE witness Hernandez's direct testimony.

Q. IS THE REQUESTED EE/LM PLAN UTILITY INCENTIVE CONSISTENT WITH THE RULE?

A. Yes. Section 8.L of the Rule requires a proposed utility incentive to be based on a utility's costs and on satisfactory performance of measures and programs, and to not

exceed the product of its weighted average cost of capital ("WACC") and approved programs costs. EPE's incentive proposal, which is the same as the incentive approved in Case No. 16-00185-UT, is based on EPE's EE/LM Plan program costs, and is performance based subject to true-up based on verified savings of program performance as shown in EPE witness Hernandez's direct testimony. This proposal will not result in a utility incentive which exceeds the amount of EPE's WACC of 7.6657 percent approved by the Commission in EPE's last general rate case, Case No. 15-00127-UT.

EPE's Competitive Bidding Process for the 2019-2021 EE/LM Plan

Q. WHAT WAS THE COMPETITIVE BIDDING PROCESS THAT RESULTED IN THE 2019-2021 EE/LM PLAN?

A. On October 9, 2017, EPE issued the El Paso Electric Company 2019–2021 New Mexico Energy Efficiency and Load Management Programs RFP # EPE-50062135-MM. EPE provided a tentative schedule within the RFP for the opportunity to ask questions, an Intent to Bid date, a Proposal Due date, and a Program Implementation date to name a few of the dates. EPE then provided all the questions and answers to all the bidders via email and on EPE's website. Bidders were asked to submit separate proposals for the following categories; educational programs, residential programs, low income programs, small commercial programs, large commercial programs, and residential and commercial load management programs. EPE then evaluated the proposals based on the required RFP criteria as discussed below.

Q. HOW DID EPE GIVE NOTICE OF THE 2019-2021 NEW MEXICO ENERGY EFFICIENCY AND LOAD MANAGEMENT PROGRAMS' RFP?

A. The RFP was publicly posted on EPE's website and a list of potential bidders were notified through electronic mail. The list of potential bidders consisted of members of the Association of Energy Services Professionals, local implementers, and other organizations from previous engagements.

Q. DID EPE RESPOND TO PROSPECTIVE BIDDER QUESTIONS?

A. Yes. EPE responded to bidder questions by posting the answers to the submitted questions on the Company's website, and responding to bidders electronically.

Q. HOW MANY PROPOSALS DID EPE RECEIVE IN RESPONSE TO THE RFP?

A. In response to the RFP, EPE received 21 proposals from 13 bidders who proposed various energy efficiency programs across the six program categories.

Q. CAN YOU SUMMARIZE THE PROCESS USED BY EPE TO EVALUATE THE BIDS IT RECEIVED IN RESPONSE TO THE RFP?

A. Yes. The process used by EPE to evaluate the bids it received in response to the RFP was to first verify that they met all criteria set forth in the RFP. Required criteria included: (1) completeness and responsiveness; (2) cost effectiveness; (3) evidence of energy saved; (4) experience; (5) financial viability and creditworthiness; (6) project schedule; and (7) technical capabilities.

Of the 21 proposals, seven proposals were disqualified due to one or more of the following criteria: (1) failure to demonstrate cost effectiveness; (2) out of the scope of the RFP; (3) lack of energy savings evidence; or (4) incompleteness of the proposal.

Based on the criteria stated above, it was determined that 14 of the 21 proposals met the requirements and were recommended for further evaluation. EPE used a comparative analysis to perform further evaluation of the remaining proposals. Based on the selection criteria, 7 of the 14 were eliminated during the comparative analysis, resulting in the final selection of 7 proposals from the total number of proposals for the EE/LM Plan.

Q. WHICH PROPOSALS WERE SELECTED BY EPE AS A RESULT OF THE RFP?

A. Based on the selection criteria, the following seven proposals were selected for the EE/LM Plan: LivingWise Program, Residential Comprehensive Program, ENERGY STAR® New Homes Program, NM EnergySaver Program, Commercial Comprehensive Program, SCORE Plus Program, and Commercial Load Management Program.

For the Commercial Comprehensive Program, the bidder was selected for their ability to provide a cost effective turn-key program and their past experience assisting in the Small Commercial Comprehensive Program.

For the Load Management Program, the bidder was selected for their technical capabilities, local presence, experience in implementing similar programs, and ability to integrate existing clientele into the program.

The current implementers for the LivingWise Program, Low Income Residential Program, and Residential Comprehensive Program were retained for their cost effectiveness, their experience, and their ability to provide evidence of energy savings.

Description of Proposed EE/LM Plan Programs

Q. PLEASE PROVIDE A DESCRIPTION OF EPE'S PROPOSED RESIDENTIAL PROGRAMS.

A. EPE has five proposed residential EE Programs. Following is a description of each program:

1. LivingWise® Program – This program serves as an effective community outreach program to improve customer awareness of energy efficiency measures and programs. Through this program, EPE identifies and enrolls teachers of 5th grade students, providing them with a LivingWise kit that contains energy saving devices and energy efficiency educational materials. The kits will continue to include three LED light bulbs, one 1.5 gpm kitchen faucet aerator, two 0.5 gpm bathroom faucet aerators, a digital thermometer, a flow rate test bag, a natural resource fact chart, and instructions on how to install all of the measures. EPE proposes to include an additional 1.5 gallons per minute ("gpm") low-flow showerhead, for a total of two showerheads per kit. All of the materials provided

meet state and national educational standards, which allow the program to easily fit into the teacher's existing requirements. The students take the LivingWise kit home, and with the help of their parents, install the devices in their home and complete a home energy audit report. All of the responses, including the home audits, teacher responses, student input and parent responses, are tabulated. This program is designed to generate immediate and long-term energy savings for participants.

2. Residential Comprehensive Program – This program offers rebates for the installation of various energy saving measures. The current measures include ceiling and floor insulation, duct sealing, air infiltration reduction, and solar screen installation. This program also offers rebates for eligible high efficiency evaporative coolers, central refrigerated air conditioners, mini-split air conditioning systems, and heat pumps. In addition, EPE provides rebates for energy efficient pool pump motors and insulation for homes with evaporative cooling that have electric resistance heating. EPE proposes to add rebates for attic encapsulation, ENERGY STAR® cool roof, ENERGY STAR® electric clothes dryers, ENERGY STAR® connected smart thermostats, and ENERGY STAR® windows to the Residential Comprehensive Program. The rebates are paid directly to the customer or, upon customer approval, can be paid to the contractors that perform the installation.

3. NM Appliance Recycling Program - This program will provide rebates designed to encourage EPE's residential customers to recycle their older, less efficient refrigerators and freezers rather than use them as secondary or backup units. The

NM Appliance Recycling Program offers eligible customers a $50 incentive for EPE to remove and recycle their old refrigerator or freezer.

4. ENERGY STAR® New Homes Program ("New Homes Program") – This program provides incentives for homebuilders to construct more energy efficient homes that exceed the current building code. There are two incentive paths in this program that homebuilders can choose from, depending upon which one fits their needs: the Prescriptive Path or the Performance Path. The measure-specific Prescriptive Path provides incentives based on above-code installation of a combination of measures including ENERGY STAR® lighting and refrigerators, high-efficiency cooling equipment, radiant barriers, and insulation. The Performance Path provides tiered incentive levels for new homes that exceed the 2009 International Energy Conservation Code. The minimum tier for homebuilders to qualify for the Performance Path is ten percent above the standard. The incentives for the New Homes Program are paid directly to the homebuilder or, upon their approval, to one of their subcontractors.

5. NM EnergySaver Program – This program is EPE's low income program that currently offers eligible residential customers, depending on their heating type, a variety of energy efficiency measures including insulation, lighting upgrades, low-flow showerheads, faucet aerators, duct sealing, and air infiltration reduction at no cost. EPE proposes to offer domestic hot water pipe insulation, ENERGY STAR® connected smart thermostats, domestic hot water tank insulation, and PAR 38 (parabolic aluminized reflector) LED 65 watt replacement as new measures. Qualification for the Program is based on an annual household income

at or below 200 percent of the federal poverty guidelines. In the EE/LM Plan, EPE will focus program promotions to those customers experiencing ability-to-pay problems. This program has been extremely successful due to the extensive collaboration with other community organizations that provide services to low income customers. In 2019-2021, EPE will continue to collaborate with New Mexico Gas Company and Zia Natural Gas to identify EPE customers that may be able to receive assistance.

Q. PLEASE PROVIDE A DESCRIPTION OF EPE'S 2019-2021 PROPOSED COMMERCIAL PROGRAMS.

A. EPE has three proposed commercial Programs. The following is a description of each program:

1. Commercial Comprehensive Program – This program offers incentives and rebates for lighting retrofits and new construction projects to commercial customers with an average demand of equal to or less than 100 kW, as well as technical support and outreach services as necessary. This program includes all of EPE's commercial direct rebates, such as commercial cooling, ENERGY STAR® cool roofs, Heating Ventilation and Air Conditioning ("HVAC") energy management, window treatments, vending energy misers, commercial pool pumps, and night covers for refrigeration cases. There is also a high efficiency HVAC tune-up measure that is available through participating contractors for this program. In the EE/LM Plan, EPE proposes to extend program rebates to commercial customers with an average demand greater than 100 kW. EPE also

proposes to add rebates for ENERGY STAR® commercial kitchen equipment, ENERGY STAR® beverage vending machines, and electronically commutated motors ("ECM") evaporator fan motors. New construction and retrofit projects are accepted in this program. Incentives and rebates are paid directly to the customer or, upon customer approval, may be paid to the contractors that perform the installation.

2. SCORE Plus Program – This program offers incentives for commercial customers with an average demand of greater than 100 kW, as well as all schools and city and county customers. This program also provides customers with technical support and outreach services as necessary. The SCORE Plus Program provides incentives for a wide range of energy efficiency measures including lighting, HVAC, equipment controls, and custom projects. As with the Commercial Comprehensive Program, there is a high efficiency HVAC tune-up measure that is available through participating contractors in this program. New construction and retrofit projects are accepted in this program. Incentives are paid directly to the customer or, upon customer approval, can be paid to the contractors that perform the installation.

3. Commercial Load Management Program – This program allows participating customers to provide, when requested by EPE, voluntary curtailment of electric consumption during peak demand periods in return for incentive payments. Incentives are based on verified demand savings that customers are able to achieve in response to notifications of voluntary curtailment events by EPE.

Demand savings and incentive payment amounts are based on the actual, verified load curtailments.

VII. PREFILING REQUIREMENT FOR STAKEHOLDER INPUT

Q. PLEASE DESCRIBE EPE'S PROCESS FOR SOLICITING NON-BINDING RECOMMENDATIONS FOR EPE'S EE/LM PLAN.

A. EPE issued a request for non-binding recommendations on the design and implementation of the programs via email on August 24, 2017. EPE solicited input from stakeholder groups, including the Commission Staff, the New Mexico Attorney General's office, and the New Mexico Energy, Minerals and Natural Resources Department, and other interested persons before seeking PRC approval. EPE held a Public Participation Meeting in Santa Fe, New Mexico, on October 12, 2017, and another in Las Cruces, New Mexico on June 12, 2018. EPE invited via e-mail all persons whose e-mail addresses are listed on the official service list for EPE's most recent EE/LM case, IRP case, and Rate Case. Please see Exhibit AGP-3 for the Official Service List and Exhibit AGP-4 for the list of the attendees. Some of the attendees provided non-binding recommendations that were evaluated by EPE of which I list below, and EPE witness Martin provides analysis for certain recommendations.

Q. WHAT NON-BINDING RECOMMENDATIONS DID EPE RECEIVE?

A. EPE received the following non-binding recommendations:

- to review the 2011 New Mexico Energy Efficiency Potential Study (the "2011 EEPS") for possible recommendations to include in the EE/LM Plan,
- to consider adding high efficiency cooler blower motors to the residential program, and
- multiple recommendations regarding low income households, as explained more thoroughly below.

Q. HAS EPE CONSIDERED AND RESEARCHED ALL OF THE NON-BINDING RECOMMENDATIONS?

A. Yes.

- After reviewing the 2011 EEPS, EPE included additional measures to the Residential and Commercial Programs, such as electric clothes dryers, attic encapsulation, windows, smart thermostats, and cool roofs.
- EPE considered and researched adding high efficiency cooler blower motors to the residential program. Upon evaluation, EPE decided to include evaporative cooler models with factory installed ECMs; but, determined that blower motor replacement was not a feasible measure.
- EPE considered and researched the list of recommendations and questions specific to low income households. After this evaluation, EPE decided to:
  - include additional measures for low income customers, as described by EPE witness Martin,
  - increase the NM EnergySaver program incentive budget in the EE/LM Plan,

- propose a NM Appliance Recycling Program and EnergyStar residential clothes dryer rebate,
- add the programmable thermostat to the Residential Comprehensive Program,
- foster better communication between customer service and EPE's Energy Efficiency department so as to support more families who need help with their electric bills. This will allow more streamlined customer participation, and
- increase coordination with other organizations supporting low income customers. EPE's NM EnergySaver Program has worked with community agencies in the region for many years and will continue to collaborate with these agencies to provide energy efficiency information as well as a conduit to EPE's programs for low income customers.

With regard to the statement that the majority of programs are only available to households with refrigerated air units, EPE has considered and evaluated additional measures for homes with evaporative cooling.

VIII. COMPLIANCE REQUIREMENTS

Q. HAS EPE MET THE FILING REQUIREMENTS OF THE RULE?

A. Yes. See Exhibit AGP-5 for the complete listing of all of the filing requirements of the Rule.

Q. HAS EPE COMPLIED WITH THE RECOMMENDED DECISION AND FINAL ORDER IN CASE NO. 16-00185-UT?

A. Yes. In Case No. 16-00185-UT, the Recommended Decision and Final Order directed EPE to:

1. Allocate program costs that support more than one measure or program among its individual measures and programs;
2. Use historic annual actual revenues from two years before the prior year, adjusted as appropriate, to calculate its prior year budgets;
3. Use the Commission-approved WACC grossed-up to incorporate EPE's payment of taxes on the equity component and adjusted down to reflect tax deductions EPE receives for its interest payments on the debt component;
4. Investigate achievable EE/LM programs available in its New Mexico service territory and analyze the cost-effectiveness of any such program as well as analyze whether to propose including any such EE/LM programs in its future filings;
5. Apply Rate Rider No. 17 to customers subject to Rate Nos. 11 and 25; and
6. EPE shall file testimony addressing the identity of the entity who employs the independent program evaluator and how the evaluator was chosen, the validity of the evaluator's free ridership assumptions used in the evaluator's most recent evaluation of EPE's EE/LM portfolio, and why EPE recovers M&V costs through its EE Rider and not through creation of a regulatory asset included in base rates.

Q. HAS EPE COMPLIED WITH THESE REQUIREMENTS?

A. Yes. EPE has complied with the requirements of the Final Order in Case No. 16-00185-UT. Please refer to Exhibit AGP-6 for a list of the EPE witnesses addressing each specific requirement.

Q. HAS EPE MET THE M&V REQUIREMENTS OF THE EUEA AND THE RULE?

A. Yes. The Commission-approved M&V evaluator, Evergreen Economics, performed its independent M&V evaluation of EPE's 2017 EE/LM Programs.

IX. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

2018 Program Budget

Programs	Budget				
	Customer Incentives	Administration*	Marketing	M&V	Total
Education	**$149,620**	**$7,697**	**$0**	**$0**	**$157,317**
LivingWise® Program	$149,620	$7,697	$0	$0	$157,317
Residential	**$1,433,415**	**$597,967**	**$0**	**$35,000**	**$2,066,382**
Residential Comprehensive Program	$954,548	$256,834	$0	$20,000	$1,231,382
CFL & LED Program	$296,500	$173,500	$0	$8,000	$478,000
ENERGY STAR® New Homes Program	$182,367	$167,633	$0	$7,000	$357,000
Low Income	**$462,016**	**$48,449**	**$0**	**$0**	**$510,465**
NM EnergySaver Program	$462,016	$48,449	$0	$0	$510,465
Commercial	**$1,140,223**	**$935,880**	**$0**	**$110,000**	**$2,186,103**
SCORE Plus Program	$730,502	$730,951	$0	$70,000	$1,531,453
Small Commercial Comprehensive Program	$409,721	$204,929	$0	$40,000	$654,650
Marketing All Programs	**$0**	**$0**	**$110,000**	**$0**	**$110,000**
Awareness Building Campaign	**$0**	**$0**	**$61,000**	**$0**	**$61,000**
General Administration	**$0**	**$100,000**	**$0**	**$0**	**$100,000**
Total Portfolio Costs	**$3,185,274**	**$1,689,993**	**$171,000**	**$145,000**	**$5,191,267**

*Administration includes EPE's internal administration costs of $240,746 recovered through base rates as approved for 2017 in Case No. 16-00185-UT

Exhibit AGP-1
Page of 1

2019						
Programs	**Customer Incentives**	**Administrative Expenses**	**Marketing**	**R&D**	**M&V Costs**	**Program Cost**
Education	**$ 40,413**	**$ 32,781**	**$ 2,745**		**$ -**	**$ 75,939**
LivingWise®	$ 40,413	$ 32,781	$ 2,745		$ -	$ 75,939
Residential	**$ 1,481,814**	**$ 577,651**	**$ 32,885**		**$ 35,000**	**$ 2,127,350**
Residential Comprehensive	$ 1,215,809	$ 315,843	$ 23,178		$ 20,000	$ 1,574,830
NM Appliance Recycling	$ 25,000	$ 73,337	$ 477		$ 8,000	$ 106,813
ENERGY STAR® New Homes	$ 241,005	$ 188,471	$ 9,230		$ 7,000	$ 445,707
Low Income	**$ 492,016**	**$ 53,775**	**$ 9,380**		**$ -**	**$ 555,171**
NM EnergySaver	$ 492,016	$ 53,775	$ 9,380		$ -	$ 555,171
Commercial	**$ 1,698,035**	**$ 1,024,360**	**$ 32,371**	**$ 100,000**	**$ 110,000**	**$ 2,964,766**
SCORE Plus	$ 746,778	$ 703,961	$ 14,236	$ 43,979	$ 60,000	$ 1,568,955
Commercial Comprehensive	$ 696,256	$ 226,965	$ 13,273	$ 41,004	$ 40,000	$ 1,017,499
Commercial Load Management	$ 255,000	$ 93,435	$ 4,861	$ 15,017	$ 10,000	$ 378,313
Totals	**$ 3,712,277**	**$ 1,688,568**	**$ 77,381**	**$ 100,000**	**$ 145,000**	**$ 5,723,226**

***Total 2019 Program Costs are based on 3% of 2017 retail revenues and includes an underage of $609,580 from 2017 Program Year.**

****Amounts may not add or tie due to rounding.**

Exhibit AGP-2
Page 1 of 3

2020						
Programs	**Customer Incentives**	**Administrative Expenses**	**Marketing**	**R&D**	**M&V Costs**	**Program Cost**
Education	**$ 40,413**	**$ 32,863**	**$ 2,745**		**$ -**	**$ 76,021**
LivingWise®	$ 40,413	$ 32,863	$ 2,745		$ -	$ 76,021
Residential	**$ 1,277,089**	**$ 543,357**	**$ 32,692**		**$ 27,000**	**$ 1,880,139**
Residential Comprehensive	$ 1,011,084	$ 281,010	$ 22,212		$ 20,000	$ 1,334,307
Refrigerator Recycling	$ 25,000	$ 73,387	$ 549		$ -	$ 98,937
ENERGY STAR® New Homes	$ 241,005	$ 188,960	$ 9,931		$ 7,000	$ 446,895
Low Income	**$ 465,142**	**$ 54,356**	**$ 10,219**		**$ 8,000**	**$ 537,717**
NM EnergySaver	$ 465,142	$ 54,356	$ 10,219		$ 8,000	$ 537,717
Commercial	**$ 1,444,084**	**$ 933,960**	**$ 31,725**	**$ 100,000**	**$ 110,000**	**$ 2,619,769**
SCORE Plus	$ 716,829	$ 678,241	$ 15,748	$ 49,639	$ 60,000	$ 1,520,458
Commercial Comprehensive	$ 472,255	$ 161,768	$ 10,375	$ 32,703	$ 40,000	$ 717,100
Commercial Load Management	$ 255,000	$ 93,951	$ 5,602	$ 17,658	$ 10,000	$ 382,212
Totals	**$ 3,226,728**	**$ 1,564,537**	**$ 77,381**	**$ 100,000**	**$ 145,000**	**$ 5,113,646**

***Total 2020 Program Costs are based on 3% of 2017 retail revenues.**

****Amounts may not add or tie due to rounding.**

Exhibit AGP-2
Page 2 of 3

2021						
Programs	**Customer Incentives**	**Administrative Expenses**	**Marketing**	**R&D**	**M&V Costs**	**Program Cost**
Education	**$ 40,413**	**$ 33,508**	**$ 2,745**		**$ 8,000**	**$ 84,665**
LivingWise®	$ 40,413	$ 33,508	$ 2,745		.	$ 84,665
Residential	**$ 1,279,014**	**$ 563,781**	**$ 33,149**		**$ 27,000**	**$ 1,902,944**
Residential Comprehensive	$ 1,013,009	$ 297,193	$ 22,583		$ 20,000	$ 1,352,784
NM Appliance Recycling	$ 25,000	$ 73,786	$ 557		$ -	$ 99,343
ENERGY STAR® New Homes	$ 241,005	$ 192,803	$ 10,009		$ 7,000	$ 450,816
Low Income	**$ 465,076**	**$ 61,771**	**$ 10,368**		**$ -**	**$ 537,215**
NM EnergySaver	$ 465,076	$ 61,771	$ 10,368		$ -	$ 537,215
Commercial	**$ 1,395,963**	**$ 955,519**	**$ 31,120**	**$ 96,220**	**$ 110,000**	**$ 2,588,822**
SCORE Plus	$ 666,832	$ 688,097	$ 14,865	$ 45,963	$ 60,000	$ 1,475,758
Commercial Comprehensive	$ 474,131	$ 169,404	$ 10,570	$ 32,681	$ 40,000	$ 726,785
Commercial Load Management	$ 255,000	$ 98,018	$ 5,685	$ 17,576	$ 10,000	$ 386,279
Totals	**$ 3,180,466**	**$ 1,614,579**	**$ 77,381**	**$ 96,220**	**$ 145,000**	**$ 5,113,646**

***Total 2021 Program Costs are based on 3% of 2017 retail revenues.**

****Amounts may not add or tie due to rounding.**

Exhibit AGP-2
Page 3 of 3

2019-2021 EE/LM Public Advisory Meeting Service List - October 12, 2017

	Name	Email Address	Rate Case	EE/LM	IRP	Notes
1	Alicia Armijo	Aarmijo@nmag.gov			X	
2	Cholla Khoury, Esq.	Ckhoury@nmag.gov	X			
3	Joseph Yar	Jyar@nmag.gov			X	
4	Charles Noble	noble.ccae@gmail.com	X	X	X	
5	Arnulfo Castaneda	acastaneda@cityofanthonynm.com	X			
6	Jennifer Vega-Brown	Jvega-brown@las-cruces.org			X	
7	Jorge A. Garcia	JAG@las-cruces.org		X	X	
8	Marcia B. Driggers	mdriggers@las-cruces.org			X	
9	Marcia Driggers	marcyd@las-cruces.org	X	X		
10	Robert Garza	rgarza@las-cruces.org	X			
11	Stuart C. Ed	Sed@las-cruces.org		X	X	
12	William R. Babington, Jr.	rbabington@las-cruces.org	X	X		
13	Tom Figart	tomf@donaanacounty.org	X	X	X	
14	Jill Tauber	jtauber@earthjustice.org	X			
15	Sara Gersen	sgersen@earthjustice.org	X			
16	Adrian J. Rodriguez	Adrian.rodriguez@epelectric.com	X			
17	Curtis Hutcheson	Curtis.hutcheson@epelectric.com	X	X	X	
18	James Schichtl	James.schichtl@epelectric.com		X		
19	Susanne Stone	susanne.stone@epelectric.com		X		
20	Araceli Perea	araceli.perea@epelectric.com				Additional to Official List
21	Mariah Novela	mariah.medley@epelectric.com				Additional to Official List
22	Leslie M. Padilla	lpadilla@dwmrlaw.com	X	X	X	
23	Nancy Burns	nancy.burns@epelectric.com	X	X	X	
24	Patricia Griego	Patricia.Griego@epelectric.com		X	X	
25	Kyle J. Smith	kyle.j.smith124.civ@mail.mil	X		X	
26	Robert Ganton	Robert.a.ganton.civ@mail.mil			X	
27	David Van Winkle	david@vw77.com			X	
28	Ken Hughes	ken.hughes@state.nm.us				Additional to Official List
29	Carla Sonntag	Carla@nmusa.org	X			
30	Anthony Sisneros	Anthony.sisneros@state.nm.us			X	
31	Bradford Borman	Bradford.Borman@state.nm.us			X	
32	Bruno Carrara	Bruno.carrara@state.nm.us	X			
33	Charles Gunter	Charles.gunter@state.nm.us			X	
34	Cydney Beadles	Cydney.Beadles@state.nm.us			X	
35	Elisha Leyba-Tercero	Elisha.Leyba-Tercero@state.nm.us	X		X	
36	Heidi Pitts	Heidi.Pitts@state.nm.us		X		
37	Jack Sidler	jack.sidler@state.nm.us			X	
38	Judith Amer	Judith.amer@state.nm.us			X	
39	Julie Park	Julie.Park@state.nm.us		X		
40	Michael C. Smith	Michaelc.smith@state.nm.us			X	
41	Russell Fisk	Russell.Fisk@state.nm.us		X		
42	John Reynolds	john.reynolds@state.nm.us				Additional to Official List
43	Doug Gegax	dgegax@nmsu.edu	X		X	
44	Glen Haubold	ghaubold@ad.nmsu.edu			X	
45	Lizbeth Ellis	lellis@nmsu.edu	X		X	
46	Allen Downs	ecomaxac@lifeisgood2.com	X	X	X	
47	Jason Marks	lawoffice@jasonmarks.com	X	X	X	
48	Rocky Bacchus	rocky.bacchus@gmail.com	X	X	X	
49	Ramona Blaber	Ramona.Blaber@sierraclub.org	X	X		
50	Adam Bickford	abickford@swenergy.org		X		
51	Howard Geller	hgeller@swenergy.org		X		
52	J. Cotton/ A. Crane	ctcolumbia@aol.com	X		X	
53	Rick Gilliam	rick@votesolar.org			X	
54	Steve Michel	smichel@westernresources.org	X		X	
55	Anastasia Stevens	ast@keleher-law.com	X	X	X	
56	Andrew Harriger	akharriger@sawvel.com	X			
57	Bruce Throne	bthroneatty@newmexico.com	X			
58	Carol A. Clifford	Carol@thejonesfirm.com			X	
59	Dahl Harris	dahlharris@hotmail.com	X			
60	Dan Neidlinger	dneid@cox.net			X	
61	Don Hancock	sricdon@earthlink.net	X	X	X	
62	Jerry Todd Wertheim	Todd@thejonesfirm.com			X	
63	Jim Dittmer	jdittmer@utilitech.net	X			
64	Joan E. Drake	Jdrake@modrall.com	X		X	

2019-2021 EE/LM Public Advisory Meeting Service List - October 12, 2017						
	Name	Email Address	Rate Case	EE/LM	IRP	Notes
65	Joe Hertz, PE	jaherz@sawvel.com	X			
66	John Wellinghoff	jon.wellinghoff@stoel.com	X			
67	Johsua L. Smith	jsmith.watsonlawlc@gmail.com	X			
68	Kelly Crandall	kcrandall@kfwlaw.com	X			
69	Kurt Wihl	kw@keleher-law.com	X			
70	Megan O'Reilly	arcresearchandanalysis@gmail.com	X			
71	Merrie Lee Soules	mlsoules@hotmail.com	X		X	
72	Nann M. Winter	nwinter@stelznerlaw.com	X			
73	Noel John Schaefer	schaefno@gmail.com	X		X	
74	Stephen Fischmann	Stephen.Fischmann@gmail.com			X	
75	Tom Solomon	tasolomon6@gmail.com			X	
76	William Steele	wa.steele@hotmail.com	X			
77	Dan Townsend	ecolo100@hotmail.com				Additional to Official List

2019-2021 EE/LM Public Advisory Meeting Service List - June 12, 2017						
	Name	Official Service List Email Address	Rate Case	EE/LM	IRP	Notes
1	Alicia Armijo	Aarmijo@nmag.gov			X	
2	Joseph Yar	Jyar@nmag.gov			X	
3	Charles Noble	noble.ccae@gmail.com	X	X	X	
4	Mayor Diana M. Trujillo	mayortrujillo@cityofanthonynm.org				Additional to Service List
5	William R. Babington, Jr.	rbabington@las-cruces.org	X	X		
6	Jennifer Vega-Brown	Jvega-brown@las-cruces.org			X	Additional to Official List
7	Jorge A. Garcia	JAG@las-cruces.org		X	X	
8	Marcia B. Driggers	mdriggers@las-cruces.org	X	X	X	
9	Robert Garza	rgarza@las-cruces.org	X			Delivery Failure
10	Stuart C. Ed	Sed@las-cruces.org		X	X	
11	Tom Figart	tomf@donaanacounty.org	X	X	X	
12	Jill Tauber	jtauber@earthjustice.org	X			
13	Sara Gersen	sgersen@earthjustice.org	X			
14	Adrian J. Rodriguez	Adrian.rodriguez@epelectric.com	X			
15	Curtis Hutcheson	Curtis.hutcheson@epelectric.com	X	X	X	
16	James Schichtl	James.schichtl@epelectric.com		X		
17	Susanne Stone	susanne.stone@epelectric.com		X		
18	Araceli Perea	araceli.perea@epelectric.com				Additional to Official List
19	Mariah Novela	mariah.medley@epelectric.com				Additional to Official List
20	Nancy Burns	nancy.burns@epelectric.com	X	X	X	
21	Patricia Griego	Patricia.Griego@epelectric.com		X	X	
22	Kyle J. Smith	kyle.j.smith124.civ@mail.mil	X		X	
23	Robert Ganton	Robert.a.ganton.civ@mail.mil			X	
24	David Van Winkle	david@vw77.com			X	Requested to be Removed From Case
25	Ken Hughes	ken.hughes@state.nm.us				Additional to Official List
26	Carla Sonntag	Carla@nmusa.org	X			
27	Anthony Sisneros	Anthony.sisneros@state.nm.us			X	
28	Bradford Borman	Bradford.Borman@state.nm.us			X	
29	Charles Gunter	Charles.gunter@state.nm.us			X	
30	Cydney Beadles	Cydney.Beadles@state.nm.us			X	
31	Elisha Leyba-Tercero	Elisha.Leyba-Tercero@state.nm.us	X		X	
32	Heidi Pitts	Heidi.Pitts@state.nm.us		X		
33	Jack Sidler	jack.sidler@state.nm.us			X	
34	Judith Amer	Judith.amer@state.nm.us			X	
35	Milo Chavez	Milo.Chavez@state.nm.us				Additional to Official List
36	Michael C. Smith	Michaelc.smith@state.nm.us			X	
37	Russell Fisk	Russell.Fisk@state.nm.us		X		
38	John Reynolds	john.reynolds@state.nm.us				Additional to Official List
39	Doug Gegax	dgegax@nmsu.edu	X		X	
40	Glen Haubold	ghaubold@ad.nmsu.edu			X	
41	Lizbeth Ellis	lellis@nmsu.edu	X		X	
42	Allen Downs	ecomaxac@lifeisgood2.com	X	X	X	
43	Jason Marks	lawoffice@jasonmarks.com	X	X	X	
44	Rocky Bacchus	rocky.bacchus@gmail.com	X	X	X	
45	Ramona Blaber	Ramona.Blaber@sierraclub.org	X	X		
46	Adam Bickford	abickford@swenergy.org		X		
47	Howard Geller	hgeller@swenergy.org		X		
48	J. Cotton/ A. Crane	ctcolumbia@aol.com	X		X	
49	Rick Gilliam	rick@votesolar.org			X	
50	Steve Michel	smichel@westernresources.org	X		X	
51	Anastasia Stevens	astevens.law@gmail.com	X	X	X	
52	Andrew Harriger	akharriger@sawvel.com	X			
53	Bruce Throne	bthroneatty@newmexico.com	X			
54	Carol A. Clifford	Carol@thejonesfirm.com			X	
55	Dahl Harris	dahlharris@hotmail.com	X			
56	Dan Neidlinger	dneid@cox.net			X	
57	Don Hancock	sricdon@earthlink.net	X	X	X	
58	Jerry Todd Wertheim	Todd@thejonesfirm.com			X	
59	Jim Dittmer	jdittmer@utilitech.net	X			

2019-2021 EE/LM Public Advisory Meeting Service List - June 12, 2017						
	Name	Official Service List Email Address	Rate Case	EE/LM	IRP	Notes
60	Joan E. Drake	Jdrake@modrall.com	X		X	
61	Joe Hertz, PE	jaherz@sawvel.com	X			
62	John Wellinghoff	jon.wellinghoff@stoel.com	X			Delivery Failure
63	Johsua L. Smith	jsmith.watsonlawlc@gmail.com	X			
64	Kelly Crandall	kcrandall@kfwlaw.com	X			Delivery Failure
65	Megan O'Reilly	arcresearchandanalysis@gmail.com	X			
66	Merrie Lee Soules	mlsoules@hotmail.com	X		X	
67	Nann M. Winter	nwinter@stelznerlaw.com	X			
68	Noel John Schaefer	schaefno@gmail.com	X		X	
69	Stephen Fischmann	Stephen.Fischmann@gmail.com			X	
70	Tom Solomon	tasolomon6@gmail.com			X	
71	William Steele	wa.steele@hotmail.com	X			
72	Dan Townsend	ecolo100@hotmail.com				Additional to Official List
73	Desmond Machuca	desmond.machuca@epelectric.com				Additional to Official List
74	Walter Guerrero	walter.guerrero@epelectric.com				Additional to Official List
75	Crystal Enoch	crystal.enoch@epelectric.com				Additional to Official List
76	Geoffrey Becker	geoffrey.becker@epelectric.com				Additional to Official List
77	Nathan Bouche	nathan.bouche@clearesult.com				Additional to Official List
78	Jon Gaumer	jgaumer@clearesult.com				Additional to Official List
79	James Heier	jheier@resourceaction.com				Additional to Official List
80	Lee Moran	LMoran@resourceaction.com				Additional to Official List
81	Robin Ribble-Harder	Robin.Ribble-Harder@icf.com				Additional to Official List
82	Monica Villanueva-Rust	monica.rust@icf.com				Additional to Official List
83	Steven Ellison	Steven.Ellison@icf.com				Additional to Official List
84	David Dollahon	ddollahon@las-cruces.org				Additional to Official List
85	Maritza Perez	maritza.perez@epelectric.com				Additional to Official List
86	Justin Brant	jbrant@swenergy.org				Additional to Official List

2019-2021 EE/LM Public Advisory Meeting RSVP & Attendee List - October 12, 2017				
Present	**Name**	**Email**	**Webinar**	**Santa Fe**
	Carol Clifford	carol@thejonesfirm.com	X	
X	Jiadai Lin	jiadai@thejonesfirm.com		X
	Dale Harrell	dharrell@ad.nmsu.edu	X	
	Alton Looney	Alton Looney <alooney@ad.nmsu.edu>	X	
X	Patrick Chavez	pchavez@nmsu.edu	X	
X	Lisa LaRocque	Lisa LaRocque <llarocque@las-cruces.org>	X	
X	Philip Simpson	philipbsimpson@comcast.net	X	
	Nelson J. Goodin	Nelson J. Goodin <nelsong@donaanacounty.org>	X	
X	Bradford Borman	Bradford.Borman@state.nm.us		X
	Steve Bean	steven.bean@pnm.com	X	
X	Erik Seelinger	erick.seelinger@pnm.com	X	
X	Jeremy Lovelady	jeremy.m.lovelady@xcelenergy.com	X	
X	Steve Casey	slcasey@tecoenergy.com	X	
X	Amy Martin	amartin@frontierassoc.com	X	
	Jean Krausse	jkrausse@frontierassoc.com	X	
X	Susanne Stone	susanne.stone@epelectric.com		X
X	Araceli Perea	araceli.perea@epelectric.com		X
X	Curtis Hutcheson	curtis.hutcheson@epelectric.com		X
X	Walter Guerrero	walter.guerrero@epelectric.com	X	
X	Desmond Machuca	desmond.machuca@epelectric.com	X	
X	Whitney Hardin	whitney.hardin@epelectric.com	X	
X	Nancy Burns	nancy.burns@epelectric.com		X
X	Patricia Griego	Patricia.Griego@epelectric.com		X
X	Mariah Novela	mariah.medley@epelectric.com	X	
X	Allen Downs	ecomaxac@lifeisgood2.com		X
X	Carla Sonntag	Carla@nmusa.org	X	
X	Howard Geller	hgeller@swenergy.org	X	
X	Stephen Fischmann	Stephen.Fischmann@gmail.com		X
X	Tom Figart	tomf@donaanacounty.org	X	
X	Sharon James	sharon.james@pnm.com	X	

2019-2021 EE/LM Public Advisory Meeting RSVP & Attendee List - June 12, 2017				
Present	**Name**	**Email**	**Webinar**	**Las Cruces**
X	Nathan Bouche	nathan.bouche@clearesult.com		X
X	Jon Gaumer	jgaumer@clearesult.com		X
X	Susanne Stone	susanne.stone@epelectric.com		X
X	Araceli Perea	araceli.perea@epelectric.com		X
X	Mariah Novela	mariah.medley@epelectric.com		X
X	Nancy Burns	nancy.burns@epelectric.com	X	
X	Desmond Machuca	desmond.machuca@epelectric.com		X
X	Walter Guerrero	walter.guerrero@epelectric.com		X
X	Crystal Enoch	crystal.enoch@epelectric.com		X
X	Curtis Hutcheson	Curtis.hutcheson@epelectric.com		X
X	Patricia Griego	patricia.griego@epelectric.com	X	
X	Maritza Perez	martiza.perez@epelectric.com	X	
X	Steven Ellison	Steven.Ellison@icf.com	X	
X	John Reynolds	john.reynolds@state.nm.us	X	
X	James Heier	jheier@resourceaction.com	X	
X	Lee Moran	LMoran@resourceaction.com	X	
X	Merrie Lee Soules	mlsoules@hotmail.com		X
X	Allen Downs	biz@lifeisgood2.com		X
X	Jack Sidler	jack.sidler@state.nm.us	X	
X	Robin Ribble-Harder	Robin.Ribble-Harder@icf.com	X	
X	Anastasia Stevens	astevens.law@gmail.com	X	
	Chuck Noble	noble.ccae@gmail.com	X	
X	Justin Brant	jbrant@swenergy.org	X	
X	Doug Campion	dcampion@smarterworks.net	X	
X	Carol Clifford	carol@thejonesfirm.com	X	
X	Larry Weight	LWeight@resourceaction.com	X	
X	Amy Martin	amartin@frontierenergy.com		X
X	Derek Neumann	dneumann@frontierenergy.com		X

17.7.2.8 PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	Witness/Reference
A. Timing. Beginning in the year specified below, each public utility shall file an application every three years:	Perea

2018	2019	2020
El Paso Electric Company (and its successors)	Southwest Public Service Company (and its successors)	Public Service Company of New Mexico (and its successors)
Zia Natural Gas Company (and its successors)	New Mexico Gas Company (and its successors)	Raton Natural Gas Company (and its successors)
		Any other public utility

Each of the three years covered by an application shall, for the purposes of 17.7.2.7 NMAC, be treated as a plan year. Each public utility may, but is not required to, file an application prior to the year specified in this subsection. If a utility does not elect to file an application prior to the year specified in this subsection, the measures, programs and incentive approved in the utility's last energy efficiency case shall continue in effect until modified or terminated. If a utility does elect to file an application prior to the year specified in this subsection, the measures, programs and incentive approved in that case shall continue in effect as provided by the commission. All utilities shall file their annual reports each year and in the same docket as the application that covered the period of the annual report. Public service company of New Mexico (and its successors) shall file its application and its annual reports on April 15 of the applicable year. Southwestern public service company (and its successors) shall file its application and its annual reports on May 15 of the applicable year. El Paso Electric Company (and its successors) shall file its application and its annual reports on June 1 of the applicable year. A natural gas company shall file its annual report on or before July 1 of each year, and shall file its application on or before August 31 of the applicable year in which it is required to file an application. If a specified filing date falls on a weekend or legal holiday, the public utility shall file on the next business day.

B. Compliance with pre-filing requirements. Applications shall describe how the public utility has met the pre-filing requirements of Subsection E of Section 62-17-5 NMSA 1978, including descriptions of the process used to solicit non-binding recommendations, and any competitive bids required by the commission for good cause. The public utility shall identify by name, association, and contact information, each interested party that participated in the process, including commission staff, the attorney general, and the energy, minerals and natural resources department. The public utility shall summarize each participant's non-binding recommendation on the design, implementation, and use of third-party energy service contractors through competitive bidding for programs and measures.	Perea
C. The public utility shall identify within its application its estimated plan year funding for energy efficiency and load management program costs.	Perea
(1) Estimated plan year funding for electric public utilities' energy efficiency and load management program costs shall be three percent of billing revenues from all of its customers' bills that the public utility estimates to be billed during the plan year, excluding:	Perea
(a) gross receipts taxes and franchise and right-of-way access fees;	Perea
(b) revenues that the public utility estimates to bill during the plan year to any single customer that exceed seventy five thousand ($75,000);	Perea
(c) any customer's plan year self-directed program credits approved by the public utility or by a commission approved self-direct administrator; and	Perea

Exhibit AGP-5
Page 1 of 10

17.7.2.8 PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	Witness/Reference
(d) any customer's plan year self-directed program exemptions approved by the public utility or by a commission approved self-direct administrator.	Perea
(2) Estimated plan year funding for gas public utilities' energy efficiency and load management program costs shall not exceed three percent of customers' bills that the public utility estimates to be billed during the plan year, excluding:	N/A
(a) gross receipts taxes and franchise and right-of-way access fees;	N/A
(b) revenues that the public utility estimates to bill during the plan year to any single customer that exceed seventy five thousand ($75,000);	N/A
(c) any customer's plan year self-directed program credits approved by the public utility or by a commission approved self-direct administrator; and	N/A
(d) any customer's plan year self-directed program exemptions approved by the public utility or by a commission approved self-direct administrator	N/A
D. The public utility's application shall calculate and provide the difference between its actual prior plan year expenditures for measures and programs and the same plan year's applicable funding required by statute. At the end of each plan year, the public utility shall calculate the following applicable values:	Perea/Hernandez
(1) any plan year overage; or	Perea/Hernandez
(2) any plan year underage.	Perea/Hernandez
E. In each plan year, a public utility shall make its best efforts to expend its applicable plan funding as calculated in Subsection C of 17.7.2.8 NMAC above subtracting any applicable prior plan year overage or adding any applicable prior plan year underage; provided, however, that a public utility may periodically adjust its plan year expenditures by an amount not greater than ten percent of the applicable funding required by statute if the adjustment will result in aligning plan year expenditures more closely with projected plan year collections under the utility's energy efficiency rider. By motion in the docket of its most recent energy efficiency case a utility may seek approval to adjust its plan year expenditures by more than ten percent of the applicable funding required by statute.	Perea
F. The application shall include an executive summary to facilitate commission review.	Application
G. The utility shall utilize well known, commercially available or standard engineering, economic and financial calculations, ratings, and simulations, or other reasonable methods, to determine monetary costs and avoided monetary costs of measures and programs.	Martin
H. For each proposed measure or program, including previously approved measures and programs submitted for reauthorization, the application shall provide:	Perea
(1) the public utility's statement that the measure or program is estimated to be cost-effective and meets the utility cost test;	Perea
(2) a detailed description of the proposed measure or program;	Perea
(3) the expected useful life of the measure or program;	Martin
(4) any participation requirements and restrictions of the measure or program;	Perea/Martin
(5) the time period during which the measure or program will be offered;	Perea
(6) a description of any competitive bid process for utility measures or programs;	Perea
(7) the estimated number of measure or program participants, supported by written testimony and exhibits;	Perea
(8) the estimated economic benefit to the participants attributable to the measure or program, supported by written testimony and exhibits;	Martin
(9) the estimated annual energy savings and the estimated energy savings over the useful life for the measure or program (expressed in kilowatt hours and dollars), supported by written testimony and exhibits;	Perea
(10) the estimated annual demand savings and the estimated demand savings over the useful life for the measure or program (expressed in kilowatts and dollars), supported by written testimony and exhibits;	Perea

Exhibit AGP-5
Page 2 of 10

17.7.2.8 PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	Witness/Reference
(11) the proposed program costs to be incurred by the utility to support more than one measure or program, along with the associated allocation of this cost to each measure or program, and the method used to determine each allocation, supported by written testimony and exhibits;	Perea
(12) a detailed separate measure or program budget that identifies the estimated monetary program costs to be incurred by the public utility in acquiring, developing, and operating each measure and program on a life cycle basis, for each year of the expected useful life of the measure or program;	Perea
(13) the estimated monetary program costs to be incurred by the public utility in acquiring, developing, and operating each measure or program on a life cycle basis, supported by written testimony and workpapers that:	Perea
(a) demonstrate and justify how the estimated monetary program costs will be equal to or greater than the actual monetary program costs; and	Perea
(b) explain the public utility's rationale and methodology used to determine the estimated monetary program	Perea
(14) the estimated avoided monetary cost associated with developing, acquiring and operating associated supply side resources, supported by written testimony and exhibits that:	Perea
(a) demonstrate and justify how the estimated avoided monetary cost will be equal to or greater than the actual avoided monetary cost; and	Perea
(b) explain the public utility's rationale and methodology used to estimate the avoided monetary cost associated with acquiring, developing, and operating the associated supply side resource.	Perea
(15) supporting documentation, underlying data, calculations, estimates and other items shall be presented in a manner that facilitates the preparation of a measurement and verification report by an independent program evaluator, along with compilation and preparation of the public utility's reporting requirements, and that facilitates a simple comparison of measure or program estimated results to actual results, including the public utility's cost of capital and discount rate; and	Perea
(16) if the utility cost test is not met, justify why the utility is proposing to implement the program within its portfolio of proposed programs.	Perea
I. The public utility shall demonstrate, and has the burden to demonstrate, that it has evaluated and determined that the proposed measure or program is cost-effective and will reduce energy usage or energy demand or both, if approved by the commission and implemented by the utility.	Perea
J. The public utility shall demonstrate that its portfolio of proposed measures and programs are cost-effective, meets the utility cost test as defined by Subsection C of Section 62-17-4 NMSA 1978 and are designed to provide every affected customer class with the opportunity to participate and benefit economically.	Perea
K. The public utility shall demonstrate that no less than five percent of the funding for measure and program costs shall be specifically directed to measures or programs for low-income customers.	Perea
L. As stated in Subsection F of Section 62-17-5 NMSA 1978, applications may include a proposal for an opportunity to earn a profit on cost effective energy efficiency and load management resource development that, with satisfactory program performance, is financially more attractive to the public utility than a supply- side utility resource. Accordingly, any application that includes a proposed annual incentive award shall:	Hernandez
(1) be based on the utility's costs;	Hernandez
(2) be based on satisfactory performance of measures and programs;	Hernandez
(3) be supported by written testimony and exhibits; and	Hernandez
(4) shall not exceed the product (expressed in dollars) of:	Hernandez
(a) its weighted cost of capital (expressed as a percent), and	Hernandez
(b) its approved annual program costs.	Hernandez

Exhibit AGP-5
Page 3 of 10

17.7.2.8 PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	Witness/Reference
M. For each approved large customer self-directed program, the utility's application shall describe, in an annual report, the process that enabled the utility to determine that a large customer self-directed program met the cost-effective definition set forth in Subsection B of Section 62-17-9 NMSA 1978 and merited the credit or exemption.	Perea
N. The commission shall act expeditiously on the public utility's request for approval of its energy efficiency and load management measures and programs.	Perea
17.7.2.9 RESIDENTIAL PROGRAMS:	
A. The programs should enable residential customers or households to conserve energy, reduce demand, or reduce residential energy bills.	Perea
B. Provided that the public utility's total portfolio of programs remains cost-effective, no less than five percent of the amount received by the public utility for program costs shall be specifically directed to energy efficiency programs for low-income customers.	Perea
(1) A public utility may coordinate with existing community resources, including affordable housing programs, and low-income weatherization programs managed by federal, state, county, or local governments. This section does not preclude the public utility from designing and proposing other low-income programs.	Perea
(2) Whenever possible, providers of low-income energy efficiency measures or programs should have demonstrated experience and effectiveness in the design, administration and provision of low-income measures and programs, along with experience in identifying and conducting outreach to low-income households. In the absence of qualified independent agencies, a public utility that does not provide measures or programs directly, may solicit qualified competitive bids for these services.	Perea
(3) Public utilities shall notify customers experiencing ability-to-pay problems of the availability of energy efficiency and load management measures and programs, as well as hardship funds.	Perea
(4) In developing the utility cost test for energy efficiency and load management measures and programs directed to low-income customers, unless otherwise quantified in a commission proceeding, the public utility shall assume that twenty percent of the calculated energy savings is the reasonable value of reductions in working capital, reduced collection costs, lower bad-debt expense, improved customer service, effectiveness, and other appropriate factors qualifying as utility system economic benefits.	Perea
17.7.2.10 SELF-DIRECTED PROGRAM CREDITS FOR LARGE CUSTOMERS: The following criteria apply to large customer utility credits for self-directed programs.	N/A
A. The expenditures made by the large customer at its facilities shall be cost-effective according to the utility cost test.	N/A
B. Projects that have received rebates, financial or other program support from a utility are not eligible for a credit.	N/A
C. Eligible expenditures must have a simple payback period of more than one year but less than seven years.	N/A
D. Large customers shall seek and receive approval for credits from the utility or a commission-approved self-direct administrator.	N/A
E. Large customers applying for an investor-owned electric utility bill credit must meet the electricity consumption size criteria set forth in Subsection G of Section 62-17-4 NMSA 1978 and the utility cost test.	N/A
F. Large customers applying for gas utility bill credit must meet the gas consumption criteria as set forth in Subsection G of Section 62-17-4 NMSA 1978 and the utility cost test.	N/A
G. Large customers seeking a credit shall provide, to the public utility or the commission-approved self-direct program administrator, access to all relevant engineering studies and documentation needed to verify energy savings of the project, and allow access to its site for reasonable inspections, at reasonable times. All records relevant to a self-direct program shall be maintained by the large customer for the duration of that program, which shall be evaluated in accordance with 17.7.2.15 NMAC, subject to appropriate protections for confidentiality.	N/A

Exhibit AGP-5
Page 4 of 10

17.7.2.8 PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	Witness/Reference
H. The utility shall designate a qualified representative to review, approve, or disapprove large customer requests for credits.	N/A
I. The commission may appoint a "commission-approved" self-direct program administrator to review, approve, or disapprove large customer requests for credits.	N/A
J. Approvals or disapprovals by the utility representative or administrator shall be subject to commission review. Within 30 business days of the action, the utility representative or administrator shall file and serve notice of each self-direct program review, approval, or disapproval with the commission, and on all interested parties. Notice of an appeal of a utility or administrator approval or disapproval of a large customer credit request shall be filed with the commission within 30 calendar days of the approval or disapproval action by Staff, the large customer or any interested party.	N/A
K. Once approved, the credit may be used to offset up to seventy percent of the tariff rider authorized by the Efficient Use of Energy Act, until said credit is exhausted.	N/A
L. Any credit not fully utilized in the year it is received shall carry over to subsequent years.	N/A
M. Implementation of credits shall be designed to minimize utility administrative costs.	N/A
N. Self-direct program participants, or large customers seeking exemption, shall submit qualified in-house or contracted engineering studies, and such other information as may be reasonably required by the utility or program administrator, to demonstrate qualification for self-direct program credits.	N/A
O. Large customers must respond to reasonable utility or administrator information requests and allow the utility or an administrator to perform necessary site visits.	N/A
P. The utility or administrator shall act in a timely manner on requests for self-direct program approval.	N/A
Q. For investor-owned electric utilities, the equivalent amount of energy savings associated with a large customer's self-directed program will be accounted for in calculating its compliance with minimum required energy savings.	N/A
R. Large customer expenditures incurred to produce electric energy savings or electric demand savings are only eligible for an electric utility bill credit. Large customer expenditures incurred to produce natural gas energy savings or natural gas demand savings are only eligible for a gas utility bill credit. Large customer expenditures incurred to produce both electric and natural gas energy savings, both electric and natural gas demand savings, or any combination of energy savings and demand savings for both electric and natural gas are eligible for both an electricity bill credit and a gas utility bill credit, provided that the same energy efficiency expenditures or load management expenditures cannot be accounted for twice.	N/A
S. Upon written request by the large customer, the information provided by that customer to the utility or program administrator, program evaluator, or others, shall remain confidential, except as otherwise ordered by the commission.	N/A
17.7.2.11 SELF-DIRECTED PROGRAM EXEMPTIONS FOR LARGE CUSTOMERS: The following criteria apply to utility exemptions to large customers for self-directed programs.	N/A
A. To receive approval for an exemption to paying seventy percent of the tariff rider, a large customer must demonstrate to the reasonable satisfaction of the utility or self-direct program administrator that it has exhausted all cost-effective energy efficiency measures at its facility.	N/A
B. Projects that have received rebates, financial or other program support from a utility are not eligible for an exemption.	N/A
C. Eligible expenditures must have a simple payback period of more than one year but less than seven years.	N/A
D. Large customers shall seek and receive approval for exemptions from the utility or a commission-approved self-direct administrator.	N/A
E. Large customers applying for an investor-owned electric utility bill exemption must meet the electricity consumption size criterion set forth in Subsection G of Section 62-17-4 NMSA 1978.	N/A

Exhibit AGP-5
Page 5 of 10

17.7.2.8 PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	Witness/Reference
F. Large customers applying for a gas utility bill exemption must meet the gas consumption criterion set forth in Subsection G of Section 62-17-4 NMSA 1978	N/A
G. The utility shall designate a qualified representative to review and approve, or disapprove, large customer requests for exemptions.	N/A
H. The commission may appoint a "commission-approved" self-direct program administrator to review and approve, or disapprove, large customer requests for exemptions.	N/A
I. Approvals or disapprovals by the utility representative or administrator shall be subject to commission review. Within 30 business days of the action, the utility representative or administrator shall file and serve notice of each self-direct program approval or disapproval with the commission, and on all interested parties. Notice of an appeal of a utility or administrator approval or disapproval of a large customer exemption request shall be filed with the commission within 30 calendar days of the approval or disapproval action by staff, the large customer or any interested party.	N/A
J. Self-direct program participants, or large customers seeking an exemption shall provide, to the public utility or the commission approved self-direct program administrator, access to all relevant engineering studies and documentation needed to verify energy saving of the project, and allow access to its site for reasonable inspections, at reasonable times. All records relevant to a self-direct program shall be maintained by the large customer for the duration of that program, which shall be evaluated in accordance with 17.7.2.15 NMAC, subject to appropriate protections for confidentiality.	N/A
K. Self-direct program participants, or large customers seeking exemption, shall submit qualified in-house or contracted engineering studies, and such other information as may be reasonably required by the utility or program administrator, to demonstrate qualification for self-direct program exemptions.	N/A
L. Large customers must respond to reasonable utility or administrator information requests and allow the utility or an administrator to perform necessary site visits.	N/A
M. The utility or administrator shall act in a timely manner on requests for self-direct program approval.	N/A
N. For investor-owned electric utilities, the equivalent amount of energy savings associated with a large customer's self-directed program will be accounted for in calculating its compliance with minimum required energy savings.	N/A
O. Large customer expenditures incurred to produce electric energy savings or electric demand savings are only eligible for an electric utility bill credit. Large customer expenditures incurred to produce natural gas energy savings or natural gas demand savings are only eligible for a gas utility bill credit. Large customer expenditures incurred to produce both electric and natural gas energy savings, both electric and natural gas demand savings or any combination of energy savings and demand savings for both electric and natural gas are eligible for both an electricity bill credit and a gas utility bill credit, provided that the same energy efficiency expenditures or load management expenditures cannot be accounted for twice.	N/A
P. Upon written request by the large customer, the information provided by large customers to the utility or program administrator, program evaluator or others shall remain confidential, except as otherwise ordered by the commission.	N/A
17.7.2.12 MODIFICATION OR TERMINATION OF PROGRAMS: Within each plan year, the utility, commission staff, attorney general, energy, minerals and natural resources department, or any other interested party, may petition the commission to modify or terminate a measure or program, or to approve a new program, for good cause by filing a motion in the same docket in which the public utility filed its most recent application. Program modification or termination shall not nullify any preexisting obligations of the utility, alternative energy efficiency provider, or contractor, for performance or failure to perform. Termination of a program or programs shall be accomplished in a manner that allows the utility to fully recover its prudent and reasonable program costs.	Perea
17.7.2.13 FILING REQUIREMENTS FOR COST RECOVERY :	

Exhibit AGP-5
Page 6 of 10

		Witness/Reference
	17.7.2.8 PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	
	A. Public utility recovery of program costs shall only be from customer classes with an opportunity to participate in approved measures and programs and shall be three percent of customers' bills or seventy-five thousand dollars ($75,000) per customer per plan year, whichever is less.	Hernandez
	B. The public utility, at its option, may recover its prudent and reasonable program costs and approved incentives, either through an approved tariff rider, in base rates or by combining recovery through a tariff rider and base rates.	Hernandez
	C. If a public utility seeks recovery of costs through a tariff rider, a utility shall present the proposed ratemaking treatment to the commission for approval. The proposal shall reconcile recovery of any costs currently being recovered through a tariff rider or in base rates, or by a combination of the two, as well as any new costs proposed to be recovered through a tariff rider or in base rates, or by a combination of the two.	Hernandez
	(1) The tariff rider shall be applied on a monthly basis, unless otherwise allowed by the commission.	Hernandez
	(2) Unless otherwise ordered by the commission, a tariff rider approved by the commission shall require language on customer bills explaining program benefits.	Hernandez
	(3) A public utility seeking approval of a tariff rider shall file an advice notice containing the information required by 17.1.2.210.11 NMAC and served upon the individuals and entities set forth in that rule. The proposed tariff rider shall go into effect 30 days after filing, unless suspended by the commission for a period not to exceed 180 days. If the commission has not acted to approve or disapprove the tariff rider by the end of an ordered suspension period, or within 30 days of filing, it shall be deemed approved as a matter of law.	Hernandez
	D. If base rate recovery of costs is sought, a utility shall present the proposed ratemaking treatment to the commission for approval. The proposal shall reconcile recovery of any costs currently being recovered through a tariff rider or in base rates, or by a combination of the two, as well as any new costs proposed to be recovered through a tariff rider or in base rates, or by a combination of the two.	Hernandez
	E. Program costs and incentives may be deferred for future recovery through creation of a regulatory asset. Prior commission approval is required for the public utility to create a regulatory asset and to establish any associated carrying charge.	Hernandez
	17.7.2.14 ANNUAL REPORT:	
	A. Annual reports shall provide information relating to the public utility's actions to comply with the Efficient Use of Energy	Perea
	B. Each public utility shall post its annual report on a publicly accessible website.	Perea
	C. Annual reports shall include the following for each measure and program:	Perea
T 1	**(1)** documentation of program expenditures and estimates of the program expenditures expected in the next year, including documentation of any adjustments to expenditures in the plan year and expected adjustments to the next plan year;	Perea
T 1	**(2)** estimated and actual customer participation levels;	Perea
T 1	**(3)** estimated and actual energy savings;	Perea
T 1	**(4)** estimated and actual demand savings;	Perea
T 1	**(5)** estimated and actual monetary costs of the public utility;	Perea
T 8	**(6)** estimated and actual avoided monetary costs of the public utility;	Perea
T 9	**(7)** an evaluation of its cost-effectiveness; and	Perea
P 1	**(8)** an evaluation of the cost-effectiveness and pay-back periods of self-directed programs.	Perea
	D. Annual reports also shall include the following:	Perea

Exhibit AGP-5
Page 7 of 10

	17.7.2.8 PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	Witness/Reference
Att	**(1)** the most recent measurement and verification report of the independent program evaluator, which includes documentation, at both the portfolio and individual program levels of expenditures, savings, and cost-effectiveness of all energy efficiency measures and programs and load management measures and programs, expenditures, savings, and cost-effectiveness of all self-direct programs, and all assumptions used by the evaluator;	Perea
P 1	**(2)** a listing of each measure or program expenditure not covered by the independent measurement and verification report and related justification as to why the evaluation was not performed;	Perea
T 4	**(3)** a comparison of estimated energy savings, demand savings, monetary costs and avoided monetary costs to actual energy savings, demand savings, actual monetary costs, and avoided monetary costs for each of the utility's approved measures or programs by year;	Perea
T 1	**(4)** a listing of the number of program participants served for each of the utility's approved measures or programs by year;	Perea
T 1	**(5)** a listing of the calculated economic benefits for each of the utility's approved measures or programs by year;	Perea
P 1	**(6)** information on the number of customers applying for and participating in self-direct programs, the number of customers applying for and receiving exemptions, measurement and verification of self-direct program targets, payback periods and achievements, customer expenditures on qualifying projects, oversight expenses incurred by the utility representative or administrator; and	Perea
	(7) any other information required by the commission.	Perea
	17.7.2.15 MEASUREMENT AND VERIFICATION:	
	A. Every energy efficiency and load management program shall be independently evaluated at least every three years. Every year, a public utility shall submit to the commission a comprehensive measurement, verification and program evaluation report prepared by an independent program evaluator.	Perea
	(1) The independent program evaluator shall, at a minimum determine and verify energy and demand savings;	Perea
	(a) determine and verify energy and demand savings;	Perea
	(b) determine program cost effectiveness by applying the monetary values contained in the utility's approved plan year application;	Perea
	(c) assess the public utility's performance in implementing energy efficiency and load management programs;	Perea
	(d) assess whether the utility has failed to meet its requirements under the Efficient Use of Energy Act or has not operated in good faith;	Perea
	(e) provide recommended improvements on program performance for commission directed modification;	Perea
	(f) confirm that commission approved measures and programs were installed or implemented, meet reasonable quality standards, and are operating fully and correctly;	Perea
	(g) utilize applicable international performance measurement and verification protocols, describe any deviation from those protocols, and explain the reason for that deviation; and	Perea
	(h) fulfill any other measurement and verification statutory requirements not specifically delineated herein.	Perea
	(2) The public utility shall cooperate with the independent program evaluator and commission staff in making information and personnel available to facilitate the independent program evaluator's proper evaluation of each public utility and completion of a comprehensive measurement, verification and program evaluation report.	Perea
	B. The commission, through its staff, will select and direct an independent program evaluator to prepare and submit a comprehensive measurement, verification and program evaluation report to the commission. Staff, to fulfill its obligation under Subsection B of this Section, may consult with public utilities and other interested parties.	Perea

Exhibit AGP-5
Page 8 of 10

17.7.2.8	PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	Witness/Reference
C.	Staff shall:	Perea
	(1) undertake a competitive bid process and abide by state purchasing rules and commission policies in selecting a sole independent program evaluator to evaluate public utility compliance with the Efficient Use of Energy Act;	Perea
	(2) develop a request for proposals ("RFP"), including the scope, terms of work, and evaluation process to score the RFP responses;	Perea
	(3) receive, review, score and rank the RFP responses;	Perea
	(4) subsequently rank and recommend competitive qualified bidders to the commission;	Perea
	(5) negotiate a contract with the competitive bidder awarded the contract; and	Perea
	(6) administer the contract, including: confirming that contract deliverables are met, reviewing invoices and related contract performance, and approving utility invoices after staff's review and approval.	Perea
D.	Funding for services of the independent program evaluator's completion of a comprehensive measurement and verification report will be paid initially by the public utility and treated as a regulatory asset; to be recovered through rates established in the public utility's next general rate proceeding.	Perea
E.	Self-direct measures, programs, expenditures, credits and exemptions shall be evaluated and reported in the utility's annual report by the independent program evaluator using the same measurement and verification standards applied to utility measures and programs by the utility or commission-approved self-direct program administrator.	Perea
F.	Upon written request by the large customer, the information provided by large customers to the utility or program administrator, program evaluator, or others, shall remain confidential except as otherwise ordered by the commission.	Perea
G.	The commission may require other information.	Perea
17.7.2.16	**RURAL ELECTRIC COOPERATIVES:**	N/A
A.	Distribution cooperative utilities shall, within 24 months after the effective date of this rule, and every 24 months thereafter, examine potential customer assistance in reducing energy consumption or peak electricity demand in a cost-effective manner. Based on these studies, distribution cooperative utilities shall establish and implement energy efficiency and load management targets and programs that are economically feasible and practical for their members and customers. Approval for such programs shall reside with the governing body of each distribution cooperative utility rather than the commission.	N/A
B.	Each distribution cooperative utility shall simultaneously file with the commission its annual report by May 1st, along with a report describing the cooperative's examination of efficiency potential set forth in Subsection A of Section 17.7.2.18 NMSA 1978. The distribution cooperative utility's report will also address all of its programs or measures that promote energy efficiency, conservation or load management. The report shall set forth the costs of each of the programs or measures for the previous calendar year and the resulting effect on electricity consumption. In offering or implementing energy efficiency, conservation or load management programs, a distribution cooperative utility shall attempt to minimize any cross-subsidies between customer classes.	N/A
C.	Each distribution cooperative utility shall include in the report required by Subsection B of Section 17.7.2.18 NMSA 1978, a description of all planned programs or measures to promote energy efficiency, conservation or load management and the anticipated implementation date.	N/A
D.	Costs resulting from programs or measures to promote energy efficiency, conservation or load management may be recovered by the distribution cooperative utility through its general rates. In requesting approval to recover such costs in general rates, the distribution cooperative utility may elect to use the procedure set forth in Subsection G of Section 62-8-7 NMSA 1978.	N/A
E.	The commission may develop necessary compliance forms.	N/A

Exhibit AGP-5
Page 9 of 10

17.7.2.8 PUBLIC UTILITY FILING REQUIREMENTS FOR APPLICATIONS AND ANNUAL REPORTS:	Witness/Reference
17.7.2.17 REGULATORY DISINCENTIVES: The commission shall, upon petition or its own motion, identify regulatory disincentives or barriers for public utility expenditures on energy efficiency and load management measures and ensure that they are removed in a manner that balances the public interest, consumers' interests and investors' interests. Public utility petitions for regulatory disincentive removal shall be supported by testimony and exhibits.	N/A
17.7.2.18 AUDIT: The commission may order a public utility to submit to an audit that examines whether the public utility's energy efficiency and load management program costs are prudent, reasonable and being properly assigned to programs in accordance with this rule, commission orders, and other applicable requirements and standards. The cost of such audit shall be considered recoverable program costs, unless it results in a commission order containing findings of the public utility's malfeasance, in which case, audit costs shall not be recoverable from the public utility's customers.	
17.7.2.19 VARIANCES: Written applications for a variance from any of the provisions of this guideline shall:	
A. state the reason(s) for the variance request;	
B. identify each of the sections of this guideline for which a variance is requested;	
C. describe the effect the variance will have, if granted, on compliance with this guideline;	
D. describe how granting the variance will not compromise, or will further, the purposes of this guideline; and	
E. indicate why the proposed variance is a reasonable alternative to the requirements of this guideline.	

[17.7.2.19 NMAC - N, 9/26/2017]

HISTORY OF 17.7.2 NMAC:

Pre NMAC History: none.

History of Repealed Material:

17.7.2 NMAC, Energy Efficiency (filed 2/2/2007), repealed 5/3/2010.

17.7.2 NMAC, Energy Efficiency (filed 4/16/2010), repealed 1/1/2015.

17.7.2 NMAC, Energy Efficiency, filed (04/16/2010) - Repealed effective 9/26/2017.

NMAC History:

17.7.2 NMAC, Energy Efficiency (filed 2/2/2007) was replaced by 17.7.2 NMAC, Energy Efficiency, effective 5/3/2010.

17.7.2 NMAC, Energy Efficiency, (filed 04/16/2010) was replaced by 17.7.2 NMAC, Energy Efficiency, effective 9/26/2017.

Exhibit AGP-5
Page 10 of 10

	XIV. DECRETAL PARAGRAPHS	Witness
A.	The foregoing Sections of this Recommended Decision are approved and adopted as the rulings, determinations,	N/A
B.	EPE's Revised 2017 EE Plan is approved.	N/A
C.	EPE's Revised Advice Notice No. 262 is disapproved and cancelled.	N/A
D.	Within three business days of issuance of the Final Order in this case, EPE shall file an advice notice to implement the approved 2017 EE Rider.	N/A
E.	EPE is authorized to adjust its 2017 PY-authorized budget by up to $soo,ooo during the 2017 PY without PRC approval.	N/A
F.	EPE is authorized to shift funding among the 2017 PY programs during the 2017 PY, and therefore change the 2017 PY approved program budgets, without PRC approval.	N/A
G.	In future EE/LM applications, EPE shall allocate program costs that support more than one measure or program among its individual measures and programs.	Perea
H.	In future EE/LM applications, EPE shall use historic annual actual revenues from two years before the PY, adjusted as appropriate, to calculate its PY budgets.	Perea
I.	EPE is granted a variance from the requirement of 17.7.2.8(E) NMAC to add the budget underage difference between its Commission authorized funding and its actual expenditures in PY 2015 to its PY 2017 budget.	N/A
J.	In its next EE/LM application, EPE shall file testimony identifying its rate classes that are exempt from paying the EE Rider and justifying each's exemption.	Perea/ Hernandez
K.	In future EE/LM applications, if EPE uses its WACC to discount costs in calculating the UCTs of its EE/LM programs, it shall use its PRC-approved WACC grossed up to incorporate EPE's payment of taxes on the equity component and adjusted down to reflect tax deductions EPE receives for its interest payments on the debt component.	Hernandez
L.	Before filing its annual EE/LM application, EPE shall investigate achievable EE/LM programs available in its New Mexico service territory and shall analyze the costeffectiveness of any such programs. If any such programs are cost effective, EPE shall analyze whether to propose including any such programs in its EE/LM application. EPE shall file testimony with its annual EE/LM plan applications showing how it complied with these requirements.	Perea / Martin
M.	On a going forward basis, EPE shall notify in advance via e-mail all persons whose e-mail addresses are listed on the official service list for EPE's most recent EE/LM case, IRP case and rate case, of how those parties may provide EPE with nonbinding recommendations on EPE's proposed programs and measures.	Perea
N.	Rate Nos. 11 and 25 shall be subject to Rate Rider No. 17.	N/A
O.	EPE's request that it no longer be required to provide the quarterly reports ordered in Case No. 13-00176-UT is granted.	N/A
P.	In its next EE/LM application, EPE shall file testimony addressing:	
	• The identity of the entity who employs the independent program evaluator and how the evaluator was chosen	Perea
	• The validity of the evaluator's free ridership assumptions used in the evaluator's most recent evaluation of EPE's EE portfolio	Perea
	• Why EPE recovers M&V costs through its EE Rider, not through creation of a regulatory asset included in rate base	Hernandez
Q.	Any matter not specifically ruled on during the course of this proceeding or in this Order is disposed of consistent with this Order and Commission Rules.	N/A
R.	EPE's suggested corrections to the transcript are adopted to the extent that they correct errors in transcription.	N/A
S.	This Order is effective immediately.	N/A
T.	Copies of this Order shall be mailed to all persons listed on the official service list for this case.	N/A
U.	This Docket is closed	

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17- EFFICIENT USE OF ENERGY RECOVERY FACTOR	)	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	)	

AFFIDAVIT

STATE OF TEXAS)
) ss
COUNTY OF EL PASO)

Araceli G. Perea hereby deposes and states under oath that the information contained in the foregoing Direct Testimony of Araceli G. Perea, together with the statements of facts contained therein and any exhibits attached thereto, are true and accurate based on my personal knowledge and belief.

SIGNED this 27th day of June, 2018.

ARACELI G. PEREA

Subscribed and sworn to before me this 27th day of June, 2018.

MARITZA PEREZ
Notary Public, State of Texas
Comm. Expires 01-25-2022
Notary ID 129590432

My Commission expires:

1-25-22

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17- EFFICIENT USE OF ENERGY RECOVERY FACTOR	)	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	)	

DIRECT TESTIMONY

OF

AMY D. MARTIN

ON BEHALF OF

EL PASO ELECTRIC COMPANY

JULY 2, 2018

TABLE OF CONTENTS

Subject		Page
I.	INTRODUCTION AND QUALIFICATIONS	1
II.	PURPOSE OF TESTIMONY	2
III.	PROGRAM ANALYSIS AND VALIDATION	3
IV.	COST-EFFECTIVENESS CALCULATIONS	7
V.	CONCLUSION	16

EXHIBITS

Exhibit ADM-1 EPE's 2019-2021 Energy Efficiency and Load Management Plan

EL PASO ELECTRIC COMPANY
DIRECT TESTIMONY OF
AMY D. MARTIN

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Amy D. Martin. I am the Vice President of Consulting and Engineering at Frontier Energy ("Frontier"), 1515 S. Capital of Texas Highway, Suite 110, Austin, Texas 78746.

Q. WHAT IS FRONTIER'S ROLE IN THIS PROCEEDING?

A. Frontier has been retained by El Paso Electric Company ("EPE" or "Company") to analyze and validate the cost-effectiveness of EPE's proposed energy efficiency programs for residential, commercial, and industrial customers in EPE's New Mexico service territory.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE.

A. I earned a Bachelor of Science degree in biology from The University of Texas at Austin ("UT Austin") in August 2003 and a Master of Public Affairs degree from the LBJ School of Public Affairs at UT Austin in May 2009.

In 2005, I was hired by the Electric Power Research Institute as a technical resource specialist. In 2006, I began work as an Enforcement Coordinator in the public drinking water division of the Texas Commission on Environmental Quality. In this role, I coordinated efforts to expeditiously settle enforcement actions against environmental violators. In 2008, while at the LBJ School of Public Affairs, I began interning at Frontier; after graduation I was hired on full time as an Energy Analyst II.

In this capacity, I conducted cost-effectiveness analyses, provided qualitative research and quantitative analysis to analyze utility energy efficiency programs, and supported the testimony of Frontier staff in regulatory filings in New Mexico, Arkansas, Oklahoma, and Texas. In 2012, I transitioned to Manager of Program Design & Evaluation, and in 2014, I was promoted to my current role, Vice President of Consulting and Engineering. I am currently a member of the Association of Energy Service Professionals, the Association of Energy Engineers, and the Gulf Coast Power Association EmPOWERing Women organization.

Q. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES WITH FRONTIER.

A. As the Vice President of Consulting and Engineering, my primary responsibilities include overseeing the firm's consulting projects, including the planning and evaluation of utility energy efficiency programs. In addition, I provide regulatory support to Frontier's client base and administer the Texas investor-owned utilities' energy efficiency organization, the Electric Utility Marketing Managers of Texas.

Q. HAVE YOU TESTIFIED BEFORE IN REGULATORY OR LEGISLATIVE PROCEEDINGS?

A. Yes.

II. PURPOSE OF DIRECT TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my direct testimony is to present and support EPE's 2019-2021 Energy Efficiency and Load Management Plan ("EE/LM Plan") attached as Exhibit ADM-1. In doing so, I describe the program screening and cost-effectiveness analysis EPE used to develop its EE/LM Plan.

Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes, I am sponsoring Exhibit ADM-1: EPE's EE/LM Plan. This exhibit contains the details of the energy efficiency and load management ("EE/LM") portfolio and programs' benefit-cost analyses, including the technical assumptions, program costs and energy and demand savings used to estimate cost-effectiveness. More specifically, ADM-1 contains information pertaining to program descriptions, eligible measures, estimated useful lives, requirements and restrictions, estimated participants, supporting documentation, underlying data, calculations and estimates used to calculate cost-effectiveness.

Q. WAS THE ATTACHED EXHIBIT PREPARED UNDER YOUR DIRECT SUPERVISION AND CONTROL?

A. Yes.

III. PROGRAM ANALYSIS AND VALIDATION

Q. HOW DID FRONTIER PARTICIPATE IN THE ANALYSIS AND VALIDATION OF EPE'S PROPOSED ENERGY EFFICIENCY AND LOAD MANAGEMENT PROGRAMS?

A. Frontier worked collaboratively with EPE to analyze potential program modifications of its selected EE/LM programs, consider new measures, and conduct the program- and portfolio-level cost-effectiveness analyses supporting EPE's proposed EE/LM Plan.

Q. PLEASE DESCRIBE THE GENERAL PROCESS USED TO ANALYZE AND VALIDATE EPE'S PROPOSED PROGRAMS' COST-EFFECTIVENESS.

A. Frontier conducted the quantitative analyses used to estimate the costs and benefits of EPE's potential EE/LM program portfolio. Previous program year participation levels and savings data and implementer-provided estimates formed the basis for the initial projections.[1] Frontier analyzed how program designs and measure mixes impacted likely participation, estimated savings, and overall cost-effectiveness. In collaboration with EPE, Frontier used the results of this analysis to propose the necessary program design inputs, budgets and participation levels required to demonstrate a portfolio of cost-effective energy efficiency programs accessible to every affected customer class, which were included in EPE's EE/LM Plan.

Exhibit ADM-1 provides additional details regarding the proposed programs and associated measures, including the expected useful life, participation requirements and restrictions, and the time period during which the programs will be offered. In

[1] Estimated savings were projected based on past program participant-level data, including, but not limited to, measure mix and housing characteristics. For new programs, implementer-provided costs and savings were used to inform estimated program performance. Technical assumptions provided in the New Mexico Technical Resource Manual ("NM TRM") developed by the Commission's previously selected M&V provider, ADM, were used to calculate savings. The Texas Technical Reference Manual version 5.0 ("TX TRM") and Illinois Statewide Technical Reference Manual for Energy Efficiency version 6.0 (IL TRM) were used for measures not included in the NM TRM. Please see Exhibit ADM-1 for details regarding technical assumptions and savings calculations.

addition, Exhibit ADM-1 also details the estimated number of program participants, estimated economic benefit to the participants, and projected energy and demand savings and budgets.

Q. DID FRONTIER REVIEW ANY OF THE NON-BINDING RECOMMENDATIONS EPE RECEIVED FOR THE EE/LM PLAN?

A. Yes. EPE requested Frontier research the potential for new measures within its EnergySaver Program which is targeted at low-income customers. Specifically, Frontier calculated potential savings and conducted cost-effectiveness analyses for water heater pipe and tank insulation, outdoor lighting, and smart thermostats. Based on the savings potential and relative low cost of each of these measures, Frontier determined the measures could be added into the NM EnergySaver Program while maintaining cost-effectiveness under the assumptions provided in ADM-1.

At EPE's request, Frontier also researched the potential to include heat pump water heaters and ductless split heat pumps in its low-income focused program. While these measures can be cost-effective for certain households under some program designs, due to the relatively high cost of purchase and installation, these measures are not a good fit for the NM EnergySaver Program in which customers are provided energy efficiency upgrades at no cost. As a result, these two measures were not included in the assumptions used to calculate cost-effectiveness for the NM EnergySaver Program.

Q. WHAT COST-EFFECTIVENESS STANDARD WAS USED TO ANALYZE THE PROPOSED PROGRAMS?

A. EPE used the Utility Cost Test ("UCT") to analyze the measure mix for each program, as directed by Rule 17.7.2 of the New Mexico Administrative Code ("NMAC") (the "Rule").[2]

Q. WERE ANY OTHER COST-EFFECTIVENESS TESTS USED TO ANALYZE POTENTIAL PROGRAMS?

A. No.

Q. PLEASE DESCRIBE ANY DEFINING CHARACTERISTICS OF EPE'S SERVICE TERRITORY THAT IMPACT SAVINGS POTENTIAL.

A. EPE's residential sector has a particularly high saturation of evaporative cooling for residences. EPE's 2017 Residential Appliance Saturation Survey indicates that 51.5 percent of EPE's residential customers have evaporative cooling systems. The most common household heating source across EPE service territory is a natural gas furnace, with a saturation rate of 76.3 percent. Commercial customer facilities also exhibit a relatively higher saturation of evaporative cooling systems and gas space and water heating.

This creates a risk with regard to EPE's program selection because market projections may be overly weighted with savings potential from commercial refrigerated air systems. EPE's residential customer electricity consumption is much

[2] 17.7.2.8(J) NMAC.

lower than in many other parts of the country with similar ambient summer and winter temperatures, which results in a corresponding lowering of the savings potential associated with those customers.

The lower electricity consumption is primarily an outcome of the high evaporative cooling saturation. This characteristic establishes a lower energy savings potential on a per customer basis, creating ongoing challenges to EPE in achieving energy savings. Frontier was mindful of EPE's service territory characteristics in the development of the EE/LM Plan.

Q. IS EPE'S PROPOSED EE/LM PLAN COST-EFFECTIVE?

A. Yes. Applying the UCT, every proposed program and the overall energy efficiency portfolio were found to be cost-effective. Please see section IV of my direct testimony and Exhibit ADM-1 for more details.

IV. COST-EFFECTIVENESS CALCULATIONS

Q. DESCRIBE THE UCT STANDARD EPE USED TO DETERMINE THE COST EFFECTIVENESS OF EPE'S PROPOSED PROGRAMS AND OVERALL PORTFOLIO.

A. The Efficient Use of Energy Act ("EUEA"), defines the UCT as "a standard that is met if the monetary costs that are borne by the public utility and that are incurred to develop, acquire and operate energy efficiency or load management resources on a life-cycle basis are less than the avoided monetary costs associated with developing,

acquiring and operating the associated supply-side resources."[3]

As such, the UCT restricts the benefit-cost test perspective to a comparison of avoided supply-side costs to utility program costs. The present value of avoided capacity and energy costs across the life of the measures are treated as benefits and included in the numerator of the benefit-cost ratio. EPE's avoided capacity and energy costs used to calculate the program benefits are detailed in Exhibit ADM-1, Appendix C. The present value of program costs and incentives as detailed in Exhibit ADM-1 are included in the denominator of the benefit-cost ratio. A benefit-cost ratio greater than 1.0 indicates the program is cost-effective. The UCT is expressed using the following inputs:

Benefits	Costs
• Energy-related costs avoided by the utility • Capacity-related costs avoided by the utility	• Administrative ("admin") costs[4] • Participant Incentives

Q. WHAT DISCOUNT RATES WERE USED TO CALCULATE THE UCT?

A. EPE provided three discount rates that were used to calculate the present value of costs and benefits for the UCT calculation, as shown in EPE witness Adrian Hernandez's Exhibit AH-2. All other factors held constant, the higher the discount rate, the lower the UCT value. Specifically, the following three discount rates, based on EPE's weighted average cost of capital ("WACC"), as provided by EPE were used: (1) 7.6657 percent - the Commission-approved WACC from NMPRC Case

[3] NMSA 1978, Section 62-17-4(K).

[4] For the purpose of cost-effectiveness testing, "administrative costs" include program administration, marketing, research and development, and measurement & verification ("M&V") expenses. Please see EPE witness Perea's Exhibit AGP-2 for a breakdown of administrative costs per program.

No. 15-00127-UT; (2) 6.9812 percent - after tax WACC from NMPRC Case No. 15-00127-UT; (3) 8.3667 percent - Hearing Examiner methodology from NMPRC Case No. 16-00185-UT.

Q. WHAT OTHER FACTORS WERE USED TO CALCULATE THE UCT?

A. Because cost-effectiveness is calculated by first converting estimated gross savings at the meter to estimated net savings at the source, two additional factors were applied to estimated program impacts in the cost-effectiveness calculation: (1) EPE's line loss factor of 8.32 percent[5] was used to convert program savings calculated at the meter to savings at the source; and (2) program-level net-to-gross ("NTG") ratios obtained from EPE's 2017 measurement and verification evaluation report as prepared by the statewide evaluator, Evergreen Economics ("Evergreen"),[6] were used to adjust participant savings to reflect the impact of customers who are not influenced by an energy efficiency incentive program, but who accept a utility rebate. This factor converts gross program savings to net program savings. Please see Exhibit ADM-1 for the NTG factors used for each program.

Q. DID EPE PROVIDE THE COSTS ASSOCIATED WITH THE ACQUISITION, DEVELOPMENT, AND OPERATION OF EACH PROGRAM?

A. Yes. Costs associated with the acquisition, development, and operation for each program in EPE's EE/LM Plan are included in the analyses shown in Exhibit ADM-1. Program-level costs used to calculate cost-effectiveness are also provided in

[5] EPE's line loss factor approved in Case No. 15-00127-UT.
[6] Evaluation of the 2017 El Paso Electric Energy Efficiency Programs, May 8, 2018, Evergreen Economics.

Exhibit ADM-1 and summarized in the tables below. As described in EPE witness Araceli G. Perea's direct testimony, EPE established the total program funding based on the Rule requirements outlined in the EUEA. From that total, EPE and Frontier developed projected budgets to implement cost-effective programs.

Q. DID EPE ASSEMBLE A COST-EFFECTIVE PORTFOLIO OF ENERGY EFFICIENCY PROGRAMS?

A. Yes. Table 1, Table 2 and Table 3 on the following pages list the 2019, 2020, and 2021 projected program participants,[7] energy and demand savings,[8] and estimated program costs used to calculate the UCT for each program in EPE's proposed EE/LM Plan. Based on this analysis, every program and the overall portfolio are cost-effective, in accordance with the Rule. Please see Exhibit ADM-1 for the program-level technical assumptions used to produce these results.

Table 1*

2019	Participants	Annual kW	Annual kWh	Annual Incentive Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
LivingWise®	3,050	10	863,634	$40,413	$35,526	$75,939
Residential Comprehensive	2,336	1,989	3,308,960	$1,215,809	$359,021	$1,574,830
NM[9] Appliance Recycling	500	76	615,183	$25,000	$81,813	$106,813
ENERGY STAR® New Homes	300	285	587,895	$241,005	$204,702	$445,707
NM EnergySaver	42,785	259	1,845,568	$492,016	$63,155	$555,171
SCORE Plus	175	1,309	5,520,186	$746,778	$822,176	$1,568,955
Commercial Comprehensive	295	722	4,139,158	$696,256	$321,242	$1,017,499
Commercial Load Management	15	4,083	40,903	$255,000	$123,313	$378,313
Total Portfolio Budget	**49,456**	**8,732**	**16,921,489**	**$3,712,277**	**$2,010,949**	**$5,723,226**

[7] For some programs, the number of program participants may represent the projected number of homes or businesses participating in a program. For others, the number of participants may represent the number of installed measures or number of completed projects (which consist of various measure mixes and quantities). Please see Exhibit ADM-1 for details.
[8] Savings (kW and kWh) represent annual savings resulting from installed measures each program year.
[9] "NM" represents "New Mexico"

*Due to rounding, totals may not match the sum of individual programs as summarized in this table.

Table 2*

2020	Participants	Annual kW	Annual kWh	Annual Incentive Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
LivingWise®	3,050	10	863,634	$40,413	$35,608	$76,021
Residential Comprehensive	1,978	1,601	2,694,855	$1,011,084	$323,223	$1,334,307
NM Appliance Recycling	500	76	615,183	$25,000	$73,937	$98,937
ENERGY STAR® New Homes	300	285	587,895	$241,005	$205,890	$446,895
NM EnergySaver	42,657	239	1,790,927	$465,142	$72,575	$537,717
SCORE Plus	171	1,250	5,295,592	$716,829	$803,628	$1,520,458
Commercial Comprehensive	202	506	2,880,954	$472,255	$244,845	$717,100
Commercial Load Management	15	4,083	40,903	$255,000	$127,212	$382,212
Total Portfolio Budget	**48,873**	**8,050**	**14,769,944**	**$3,226,728**	**$1,886,918**	**$5,113,646**

*Due to rounding, totals may not match the sum of individual programs as summarized in this table.

Table 3*

2021	Participants	Annual kW	Annual kWh	Annual Incentive Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
LivingWise®	3,050	10	863,634	$40,413	$44,253	$84,665
Residential Comprehensive	1,982	1,604	2,700,466	$1,013,009	$339,775	$1,352,784
NM Appliance Recycling	500	76	615,183	$25,000	$74,343	$99,343
ENERGY STAR® New Homes	300	285	587,895	$241,005	$209,811	$450,816
NM EnergySaver	42,656	239	1,790,780	$465,076	$72,139	$537,215
SCORE Plus	157	1,154	4,917,478	$666,832	$808,926	$1,475,758
Commercial Comprehensive	204	508	2,888,674	$474,131	$252,654	$726,785
Commercial Load Management	15	4,083	40,903	$255,000	$131,279	$386,279
Total Portfolio Budget	**48,864**	**7,959**	**14,405,014**	**$3,180,466**	**$1,933,180**	**$5,113,646**

*Due to rounding, totals may not match the sum of individual programs as summarized in this table.

Table 4 provides a snapshot of the EE/LM Plan's 2019 UCT results, as calculated under three discount rates. A benefit-cost ratio greater than 1.0 demonstrates that the

program and overall portfolio is cost-effective under the EUEA's standards.[10] Table 5 and Table 6 provide the same data for 2020 and 2021, respectively.

Table 4

2019	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
LivingWise®	1.24	1.22	1.19
Residential Comprehensive	1.68	1.62	1.56
NM Refrigerator Recycling	1.05	1.03	1.01
ENERGY STAR® New Homes	1.11	1.05	1.00
NM EnergySaver	1.19	1.14	1.09
SCORE Plus	1.43	1.38	1.33
Commercial Comprehensive	1.31	1.27	1.22
Commercial Load Management	1.05	1.05	1.05
Total Portfolio	**1.38**	**1.33**	**1.29**

Table 5

2020	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
LivingWise®	1.27	1.25	1.22
Residential Comprehensive	1.63	1.57	1.51
NM Refrigerator Recycling	1.16	1.14	1.12
ENERGY STAR® New Homes	1.13	1.07	1.02
NM EnergySaver	1.19	1.14	1.09
SCORE Plus	1.44	1.39	1.34
Commercial Comprehensive	1.33	1.28	1.24
Commercial Load Management	1.06	1.06	1.06
Total Portfolio	**1.37**	**1.32**	**1.28**

Table 6

2021	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
LivingWise®	1.16	1.14	1.11
Residential Comprehensive	1.64	1.58	1.52
NM Refrigerator Recycling	1.18	1.15	1.13
ENERGY STAR® New Homes	1.14	1.08	1.03
NM EnergySaver	1.21	1.16	1.11
SCORE Plus	1.40	1.34	1.29
Commercial Comprehensive	1.34	1.29	1.25
Commercial Load Management	1.07	1.07	1.07
Total Portfolio	**1.37**	**1.32**	**1.27**

[10] NMSA 1978, Sections 62-17-4(C) and (K)

Q. WHAT ARE THE PROJECTED LIFETIME SAVINGS FOR EACH YEAR OF EPE'S PROPOSED EE/LM PLAN?

A. The projected lifetime energy and demand savings for each year of EPE's proposed portfolio are shown in Table 7 (2019), Table 8 (2020), and Table 9 (2021). Lifetime savings per program are provided in Exhibit ADM-1.

Table 7*

Year	Annual Participants	kW	kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
2019	49,456	8,732	16,921,489	$3,712,277	$2,010,949	$5,723,226
2020	0	4,650	16,880,586	$0	$0	$0
2021	0	4,650	16,880,201	$0	$0	$0
2022	0	4,650	16,880,201	$0	$0	$0
2023	0	4,650	16,879,809	$0	$0	$0
2024	0	4,638	16,751,428	$0	$0	$0
2025	0	4,638	16,751,428	$0	$0	$0
2026	0	4,634	16,603,523	$0	$0	$0
2027	0	4,514	14,662,896	$0	$0	$0
2028	0	4,507	14,618,305	$0	$0	$0
2029	0	4,451	14,036,685	$0	$0	$0
2030	0	4,437	13,948,871	$0	$0	$0
2031	0	4,300	13,291,865	$0	$0	$0
2032	0	4,300	13,288,156	$0	$0	$0
2033	0	3,773	9,947,149	$0	$0	$0
2034	0	522	1,720,720	$0	$0	$0
2035	0	522	1,720,720	$0	$0	$0
2036	0	522	1,720,720	$0	$0	$0
2037	0	332	1,068,520	$0	$0	$0
2038	0	332	1,068,520	$0	$0	$0
2039	0	255	523,252	$0	$0	$0
2040	0	255	523,252	$0	$0	$0
2041	0	255	523,252	$0	$0	$0
2042	0	23	46,052	$0	$0	$0
2043	0	23	46,052	$0	$0	$0
2044	0	-	-	$0	$0	$0
2045	0	-	-	$0	$0	$0
		Lifetime kWh	**237,303,650**			

* Due to rounding, lifetime kWh may not match the sum of individual years as summarized in this table.

Table 8*

Year	Annual Participants	kW	kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
2020	48,873	8,050	14,769,944	$3,226,728	$1,886,918	$5,113,646
2021	0	3,967	14,729,041	$0	$0	$0
2022	0	3,967	14,728,272	$0	$0	$0
2023	0	3,967	14,728,272	$0	$0	$0
2024	0	3,967	14,727,879	$0	$0	$0
2025	0	3,955	14,596,680	$0	$0	$0
2026	0	3,955	14,596,680	$0	$0	$0
2027	0	3,950	14,448,774	$0	$0	$0
2028	0	3,831	12,508,148	$0	$0	$0
2029	0	3,823	12,463,557	$0	$0	$0
2030	0	3,808	11,985,802	$0	$0	$0
2031	0	3,799	11,909,145	$0	$0	$0
2032	0	3,662	11,253,771	$0	$0	$0
2033	0	3,662	11,250,062	$0	$0	$0
2034	0	3,320	9,075,220	$0	$0	$0
2035	0	507	1,674,397	$0	$0	$0
2036	0	507	1,674,397	$0	$0	$0
2037	0	507	1,674,397	$0	$0	$0
2038	0	328	1,060,816	$0	$0	$0
2039	0	328	1,060,816	$0	$0	$0
2040	0	251	515,547	$0	$0	$0
2041	0	251	515,547	$0	$0	$0
2042	0	251	515,547	$0	$0	$0
2043	0	19	38,347	$0	$0	$0
2044	0	19	38,347	$0	$0	$0
2045	0	-	-	$0	$0	$0
2046	0	-	-	$0	$0	$0
		Lifetime kWh	**206,539,402**			

* Due to rounding, lifetime kWh may not match the sum of individual years as summarized in this table.

Table 9*

Year	Annual Participants	kW	kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
2021	48,864	7,959	14,405,014	$3,180,466	$1,933,180	$5,113,646
2022	0	3,876	14,364,111	$0	$0	$0
2023	0	3,876	14,363,726	$0	$0	$0
2024	0	3,876	14,363,726	$0	$0	$0
2025	0	3,876	14,363,334	$0	$0	$0
2026	0	3,865	14,233,933	$0	$0	$0
2027	0	3,865	14,233,933	$0	$0	$0
2028	0	3,861	14,086,027	$0	$0	$0
2029	0	3,742	12,145,400	$0	$0	$0
2030	0	3,734	12,100,809	$0	$0	$0
2031	0	3,719	11,623,055	$0	$0	$0
2032	0	3,710	11,546,544	$0	$0	$0
2033	0	3,573	10,891,170	$0	$0	$0
2034	0	3,573	10,887,462	$0	$0	$0
2035	0	3,230	8,712,619	$0	$0	$0
2036	0	507	1,674,575	$0	$0	$0
2037	0	507	1,674,575	$0	$0	$0
2038	0	507	1,674,575	$0	$0	$0
2039	0	328	1,060,816	$0	$0	$0
2040	0	328	1,060,816	$0	$0	$0
2041	0	251	515,547	$0	$0	$0
2042	0	251	515,547	$0	$0	$0
2043	0	251	515,547	$0	$0	$0
2044	0	19	38,347	$0	$0	$0
2045	0	19	38,347	$0	$0	$0
2046	0	-	-	$0	$0	$0
2047	0	-	-	$0	$0	$0
		Lifetime kWh	**201,089,557**			

* Due to rounding, lifetime kWh may not match the sum of individual years as summarized in this table.

Q. HOW WERE FUTURE COSTS AND BENEFITS ACCOUNTED FOR IN YOUR ANALYSIS?

A. Each of the energy efficiency measures assessed in this analysis has an estimated useful life of equal to or greater than one year. Portfolio impacts are evaluated

through the entire period that benefits occur, which is through 2045.

Q. DID EPE DEMONSTRATE AND JUSTIFY HOW THE ESTIMATED MONETARY PROGRAM COSTS WILL BE EQUAL TO OR GREATER THAN THE ACTUAL MONETARY PROGRAM COSTS?

A. Yes. EPE formulated its program requirement estimates on a historically proven design based on Frontier's and EPE's extensive experience administering and implementing energy efficiency programs. Furthermore, EPE designed the EE/LM Plan to allow flexibility in spending EPE's budget to achieve its goals. While every estimate has inherent uncertainty, EPE's approach helps ensure that estimated monetary program costs will be equal to or greater than actual monetary program costs. It also helps ensure that actual monetary program benefits exceed actual monetary program costs.

V. CONCLUSION

Q. HAS EPE MET THE COST-EFFECTIVENESS REQUIREMENTS OF THE EE RULE?

A. Yes, EPE has met the cost-effectiveness requirements of the Rule. Please see Exhibit ADM-1 for a full description of supporting documentation and underlying assumptions used to calculate cost-effectiveness for each program.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

EL PASO ELECTRIC'S 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN

1515 S. Capital of Texas Hwy, Suite 110
Austin, Texas 78746

JULY 2, 2018

Table of Contents

EXECUTIVE SUMMARY 5
ENERGY EFFICIENCY PLAN OVERVIEW 5
PROPOSED BUDGET 8
PROGRAM SCREENING & COST-EFFECTIVENESS ANALYSIS 9
PROGRESS TOWARDS 2020 GOAL 13
EE/LM PLAN DEVELOPMENT 14
BACKGROUND OF EXISTING PROGRAMS 14
REGULATORY REQUIREMENTS 14
PROGRAM ANALYSIS & VALIDATION 14
MEASUREMENT AND VERIFICATION 18
CUSTOMER SELF-DIRECTED ALTERNATIVES 19
EPE 2019-2021 RESIDENTIAL PROGRAM PORTFOLIO 20
LIVINGWISE® PROGRAM 21
RESIDENTIAL COMPREHENSIVE PROGRAM 26
NEW MEXICO APPLIANCE RECYCLING PROGRAM 37
ENERGY STAR® NEW HOMES PROGRAM 41
NM ENERGYSAVER PROGRAM 47
SCORE PLUS PROGRAM 55
COMMERCIAL COMPREHENSIVE PROGRAM 61
COMMERCIAL LOAD MANAGEMENT PROGRAM 68
APPENDIX A: COST-EFFECTIVENESS INPUTS 72
RESIDENTIAL PROGRAMS INPUTS 72
COMMERCIAL PROGRAMS INPUTS 74
APPENDIX B: DISCOUNT RATES 76
UTILITY DISCOUNT RATE 76
APPENDIX C: AVOIDED COSTS 77
UTILITY AVOIDED COSTS 77

List of Tables

Table 1: New Measures 7
Table 2: 2019 Proposed Program and Total Portfolio Budgets 8
Table 3: 2020 Proposed Program and Total Portfolio Budgets 8
Table 4: 2021 Proposed Program and Total Portfolio Budgets 9
Table 5. 2019 Portfolio Cost-Effectiveness Results 9
Table 6. 2020 Portfolio Cost-Effectiveness Results 9
Table 7. 2021 Portfolio Cost-Effectiveness Results 10
Table 8. 2019 Program Cost-Effectiveness Results 10
Table 9. 2020 Program Cost-Effectiveness Results 10
Table 10. 2021 Program Cost-Effectiveness Results 11
Table 11. 2019 Projected Impacts* 11
Table 12. 2020 Projected Impacts* 12
Table 13. 2021 Projected Impacts* 13
Table 14. LivingWise® Program Forecasting Assumptions 22
Table 15. 2019 LivingWise® Program Projections 23
Table 16. 2020 LivingWise® Program Projections 23
Table 17. 2021 LivingWise® Program Projections 24
Table 18. 2019 LivingWise® Program Cost-Effectiveness Analysis 24
Table 19. 2020 LivingWise® Program Cost-Effectiveness Analysis 25
Table 20. 2021 LivingWise® Program Cost-Effectiveness Analysis 25
Table 21. Residential Comprehensive Program Eligibility Criteria 27
Table 22. Residential Comprehensive Program Forecasting Assumptions 30
Table 23. Residential Comprehensive Program Forecasting Assumptions Continued 31
Table 24. Residential Comprehensive Program Forecasting Assumptions Continued 31
Table 25. Residential Comprehensive Program Forecasting Assumptions Continued 32
Table 26. Residential Comprehensive Program Forecasting Assumptions Continued 32
Table 27. 2019 Residential Comprehensive Program Projections 33
Table 28. 2020 Residential Comprehensive Program Projections 34
Table 29. 2021 Residential Comprehensive Program Projections 35
Table 30. 2019 Residential Comprehensive Program Cost-Effectiveness Analysis 36
Table 31. 2020 Residential Comprehensive Program Cost-Effectiveness Analysis 36
Table 32. 2021 Residential Comprehensive Program Cost-Effectiveness Analysis 36
Table 33. NM Appliance Recycling Program Forecasting Assumptions 38
Table 34. 2019 NM Appliance Recycling Program Projections 38
Table 35. 2020 NM Appliance Recycling Program Projections 39
Table 36. 2021 NM Appliance Recycling Program Projections 39
Table 37. 2019 NM Appliance Recycling Program Cost-Effectiveness Analysis 40
Table 38. 2020 NM Appliance Recycling Program Cost-Effectiveness Analysis 40
Table 39. 2021 NM Appliance Recycling Program Cost-Effectiveness Analysis 40
Table 40. ENERGY STAR® New Homes Program Forecasting Assumptions 43
Table 41. 2019 ENERGY STAR® New Homes Program Projections 43
Table 42. 2020 ENERGY STAR® New Homes Program Projections 44
Table 43. 2021 ENERGY STAR® New Homes Program Projections 45
Table 44. 2019 ENERGY STAR® New Homes Program Cost-Effectiveness Analysis 46
Table 45. 2020 ENERGY STAR® New Homes Program Cost-Effectiveness Analysis 46
Table 46. 2021 ENERGY STAR® New Homes Program Cost-Effectiveness Analysis 46
Table 47. Federal Poverty Guidelines (2018) 48
Table 48. NM EnergySaver Program Forecasting Assumptions 49
Table 49. NM EnergySaver Program Forecasting Assumptions Continued 49

Table 50. NM EnergySaver Program Forecasting Assumptions Continued 50
Table 51. 2019 NM EnergySaver Program Projections 50
Table 52. 2020 NM EnergySaver Program Projections 51
Table 53. 2021 NM EnergySaver Program Projections 52
Table 54. 2019 NM EnergySaver Program Cost-Effectiveness Analysis 53
Table 55. 2020 NM EnergySaver Program Cost-Effectiveness Analysis 53
Table 56. 2021 NM EnergySaver Program Cost-Effectiveness Analysis 53
Table 57. SCORE Plus Program Forecasting Assumptions 57
Table 58. SCORE Plus Program Forecasting Assumptions Continued 57
Table 59. 2019 SCORE Plus Program Projections 58
Table 60. 2020 SCORE Plus Program Projections 58
Table 61. 2021 SCORE Plus Program Projections 59
Table 62. 2019 SCORE Plus Program Cost-Effectiveness Analysis 60
Table 63. 2020 SCORE Plus Program Cost-Effectiveness Analysis 60
Table 64. 2021 SCORE Plus Program Cost-Effectiveness Analysis 60
Table 65. Commercial Comprehensive Program Forecasting Assumptions 63
Table 66. Commercial Comprehensive Program Forecasting Assumptions Continued 63
Table 67. Commercial Comprehensive Program Forecasting Assumptions Continued 64
Table 68. Commercial Comprehensive Program Forecasting Assumptions Continued 64
Table 69. 2019 Commercial Comprehensive Program Annual Impact Projections 65
Table 70. 2020 Commercial Comprehensive Program Annual Impact Projections 65
Table 71. 2021 Commercial Comprehensive Program Annual Impact Projections 66
Table 72. 2019 Commercial Comprehensive Program Cost-Effectiveness Analysis 67
Table 73. 2020 Commercial Comprehensive Program Cost-Effectiveness Analysis 67
Table 74. 2021 Commercial Comprehensive Program Cost-Effectiveness Analysis 67
Table 75. Commercial Load Management Program Forecasting Assumptions 69
Table 76. 2019 Commercial Load Management Program Projections 70
Table 77. 2020 Commercial Load Management Program Projections 70
Table 78. 2021 Commercial Load Management Program Projections 70
Table 79. 2019 Commercial Load Management Program Cost-Effectiveness Analysis 71
Table 80. 2020 Commercial Load Management Program Cost-Effectiveness Analysis 71
Table 81. 2021 Commercial Load Management Program Cost-Effectiveness Analysis 71
Table 82. Residential Measure Lives and Savings Sources 72
Table 83. Residential Net-to-Gross Ratios ("NTGR") and Free Ridership 73
Table 84. Commercial Measure Lives and Savings Sources 74
Table 85. Commercial Net-to-Gross Ratios ("NTGR") and Free Ridership 75
Table 86: Avoided Costs 78

Executive Summary

Pursuant to the New Mexico Efficiency Use of Energy Act (NMSA 1978, Section 62-17-1 et seq.) ("EUEA") and the New Mexico Public Regulation Commission ("Commission" or "NMPRC") Energy Efficiency Rule ("EE Rule" or "Rule"),[1] El Paso Electric Company ("EPE," or "Company") submits its proposed 2019-2021 Energy Efficiency and Load Management Plan ("EE/LM Plan"). The EUEA and Rule require public utilities to offer customers cost-effective energy efficiency ("EE") and load management ("LM") programs ("Programs"). The EUEA and Rule further authorize cost recovery for qualified expenditures relating to the study, development and implementation of these Programs.

EPE's EE/LM Plan proposes changes and additions to EPE's existing portfolio of programs that have been designed to increase participation and to expedite EPE's achievement of EUEA goals. These changes and additions will be implemented upon Commission review and approval.

EPE offers retail electric service in both Texas and New Mexico to approximately 417,900 customers, with approximately 23 percent of customers located in New Mexico. EPE serves approximately 98,000 customers in New Mexico (86,300 or 88 percent within the residential customer class). EPE's New Mexico service territory encompasses the City of Las Cruces, and nearby municipalities located in the New Mexico counties of Doña Ana, Luna, Otero and Sierra.

Energy Efficiency Plan Overview

2018 Programs

EPE's existing EE Programs were approved by the Commission in NMPRC Case No. 16-00185-UT. This EE/LM Program portfolio is available to customers in EPE's New Mexico residential, commercial, and industrial customer classes and includes:

- LivingWise® Program (Educational);
- Residential Comprehensive Program;
- CFL & LED Program;
- ENERGY STAR® New Homes Program;
- New Mexico EnergySaver Program (Low-income program);
- School and Business Assistance ("SCORE Plus") Program; and
- Small Commercial Comprehensive Program.

[1] New Mexico Administrative Code ("NMAC") Title 17 Chapter 7 Part 2.

Proposed EE/LM Plan Overview

EPE contracted with Frontier Energy ("Frontier") to assist in the analysis and validation of EPE's proposed program offerings selected for 2019, 2020, and 2021.

In 2017, prior to working with Frontier to screen programs for cost-effectiveness, EPE issued the 2019–2021 New Mexico Energy Efficiency and Load Management Programs RFP # EPE-50062135-MM. This competitive bidding process allowed EPE to review proposals related to educational, residential, low income, small and large commercial, and residential and commercial load management programs. EPE evaluated the proposals based on the required RFP criteria and selected the programs making up the EE/LM Plan presented herein.

Frontier worked collaboratively with EPE to analyze potential program modifications of its selected EE/LM programs, consider new measures, and conduct the program- and portfolio-level cost-effectiveness analyses supporting EPE's proposed EE/LM Plan.

Proposed Changes

EPE's proposed EE/LM Plan consists of the following programs:

- **Residential**
    1. LivingWise® Program;
    2. Residential Comprehensive Program;
    3. New Mexico ("NM") Appliance Recycling Program;
    4. ENERGY STAR® New Homes Program; and
    5. NM EnergySaver Program
- **Commercial**
    1. SCORE Plus Program;
    2. Commercial Comprehensive Program; and
    3. Commercial Load Management

While this list of programs is similar to EPE's 2018 program portfolio, there are significant changes for 2019, 2020, and 2021:

1. Addition of the:
    a. NM Appliance Recycling Program; and
    b. Load Management Program
2. Removal of the CFL & LED Program
3. Modification of the 2018 Small Commercial Program from an EPE-administered offering to a turn-key program design implemented by Frontier called the Commercial Comprehensive Program.

In addition, EPE added new measures to three programs. The measures listed in the below table were included in the program-level cost-effectiveness analyses.

Table 1: New Measures

Program	New Measures
Residential Comprehensive	ENERGY STAR® Windows
	Electric Clothes Dryers
	Attic Encapsulation
	ENERGY STAR® Smart Thermostat
	ENERGY STAR® Cool Roof
NM EnergySaver	Pipe Insulation
	Tank Insulation
	PAR38 Lamp
	ENERGY STAR® Smart Thermostat
Commercial Comprehensive	ENERGY STAR® Combination Ovens
	ENERGY STAR® Convection Ovens
	ENERGY STAR® Hot Food Holding Cabinets
	ENERGY STAR® Electric Fryers
	ENERGY STAR® Steam Cookers
	Ice maker
	Beverage Vending Machine
	ECM Evaporator Fan Motor

Proposed Budget

EPE established the portfolio budget based on the three percent funding methodology outlined in the EUEA. The proposed program budgets shown in the below tables were developed based on past experience, anticipated participation levels by measure, and the associated measure incentive levels that were deemed necessary to encourage participation.[2]

Table 2: 2019 Proposed Program and Total Portfolio Budgets

EPE Plan	Annual Incentive Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
LivingWise® Program	$40,413	$35,526	$75,939
Residential Comprehensive Program	$1,215,809	$359,021	$1,574,830
NM Appliance Recycling Program	$25,000	$81,813	$106,813
ENERGY STAR® New Homes Program	$241,005	$204,702	$445,707
NM EnergySaver Program	$492,016	$63,155	$555,171
SCORE Plus Program	$746,778	$822,176	$1,568,955
Commercial Comprehensive Program	$696,256	$321,242	$1,017,499
Commercial Load Management	$255,000	$123,313	$378,313
Total Portfolio	**$3,712,277**	**$2,010,949**	**$5,723,226**

Table 3: 2020 Proposed Program and Total Portfolio Budgets

EPE Plan	Annual Incentive Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
LivingWise® Program	$40,413	$35,608	$76,021
Residential Comprehensive Program	$1,011,084	$323,223	$1,334,307
NM Appliance Recycling Program	$25,000	$73,937	$98,937
ENERGY STAR® New Homes Program	$241,005	$205,890	$446,895
NM EnergySaver Program	$465,142	$72,575	$537,717
SCORE Plus Program	$716,829	$803,628	$1,520,458
Commercial Comprehensive Program	$472,255	$244,845	$717,100
Commercial Load Management	$255,000	$127,212	$382,212
Total Portfolio	**$3,226,728**	**$1,886,918**	**$5,113,646**

[2] Due to rounding, totals may not match the sum of individual programs as summarized in these tables, or others throughout this document.

Table 4: 2021 Proposed Program and Total Portfolio Budgets

EPE Plan	Annual Incentive Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
LivingWise® Program	$40,413	$44,253	$84,665
Residential Comprehensive Program	$1,013,009	$339,775	$1,352,784
NM Appliance Recycling Program	$25,000	$74,343	$99,343
ENERGY STAR® New Homes Program	$241,005	$209,811	$450,816
NM EnergySaver Program	$465,076	$72,139	$537,215
SCORE Plus Program	$666,832	$808,926	$1,475,758
Commercial Comprehensive Program	$474,131	$252,654	$726,785
Commercial Load Management	$255,000	$131,279	$386,279
Total Portfolio	**$3,180,466**	**$1,933,180**	**$5,113,646**

Program Screening & Cost-effectiveness Analysis

Overview

Frontier conducted the quantitative analyses used to estimate the costs and benefits of EPE's potential EE/LM Plan.

EPE provided three discount rates that were used to calculate the present value of costs and benefits for the UCT calculation, as shown in EPE Witness Adrian Hernandez's Exhibit AH-2. All other factors held constant, the higher the discount rate, the lower the UCT value. Specifically, the following three discount rates, based on EPE's weighted average cost of capital ("WACC"), as provided by EPE were used: (1) 7.6657% - the Commission approved WACC from NMPRC Case No. 15-00127-UT; (2) 6.9812% - after tax WACC from NMPRC Case No. 15-00127-UT; (3) 8.3667% - Hearing Examiner methodology from NMPRC Case No. 16-00185-UT.

The below tables provide the cost-effectiveness of EPE's EE/LM Plan under these three different discount rates.

Table 5. 2019 Portfolio Cost-Effectiveness Results

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.38	1.33	1.29
Total Benefits ($000s)	7,925	7,640	7,366
Total Costs ($000s)	5,723	5,723	5,723

Table 6. 2020 Portfolio Cost-Effectiveness Results

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.37	1.32	1.28
Total Benefits ($000s)	7,025	6,773	6,531
Total Costs ($000s)	5,114	5,114	5,114

Table 7. 2021 Portfolio Cost-Effectiveness Results

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.37	1.32	1.27
Total Benefits ($000s)	6,993	6,741	6,501
Total Costs ($000s)	5,114	5,114	5,114

The following three tables provide the program-level results under the three discount rates. Because all programs have a benefit-cost ratio equal to or greater than 1.00, the programs and overall portfolio are cost-effective based on the Utility Cost Test ("UCT").

Table 8. 2019 Program Cost-Effectiveness Results

Program	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
LivingWise® Program	1.24	1.22	1.19
Residential Comprehensive Program	1.68	1.62	1.56
NM Appliance Recycling Program	1.05	1.03	1.01
ENERGY STAR® New Homes Program	1.11	1.05	1.00
NM EnergySaver Program	1.19	1.14	1.09
SCORE Plus Program	1.43	1.38	1.33
Commercial Comprehensive Program	1.31	1.27	1.22
Commercial Load Management	1.05	1.05	1.05
Total Portfolio	**1.38**	**1.33**	**1.29**

Table 9. 2020 Program Cost-Effectiveness Results

Program	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
LivingWise® Program	1.27	1.25	1.22
Residential Comprehensive Program	1.63	1.57	1.51
NM Appliance Recycling Program	1.16	1.14	1.12
ENERGY STAR® New Homes Program	1.13	1.07	1.02
NM EnergySaver Program	1.19	1.14	1.09
SCORE Plus Program	1.44	1.39	1.34
Commercial Comprehensive Program	1.33	1.28	1.24
Commercial Load Management	1.06	1.06	1.06
Total Portfolio	**1.37**	**1.32**	**1.28**

Table 10. 2021 Program Cost-Effectiveness Results

Program	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
LivingWise® Program	1.16	1.14	1.11
Residential Comprehensive Program	1.64	1.58	1.52
NM Appliance Recycling Program	1.18	1.15	1.13
ENERGY STAR® New Homes Program	1.14	1.08	1.03
NM EnergySaver Program	1.21	1.16	1.11
SCORE Plus Program	1.40	1.34	1.29
Commercial Comprehensive Program	1.34	1.29	1.25
Commercial Load Management	1.07	1.07	1.07
Total Portfolio	**1.37**	**1.32**	**1.27**

The projected annual kilowatt ("kW") and kilowatt-hour ("kWh") savings and costs for EPE's EE/LM Plan are summarized in the following tables. In addition, total projected lifetime energy savings for the overall portfolio is presented in the last row of each table. Projected savings per measure are detailed in the individual program sections of this EE/LM Plan.

Table 11. 2019 Projected Impacts*

Year	Annual Participants[3]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
2019	49,456	8,732	16,921,489	$3,712,277	$2,010,949	$5,723,226
2020	0	4,650	16,880,586	0	0	0
2021	0	4,650	16,880,201	0	0	0
2022	0	4,650	16,880,201	0	0	0
2023	0	4,650	16,879,809	0	0	0
2024	0	4,638	16,751,428	0	0	0
2025	0	4,638	16,751,428	0	0	0
2026	0	4,634	16,603,523	0	0	0
2027	0	4,514	14,662,896	0	0	0
2028	0	4,507	14,618,305	0	0	0
2029	0	4,451	14,036,685	0	0	0
2030	0	4,437	13,948,871	0	0	0
2031	0	4,300	13,291,865	0	0	0
2032	0	4,300	13,288,156	0	0	0
2033	0	3,773	9,947,149	0	0	0
2034	0	522	1,720,720	0	0	0
2035	0	522	1,720,720	0	0	0
2036	0	522	1,720,720	0	0	0

[3] For some programs, the number of program participants may represent the projected number of homes or businesses participating in a program. For others, the number of participants may represent the number of installed measures or number of completed projects (which consists of various measure mixes and quantities). Please see the program descriptions for details.

2037	0	332	1,068,520	0	0	0
2038	0	332	1,068,520	0	0	0
2039	0	255	523,252	0	0	0
2040	0	255	523,252	0	0	0
2041	0	255	523,252	0	0	0
2042	0	23	46,052	0	0	0
2043	0	23	46,052	0	0	0
Lifetime kWh			**237,303,650**			

*Due to rounding, totals may not match the sum of individual parts as summarized in this table.

Table 12. 2020 Projected Impacts*

Year	Annual Participants[4]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
2020	48,873	8,050	14,769,944	$3,226,728	$1,886,918	$5,113,646
2021	0	3,967	14,729,041	0	0	0
2022	0	3,967	14,728,272	0	0	0
2023	0	3,967	14,728,272	0	0	0
2024	0	3,967	14,727,879	0	0	0
2025	0	3,955	14,596,680	0	0	0
2026	0	3,955	14,596,680	0	0	0
2027	0	3,950	14,448,774	0	0	0
2028	0	3,831	12,508,148	0	0	0
2029	0	3,823	12,463,557	0	0	0
2030	0	3,808	11,985,802	0	0	0
2031	0	3,799	11,909,145	0	0	0
2032	0	3,662	11,253,771	0	0	0
2033	0	3,662	11,250,062	0	0	0
2034	0	3,320	9,075,220	0	0	0
2035	0	507	1,674,397	0	0	0
2036	0	507	1,674,397	0	0	0
2037	0	507	1,674,397	0	0	0
2038	0	328	1,060,816	0	0	0
2039	0	328	1,060,816	0	0	0
2040	0	251	515,547	0	0	0
2041	0	251	515,547	0	0	0
2042	0	251	515,547	0	0	0
2043	0	19	38,347	0	0	0
2044	0	19	38,347	0	0	0
2045	0	-	-	0	0	0
2046	0	-	-	0	0	0
Lifetime kWh			**206,539,402**			

*Due to rounding, totals may not match the sum of individual parts as summarized in this table.

[4] For some programs, the number of program participants may represent the projected number of homes or businesses participating in a program. For others, the number of participants may represent the number of installed measures or number of completed projects (which consists of various measure mixes and quantities). Please see the program descriptions for details.

Table 13. 2021 Projected Impacts*

Year	Annual Participants[5]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Costs ($)
2021	48,864	7,959	14,405,014	$3,180,466	$1,933,180	$5,113,646
2022	0	3,876	14,364,111	0	0	0
2023	0	3,876	14,363,726	0	0	0
2024	0	3,876	14,363,726	0	0	0
2025	0	3,876	14,363,334	0	0	0
2026	0	3,865	14,233,933	0	0	0
2027	0	3,865	14,233,933	0	0	0
2028	0	3,861	14,086,027	0	0	0
2029	0	3,742	12,145,400	0	0	0
2030	0	3,734	12,100,809	0	0	0
2031	0	3,719	11,623,055	0	0	0
2032	0	3,710	11,546,544	0	0	0
2033	0	3,573	10,891,170	0	0	0
2034	0	3,573	10,887,462	0	0	0
2035	0	3,230	8,712,619	0	0	0
2036	0	507	1,674,575	0	0	0
2037	0	507	1,674,575	0	0	0
2038	0	507	1,674,575	0	0	0
2039	0	328	1,060,816	0	0	0
2040	0	328	1,060,816	0	0	0
2041	0	251	515,547	0	0	0
2042	0	251	515,547	0	0	0
2043	0	251	515,547	0	0	0
2044	0	19	38,347	0	0	0
2045	0	19	38,347	0	0	0
2046	0	-	-	0	0	0
2047	0	-	-	0	0	0
Lifetime kWh			**201,089,557**			

*Due to rounding, totals may not match the sum of individual parts as summarized in this table.

Progress towards 2020 Goal

In calendar year 2014, the EUEA required investor-owned electric utilities to achieve a cumulative energy savings (2008-2014) of five percent of the 2005 total retail kWh sales to its New Mexico customers. The savings requirement for 2020 is a cumulative energy savings goal (2008-2020) of eight percent of the 2005 total retail kWh sales. EPE's energy savings goal for 2014 ("2014 Goal") was 65,815,596 kWh and the goal for 2020 ("2020 Goal") is 105,304,953 kWh.

In 2014, EPE achieved a verified, cumulative energy savings of 72,485,216 kWh or approximately 110% of the 2014 Goal. As of 2017, EPE had achieved a verified, cumulative energy savings of 118,301,310

[5] For some programs, the number of program participants may represent the projected number of homes or businesses participating in a program. For others, the number of participants may represent the number of installed measures or number of completed projects (which consists of various measure mixes and quantities). Please see the program descriptions for details.

kWh, surpassing the 2020 goal by 12.3%. EPE anticipates that, by the end of 2018 if savings are realized, the cumulative energy savings will be 131,548,092 kWh, approximately 125% of the 2020 Goal.

EE/LM Plan Development

Background of Existing Programs

EPE began its New Mexico EE Programs with the LivingWise® Program and CFL Program in 2008, followed with more extensive Program offerings in subsequent years. These offerings included residential customer rebate measures for high efficiency cooling and weatherization and a continuation of a markdown program for CFLs and a CFL giveaway measure. The commercial customer class was provided with longstanding offers for incentives on a variety of efficiency projects since 2009. The initial commercial measures eligible for incentives included lighting and HVAC technologies, motors, variable speed drives ("VSD") and thermal energy storage. EPE also offered a low-income program for qualifying residential customers.

In NMPRC Case 11-00047-UT, EPE filed and received approval for program changes to its 2010 Programs for 2011 through 2013. EPE's 2014-2016 EE Programs were approved by the Commission in NMPRC Case No. 13-00176-UT and the 2017/2018 offerings were approved in NMPRC Case No. 16-00185-UT.

In addition to formal rebate and incentive programs currently offered in New Mexico and Texas, EPE's website (www.epelectric.com) contains energy conservation and energy efficiency information for its customers. At this website, customers and the general public are also provided with links to additional websites for energy efficiency tips and information. In addition, EPE offers a variety of rates to residential, commercial and industrial customers in its New Mexico and Texas jurisdictions that are designed to promote load management and energy efficiency.

Regulatory Requirements

17.7.2.8.J NMAC requires that the utility's portfolio of EE Programs be cost-effective. Section 62-17-4(C) of the EUEA states that the UCT shall be used to determine cost-effectiveness. All Programs proposed by EPE in the EE/LM Plan are cost-effective, achieving a positive UCT of 1.00 or greater.

Program Analysis & Validation

EPE employed Frontier to analyze potential program modifications of its selected EE/LM programs, consider new measures, and conduct the program- and portfolio-level cost-effectiveness analyses supporting EPE's proposed EE/LM Plan.

Frontier has significant experience in program analysis, development, and validation. As a nationally recognized consulting firm, it provides energy efficiency and demand response program design, evaluation, implementation, and measurement and verification ("M&V") services to clients across the country. Frontier has provided significant contributions to program design, implementation, and evaluation activities in Colorado, Oklahoma, Arkansas, Texas, and New Mexico, as well as Ontario, Canada.

Cost-effectiveness Analysis

EPE used the UCT to analyze, screen, and validate the measure mix for each program design, as directed by the EUEA. The EUEA defines the UCT as "a standard that is met if the monetary costs that are borne by the public utility and that are incurred to develop, acquire and operate energy efficiency or load management resources on a life-cycle basis are less than the avoided monetary costs associated with developing, acquiring and operating the associated supply-side resources."

As such, the UCT restricts the benefit-cost test perspective to a comparison of avoided supply-side costs to utility program costs. The present value of avoided capacity and energy costs across the life of the measures are treated as benefits and included in the numerator of the benefit-cost ratio. The present value of program costs and incentives as detailed herein are included in the denominator of the benefit-cost ratio. A benefit-cost ratio greater than or equal to 1.00 indicates the program is cost-effective and demonstrates that the utility will benefit from implementation of the EE/LM Plan. In turn, this will translate into benefits to customers in the form of lower electricity rates in the long run. The UCT is expressed using the following inputs:

Benefits:

- Energy-related costs avoided by the utility
- Capacity-related costs avoided by the utility

Costs:

- Administrative costs[6]
- Participant incentives

Assumptions and Methodologies

EPE employed standard methods and resources to analyze this plan. Technical assumptions provided in the New Mexico Technical Resource Manual ("NM TRM") developed by the Commission's previously selected M&V evaluator, ADM, were used to calculate projected savings. For new programs, implementer-provided costs and savings were used to inform estimated program performance. The Texas Technical Reference Manual version 5.0 ("TX TRM") and the Illinois Statewide Technical Reference Manual for Energy Efficiency version 6.0 ("IL TRM") were used for measures not included in the NM TRM.

To calculate cost-effectiveness for EPE's selected programs, Frontier projected typical participant incentives and savings based on previous results, program administrator experience, and program implementer planning documents including, but not limited to, projected measure mix and housing characteristics. The incentive and annual savings per average participant used in the cost-effectiveness calculations are provided in the forecasting assumptions per measure for each program. The measures included in the forecasting assumptions for each program represent the eligible measures most likely to be installed in the program, or the measures EPE and its program implementer, if applicable, are targeting for increased installation. EPE may choose to increase or decrease the list of eligible measures per program based on new information, cost-effectiveness potential, or other reasons as deemed appropriate by the utility.

Each program was analyzed following the steps below:

1. Collect program inputs, including:

[6] For the purpose of cost-effectiveness testing, "administrative costs" include program administration, marketing, research & development, and M&V expenses. Please see EPE witness Perea's Exhibit AGP-2 for a breakdown of administrative costs per program.

a. Measure specifications or typical savings;
b. Estimated useful lives ("EUL"); and
c. Net-to-gross factors.

2. Estimate projected participation and incentive costs.
3. Calculate UCT.
4. Review program savings, cost, and cost-effectiveness results and revise inputs where appropriate.

The sources for these inputs and estimates include the following:

- NM TRM;
- TX TRM;
- IL TRM;
- ENERGY STAR® resources;
- Implementer provided projections;
- Measurement & Verification ("M&V") Reports; and
- EPE and program administrator experience.

Utility Economic and Technical Assumptions

Three EPE provided discount rates were used to calculate the present value of costs and benefits for the UCT calculation. The higher the UCT, the more cost-effective the program is. All other factors held constant, the higher the discount rate, the lower the UCT value. Specifically, the following three weighted average cost of capital ("WACC") rates as provided by EPE were used: (1) 7.6657% - the Commission approved WACC from NMPRC Case No. 15-00127-UT; (2) 6.9812% - after tax WACC from NMPRC Case No. 15-00127-UT; (3) 8.3667% - Hearing Examiner methodology from NMPRC Case No. 16-00185-UT.

Supply and production avoided cost values were supplied by EPE (see Appendix C: Avoided Costs). All energy and demand impact estimates have been adjusted for EPE's line loss factor of 8.32%.[7]

Proposed EE/LM Plan

EPE focused on designing a portfolio of Programs that will result in energy and demand savings, rather than non-energy benefits. EPE recognizes that there may be non-energy benefits associated with its proposed EE/LM Plan but has not included benefits of this type in the cost-effectiveness test presented in this analysis.

The portfolio of EE Programs comprising EPE's proposed EE/LM Plan are described below.

Residential Program Descriptions

The EE/LM Plan includes five residential EE Programs. Following is a description of each program:

1. **LivingWise® Program** – This program serves as an effective community outreach program to improve customer awareness of energy efficiency measures and programs. Through this program, EPE identifies and enrolls teachers of 5th grade students,

[7] EPE's line loss factor approved in Case No. 15-00127-UT.

providing them with a LivingWise kit that contains energy saving devices and energy efficiency educational materials. The kits will continue to include three LED light bulbs, one 1.5 gallons per minute ("gpm") kitchen faucet aerator, two 0.5 gpm bathroom faucet aerators, a digital thermometer, a flow rate test bag, a natural resource fact chart, and instructions on how to install all of the measures. EPE proposes to include an additional 1.5 gpm low-flow showerhead, for a total of two showerheads per kit. All of the materials provided meet state and national educational standards, which allow the program to easily fit into the teacher's existing requirements. The students take the LivingWise kit home, and with the help of their parents, install the devices in their home and complete a home energy audit report. All of the responses, including the home audits, teacher responses, student input and parent responses, are tabulated. This program is designed to generate immediate and long-term energy savings for participants.

2. **Residential Comprehensive Program** – This program offers rebates for the installation of various energy saving measures. The current measures include ceiling and floor insulation, duct sealing, air infiltration reduction, and solar screen installation. This program also offers rebates for eligible high efficiency evaporative coolers, central refrigerated air conditioners, mini-split air conditioning systems, and heat pumps. In addition, EPE provides rebates for energy efficient pool pump motors and insulation for homes with evaporative cooling that have electric resistance heating. EPE proposes to add rebates for attic encapsulation, ENERGY STAR® cool roof, ENERGY STAR® electric clothes dryers, ENERGY STAR® connected smart thermostats, and ENERGY STAR® windows to the Residential Comprehensive Program. The rebates are paid directly to the customer or, upon customer approval, can be paid to the contractors that perform the installation.

3. **NM Appliance Recycling Program** – This program will provide rebates designed to encourage EPE's residential customers to recycle their older, less efficient refrigerators and freezers rather than use them as secondary or backup units. The NM Appliance Recycling Program offers eligible customers a $50 incentive for EPE to remove and recycle their old refrigerator or freezer.

4. **ENERGY STAR® New Homes Program** ("New Homes Program") – This program provides incentives for homebuilders to construct more energy efficient homes that exceed the current building code. There are two incentive paths in this program that homebuilders can choose from, depending upon which one fits their needs: the Prescriptive Path or the Performance Path. The measure-specific Prescriptive Path provides incentives based on above-code installation of a combination of measures including ENERGY STAR® lighting and refrigerators, high-efficiency cooling equipment, radiant barriers, and insulation. The Performance Path provides tiered incentive levels for new homes that exceed the 2009 International Energy Conservation Code. The minimum tier for homebuilders to qualify for the Performance Path is ten percent above the standard. The incentives for the New Homes Program are paid directly to the homebuilder or, upon their approval, to one of their subcontractors.

5. **NM EnergySaver Program** – This program is EPE's low income program that currently offers eligible residential customers, depending on their heating type, a variety of energy efficiency measures including insulation, lighting upgrades, low-flow showerheads, faucet aerators, duct sealing, and air infiltration reduction at no cost. EPE proposes to offer domestic hot water pipe insulation, ENERGY STAR® connected smart thermostats, domestic hot water tank insulation, and PAR38 (parabolic aluminized reflector) LED 65 watt replacement lamps as new measures. Qualification for the Program is based on an annual household income at or below 200 percent of the federal poverty guidelines. In the EE/LM Plan, EPE will focus program promotions to those customers experiencing ability-to-pay problems. This program has been extremely successful due to the extensive collaboration with other community organizations that provide services to low

income customers. In 2019-2021, EPE will continue to collaborate with New Mexico Gas Company and Zia Natural Gas to identify EPE customers that may be able to receive assistance.

EPE's EE/LM Plan includes three commercial EE Programs. Following is a description:

1. **SCORE Plus Program** – This program offers incentives for commercial customers with an average demand of greater than 100 kW, as well as all schools and city and county customers. This program also provides customers with technical support and outreach services as necessary. The SCORE Plus Program provides incentives for a wide range of energy efficiency measures including lighting, HVAC, equipment controls, and custom projects. As with the Commercial Comprehensive Program, there is a high efficiency HVAC tune-up measure that is available through participating contractors in this program. New construction and retrofit projects are accepted in this program. Incentives are paid directly to the customer or, upon customer approval, can be paid to the contractors that perform the installation.
2. **Commercial Comprehensive Program** – This program offers incentives and rebates for lighting retrofits and new construction projects to commercial customers with an average demand of equal to or less than 100 kW, as well as technical support and outreach services as necessary. This program includes all EPE's commercial direct rebates, such as commercial cooling, ENERGY STAR® cool roofs, Heating Ventilation and Air Conditioning ("HVAC") energy management, window treatments, vending energy misers, commercial pool pumps, and night covers for refrigeration cases. There is also a high efficiency HVAC tune-up measure that is available through participating contractors for this program. In the EE/LM Plan, EPE proposes to extend program rebates to commercial customers with an average demand greater than 100 kW. EPE also proposes to add rebates for ENERGY STAR® commercial kitchen equipment, ENERGY STAR® beverage vending machines, and ECM evaporator fan motors. New construction and retrofit projects are accepted in this program. Incentives and rebates are paid directly to the customer or, upon customer approval, may be paid to the contractors that perform the installation.
3. **Commercial Load Management** - This program allows participating customers to provide, when requested by EPE, voluntary curtailment of electric consumption during peak demand periods in return for incentive payments. Incentives are based on verified demand savings that customers are able to achieve in response to notifications of voluntary curtailment events by EPE. Demand savings and incentive payment amounts are based on the actual, verified load curtailments.

Measurement and Verification

Unless otherwise specified within the program-specific details of this Plan, the M&V described in this section is applicable to all Programs within EPE's EE/LM Plan.

EPE will utilize deemed savings values for the majority of projects when available. If formal M&V is required for a custom project by the statewide M&V evaluator, Evergreen Economics, EPE will work with the customer to develop a formal M&V process in accordance with the International Performance Measurement and Verification Protocol ("IPMVP"). For measures utilizing deemed or stipulated savings, participants' contractors or EPE Program implementers will record pre- and post-installation equipment and building characteristics on EPE-provided measure calculators. For example, on commercial lighting projects, contractors or implementers will need to complete the appropriate Lighting Survey Form to

indicate pre- and post-installation lighting fixtures, as well as identify the correct building type where the project will be completed.

EPE will coordinate to ensure that an adequate number of installations are pre- and post-inspected to ensure that the Programs are producing the expected savings. An EPE employee or EPE's Program implementers will be sent to perform a pre- and post-inspection of a sample of the projects.

The statewide M&V evaluator will also provide additional installation inspections to increase the confidence in the results of the EE/LM Plan. EPE will rely on the statewide evaluator to provide M&V review and feedback. The statewide M&V evaluator will be responsible for developing M&V activities to be performed, as well as a method to evaluate expenditures, free-ridership, and energy savings for the Programs. Additionally, they will review all technical assumptions used by EPE to confirm that the expected savings were achieved at the end of the program year. EPE will make adjustments going forward for future plan years based on the findings and results of the statewide evaluator.

EPE retains the right to modify rebate levels and remove or add measures, as deemed necessary, based on economic conditions and program performance while maintaining cost-effectiveness.

Customer Self-Directed Alternatives

The EUEA and the Rule allow for large commercial customers to develop self-directed alternatives. Large customer self-sponsors are required to develop their M&V plans in accordance with the EUEA and the Rule and follow EPE's procedures for filing and approval of self-directed projects. Based on the criteria in the Rule, EPE or the Commission-approved self-direct program administrator will verify that a reasonable M&V plan has been developed and that this plan is followed in order to quantify the energy savings for each project. Credits will be applied against the large customer's Efficient Use of Energy Recovery Factor charged by EPE in accordance with the EUEA and the Rule.

EPE 2019-2021 Residential Program Portfolio

EPE's Residential Energy Efficiency Program portfolio includes the following programs:

1. LivingWise® Program;
2. Residential Comprehensive Program;
3. NM Appliance Recycling Program;
4. ENERGY STAR® New Homes Program; and
5. NM EnergySaver Program.

LivingWise® Program

Program Objectives and Goals

The LivingWise® Program delivers residential energy efficiency education and measures to fifth grade students. The program produces energy savings through the installation of LEDs, high efficiency showerheads and aerators. In addition, the take home kit provides materials to educate students and their families on valuable ways to save energy, water, and money. The program's ultimate objective is to instill life-long energy saving behaviors.

Implementation and Administration Plan

Assignment of Responsibilities

Resource Action Programs ("RAP") is EPE's implementer for this program. RAP will produce custom LivingWise® Program materials with EPE's approval. EPE will review and approve a list of schools to be targeted by RAP. Each participating teacher will receive a set of teacher materials and a LivingWise® Kit. Every student in the participating/enrolled class will also receive a LivingWise® Kit.

RAP staff will contact the participating/enrolled teachers at various times throughout the program to provide support for the teachers and to request the return of the audit forms and evaluations. RAP will provide EPE with a Program Summary Report in time for inclusion in EPE's Annual Report to the NMPRC.

Target Market Segment and Marketing Plan

The program targets fifth grade students living in EPE's service territory. Specifically, RAP will conduct the research and marketing efforts necessary to identify eligible schools and sign them up for the LivingWise® Program. Participating teachers will deliver the kits as part of a classroom lesson. Take home activities and measure installation in each student's home will engage the student's families.

EPE's program will be a customized version of the current LivingWise® program to more fully integrate it with overall EPE communications. The program will also provide information and incentives tied to enrollment and participation in other EPE Programs.

Participation Requirements

The schools that are approached for participation in this program will be located in EPE's New Mexico service territory.

Program Assumptions and Cost-Effectiveness

Program Timeframe

For planning purposes, three years (2019-2021) of program implementation has been assumed.

Program Forecasting Assumptions

The below table details the estimated useful life ("EUL" or "measure life"), incentive levels, projected gross annual savings at the meter per participant, measure quantity/participation levels, and free-ridership.[8] Sources for each of these assumptions are found in Appendix A.

Table 14. LivingWise® Program Forecasting Assumptions

	LivingWise® Program per Participant
Measure Life (years)	7.98
Incentive per avg participant ($) 2019	$13
Incentive per avg participant ($) 2020	$13
Incentive per avg participant ($) 2021	$13
Annual kWh	260
Annual kW	0.0027
Measure Quantity 2019	3,050
Measure Quantity 2020	3,050
Measure Quantity 2021	3,050
Free-ridership	0.00%

The incentive amount includes the measure costs of the materials provided in the LivingWise® kit, as well as the implementation costs.

Projected Program Savings and Cost-effectiveness

Projected participation, savings (annual and lifetime) and costs are shown in the tables below.

[8] Incentive dollars and savings may be rounded to the dollar, kW or kWh, as appropriate for each measure. This applies to the LivingWise Program and all other Programs within the EE/LM Plan.

Table 15. 2019 LivingWise® Program Projections

Year	Annual Participants[9]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2019	3,050	10	863,634	$40,413	$35,526	$75,939
2020	0	10	863,634	0	0	0
2021	0	10	863,634	0	0	0
2022	0	10	863,634	0	0	0
2023	0	10	863,634	0	0	0
2024	0	10	863,634	0	0	0
2025	0	10	863,634	0	0	0
2026	0	10	863,634	0	0	0
Lifetime kWh			**6,909,075**			

Table 16. 2020 LivingWise® Program Projections

Year	Annual Participants[10]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2020	3,050	10	863,634	$40,413	$35,608	$76,021
2021	0	10	863,634	0	0	0
2022	0	10	863,634	0	0	0
2023	0	10	863,634	0	0	0
2024	0	10	863,634	0	0	0
2025	0	10	863,634	0	0	0
2026	0	10	863,634	0	0	0
2027	0	10	863,634	0	0	0
Lifetime kWh			**6,909,075**			

[9] Projected number of kits.

[10] Projected number of kits.

Table 17. 2021 LivingWise® Program Projections

Year	Annual Participants[11]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2021	3,050	10	863,634	$40,413	$44,253	$84,665
2022	0	10	863,634	0	0	0
2023	0	10	863,634	0	0	0
2024	0	10	863,634	0	0	0
2025	0	10	863,634	0	0	0
2026	0	10	863,634	0	0	0
2027	0	10	863,634	0	0	0
2028	0	10	863,634	0	0	0
Lifetime kWh			**6,909,075**			

Cost effectiveness under different discounts rates each year are shown in the tables below.

Table 18. 2019 LivingWise® Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.24	1.22	1.19
Total Benefits ($000s)	94	93	91
Total Costs ($000s)	76	76	76

[11] Projected number of kits.

Table 19. 2020 LivingWise® Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.27	1.25	1.22
Total Benefits ($000s)	97	95	93
Total Costs ($000s)	76	76	76

Table 20. 2021 LivingWise® Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.16	1.14	1.11
Total Benefits ($000s)	98	96	94
Total Costs ($000s)	85	85	85

Residential Comprehensive Program

Program Objectives and Goals

The Residential Comprehensive Program seeks to generate energy and demand savings for residential customers through the promotion of comprehensive energy efficiency upgrades. This program offers rebates for the installation of various energy saving measures. The current measures include ceiling and floor insulation, duct sealing, air infiltration reduction, and solar screen installation. This program also offers rebates for eligible high efficiency evaporative coolers, central refrigerated air conditioners, mini-split air conditioning systems, and heat pumps. In addition, EPE provides rebates for energy efficient pool pump motors and insulation for homes with evaporative cooling that have electric resistance heating. EPE proposes to add rebates for attic encapsulation, ENERGY STAR® cool roof, ENERGY STAR® electric clothes dryers, ENERGY STAR® connected smart thermostats, and ENERGY STAR® windows to the Residential Comprehensive Program. The rebates are paid directly to the customer or, upon customer approval, can be paid to the contractors that perform the installation. A full list of measures assumed for the cost-effectiveness analysis is provided below.

Besides reducing customers' energy usage, this program will help customers realize improved comfort levels as a result of upgrading their home's overall efficiency. Incentives offset the upfront costs, encouraging customers to choose more efficient products.

EPE seeks to accomplish the following objectives through the Residential Comprehensive Program:

- Long-term and permanent changes in behavior, attitudes, awareness, and knowledge of energy efficiency;
- Peak electric demand reduction;
- Energy cost savings and cost-effectiveness;
- Encourage comprehensive upgrades (customers installing more than one measure);
- Increase customer awareness of the benefits of energy efficient equipment;
- Increase customer awareness of the ENERGY STAR® Label; and
- Encourage private sector delivery of energy efficient equipment.

The program is designed to facilitate the installation of a wide range of cost-effective measures.

Implementation and Administration Plan

The implementation of the Residential Comprehensive Program consists of the following tasks:

- Marketing and promotion to customers;
- Outreach to contractors;
- Application processing; and
- Program tracking and reporting.

The program will be marketed to all prospective residential participants, encouraging customers to increase the efficiency of their home's building envelope and cooling equipment. It will also encourage customers to implement additional measures through this program. In addition, EPE will offer outreach to local contractors to make them aware of the program's offerings. All application processing, program tracking, database management and reporting are administered by Frontier. Applications are received via

online submission or mail, then reviewed to confirm the applications meet the requirements of the program.

Assignment of Responsibilities

EPE will provide marketing and program outreach efforts for all measures. EPE will continue to use Frontier to process applications and track the program energy and demand savings. Frontier will also maintain the epesaver.com website for EPE. Savings are calculated using a deemed savings approach. EPE performs verification processes through onsite inspections post-installation to confirm that the installations reported in applications did occur. Evaluation, measurement, and further verification processes will be carried out by the statewide M&V evaluator who will provide reviews.

Target Market Segment and Marketing Plan

This program targets existing residential customers that have building envelope and cooling equipment inefficiencies. New construction is not eligible for this program.

The program will be marketed to all of EPE's residential customers. Marketing activities will promote the availability of the program, the energy savings to the customer, and the available rebates through the program. Mechanisms used to promote the program may include: direct mail (including bill stuffers), the EPE website, media advertising, and in-store displays.

Participation Requirements

All EPE residential customers with existing homes are eligible to participate in this program. Depending upon the measure, homes may be required to have refrigerated air conditioning or evaporative cooling with resistance heating in order to participate. New home construction is excluded from this program. The table below displays the eligibility criteria per measure:

Table 21. Residential Comprehensive Program Eligibility Criteria

Measure	Eligibility Criteria
Evaporative Cooling	Customers participating in this measure must replace their existing evaporative cooling system with a new high efficiency evaporative cooling system. The installed unit must have a minimum saturation effectiveness of 85% and must be included on EPE's qualified product listing (available on EPE's website). Installed systems cannot be portable units; therefore, window units are not eligible.
Refrigerated Air Conditioning	Customers participating in this measure must install an AHRI qualified and matched refrigerated system. Additionally, the installed system must comply with the following minimum efficiency standards: All mini-split AC/HP systems: 17.0 SEER, 12.5 EER, 9.0 HSPF (HP ONLY) Tier 1 central AC/HP systems: 15.0-15.9 SEER, 12.0 EER, 8.5 HSPF (HP ONLY) Tier 2 central AC/HP systems: 16.0-17.9 SEER, 12.5 EER, 8.5

Measure	Eligibility Criteria
	HSPF (HP ONLY) Tier 3 central AC/HP systems: 18.0 SEER, 12.5 EER, 9.0 HSPF (HP ONLY)
Ground Source Heat Pumps	Customers participating in this measure must install an AHRI qualified and matched refrigerated system. Additionally, the installed system must comply with the following minimum efficiency standards: Open Loop: ≥16.2 EER and ≥3.6 COP Closed Loop: ≥14.1 EER and ≥3.3 COP Direct Expansion: ≥15.0 EER and ≥3.5 COP
Air Infiltration Reduction	Customers participating in this program must have refrigerated air conditioning. Customers with evaporative cooling are not eligible. Customers must have electrically-fueled central heating (either an electric resistance furnace or heat pump) to claim heating savings. Pre- and post-leakage testing must be completed in accordance with EPE-approved techniques.
Duct Sealing	Customers participating in this program must have refrigerated air conditioning. Customers with evaporative cooling are not eligible. Customers must have electrically-fueled central heating (either an electric resistance furnace or heat pump) to claim heating savings. Pre- and post-leakage testing must be completed in accordance with EPE-approved techniques.
Smart Thermostats	Customers participating in this program must have refrigerated air conditioning. Customers must have electrically-fueled central heating (either an electric resistance furnace or heat pump) to claim heating savings. HVAC unit must be controlled by an ENERGY STAR qualified connected thermostat.
Ceiling Insulation	Customers participating in the measure must have refrigerated air conditioning or evaporative cooling with gas, electric resistance, or heat pump heating. The existing ceiling insulation must have an insulation R-value of R-22 or less, and the installed insulation must have an insulation R-value of R-19 or higher.

Measure	Eligibility Criteria
Attic Encapsulation	Customers participating in the measure must have refrigerated air conditioning or evaporative cooling to claim cooling savings. Customers must have gas, electric resistance, or heat pump heating to claim heating savings. The existing ceiling insulation must have an insulation R-value of R-22 or less and must be removed prior to encapsulating the attic. The installed insulation must have an insulation R-value of R-30 or higher.
Floor Insulation	Customers participating in the measure must have refrigerated air conditioning or evaporative cooling with electric resistance or heat pump heating. Customers with gas heating are disqualified. The existing floor joists must have no existing insulation, and the installed insulation must have an insulation R-value of R-19 or higher.
Cool Roofs	Customers participating in this program must have refrigerated air conditioning or evaporative cooling to claim cooling savings. Customers must have central heating (gas, electric resistance, or heat pump) to claim heating savings. The installed cool roof product must be rated by the Cool Roof Rating Council and must comply with the ENERGY STAR certified roof product performance standards. Depending on roof slope, the installed roof product must meet specific initial and 3-year solar reflectance standards.
Solar Screens or Films	Customers participating in the measure must have refrigerated air conditioning. Customers with evaporative cooling or electric resistance heating are not eligible. To be eligible the existing windows must not have solar screens or films. Installed solar screens or films must reduce solar heat gain by a minimum of 65%, must be installed on the exterior of the window, and must not be shaded by existing awnings or other shading devices. Rebates will only be paid on solar screens or films installed on south and west facing windows.
ENERGY STAR Windows	Customers participating in the measure must have refrigerated air conditioning or evaporative cooling to claim cooling savings. Customers must have central heating (gas, electric resistance, or heat pump) to claim heating savings. The installed windows must comply with the relevant ENERGY STAR U-Factor and solar heat gain coefficient standards.

Measure	Eligibility Criteria
Pool Pumps	Customers participating in the measure must replace an existing pool pump with an ENERGY STAR variable-speed pool pump with eligible controller. Two-speed and multi-speed pool pumps are not eligible. The measures only apply to in-ground pool applications.
ENERGY STAR Clothes Dryers	Customers participating in this measure must install clothes dryers that comply with current ENERGY STAR efficiency standards.

Program Assumptions and Cost-Effectiveness

Program Timeframe

For planning purposes, three years (2019-2021) of program implementation has been assumed.

Program Forecasting Assumptions

The tables below detail the measure life, incentive levels, projected gross annual savings at the meter per participant, measure quantity/participation levels, and free-ridership used to calculate program savings. Sources for each of these assumptions are found in Appendix A.

Table 22. Residential Comprehensive Program Forecasting Assumptions

	Air Infiltration (Gas Heat ("Gas"))	Duct (Gas)	Duct (Heat Pump ("HP"))	Evaporative Cooling	HVAC Tune-up
Measure Life (years)	11	18	18	15	5
Incentive per avg participant ($) 2019	$46	$124	$421	$600	$100
Incentive per avg participant ($) 2020	$46	$124	$421	$600	$100
Incentive per avg participant ($) 2021	$46	$124	$421	$600	$100
Annual kWh	73	383	2,025	3,878	933
Annual kW	0.05	0.26	0.18	2.46	0.72
Measure Quantity 2019	25	58	3	1,631	25
Measure Quantity 2020	21	43	2	1,294	25
Measure Quantity 2021	21	44	2	1,297	25
Free-ridership	57.19%	57.19%	57.19%	57.19%	57.19%

Table 23. Residential Comprehensive Program Forecasting Assumptions Continued

	Ceiling Insulation (Gas Heat/ Refrigerated Cooling, R-5 to R-8)	Ceiling Insulation (Gas Heat/ Refrigerated Cooling, R-9 to R-14)	Pool Pumps	Air Conditioning ("AC") (Gas or HP)	HP (AC/Electric Resistance ("ER") Baseboard)
Measure Life (years)	25	25	10	15	18
Incentive per avg participant ($) 2019	$53	$50	$300	$510	$500
Incentive per avg participant ($) 2020	$53	$50	$300	$510	$500
Incentive per avg participant ($) 2021	$53	$50	$300	$510	$500
Annual kWh	193	94	2,677	1,039	6,000
Annual kW	0.19	0.09	0.64	0.43	3.99
Measure Quantity 2019	6	20	15	315	1
Measure Quantity 2020	5	20	15	315	1
Measure Quantity 2021	5	20	15	315	1
Free-ridership	57.19%	57.19%	57.19%	57.19%	57.19%

Table 24. Residential Comprehensive Program Forecasting Assumptions Continued

	HP (AC; ER Furnace)	HP (AC; Gas or HP)	Solar Screens (Gas)	Windows (Refrigerated Cooling)	Windows (Evaporative Cooling)
Measure Life (years)	18	18	10	25	25
Incentive per avg participant ($) 2019	$366	$361	$73	$3,000	$450
Incentive per avg participant ($) 2020	$366	$361	$73	$3,000	$450
Incentive per avg participant ($) 2021	$366	$361	$73	$3,000	$450
Annual kWh	16,860	1,010	378	581	204
Annual kW	4.45	0.30	0.23	0.39	0.11
Measure Quantity 2019	10	15	15	10	5
Measure Quantity 2020	10	15	15	10	5
Measure Quantity 2021	10	15	15	10	5
Free-ridership	57.19%	57.19%	57.19%	57.19%	57.19%

Table 25. Residential Comprehensive Program Forecasting Assumptions Continued

	Electric Clothes Dryers	Attic Encapsulation (Refrigerated Cooling)	Attic Encapsulation (Evaporative Cooling)	Cool Roofs (Refrigerated Cooling)	Cool Roofs (Evaporative Cooling)
Measure Life (years)	14	25	25	15	15
Incentive per avg participant ($) 2019	$25	$300	$300	$300	$120
Incentive per avg participant ($) 2020	$25	$300	$300	$300	$120
Incentive per avg participant ($) 2021	$25	$300	$300	$300	$120
Annual kWh	160	717	567	483	131
Annual kW	0.02	0.56	0.24	0.40	0.18
Measure Quantity 2019	40	5	16	5	15
Measure Quantity 2020	40	5	16	5	15
Measure Quantity 2021	40	5	16	5	15
Free-ridership	57.19%	57.19%	57.19%	57.19%	57.19%

Table 26. Residential Comprehensive Program Forecasting Assumptions Continued

	Smart Thermostats
Measure Life (years)	11
Incentive per avg participant ($) 2019	$50
Incentive per avg participant ($) 2020	$50
Incentive per avg participant ($) 2021	$50
Annual kWh	1,116
Annual kW	0.00
Measure Quantity 2019	100
Measure Quantity 2020	100
Measure Quantity 2021	100
Free-ridership	57.19%

Projected Program Savings and Cost-effectiveness

Projected participation, savings (annual and lifetime) and costs are shown in the tables below.

Table 27. 2019 Residential Comprehensive Program Projections

Year	Annual Participants [12]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2019	2,336	1,989	3,308,960	$1,215,809	$359,021	$1,574,830
2020	0	1,989	3,308,960	0	0	0
2021	0	1,989	3,308,960	0	0	0
2022	0	1,989	3,308,960	0	0	0
2023	0	1,989	3,308,960	0	0	0
2024	0	1,981	3,298,069	0	0	0
2025	0	1,981	3,298,069	0	0	0
2026	0	1,981	3,298,069	0	0	0
2027	0	1,981	3,298,069	0	0	0
2028	0	1,981	3,298,069	0	0	0
2029	0	1,975	3,276,671	0	0	0
2030	0	1,974	3,223,707	0	0	0
2031	0	1,974	3,223,707	0	0	0
2032	0	1,974	3,223,707	0	0	0
2033	0	1,974	3,220,711	0	0	0
2034	0	38	112,331	0	0	0
2035	0	38	112,331	0	0	0
2036	0	38	112,331	0	0	0
2037	0	7	10,517	0	0	0
2038	0	7	10,517	0	0	0
2039	0	7	10,517	0	0	0
2040	0	7	10,517	0	0	0
2041	0	7	10,517	0	0	0
2042	0	7	10,517	0	0	0
2043	0	7	10,517	0	0	0
Lifetime kWh			**49,614,262**			

[12] Projected number of installed measures (does not represent number of homes).

Table 28. 2020 Residential Comprehensive Program Projections

Year	Annual Participants [13]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2020	1,978	1,601	2,694,855	$1,011,084	$323,223	$1,334,307
2021	0	1,601	2,694,855	0	0	0
2022	0	1,601	2,694,855	0	0	0
2023	0	1,601	2,694,855	0	0	0
2024	0	1,601	2,694,855	0	0	0
2025	0	1,592	2,683,963	0	0	0
2026	0	1,592	2,683,963	0	0	0
2027	0	1,592	2,683,963	0	0	0
2028	0	1,592	2,683,963	0	0	0
2029	0	1,592	2,683,963	0	0	0
2030	0	1,586	2,662,565	0	0	0
2031	0	1,586	2,609,738	0	0	0
2032	0	1,586	2,609,738	0	0	0
2033	0	1,586	2,609,738	0	0	0
2034	0	1,585	2,606,742	0	0	0
2035	0	36	108,612	0	0	0
2036	0	36	108,612	0	0	0
2037	0	36	108,612	0	0	0
2038	0	6	10,427	0	0	0
2039	0	6	10,427	0	0	0
2040	0	6	10,427	0	0	0
2041	0	6	10,427	0	0	0
2042	0	6	10,427	0	0	0
2043	0	6	10,427	0	0	0
2044	0	6	10,427	0	0	0
Lifetime kWh			**40,391,440**			

[13] Projected number of installed measures (does not represent number of homes).

Table 29. 2021 Residential Comprehensive Program Projections

Year	Annual Participants [14]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2021	1,982	1,604	2,700,466	$1,013,009	$339,775	$1,352,784
2022	0	1,604	2,700,466	0	0	0
2023	0	1,604	2,700,466	0	0	0
2024	0	1,604	2,700,466	0	0	0
2025	0	1,604	2,700,466	0	0	0
2026	0	1,596	2,689,575	0	0	0
2027	0	1,596	2,689,575	0	0	0
2028	0	1,596	2,689,575	0	0	0
2029	0	1,596	2,689,575	0	0	0
2030	0	1,596	2,689,575	0	0	0
2031	0	1,590	2,668,177	0	0	0
2032	0	1,589	2,615,349	0	0	0
2033	0	1,589	2,615,349	0	0	0
2034	0	1,589	2,615,349	0	0	0
2035	0	1,589	2,612,353	0	0	0
2036	0	37	108,791	0	0	0
2037	0	37	108,791	0	0	0
2038	0	37	108,791	0	0	0
2039	0	6	10,427	0	0	0
2040	0	6	10,427	0	0	0
2041	0	6	10,427	0	0	0
2042	0	6	10,427	0	0	0
2043	0	6	10,427	0	0	0
2044	0	6	10,427	0	0	0
2045	0	6	10,427	0	0	0
Lifetime kWh			**40,476,147**			

Cost effectiveness under different discounts rates each year are shown in the tables below.

[14] Projected number of installed measures (does not represent number of homes).

Table 30. 2019 Residential Comprehensive Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.68	1.62	1.56
Total Benefits ($000s)	2,646	2,546	2,449
Total Costs ($000s)	1,575	1,575	1,575

Table 31. 2020 Residential Comprehensive Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.63	1.57	1.51
Total Benefits ($000s)	2,178	2,095	2,016
Total Costs ($000s)	1,334	1,334	1,334

Table 32. 2021 Residential Comprehensive Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.64	1.58	1.52
Total Benefits ($000s)	2,223	2,139	2,058
Total Costs ($000s)	1,353	1,353	1,353

New Mexico Appliance Recycling Program

Program Objectives and Goals

This program will provide rebates designed to encourage EPE's residential customers to recycle their older, less efficient refrigerators and freezers ("unit(s)") rather than use them as secondary or backup units. The NM Appliance Recycling Program offers eligible customers a $50 incentive for EPE to remove and recycle their old refrigerator or freezer.

Implementation and Administration Plan

Implementation of the New Mexico Appliance Recycling Program will consist of the following tasks:

- Customer service operations to verify eligibility, collect customer and unit information, and to schedule/reschedule/cancel collection appointments;
- Collection and recycling of units;
- Payment of customer rebates; and
- Program tracking and reporting.

The program will be marketed to all New Mexico residential customers, encouraging customers to save energy by recycling their less efficient refrigerators and freezers. All eligibility processing, collection scheduling, unit recycling, and program tracking and reporting will be administered by an implementer. Units that meet eligibility criteria for the program will be tracked in a database administered by the program implementer.

Assignment of Responsibilities

EPE will provide marketing and program outreach efforts in conjunction with the implementer. EPE has contracted with ARCA Recycling, Inc. ("ARCA") to implement this program. ARCA will verify that units are standard household size and in working condition at time of collection. Savings are calculated using a deemed savings approach. Evaluation, measurement, and further verification processes will be carried out by the statewide M&V evaluator who will provide reviews.

Target Market Segment and Marketing Plan

This program targets residential customers that have inefficient refrigerators and freezers. The program will be marketed to EPE's residential customers. Marketing activities will promote the availability of the program, the energy savings to the customer, and the available rebates through the program. Mechanisms used to promote the program may include: direct mail (including bill stuffers), the EPE website, media advertising, and in-store displays.

Participation Requirements

All EPE New Mexico residential customers are eligible to participate in this program.

Program Assumptions and Cost-Effectiveness

Program Timeframe

For planning purposes, three years (2019-2021) of program implementation has been assumed.

Program Forecasting Assumptions

The table below details the measure life, incentive levels, projected gross annual savings at the meter per participant, measure quantity/participation levels, and free-ridership. Sources for each of these assumptions are found in Appendix A.

Table 33. NM Appliance Recycling Program Forecasting Assumptions

	NM Appliance Recycling
Measure Life (years)	8
Incentive per avg participant ($) 2019	$50
Incentive per avg participant ($) 2020	$50
Incentive per avg participant ($) 2021	$50
Annual kWh	1,128
Annual kW	0.14
Measure Quantity 2019	500
Measure Quantity 2020	500
Measure Quantity 2021	500
Free-ridership	0.00%

Projected Program Savings and Cost-effectiveness

Projected participation, savings (annual and lifetime) and costs are shown in the tables below.

Table 34. 2019 NM Appliance Recycling Program Projections

Year	Annual Participants[15]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2019	500	76	615,183	$25,000	$81,813	$106,813
2020	0	76	615,183	0	0	0
2021	0	76	615,183	0	0	0
2022	0	76	615,183	0	0	0
2023	0	76	615,183	0	0	0
2024	0	76	615,183	0	0	0
2025	0	76	615,183	0	0	0
2026	0	76	615,183	0	0	0
Lifetime kWh			**4,921,466**			

[15] Projected number of units to be recycled.

Table 35. 2020 NM Appliance Recycling Program Projections

Year	Annual Participants[16]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2020	500	76	615,183	$25,000	$73,937	$98,937
2021	0	76	615,183	0	0	0
2022	0	76	615,183	0	0	0
2023	0	76	615,183	0	0	0
2024	0	76	615,183	0	0	0
2025	0	76	615,183	0	0	0
2026	0	76	615,183	0	0	0
2027	0	76	615,183	0	0	0
Lifetime kWh			**4,921,466**			

Table 36. 2021 NM Appliance Recycling Program Projections

Year	Annual Participants[17]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2021	500	76	615,183	$25,000	$74,343	$99,343
2022	0	76	615,183	0	0	0
2023	0	76	615,183	0	0	0
2024	0	76	615,183	0	0	0
2025	0	76	615,183	0	0	0
2026	0	76	615,183	0	0	0
2027	0	76	615,183	0	0	0
2028	0	76	615,183	0	0	0
Lifetime kWh			**4,921,466**			

Cost effectiveness under different discounts rates each year are shown in the tables below.

[16] Projected number of units to be recycled.

[17] Projected number of units to be recycled.

Table 37. 2019 NM Appliance Recycling Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.05	1.03	1.01
Total Benefits ($000s)	112	110	108
Total Costs ($000s)	107	107	107

Table 38. 2020 NM Appliance Recycling Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.16	1.14	1.12
Total Benefits ($000s)	115	113	110
Total Costs ($000s)	99	99	99

Table 39. 2021 NM Appliance Recycling Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.18	1.15	1.13
Total Benefits ($000s)	117	115	112
Total Costs ($000s)	99	99	99

ENERGY STAR® New Homes Program

Program Objectives and Goals

The ENERGY STAR® New Homes Program leverages the nationally-recognized ENERGY STAR® name to improve residential new construction practices. EPE's ENERGY STAR® New Homes Program generates energy and demand savings for residential customers through the promotion of high efficiency home building practices. The purpose of the ENERGY STAR® New Homes Program is to provide incentives for building houses that meet current ENERGY STAR® standards and high-performance standards set by EPE.

The objective of the ENERGY STAR® New Homes Program is to make home builders and homebuyers aware of the benefits and comforts of high efficiency home building practices. The program is designed to increase the overall efficiency of customer homes in compliance with the ENERGY STAR® New Home guidelines.

EPE also seeks to accomplish the following objectives and goals through the ENERGY STAR® New Homes Program:

- Achieve customer energy and cost savings;
- Peak electric demand reduction;
- Increase customer awareness of, and demand for ENERGY STAR® homes; and
- Increase the number of builders having the technical capacity to build ENERGY STAR® homes.

There are two incentive paths in this program that homebuilders can choose from, depending upon which best fits their needs: (1) Prescriptive Path or (2) Performance Path. The measure-specific Prescriptive Path provides incentives based on above-code installation of a combination of measures including ENERGY STAR® lighting, refrigerated air conditioning, radiant barrier, ENERGY STAR® refrigerators and insulation. The Performance Path provides tiered incentive levels for new homes that exceed the 2009 International Energy Conservation Code. The minimum tier for homebuilders to qualify for the Performance Path is ten percent above the standard. The incentives for this program are paid directly to the homebuilder or, upon their approval, to one of their subcontractors.

Implementation and Administration Plan

Implementation of the ENERGY STAR® New Home Program consists of the following tasks:

- Marketing and promotion to customers;
- Outreach to contractors;
- Application processing; and
- Program tracking and reporting.

The program will be marketed to applicable residential customers and local home builders, encouraging customers to recognize the benefits of the different paths of the program and contractors to acknowledge the opportunities participating in the program could offer. All application processing and program tracking and reporting will be administered by an implementer. Homes that meet the criteria and participate in the program will be tracked in a database administered by the program implementer.

Assignment of Responsibilities

EPE will provide marketing and program outreach efforts in conjunction with the implementer. EPE has contracted with ICF Resources LLC ("ICF") to implement this program. ICF and EPE will perform verification processes through a sample of onsite inspections at construction completion to confirm that the installations reported did occur and that homes met the program criteria. Evaluation, measurement, and further verification processes will be carried out by the statewide M&V evaluator who will provide reviews.

Target Market Segment and Marketing Plan

This program targets new construction residential single and multifamily homes.

The program will be marketed to applicable residential customers and local home builders. Marketing activities will promote the availability of the program, the energy savings to the customer, and the available incentives of the program. Mechanisms that may be used to promote the program may include the EPE website, media, and advertising.

Participation Requirements

To participate in this program, a homebuilder will submit home applications through the Performance or Prescriptive Path. An approved Performance Path home must achieve the ENERGY STAR® Home Energy Rating System ("HERS") Index Target, as defined in the EPA's ENERGY STAR® Certified Homes, Version 3 (Rev. 08) by incorporating a variety of measures including: tight construction and ducts, effective insulation systems, efficient heating and cooling systems, high-performance windows, and ENERGY STAR® appliances and products. HERS Rater independent testing of energy performance is required for each Performance Path home, and each home must perform a minimum of ten percent above 2009 IECC code to be eligible for incentive payout to the homebuilder. An approved Prescriptive Path home receives incentives for the installation of above-code products in new construction homes. A homebuilder must install a minimum of two of the following measures to qualify: efficient air conditioning, LED lighting, radiant barrier, ENERGY STAR® refrigerator, and/or insulation. Prescriptive Path incentive payments differ by measure type and measure quantity.

Program Assumptions and Cost-Effectiveness

Program Timeframe

For planning purposes three years (2019-2021) of program implementation has been assumed.

Program Forecasting Assumptions

The table below details the measure life, incentive levels, projected gross annual savings at the meter per participant, measure quantity/participation levels, and free-ridership. Sources for each of these assumptions are found in Appendix A.

Table 40. ENERGY STAR® New Homes Program Forecasting Assumptions

	Performance Path Energy Star Certified[18]	Performance Path	Prescriptive Path
Measure Life (years)	23	23	15
Incentive per avg participant ($) 2019	$1,201	$1,000	$500
Incentive per avg participant ($) 2020	$1,201	$1,000	$500
Incentive per avg participant ($) 2021	$1,201	$1,000	$500
Annual kWh	2,562	2,665	926
Annual kW	1.46	1.29	0.45
Measure Quantity 2019	5	175	120
Measure Quantity 2020	5	175	120
Measure Quantity 2021	5	175	120
Free-ridership	8.70%	8.70%	8.70%

Projected Program Savings and Cost-effectiveness

Projected participation, savings (annual and lifetime) and costs are shown in the tables below.

Table 41. 2019 ENERGY STAR® New Homes Program Projections

Year	Annual Participants[19]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2019	300	285	587,895	$241,005	$204,702	$445,707
2020	0	285	587,895	0	0	0
2021	0	285	587,895	0	0	0
2022	0	285	587,895	0	0	0
2023	0	285	587,895	0	0	0
2024	0	285	587,895	0	0	0
2025	0	285	587,895	0	0	0
2026	0	285	587,895	0	0	0
2027	0	285	587,895	0	0	0
2028	0	285	587,895	0	0	0
2029	0	285	587,895	0	0	0
2030	0	285	587,895	0	0	0
2031	0	285	587,895	0	0	0

[18] The Performance Path with ENERGY STAR certification is considered part of the standard Performance Path for implementation purposes. Home builders that register with ENERGY STAR receive formal certification, follow stringent ENERGY STAR guidelines, and receive a slightly higher incentive for completed homes.

[19] Projected number of homes.

2032	0	285	587,895	0	0	0
2033	0	285	587,895	0	0	0
2034	0	232	477,200	0	0	0
2035	0	232	477,200	0	0	0
2036	0	232	477,200	0	0	0
2037	0	232	477,200	0	0	0
2038	0	232	477,200	0	0	0
2039	0	232	477,200	0	0	0
2040	0	232	477,200	0	0	0
2041	0	232	477,200	0	0	0
Lifetime kWh			**12,636,026**			

Table 42. 2020 ENERGY STAR® New Homes Program Projections

Year	Annual Participants[20]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2020	300	285	587,895	$241,005	$205,890	$446,895
2021	0	285	587,895	0	0	0
2022	0	285	587,895	0	0	0
2023	0	285	587,895	0	0	0
2024	0	285	587,895	0	0	0
2025	0	285	587,895	0	0	0
2026	0	285	587,895	0	0	0
2027	0	285	587,895	0	0	0
2028	0	285	587,895	0	0	0
2029	0	285	587,895	0	0	0
2030	0	285	587,895	0	0	0
2031	0	285	587,895	0	0	0
2032	0	285	587,895	0	0	0
2033	0	285	587,895	0	0	0
2034	0	285	587,895	0	0	0
2035	0	232	477,200	0	0	0
2036	0	232	477,200	0	0	0
2037	0	232	477,200	0	0	0
2038	0	232	477,200	0	0	0
2039	0	232	477,200	0	0	0

[20] Projected number of homes.

2040	0	232	477,200	0	0	0
2041	0	232	477,200	0	0	0
2042	0	232	477,200	0	0	0
Lifetime kWh			**12,636,026**			

Table 43. 2021 ENERGY STAR® New Homes Program Projections

Year	Annual Participants[21]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2021	300	285	587,895	$241,005	$209,811	$450,816
2022	0	285	587,895	0	0	0
2023	0	285	587,895	0	0	0
2024	0	285	587,895	0	0	0
2025	0	285	587,895	0	0	0
2026	0	285	587,895	0	0	0
2027	0	285	587,895	0	0	0
2028	0	285	587,895	0	0	0
2029	0	285	587,895	0	0	0
2030	0	285	587,895	0	0	0
2031	0	285	587,895	0	0	0
2032	0	285	587,895	0	0	0
2033	0	285	587,895	0	0	0
2034	0	285	587,895	0	0	0
2035	0	285	587,895	0	0	0
2036	0	232	477,200	0	0	0
2037	0	232	477,200	0	0	0
2038	0	232	477,200	0	0	0
2039	0	232	477,200	0	0	0
2040	0	232	477,200	0	0	0
2041	0	232	477,200	0	0	0
2042	0	232	477,200	0	0	0
2043	0	232	477,200	0	0	0
Lifetime kWh			**12,636,026**			

[21] Projected number of homes.

Cost effectiveness under different discounts rates each year are shown in the tables below.

Table 44. 2019 ENERGY STAR® New Homes Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.11	1.05	1.00
Total Benefits ($000s)	496	470	446
Total Costs ($000s)	446	446	446

Table 45. 2020 ENERGY STAR® New Homes Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.13	1.07	1.02
Total Benefits ($000s)	506	480	455
Total Costs ($000s)	447	447	447

Table 46. 2021 ENERGY STAR® New Homes Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.14	1.08	1.03
Total Benefits ($000s)	515	489	463
Total Costs ($000s)	451	451	451

NM EnergySaver Program

Program Objectives and Goals

EPE's NM EnergySaver Program seeks to generate energy and demand savings for low-income residential customers through the installation of cost-effective measures in eligible residences. Depending on home heating type, a variety of energy efficiency measures are offered at no cost, including insulation, light-emitting diodes ("LEDs"), duct sealing, and air infiltration reduction. Homes with electric water heaters may also be eligible for low-flow showerheads and bathroom and kitchen faucet aerators. EPE proposes to offer domestic hot water pipe insulation, domestic hot water tank insulation, ENERGY STAR® certified smart thermostats, and outdoor lighting upgrades as new measures.

The purpose of the NM EnergySaver Program is to help EPE low-income residential customers make their homes more energy efficient, increase comfort levels, and reduce utility bills. The primary goal of this program is to achieve cost-effective reduction in energy consumption and peak demand. EPE also seeks to accomplish the following objectives through the NM EnergySaver Program:

- Achieve customer energy and cost savings;
- Educate customers on the benefits of continued or expanded energy efficiency and conservation efforts; and
- Supplement the resources of existing state, federal, and nonprofit programs to allow more energy efficiency measures to be completed in eligible homes.

Implementation and Administration Plan

The implementation of the NM EnergySaver Program consists of the following tasks:

- Marketing, promotion, and outreach to eligible customers;
- Customer service and scheduling;
- Direct installation of energy efficiency services to customers; and
- Program tracking and reporting.

The program will be marketed to all low-income residential customers. EPE will contract with Frontier to implement the NM EnergySaver Program through Participating Service Provider(s). Frontier has demonstrated experience and effectiveness in the design, administration and provision of low-income measures and programs, along with experience in identifying and conducting outreach to low-income households. Frontier will work with Participating Service Provider(s) to provide outreach to eligible low-income customers.

Assignment of Responsibilities

For the NM EnergySaver Program, EPE and Frontier will provide marketing, promotion and program outreach efforts. Participating Service Provider(s) will be responsible for scheduling and performing installations of energy efficiency measures and educating customers on the benefits of energy efficiency and conservation efforts. Homes participating in this program will be tracked in an online database administered by Frontier. Frontier will provide EPE with customer information, as well as data on the measures installed for each customer.

Savings are calculated using a deemed savings approach. EPE performs verification processes through onsite inspections post installation to confirm that the installations reported in applications did occur.

Evaluation, measurement, and further verification processes will be carried out by the statewide M&V evaluator who will provide reviews.

Target Market Segment and Marketing Plan

This program targets low-income residential customers that are at or below 200% of the Federal Poverty Guidelines. Eligible customers may be home owners or renters. Low-income single-family homes, multifamily homes, townhomes, duplexes, apartments, or manufactured homes meeting the poverty guidelines are eligible for this program.

Marketing activities will promote the availability of the program and the energy savings to the customer. Mechanisms that may be used to promote the program may include: direct mail (bill stuffers), the EPE website, media advertising, and community outreach.

Participation Requirements

Only customers at or below 200% of the Federal Poverty Guidelines are eligible to participate in this program. Each year the Federal Poverty Guidelines are published in the Federal Register, the table below displays the 2018 guidelines:[22]

Table 47. Federal Poverty Guidelines (2018)[23]

	Annual Income	
Family Size	100%	200%
1	$12,140	$24,280
2	$16,460	$32,920
3	$20,780	$41,560
4	$25,100	$50,200
5	$29,420	$58,840
6	$33,740	$67,480
7	$38,060	$76,120
8	$42,380	$84,760

Program Assumptions and Cost-Effectiveness

Program Timeframe

For planning purposes, three years (2019-2021) of program implementation has been assumed.

Program Forecasting Assumptions

The tables below detail the measure life, incentive levels, projected gross annual savings at the meter per participant, measure quantity/participation levels, and free-ridership. Sources for each of these assumptions are found in Appendix A.

[22] U.S. Department of Health & Human Services. "The HHS Poverty Guidelines for 2018," Online. https://aspe.hhs.gov/poverty-guidelines

[23] Add $4,320 for each person greater than eight.

Table 48. NM EnergySaver Program Forecasting Assumptions

	Ceiling Insulation	Duct Efficiency	Infiltration Reduction	LED (60W equivalent) 22 bulbs per home; max 25	Low Flow Showerheads
Measure Life (years)	25	18	11	20	10
Incentive per avg participant ($) 2019	$378	$437	$66	$3	$107
Incentive per avg participant ($) 2020	$378	$437	$66	$3	$107
Incentive per avg participant ($) 2021	$378	$437	$66	$3	$107
Annual kWh	465	867	135	8	664
Annual kW	0.22	0.25	0.06	0.00	0.00
Measure Quantity 2019	70	582	200	35,200	600
Measure Quantity 2020	55	545	125	35,200	600
Measure Quantity 2021	55	545	124	35,200	600
Free-ridership	0.00%	0.00%	0.00%	0.00%	0.00%

Table 49. NM EnergySaver Program Forecasting Assumptions Continued

	Smart Thermostats	PAR38 Lamps	Faucet Aerators	Pipe Insulation	Tank Insulation
Measure Life (years)	11	20	5	13	7
Incentive per avg participant ($) 2019	$50	$3	$1	$1	$30
Incentive per avg participant ($) 2020	$50	$3	$1	$1	$30
Incentive per avg participant ($) 2021	$50	$3	$1	$1	$30
Annual kWh	501	42	199	9	339
Annual kW	0.0000	0.0052	0.0000	0.0002	0.0096
Measure Quantity 2019	10	4800	511	400	400
Measure Quantity 2020	10	4800	511	400	400
Measure Quantity 2021	10	4800	511	400	400
Free-ridership	0.00%	0.00%	0.00%	0.00%	0.00%

Table 50. NM EnergySaver Program Forecasting Assumptions Continued

	Advanced Power Strips	HVAC Tune-ups
Measure Life (years)	4	5
Incentive per avg participant ($) 2019	$5	$100
Incentive per avg participant ($) 2020	$5	$100
Incentive per avg participant ($) 2021	$5	$100
Annual kWh	36	933
Annual kW	0.00	0.72
Measure Quantity 2019	10	2
Measure Quantity 2020	10	1
Measure Quantity 2021	10	1
Free-ridership	0.00%	0.00%

Projected Program Savings and Cost-effectiveness

Projected participation, savings (annual and lifetime), costs, and cost-effectiveness results are shown in the tables below.

Because this program is targeted to low-income customers, EPE assumed that twenty percent (20%) of the calculated energy savings is the reasonable value of reductions in working capital, reduced collection costs, lower bad-debt expense, improved customer service, effectiveness, and other appropriate factors qualifying as utility system economic benefits. As a result, the total program benefits were increased by 20%. The UCT results reflect this increase.

Table 51. 2019 NM EnergySaver Program Projections

Year	Annual Participants[24]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2019	42,785	259	1,845,568	$492,016	$63,155	$555,171
2020	0	259	1,845,568	0	0	0
2021	0	259	1,845,568	0	0	0
2022	0	259	1,845,568	0	0	0
2023	0	259	1,845,176	0	0	0
2024	0	257	1,732,223	0	0	0
2025	0	257	1,732,223	0	0	0
2026	0	253	1,584,317	0	0	0

[24] Projected number of installed measures (does not represent number of homes).

2027	0	253	1,584,317	0	0	0
2028	0	253	1,584,317	0	0	0
2029	0	253	1,149,959	0	0	0
2030	0	239	1,115,109	0	0	0
2031	0	239	1,115,109	0	0	0
2032	0	239	1,111,401	0	0	0
2033	0	239	1,111,401	0	0	0
2034	0	239	1,111,401	0	0	0
2035	0	239	1,111,401	0	0	0
2036	0	239	1,111,401	0	0	0
2037	0	81	561,014	0	0	0
2038	0	81	561,014	0	0	0
2039	0	16	35,534	0	0	0
2040	0	16	35,534	0	0	0
2041	0	16	35,534	0	0	0
2042	0	16	35,534	0	0	0
2043	0	16	35,534	0	0	0
Lifetime kWh			**27,681,727**			

Table 52. 2020 NM EnergySaver Program Projections

Year	Annual Participants[25]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2020	42,657	239	1,790,927	$465,142	$72,575	$537,717
2021	0	239	1,790,927	0	0	0
2022	0	239	1,790,927	0	0	0
2023	0	239	1,790,927	0	0	0
2024	0	239	1,790,534	0	0	0
2025	0	238	1,678,599	0	0	0
2026	0	238	1,678,599	0	0	0
2027	0	234	1,530,693	0	0	0
2028	0	234	1,530,693	0	0	0
2029	0	234	1,530,693	0	0	0
2030	0	234	1,096,335	0	0	0
2031	0	226	1,072,504	0	0	0
2032	0	226	1,072,504	0	0	0

[25] Projected number of installed measures (does not represent number of homes).

2033	0	226	1,068,796	0	0	0
2034	0	226	1,068,796	0	0	0
2035	0	226	1,068,796	0	0	0
2036	0	226	1,068,796	0	0	0
2037	0	226	1,068,796	0	0	0
2038	0	77	553,400	0	0	0
2039	0	77	553,400	0	0	0
2040	0	13	27,920	0	0	0
2041	0	13	27,920	0	0	0
2042	0	13	27,920	0	0	0
2043	0	13	27,920	0	0	0
2044	0	13	27,920	0	0	0
Lifetime kWh			**26,735,239**			

Table 53. 2021 NM EnergySaver Program Projections

Year	Annual Participants[26]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2021	42,656	239	1,790,780	$465,076	$72,139	$537,215
2022	0	239	1,790,780	0	0	0
2023	0	239	1,790,780	0	0	0
2024	0	239	1,790,780	0	0	0
2025	0	239	1,790,387	0	0	0
2026	0	238	1,678,452	0	0	0
2027	0	238	1,678,452	0	0	0
2028	0	234	1,530,546	0	0	0
2029	0	234	1,530,546	0	0	0
2030	0	234	1,530,546	0	0	0
2031	0	234	1,096,188	0	0	0
2032	0	226	1,072,504	0	0	0
2033	0	226	1,072,504	0	0	0
2034	0	226	1,068,796	0	0	0
2035	0	226	1,068,796	0	0	0
2036	0	226	1,068,796	0	0	0
2037	0	226	1,068,796	0	0	0
2038	0	226	1,068,796	0	0	0

[26] Projected number of installed measures (does not represent number of homes).

2039	0	77	553,400	0	0	0
2040	0	77	553,400	0	0	0
2041	0	13	27,920	0	0	0
2042	0	13	27,920	0	0	0
2043	0	13	27,920	0	0	0
2044	0	13	27,920	0	0	0
2045	0	13	27,920	0	0	0
Lifetime kWh			**26,733,623**			

Table 54. 2019 NM EnergySaver Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.19	1.14	1.09
Total Benefits ($000s)	660	632	605
Total Costs ($000s)	555	555	555

Table 55. 2020 NM EnergySaver Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.19	1.14	1.09
Total Benefits ($000s)	641	613	587
Total Costs ($000s)	538	538	538

Table 56. 2021 NM EnergySaver Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.21	1.16	1.11
Total Benefits ($000s)	652	624	597
Total Costs ($000s)	537	537	537

EPE 2019-2021 Commercial Program Portfolio

EPE's Commercial Energy Efficiency Program portfolio includes the following programs:

- School and Business Assistance ("SCORE Plus") Program;
- Commercial Comprehensive Program; and
- Commercial Load Management.

SCORE Plus Program

Program Objectives and Goals

EPE will implement the SCORE Plus Program as part of its EE/LM Plan to further increase the availability of energy efficiency programs across customer classes and customer types. One of the main goals of the program is to increase participation by targeting commercial customers with an average demand of greater than 100 kW, with a special emphasis on the customers that lack the knowledge and/or personnel to properly evaluate and implement energy efficiency measures. The SCORE Plus Program will also target customers in the education and governmental market segments. EPE's focus is to encourage eligible customers to reduce their peak demand and energy use in their facilities.

The program provides incentives for a wide range of energy efficiency measures including lighting, HVAC, equipment controls, and custom projects. As with the Commercial Comprehensive Program, there is a high efficiency HVAC tune-up measure that is available through participating contractors in this program. New construction and retrofit projects are accepted in this program. Incentives are paid directly to the customer or, upon customer approval, can be paid to the contractors that perform the installation.

Implementation and Administration Plan

The SCORE Plus Program will achieve its goals by offering direct support, tools, and the training necessary for customers and their contractors to:

- Identify, evaluate, and undertake efficiency improvements;
- Identify best practices to maximize long-term savings;
- Properly evaluate energy efficiency proposals; and
- Publicize their accomplishments in energy efficiency.

This program will offer incentives to participating customers based on the savings achieved through the project. Incentives for this program will be less than those offered through the Commercial Comprehensive Program; however, the implementer will provide supporting services that will lighten the administrative load for the participating school or business, making customers more receptive to possible energy efficiency projects.

Those services provided to the customer, depending upon customer need, will likely include assistance with the following:

- Energy usage benchmarking;
- Identifying and evaluating energy-efficiency opportunities;
- Developing or integrating with existing long-term energy plans;
- Completing and submitting project documentation necessary to receive incentives regardless if the project/measure is generated by a contractor, EPE or the implementer; and
- Making the community aware of the accomplishments and benefits of participating customers.

Assignment of Responsibilities

EPE has contracted with CLEAResult for the implementation of this program. To deliver the SCORE Plus Program, the implementer will be responsible for marketing the program to the targeted customers,

providing assistance to the participants in all stages of their projects, and completing a large part of the incentive administration, program tracking and reporting, and verification duties. EPE will assist in the identification and recruitment of prospective participants and may provide verification services. EPE will maintain oversight of the program implementation and budget processes at all times.

Target Market Sector and Marketing Plan

This program is designed to attract participants from the educational, government, and private commercial sectors. The commercial and industrial customers targeted by this program will have an average demand greater than 100 kW. All school and governmental entities are also eligible to participate.

Commercial Sector

The implementer will create and execute an outreach strategy to recruit program participants. Outreach will take several forms, including coordination with EPE key accounts and public affairs personnel, outreach to energy efficiency service providers, and statewide organizations. CLEAResult will also directly contact eligible customers to inform them of the program's benefits and to identify possible projects at their facilities.

Education and Local Government Sectors

EPE and the implementer will help to identify target school districts and governmental entities in EPE's service territory and conduct recruitment meetings. It is anticipated that much of the outreach activity will be educational and use case studies from other school districts' and governmental entities' successful energy efficiency projects as illustrations of the processes and concepts involved. Further, it will be conveyed that the program's role is to provide customers with guidance and support consistently throughout the entire process of planning, implementing, and verifying energy efficiency improvements.

Participation Requirements

All schools, governmental entities, and commercial customers with an average annual demand of greater than 100 kW that take service from EPE in its New Mexico service territory are eligible for this program. Program participants will be required to follow program participation processes for the SCORE Plus Program to ensure an understanding of their responsibilities while participating in the program.

Participants will be informed of program requirements prior to the acceptance of their projects into the program. Participant requirements include the execution of all pre-installation documentation describing the project to be undertaken, the estimated savings and incentives associated with the project, and acknowledgment that any third-party contractor used to install the project is under contract to the participant and not to the program implementer or to EPE.

The acknowledgement of required pre- and post- installation inspections by the program implementer and/or EPE must also be obtained prior to project acceptance.

Program Assumptions and Cost-Effectiveness

Program Timeframe

For planning purposes three years (2019-2021) of program implementation has been assumed.

Program Forecasting Assumptions

The tables below detail the measure life, incentive levels, projected gross annual savings at the meter per participant, measure quantity/participation levels, and free-ridership. Sources for each of these assumptions are found in Appendix A.

Table 57. SCORE Plus Program Forecasting Assumptions

	Chiller Air Cooled - Screw/Scroll/ Reciprocating	Halogen	HVAC-Direct Expansion ("DX"/Heat Pump)	Integrated-ballast LEDs	LEDs
Measure Life (years)	20	1.5	15	9	8
Incentive per avg participant ($) 2019	$2,625	$51	$1,280	$9,079	$2,808
Incentive per avg participant ($) 2020	$2,625	$51	$1,280	$9,079	$2,808
Incentive per avg participant ($) 2021	$2,625	$51	$1,280	$9,079	$2,808
Annual kWh	21,874	425	10,670	49,290	19,472
Annual kW	14.39	0.05	5.83	8.29	1.35
Measure Quantity 2019	1	1	6	1	25
Measure Quantity 2020	1	2	5	1	25
Measure Quantity 2021	1	1	4	1	25
Free-ridership	17.06%	17.06%	17.06%	17.06%	17.06%

Table 58. SCORE Plus Program Forecasting Assumptions Continued

	Lighting Controls	Linear Fluorescent	HVAC Tune-ups	EnergyStar Cool Roofs
Measure Life (years)	8	15	5	15
Incentive per avg participant ($) 2019	$710	$4,837	$150	$3,025
Incentive per avg participant ($) 2020	$710	$4,837	$150	$3,025
Incentive per avg participant ($) 2021	$710	$4,837	$150	$3,025
Annual kWh	5,918	40,305	1,907	26,515
Annual kW	0.91	10.01	0.73	6.00
Measure Quantity 2019	4	134	1	2
Measure Quantity 2020	4	128	3	2
Measure Quantity 2021	4	118	1	2
Free-ridership	17.06%	17.06%	17.06%	17.06%

Projected Program Savings and Cost-effectiveness

Projected participation, savings (annual and lifetime) and costs are shown in the tables below.

Table 59. 2019 SCORE Plus Program Projections

Year	Annual Participants[27]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2019	175	1,309	5,520,186	$746,778	$822,176	$1,568,955
2020	0	1,309	5,520,186	0	0	0
2021	0	1,309	5,519,802	0	0	0
2022	0	1,309	5,519,802	0	0	0
2023	0	1,309	5,519,802	0	0	0
2024	0	1,308	5,518,077	0	0	0
2025	0	1,308	5,518,077	0	0	0
2026	0	1,308	5,518,077	0	0	0
2027	0	1,274	5,056,268	0	0	0
2028	0	1,267	5,011,677	0	0	0
2029	0	1,267	5,011,677	0	0	0
2030	0	1,267	5,011,677	0	0	0
2031	0	1,267	5,011,677	0	0	0
2032	0	1,267	5,011,677	0	0	0
2033	0	1,267	5,011,677	0	0	0
2034	0	13	19,789	0	0	0
2035	0	13	19,789	0	0	0
2036	0	13	19,789	0	0	0
2037	0	13	19,789	0	0	0
2038	0	13	19,789	0	0	0
Lifetime kWh			**79,379,279**			

Table 60. 2020 SCORE Plus Program Projections

Year	Annual Participants[28]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2020	171	1,250	5,295,592	$716,829	$803,628	$1,520,458
2021	0	1,250	5,295,592	0	0	0
2022	0	1,250	5,294,823	0	0	0
2023	0	1,250	5,294,823	0	0	0

[27] Projected number of projects.

[28] Projected number of projects.

2024	0	1,250	5,294,823	0	0	0
2025	0	1,248	5,289,648	0	0	0
2026	0	1,248	5,289,648	0	0	0
2027	0	1,248	5,289,648	0	0	0
2028	0	1,215	4,827,839	0	0	0
2029	0	1,207	4,783,248	0	0	0
2030	0	1,207	4,783,248	0	0	0
2031	0	1,207	4,783,248	0	0	0
2032	0	1,207	4,783,248	0	0	0
2033	0	1,207	4,783,248	0	0	0
2034	0	1,207	4,783,248	0	0	0
2035	0	13	19,789	0	0	0
2036	0	13	19,789	0	0	0
2037	0	13	19,789	0	0	0
2038	0	13	19,789	0	0	0
2039	0	13	19,789	0	0	0
Lifetime kWh			**75,970,868**			

Table 61. 2021 SCORE Plus Program Projections

Year	Annual Participants[29]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2021	157	1,154	4,917,478	$666,832	$808,926	$1,475,758
2022	0	1,154	4,917,478	0	0	0
2023	0	1,153	4,917,094	0	0	0
2024	0	1,153	4,917,094	0	0	0
2025	0	1,153	4,917,094	0	0	0
2026	0	1,153	4,915,368	0	0	0
2027	0	1,153	4,915,368	0	0	0
2028	0	1,153	4,915,368	0	0	0
2029	0	1,119	4,453,559	0	0	0
2030	0	1,111	4,408,968	0	0	0
2031	0	1,111	4,408,968	0	0	0
2032	0	1,111	4,408,968	0	0	0
2033	0	1,111	4,408,968	0	0	0
2034	0	1,111	4,408,968	0	0	0

[29] Projected number of projects.

2035	0	1,111	4,408,968	0	0	0
2036	0	13	19,789	0	0	0
2037	0	13	19,789	0	0	0
2038	0	13	19,789	0	0	0
2039	0	13	19,789	0	0	0
2040	0	13	19,789	0	0	0
Lifetime kWh			**70,338,656**			

Cost effectiveness under different discounts rates each year are shown in the tables below.

Table 62. 2019 SCORE Plus Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.43	1.38	1.33
Total Benefits ($000s)	2,245	2,161	2,081
Total Costs ($000s)	1,569	1,569	1,569

Table 63. 2020 SCORE Plus Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.44	1.39	1.34
Total Benefits ($000s)	2,191	2,110	2,031
Total Costs ($000s)	1,520	1,520	1,520

Table 64. 2021 SCORE Plus Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.40	1.34	1.29
Total Benefits ($000s)	2,061	1,984	1,911
Total Costs ($000s)	1,476	1,476	1,476

Commercial Comprehensive Program

Program Objectives and Goals

The Commercial Comprehensive Program will focus on the small business market segment of EPE's service territory to reduce peak demand and energy use in their facilities. Specifically, the program will target customers with an average demand of less than or equal to 100 kW. This program provides incentives for lighting retrofits and new construction projects. All of EPE's commercial direct rebates, such as commercial cooling, ENERGY STAR® cool roofs, Heating Ventilation and Air Conditioning ("HVAC") energy management, window treatments, vending energy misers, commercial pool pumps, and night covers for refrigeration cases, are included in this program. There is also a high efficiency HVAC tune-up measure that is available through participating contractors. EPE also proposes to add rebates for ENERGY STAR® commercial kitchen equipment, ENERGY STAR® beverage vending machines, and ECM evaporator fan motors. EPE also proposes to extend program rebates to commercial customers with an average demand greater than 100 kW. New construction and retrofit projects are accepted in this program. Incentives and rebates are paid directly to the customer or, upon customer approval, may be paid to the contractors that perform the installation.

Implementation and Administration Plan

EPE has contracted with Frontier to provide a turn-key program design for the 2019-2021 program years. As a result, Frontier will provide:

- Marketing, promotion, and outreach to eligible customers;
- Customer service and inspection scheduling;
- Invoicing and rebate payment; and
- Program tracking and reporting.

Additionally, Frontier will offer outreach to local contractors to make them aware of this program, as well as encourage them to use the program incentives as a marketing tool to get customer participation. All application processing, program tracking and reporting will also be administered by Frontier. Applications will be received through the mail or electronically via e-mail or online tracking databases and reviewed to confirm the applications meet the requirements of the program. The accepted applications are tracked in a Frontier database and payments are processed.

Assignment of Responsibilities

Frontier will be responsible for marketing the program to targeted customers, providing assistance to the participants in all stages of their projects, and completing incentive administration, program tracking, pre- and post-inspections, reporting, and other verification duties. EPE will refer potential projects to Frontier, including leads identifying prospective participants such as contractors and eligible local businesses, and may provide verification services. EPE will maintain oversight of the program and budget processes at all times.

Frontier will process all applications for incentives and rebates and provide all tracking through an online tracking system. Frontier will also calculate savings and administer rebate payments.

For each project, participating contractors and customers, with Frontier's assistance, will provide information on the pre- and post-installation equipment, application materials, and other building-related information as needed. The statewide M&V evaluator will provide M&V for this program.

Target Market Segment and Marketing Plan

Frontier will create and execute an outreach strategy to recruit program participants and will market this program by:

- Engaging market actors (contractors) through outreach and training;
- Directing marketing to specific customers and customer groups, including in-person visits, advertisements and articles in local publications and local business media, and distribution of program materials through trade and business associations;
- Providing program materials on the EPE website; and
- Providing workshops and training events for contractors and customers.

Marketing mechanisms may also include kick-off meetings, marketing events, e-mail distributions, bill inserts, media and other advertising, in coordination with EPE.

Participation Requirements

All commercial customers that take service from EPE in its New Mexico service territory with an average demand of less than or equal to 100 kW are eligible for this program. EPE also proposes to extend program rebates to commercial customers with an average demand greater than 100 kW. Program participants will be required to follow program participation processes for this program to ensure an understanding of their responsibilities while participating in the program. Measure-level eligibility requirements may also apply.

Participants will be informed of the program requirements as a condition of project acceptance into the program. With guidance provided by Frontier as necessary, participants will execute all necessary documents, including the execution of all pre-installation documentation describing the project to be undertaken and sufficient information to enable estimation of savings associated with the project. Frontier will inform customers that any third-party contractor used to install the project is under contract to the participant and not to EPE. The acknowledgement of required pre- and post- installation inspections by program staff must also be obtained prior to program acceptance.

Program Assumptions and Cost-Effectiveness

Program Timeframe

For planning purposes, three years (2019-2021) of program implementation has been assumed.

Program Forecasting Assumptions

The tables below detail the measure life, incentive levels, projected gross annual savings at the meter per participant, measure quantity/participation levels, and free-ridership. Sources for each of these assumptions are found in Appendix A.

Table 65. Commercial Comprehensive Program Forecasting Assumptions

	Cool Roofs	Vending Machine Controls	HVAC	HVAC Energy Management	HVAC Tune-Ups
Measure Life (years)	15	5	15	10	5
Incentive per avg participant ($) 2019	$1,634	$243	$1,014	$4,200	$150
Incentive per avg participant ($) 2020	$1,634	$243	$1,014	$4,200	$150
Incentive per avg participant ($) 2021	$1,634	$243	$1,014	$4,200	$150
Annual kWh	6,757	1,840	3,413	17,500	430
Annual kW	3.14	0.04	2.12	5.25	0.25
Measure Quantity 2019	1	1	3	1	3
Measure Quantity 2020	1	1	7	1	4
Measure Quantity 2021	2	2	7	1	4
Free-ridership	17.67%	17.67%	17.67%	17.67%	17.67%

Table 66. Commercial Comprehensive Program Forecasting Assumptions Continued

	Lighting	Pool Pumps	Window Treatments	Combination Ovens	Convection Ovens
Measure Life (years)	14.4	10	10	12	12
Incentive per avg participant ($) 2019	$3,341	$300	$134	$506	$154
Incentive per avg participant ($) 2020	$3,341	$300	$134	$506	$154
Incentive per avg participant ($) 2021	$3,341	$300	$134	$506	$154
Annual kWh	19,979	3,126	1,721	6,368	1,937
Annual kW	3.16	1.22	1.74	1.34	0.41
Measure Quantity 2019	186	38	2	4	1
Measure Quantity 2020	121	1	2	4	1
Measure Quantity 2021	121	1	2	4	1
Free-ridership	17.67%	17.67%	17.67%	17.67%	17.67%

Table 67. Commercial Comprehensive Program Forecasting Assumptions Continued

	Hot Food Holding Cabinets	Electric Fryers	Steam Cookers	Ice Makers	Beverage Vending Machines
Measure Life (years)	12	12	12	10	14
Incentive per avg participant ($) 2019	$190	$94	$1,055	$80	$115
Incentive per avg participant ($) 2020	$190	$94	$1,055	$80	$115
Incentive per avg participant ($) 2021	$190	$94	$1,055	$80	$115
Annual kWh	2,770	952	14,516	428	1,099
Annual kW	0.47	0.15	3.05	0.08	0.00
Measure Quantity 2019	2	2	48	1	1
Measure Quantity 2020	1	3	48	1	1
Measure Quantity 2021	1	3	48	1	1
Free-ridership	17.67%	17.67%	17.67%	17.67%	17.67%

Table 68. Commercial Comprehensive Program Forecasting Assumptions Continued

	Evaporative Fan Motors
Measure Life (years)	15
Incentive per avg participant ($) 2019	$35
Incentive per avg participant ($) 2020	$35
Incentive per avg participant ($) 2021	$35
Annual kWh	226
Annual kW	0.05
Measure Quantity 2019	1
Measure Quantity 2020	5
Measure Quantity 2021	5

Free-ridership	17.67%

Projected Program Savings and Cost-effectiveness

Projected participation, savings (annual and lifetime) and costs are shown in the tables below.

Table 69. 2019 Commercial Comprehensive Program Annual Impact Projections

Year	Annual Participants[30]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2019	295	722	4,139,158	$696,256	$321,242	$1,017,499
2020	0	722	4,139,158	0	0	0
2021	0	722	4,139,158	0	0	0
2022	0	722	4,139,158	0	0	0
2023	0	722	4,139,158	0	0	0
2024	0	722	4,136,347	0	0	0
2025	0	722	4,136,347	0	0	0
2026	0	722	4,136,347	0	0	0
2027	0	722	4,136,347	0	0	0
2028	0	722	4,136,347	0	0	0
2029	0	672	4,010,483	0	0	0
2030	0	672	4,010,483	0	0	0
2031	0	535	3,353,477	0	0	0
2032	0	535	3,353,477	0	0	0
2033	0	9	15,466	0	0	0
Lifetime kWh			**56,120,913**			

Table 70. 2020 Commercial Comprehensive Program Annual Impact Projections

Year	Annual Participants[31]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2020	202	506	2,880,954	$472,255	$244,845	$717,100
2021	0	506	2,880,954	0	0	0

[30] Projected number of projects.

[31] Projected number of projects.

2022	0	506	2,880,954	0	0	0
2023	0	506	2,880,954	0	0	0
2024	0	506	2,880,954	0	0	0
2025	0	505	2,877,757	0	0	0
2026	0	505	2,877,757	0	0	0
2027	0	505	2,877,757	0	0	0
2028	0	505	2,877,757	0	0	0
2029	0	505	2,877,757	0	0	0
2030	0	496	2,855,759	0	0	0
2031	0	496	2,855,759	0	0	0
2032	0	358	2,200,386	0	0	0
2033	0	358	2,200,386	0	0	0
2034	0	16	28,539	0	0	0
Lifetime kWh			**38,934,385**			

Table 71. 2021 Commercial Comprehensive Program Annual Impact Projections

Year	Annual Participants[32]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2021	204	508	2,888,674	$474,131	$252,654	$726,785
2022	0	508	2,888,674	0	0	0
2023	0	508	2,888,674	0	0	0
2024	0	508	2,888,674	0	0	0
2025	0	508	2,888,674	0	0	0
2026	0	507	2,883,825	0	0	0
2027	0	507	2,883,825	0	0	0
2028	0	507	2,883,825	0	0	0
2029	0	507	2,883,825	0	0	0
2030	0	507	2,883,825	0	0	0
2031	0	498	2,861,827	0	0	0
2032	0	498	2,861,827	0	0	0
2033	0	361	2,206,453	0	0	0
2034	0	361	2,206,453	0	0	0
2035	0	19	34,607	0	0	0
Lifetime kWh			**39,033,661**			

[32] Projected number of projects.

Cost effectiveness under different discounts rates each year are shown in the tables below.

Table 72. 2019 Commercial Comprehensive Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.31	1.27	1.22
Total Benefits ($000s)	1,334	1,289	1,244
Total Costs ($000s)	1,017	1,017	1,017

Table 73. 2020 Commercial Comprehensive Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.33	1.28	1.24
Total Benefits ($000s)	952	920	888
Total Costs ($000s)	717	717	717

Table 74. 2021 Commercial Comprehensive Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.34	1.29	1.25
Total Benefits ($000s)	974	940	908
Total Costs ($000s)	727	727	727

Commercial Load Management Program

Program Objectives and Goals

This program allows participating commercial customers to provide on-call, voluntary curtailment of electric consumption during peak demand periods in return for incentive payments. Incentives are based on verified demand savings that customers can achieve in response to notifications of voluntary curtailment events by EPE. Demand savings and incentive payment amounts are based on the actual, verified load curtailments.

Implementation and Administration Plan

The Commercial Load Management Program will achieve its goals by identifying, marketing, and evaluate prospective commercial participants:

- Identify, develop a detailed site assessment of the load management potential of participant;
- Identify, facility enablement service upgrades, and performance cash incentive payments specific to Participant's site;
- Installation of facility enablement services as determined in the site assessment;
- Provide dispatch management services during the annual event period; and
- Calculate, measure and verify actual load curtailment.

This program will offer non-cash facility enablement and cash incentives to participating customers based on the actual verified load curtailment.

Facility enablement services shall be specific to each Participant and based on individual site requirements. Facility enablement services may include, as applicable:

- Installation of controls at the site;
- Programing to enable load shedding and building control sequences;
- Integration of controls or systems as needed; and
- Connecting sites to real time grid services software platform.

Assignment of Responsibilities

EPE has contracted with Trane U.S. Inc. ("Trane") for the implementation of this program. To deliver the Commercial Load Management Program, the implementer will be responsible for program management, marketing the program, participant identification, participant outreach, site assessment, participant enrollment, facility enablement services, dispatch management, program tracking and reporting, verification duties, and incentive administration. EPE will assist in the marketing, identification and recruitment of prospective participants, and may provide verification services. EPE will maintain oversight of the program implementation and budget processes at all times.

Target Market Segment and Marketing Plan

This program is designed to attract commercial participants from the educational, government, and private commercial sectors.

Commercial Sector

The implementer will create and execute an outreach strategy to recruit program participants. Outreach will take several forms, including coordination with EPE. Trane will also directly contact eligible customers to inform them of the program's benefits.

Education and Local Government Sectors

EPE and the implementer will help to identify target school districts and governmental entities in EPE's service territory and conduct recruitment meetings.

Participation Requirements

All commercial customers, schools, and governmental entities with load management potential that take service from EPE in its New Mexico service territory are eligible for this program. Program participants will be required to execute a Participant Agreement for the Commercial Load Management Program to ensure an understanding of their responsibilities as a participant in the program.

Participants will be informed of their program requirements prior to the execution of the Participant Agreement for the Commercial Load Management Program. Participant requirements include the voluntary load curtailment, in exchange for a onetime non-cash facility enablement services, and cash performance incentives for verified load curtailment.

Program Assumptions and Cost-Effectiveness

Program Timeframe

For planning purposes, three years (2019-2021) of program implementation has been assumed.

Program Forecasting Assumptions

The table below details the measure life, incentive levels, projected gross annual savings at the meter per participant, measure quantity/participation levels, and free-ridership. Sources for each of these assumptions are found in Appendix A.

Table 75. Commercial Load Management Program Forecasting Assumptions

	Commercial Load Management
Measure Life (years)	1
Incentive per avg participant ($) 2019	$180,000
Incentive per avg participant ($) 2020	$180,000
Incentive per avg participant ($) 2021	$180,000
Annual kWh	37,500
Annual kW	3,750
Measure Quantity 2019	15
Measure Quantity 2020	15
Measure Quantity 2021	15
Free-ridership	0.00%

Projected Program Savings and Cost-effectiveness

Projected participation, savings (annual and lifetime) and costs are shown in the tables below.[33]

Table 76. 2019 Commercial Load Management Program Projections

Year	Annual Participants[34]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2019	15	4,083	40,903	$255,000	$123,313	$378,313
Lifetime kWh			**40,903**			

Table 77. 2020 Commercial Load Management Program Projections

Year	Annual Participants[35]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2020	15	4,083	40,903	$255,000	$127,212	$382,212
Lifetime kWh			**40,903**			

Table 78. 2021 Commercial Load Management Program Projections

Year	Annual Participants[36]	Annual kW	Annual kWh	Annual Rebate Costs ($)	Annual Admin Costs ($)	Total Annual Program Costs ($)
2021	3	4,083	40,903	$255,000	$131,279	$386,279
Lifetime kWh			**40,903**			

Cost effectiveness under different discounts rates each year are shown in the tables below.

[33] For Commercial Load Management, Annual Rebate Costs reflect both cash incentive payments and non-cash incentives offered through the program.

[34] Projected number of participants.

[35] Projected number of participants.

[36] Projected number of participants.

Table 79. 2019 Commercial Load Management Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.05	1.05	1.05
Total Benefits ($000s)	395	395	395
Total Costs ($000s)	378	378	378

Table 80. 2020 Commercial Load Management Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.06	1.06	1.06
Total Benefits ($000s)	403	403	403
Total Costs ($000s)	382	382	382

Table 81. 2021 Commercial Load Management Program Cost-Effectiveness Analysis

	UCT WACC = 6.9812%	UCT WACC = 7.6657%	UCT WACC = 8.3667%
Benefit/Cost Ratio	1.07	1.07	1.07
Total Benefits ($000s)	411	411	411
Total Costs ($000s)	386	386	386

Appendix A: Cost-Effectiveness Inputs

Residential Programs Inputs

Table 82. Residential Measure Lives and Savings Sources

Residential Measure Lives per Program		
Measure	**Measure Life**	**Savings Source**
LivingWise®		
LivingWise®	7.98 (weighted)	New Mexico TRM
Residential Comprehensive		
Air Infiltration	11.0	New Mexico TRM
Duct Efficiency	18.0	New Mexico TRM
Evaporative Cooling	15.0	New Mexico TRM
HVAC Tune-up	5.0	Texas TRM 5.0
Ceiling Insulation	25.0	New Mexico TRM
Pool Pump	10.0	Texas TRM 5.0
Air Conditioner	15.0	New Mexico TRM
Heat Pump	18.0	New Mexico TRM
Solar Screens	10.0	Texas TRM 5.0
ENERGY STAR® Windows	25.0	Texas TRM 5.0
Electric Clothes Dryers	14.0	Illinois TRM
Attic Encapsulation	25.0	Texas TRM 5.0
ENERGY STAR® Cool Roof	15.0	Texas TRM 5.0
ENERGY STAR® Smart Thermostat	11.0	Texas TRM New Measure Petition 48265
New Mexico Appliance Recycling		
Appliance Recycling	8.0	Texas TRM 5.0
ENERGY STAR® New Homes		
ENERGY STAR® New Homes	23.0	Texas TRM 5.0

Performance Path		
ENERGY STAR® New Homes Prescriptive Path	15.0	Weighted average based on previous installation patterns as provided by implementer
New Mexico EnergySaver		
Ceiling Insulation	25.0	New Mexico TRM
Duct Efficiency	18.0	New Mexico TRM
Air Infiltration	11.0	New Mexico TRM
LED	20.0	New Mexico TRM
Low Flow Showerhead	10.0	New Mexico TRM
Smart Thermostats	11.0	Texas TRM New Measure Petition 48265
PAR38 Lamp	20.0	New Mexico TRM
Faucet Aerator	5.0	New Mexico TRM
Pipe Insulation	13.0	Texas TRM 5.0
Tank Insulation	7.0	Texas TRM 5.0
Advanced Power Strip	4.0	New Mexico TRM
HVAC Tune-up	5.0	Texas TRM 5.0

Table 83. Residential Net-to-Gross Ratios ("NTGR") and Free Ridership

Program	NTGR	Free-Ridership	Source
LivingWise®	100.00%	0.00%	Evaluation of the 2017 El Paso Electric Energy Efficiency Programs
Residential Comprehensive	42.81%	57.19%	Evaluation of the 2017 El Paso Electric Energy Efficiency Programs
NM Appliance Recycling	100.0%	0.0%	Frontier Assumption
ENERGY STAR® New Homes	91.30%	8.70%	Evaluation of the 2017 El Paso Electric Energy Efficiency Programs
NM EnergySaver	100.00%	0.00%	Evaluation of the 2017 El Paso Electric Energy Efficiency Programs

Commercial Programs Inputs

Table 84. Commercial Measure Lives and Savings Sources

Commercial Measure Lives per Program		
Measure	**Measure Life**	**Source**
SCORE Plus		
Chiller Air Cooled – Screw/Scroll/Reciprocating	20.0	Texas TRM 5.0
ENERGY STAR® Cool Roof	15.0	Texas TRM 5.0
Halogen	1.5	Texas TRM 5.0
HVAC-DX/Heat Pump	15.0	New Mexico TRM
Integrated-ballast LED	9.0	Texas TRM 5.0
LED	8.0 (weighted)	New Mexico TRM
Lighting Controls	8.0	New Mexico TRM
Linear Fluorescent	15.0 (weighted)	New Mexico TRM
HVAC Tune-ups	5.0	Texas TRM 5.0
Commercial Comprehensive		
ENERGY STAR® Cool Roofs	15.0	Texas TRM 5.0
Vending Machine Controls	5.0	Texas TRM 5.0
HVAC	15.0	New Mexico TRM
HVAC Energy Management	15.0	Texas TRM 5.0
Lighting	14.4 (weighted)	New Mexico TRM
Pool Pumps	10	Texas TRM 5.0
Window Treatments	10.0	Texas TRM 5.0
ENERGY STAR® Combination Ovens	12.0	Texas TRM 5.0
ENERGY STAR® Convection Ovens	12.0	Texas TRM 5.0
ENERGY STAR® Hot Food Holding Cabinets	12.0	Texas TRM 5.0
ENERGY STAR® Electric Fryers	12.0	Texas TRM 5.0

ENERGY STAR® Steam Cookers	12.0	Texas TRM 5.0
Ice makers	10	Illinois TRM
Beverage Vending Machine	14.0	Illinois TRM
Evaporative Fan Motors	15.0	New Mexico TRM
Commercial Load Management		
Commercial Load Management	1.0	Texas TRM 5.0

Table 85. Commercial Net-to-Gross Ratios ("NTGR") and Free Ridership

Program	NTGR	Free-Ridership	Source
SCORE Plus	82.94%	17.06%	Evaluation of the 2017 El Paso Electric Energy Efficiency Programs
Commercial Comprehensive	82.33%	17.67%	Evaluation of the 2017 El Paso Electric Energy Efficiency Programs
Commercial Load Management	100.00%	0.00%	Frontier Assumption

Appendix B: Discount Rates

Utility Discount Rate

EPE provided three discount rates that were used to calculate the present value of costs and benefits for the UCT calculation, as shown in EPE witness Adrian Hernandez's Exhibit AH-2. All other factors held constant, the higher the discount rate, the lower the UCT value. Specifically, the following three discount rates, based on EPE's weighted average cost of capital ("WACC"), as provided by EPE were used: (1) 7.6657 percent - the Commission-approved WACC from NMPRC Case No. 15-00127-UT; (2) 6.9812 percent - after tax WACC from NMPRC Case No. 15-00127-UT; (3) 8.3667 percent - Hearing Examiner methodology from NMPRC Case No. 16-00185-UT.

Appendix C: Avoided Costs

Utility Avoided Costs

To determine the cost-effectiveness of its EE/LM Plan, EPE calculated the avoided energy and capacity costs associated with its Programs. EPE's Resource Planning Department developed the avoided energy and capacity costs included in the EE/LM Plan.

A. Avoided Energy Costs

EPE uses PROMOD, a widely accepted industry modeling tool, to determine the value of avoided energy. Input data for PROMOD includes EPE's monthly native load demand forecasts, generating unit characteristics, anticipated future fuel prices, generator unit maintenance schedules, spinning reserve requirements, market purchase power capabilities, and specific off-system firm purchases and firm sales. PROMOD evaluates the unit data, fuel and purchased power costs, and availability of the modeled generation units in order to identify the most economical manner to dispatch system and purchases power to meet EPE's expected demand. EPE uses the Marginal Energy Cost option in PROMOD to identify the most economical marginal energy prices to produce the next megawatt of electricity. EPE's avoided energy costs associated with EE Programs is a weighted-average of on-peak and off-peak avoided costs based on the marginal energy prices calculated in PROMOD.

B. Avoided Capacity Costs

EPE calculated avoided capacity costs considering future resource needs and forecasted generation additions to the EPE system. EPE then estimated capital costs for the forecasted generation additions. EPE calculated the levelized cost of capital by taking into consideration factors such as the capacity addition's estimated total installed cost, capital expenditure cash flow, estimated insurance and property tax costs, and book and tax depreciation. This levelized cost is escalated or de-escalated to provide an estimated yearly levelized cost of capital that is used for EPE's annual avoided capacity cost associated with the EE/LM Plan.

Following is a Table of EPE's forecasted avoided energy and capacity costs.

Table 86: Avoided Costs

Year	Avoided Energy ($/kWh)	Avoided Capacity ($/kW)
2019	$0.0144	$96.69
2020	$0.0159	$98.64
2021	$0.0163	$100.62
2022	$0.0167	$102.64
2023	$0.0158	$104.71
2024	$0.0158	$106.82
2025	$0.0161	$108.78
2026	$0.0171	$110.77
2027	$0.0174	$112.81
2028	$0.0178	$114.88
2029	$0.0182	$117.11
2030	$0.0185	$119.39
2031	$0.0189	$121.72
2032	$0.0193	$124.09
2033	$0.0197	$126.51
2034	$0.0202	$128.97
2035	$0.0206	$131.49
2036	$0.0210	$134.05
2037	$0.0215	$136.66
2038	$0.0219	$139.32
2039	$0.0224	$142.03
2040	$0.0229	$144.80
2041	$0.0234	$147.62
2042	$0.0239	$150.50
2043	$0.0244	$153.43
2044	$0.0249	$156.42
2045	$0.0254	$159.47

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17- EFFICIENT USE OF ENERGY RECOVERY FACTOR	)	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	)	

AFFIDAVIT

STATE OF TEXAS)
) ss
COUNTY OF Travis)

Amy d. Martin hereby deposes and states under oath that the information contained in the foregoing Direct Testimony of Amy d. Martin, together with the statements of facts contained therein and any exhibits attached thereto, are true and accurate based on my personal knowledge and belief.

SIGNED this 27 day of June, 2018.

Amy D. Martin
AMY D. MARTIN

Subscribed and sworn to before me this 27 day of June, 2018.

My Commission expires:
8/20/2021

RUBEN INFANTE, JR
My Notary ID # 123962168
Expires August 20, 2021

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17-EFFICIENT USE OF ENERGY RECOVERY FACTOR	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	

DIRECT TESTIMONY

OF

ADRIAN HERNANDEZ

ON BEHALF OF

EL PASO ELECTRIC COMPANY

JULY 2, 2018

TABLE OF CONTENTS

Subject	Page
I. INTRODUCTION AND QUALIFICATIONS	1
II. PURPOSE OF DIRECT TESTIMONY	2
III. DISCOUNT RATE USED FOR UCT	4
IV. 2017 PLAN YEAR RECONCILIATION	8
V. RECOVERY OF MEASUREMENT AND VERIFICATION COSTS	10
VI. PROPOSED RATE NO. 17 – EUERF	12
VII. CONCLUSION	17

EXHIBITS

Exhibit AH-1 Copy of Advice Notice 260

Exhibit AH-2 Discount Rate Calculations

Exhibit AH-3 Reconciliation of 2017 Collections, Expenditures, and Utility Incentive

Exhibit AH-4 Efficient Use of Energy Recovery Factor Calculation

Exhibit AH-5 Bill Impact of the Proposed Efficient Use of Energy Recovery Factor

EL PASO ELECTRIC COMPANY
DIRECT TESTIMONY OF
ADRIAN HERNANDEZ

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Adrian Hernandez. My business address is 100 North Stanton Street, El Paso, Texas, 79901.

Q. HOW ARE YOU EMPLOYED?

A. I am employed by El Paso Electric Company ("EPE" or the "Company") as a Senior Rate Analyst.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND AND EXPERIENCE.

A. In May 2007, I graduated from the University of Texas at Austin with a Bachelor of Business Administration in Accounting and a minor in Finance. In August 2011, I earned a Master of Accountancy degree from the University of Texas at El Paso. In 2014, I received a graduate certificate from New Mexico State University ("NMSU") in Public Utility Regulation & Economics. I continued at NMSU where I enrolled in a Master in Business Administration program, and graduated in December 2017. I am a Certified Public Accountant in the State of Texas.

After earning my Bachelor's degree, I was hired by BearingPoint Inc., in Washington, D.C., as a Business Analyst. In June 2008, I was employed as a Cost Accountant for Helen of Troy Limited, in El Paso, Texas. My career in the utility industry began in August 2009, when I accepted a Regulatory Accountant position with EPE. In 2014, I became an Associate Analyst with EPE's Rate Research

Department, was later promoted to Staff Rate Analyst, and in October 2016, I was promoted to my current position, Senior Rate Analyst.

Q. WHAT ARE YOUR RESPONSIBILITIES WITH EPE?

A. As a Senior Rate Analyst in the Rates and Regulatory Affairs Department, my responsibilities are to perform or assist in the preparation of economic, statistical, cost, and rate design studies; to develop models and methodologies for cost of service, profitability, and pricing studies; and to perform annualization and cost of service studies, rate design, and revenue forecasts.

Q. HAVE YOU PREVIOUSLY PRESENTED TESTIMONY BEFORE UTILITY REGULATORY BODIES?

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

II. PURPOSE OF DIRECT TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my direct testimony is as follows:

- To support EPE's discount rate used to calculate the Utility Cost Test ("UCT") for EPE's proposed 2019-2021 Energy Efficiency and Load Management Plan ("EE/LM Plan") and present two alternative rates for Commission consideration. In doing so, I analyzed three Weighted Average Cost of

Capital ("WACC") methodologies that could be used to calculate the UCT and explain why the Commission's methodology artificially causes energy efficiency and load management ("EE/LM") programs to be less cost-effective.

- To reconcile EPE's 2017 plan year tariff rider collections, plan year expenditures, and the utility incentive.
- To support EPE's requested variance from Section 15.D of 17.7.2 NMAC ("Rule"), "Funding for services of the independent program evaluator's completion of a comprehensive measurement and verification report will be paid initially by the public utility and treated as a regulatory asset; to be recovered through rates established in the public utility's next general rate proceeding.", to allow EPE to recover its measurement and verification ("M&V") costs through an approved tariff rider.
- To support EPE's proposed revision to Rate No. 17 – Efficient Use of Energy Recovery Factor ("EUERF") pursuant to 17.7.2.13 NMAC.

Q. ARE YOU SPONSORING ANY EXHIBITS IN SUPPORT OF YOUR DIRECT TESTIMONY?

A. Yes. I am sponsoring the following exhibits:

- Exhibit AH-1 Copy of Advice Notice 260;
- Exhibit AH-2 Discount Rate Calculations;
- Exhibit AH-3 Reconciliation of 2017 Collections, Expenditures, and Utility Incentive;

- Exhibit AH-4 Efficient Use of Energy Recovery Factor Calculation; and
- Exhibit AH-5 Bill Impact of the Proposed Efficient Use of Energy Recovery Factor.

III. DISCOUNT RATE USED FOR UCT

Q. AS USED IN THIS PROCEEDING, WHAT IS A DISCOUNT RATE AND HOW DOES IT RELATE TO A COMPANY'S WACC?

A. A discount rate is the rate used to calculate the present values of EE/LM programs, over their useful lives, to measure their cost effectiveness. Typically, the Commission-approved WACC is the rate of return the Commission authorizes a utility to earn based on its capital structure. The use of the WACC as a discount rate is commonly used to value public utility investments.

Q. HAS EPE USED A DISCOUNT RATE BASED ON ITS COMMISSION-APPROVED WACC TO CALCULATE THE UCT IN THIS CASE?

A. Yes.

Q. HOW HAS THE COMMISSION ORDERED EPE TO CALCULATE THE DISCOUNT RATE USING THE COMMISSION-APPROVED WACC FOR ANALYSIS OF UCT OF ITS PROPOSED EE/LM PROGRAMS?

A. The Final Order in Case No. 16-00185-UT requires EPE, if it uses its Commission-approved WACC, to "use its PRC approved WACC grossed up to incorporate EPE's

payment of taxes on the equity component and adjusted down to reflect tax deductions EPE receives for its interest payments on the debt component".[1]

Q. WHAT IS THE DISCOUNT RATE REQUIRED BY THAT FINAL ORDER, AND DID EPE USE THIS DISCOUNT RATE IN ITS UCT CALCULATION?

A. The discount rate required by that Final Order is 8.3667 percent, as shown in Exhibit AH-2, page 3. Yes, EPE used this discount rate in its UCT calculation, as discussed in the direct testimony of EPE witness Amy D. Martin.

Q. DID EPE EVALUATE THE UCT OF ITS PROPOSED PROGRAMS USING ANY OTHER DISCOUNT RATE?

A. Yes. EPE used two alternate discount rates to evaluate its proposed programs: (1) the WACC approved by the Commission in its last general rate case, Case No. 15-00127-UT, and (2) the after-tax WACC adjusted for the new federal corporate tax rate of 21 percent.

Q. WHAT IS THE DISCOUNT RATE USING THE COMMISSION-APPROVED WACC?

A. The discount rate based on the Commission-approved WACC is 7.6657 percent, as shown in Exhibit AH-2, page 2.

[1] NMPRC Case No. 16-00185-UT, Recommended Decision, ¶ K (Jan 12, 2017).

Q. WHAT IS THE DISCOUNT RATE USING THE AFTER-TAX COMMISSION-APPROVED WACC?

A. The discount rate based on the after-tax Commission-approved WACC is 6.9812 percent, as shown in Exhibit AH-2, page 2. An after-tax WACC adjustment is reflected in the debt portion by multiplying the before-tax required return of debt by 1 minus the marginal corporate tax rate or tax shield (1 – tax rate).

Q. WHY HAS EPE PROVIDED ALTERNATIVE DISCOUNT RATES BASED ON ITS COMMISSION-APPROVED WACC?

A. EPE continues to question the accuracy and fairness of grossing-up the equity component of the Commission-approved WACC to discount costs in calculating the UCT for its proposed EE/LM programs as ordered by the Commission.

Q. WHY DOES EPE CONTINUE TO QUESTION THE ACCURACY AND FAIRNESS TO RATEPAYERS OF THE COMMISSION'S ORDERED METHODOLOGY FOR CALCULATING THE DISCOUNT RATE FOR EE/LM PROGRAMS?

A. EPE continues to question the accuracy and fairness of the methodology because the ordered tax gross up of equity overstates the costs of EPE's proposed programs, making them less cost effective under the UCT. When using the WACC as a discount rate, the only difference in tax treatment between the Commission-approved WACC (7.6657 percent) and an after-tax WACC (6.9812 percent) is reflected in the debt portion by multiplying the before-tax required return of debt by 1 minus the

marginal corporate tax rate or tax shield (1 – tax rate). This adjusts the pre-tax debt rate downward to reflect the tax deductibility of corporate interest payments. Returns on equity are not deductible by corporations. This means that the equity rate of return should never change since a corporation will pay 100 percent of their tax burden on their equity returns. On the other hand, even though the cost of debt has its stated interest rate, the actual rate of return on debt is lower after taxes due to the savings related to the tax shield. For example, with a federal corporate tax rate of 21 percent, a corporation will avoid paying 100 percent of their tax burden on debt returns and only pay 79 percent (1 – 21 percent corporate tax rate). Therefore, it makes no sense that EPE should use the Commission-ordered discount rate (8.3667 percent) because it incorrectly overstates the cost of equity.

In theory, a higher discount rate means higher risks associated with the investment, making it more expensive. By using the overstated discount rate of 8.3667 percent, energy efficiency programs appear to be more costly (less cost effective). However, because utilities are typically allowed to recover energy efficiency investments in a shorter amount of time through an EE rider (EUERF), energy efficiency investments should represent a lower financial risk, not higher.

Consequently, the recommended decision makes valuing demand-side resources, like energy efficiency programs, less cost effective under the UCT analysis of EPE's proposed EE/LM programs. See the direct testimony of EPE witness Martin for the UCT comparison based on these discount rates.

Q. DOES EPE HAVE ANY RECOMMENDATIONS RELATED TO USING THE COMMISSION-APPROVED WACC AS THE DISCOUNT RATE?

A. Yes. EPE recommends that no adjustment be made to "gross-up" the cost of equity portion of EPE's WACC.

IV. 2017 PLAN YEAR RECONCILIATION

Q. DID EPE RECONCILE 2017 PLAN YEAR EXPENDITURES AND COLLECTIONS?

A. Yes. In reconciling the 2017 expenditure and collection amounts, EPE determined if there was a 2017 plan year overage or underage. As defined in 17.7.2.7 NMAC, "plan year overage means the public utility's actual prior plan year expenditures that exceeded the same plan year's actual collections" and "plan year underage means the public utility's actual prior plan year collections that exceeded the same plan year's actual expenditures."

Q. IN PERFORMING THIS RECONCILIATION, WHAT AMOUNTS DID EPE INCLUDE IN THE 2017 PLAN YEAR EXPENDITURES?

A. The 2017 plan year expenditures approved for recovery by the Commission in Case No. 16-00145-UT include customer incentives, administrative, marketing, and M&V costs totaling to $4,450,884, of which $4,222,942 was recovered through the EUERF, and $227,942 of administration costs recovered through base rates. 2017 plan year expenditures are shown in Exhibit AH-3, page 3.

Q. WHAT UTILITY INCENTIVE AMOUNT DID THE COMMISSION APPROVE FOR THE 2017 PLAN YEAR AND HOW IS THAT INCENTIVE AMOUNT REFLECTED IN THE 2017 RECONCILIATION?

A. EPE's Commission-approved baseline incentive was 7.1 percent for verified annual savings of 9 Gigawatt-hours ("GWh"), with an adder incentive of 0.075 percent for each 1.0 GWh of additional energy savings, up to a maximum of 7.6657 percent. Because EPE's 2017 verified annual savings were 12.7 GWh (a net increase of 3.0 GWh), the utility incentive increased by 0.225 percent (0.075 percent x 3) to 7.325 percent. This results in a utility incentive amount of $326,027 for the 2017 plan year. This mechanism was approved in Case No. 16-00185-UT and is shown in Exhibit AH-3, page 4.

Q. IN PERFORMING THIS RECONCILIATION, WHAT AMOUNTS DID EPE INCLUDE IN THE 2017 PLAN YEAR COLLECTIONS?

A. The 2017 plan year collections include all EUERF tariff revenues recovered in 2017 amounting to $5,158,549 and $227,942 of administration costs not recovered in the EUERF. Exhibit AH-3, page 2, details the EUERF tariff revenues by rate class.

Q. HAS EPE PROVIDED A MONTHLY RECONCILIATION OF 2017 PLAN YEAR PROGRAM COSTS AND COLLECTIONS?

A. Yes. Exhibit AH-3, page 1, shows the monthly reconciliation resulting in an underage of $609,580.

Q. HOW DOES EPE PROPOSE TO TREAT THE 2017 PLAN YEAR UNDERAGE?

A. As discussed by EPE witness Araceli G. Perea, EPE will add the 2017 plan year underage of $609,580 to its 2019 plan year budget. The proposed EUERF for 2019 does not include a reconciling component related to this underage.

Q. IS EPE REQUESTING APPROVAL OF THE 2017 RECONCILIATION?

A. Yes.

V. RECOVERY OF MEASUREMENT AND VERIFICATION COSTS

Q. IS EPE REQUESTING A VARIANCE FROM THE RULE TO AUTHORIZE RECOVERY OF ITS M&V COST THROUGH THE EUERF?

A. Yes. EPE requests a variance from 17.7.2.15.D NMAC pursuant to 17.7.2.19 NMAC.

Q. WHAT IS THE VARIANCE REQUESTED?

A. EPE requests a variance from 17.7.2.15.D NMAC to allow EPE to recover its M&V costs through its approved tariff rider.

Q. WHAT ARE THE REASONS FOR THE REQUESTED VARIANCE (17.7.2.19.A NMAC)?

A. EPE requests a variance for two reasons. First, recovery of M&V costs through the EUERF allows EPE to recover these costs when incurred as an expense instead of as

a regulatory asset. Regulatory assets are recovered much later and accrue interest over time, increasing the amount to recover from customers. Secondly, M&V costs, incurred through the Commission-approved independent M&V provider, are reasonable expenditures necessary to assess the effectiveness of energy efficiency programs.

Q. PLEASE IDENTIFY THE SECTION OF THE RULE FOR WHICH A VARIANCE IS REQUESTED (17.7.2.19.B NMAC).

A. EPE requests a variance from 17.7.2.15.D NMAC which provides "(f)unding for services of the independent program evaluator's completion of a comprehensive measurement and verification report will be paid initially by the public utility *and treated as a regulatory asset; to be recovered through rates established in the public utility's next general rate case.*" (Emphasis added.)

Q. IF GRANTED, WHAT EFFECT WILL A VARIANCE HAVE ON COMPLIANCE WITH THE RULE AND WILL A VARIANCE FURTHER THE PURPOSES OF THE RULE (17.7.2.19.C AND D NMAC)?

A. There will be no major effect on compliance with the Rule, other than the timing of recovery. Recovery through the EUERF will further the purposes of the Rule because (1) it allows collections to more closely match expenditures from that same period, (2) will assist EPE with keeping its EUERF at its required three percent funding target, and (3) eliminates the addition of accrued interest on a regulatory asset.

Q. WHY IS THE PROPOSED VARIANCE A REASONABLE ALTERNATIVE TO THE REQUIREMENTS (17.7.2.19.E NMAC)?

A. The proposed variance is a reasonable alternative because M&V expenditures meet the Rule's cost recovery guidelines (17.7.2.13.B NMAC stating that public utility may, at its option, recover its prudent and reasonable program costs). Because M&V expenses are necessary to assess the effectiveness of energy efficiency programs, they are prudent and reasonable costs.

VI. PROPOSED RATE NO. 17 – EUERF

Q. WHAT REVENUES DID EPE USE TO CALCULATE THE PROPOSED EUERF?

A. In accordance with the Final Order from Case No. 16-00185-UT, the plan year budget for 2019 is based on the 2017 historical revenues.[2] To be consistent, I also use these revenues to determine the proposed 2019 EUERF. The estimated pre-tax billed revenues (excluding franchise fees) also take into account a statutory large customer cap of $75,000. However, since no customer exceeded $75,000, there was no large customer cap applied in 2017.

As shown in Exhibit AH-4, page 2, EPE's total New Mexico revenues in 2017 were $182,352,013. However, as discussed below, two rate classes are not eligible to participate in EPE's EE/LM programs resulting in total eligible revenues of $170,454,871 from rate classes that are eligible to participate in energy efficiency programs.

[2] NMPRC Case No. 16-00185-UT, Recommended Decision ¶ H (Jan. 12, 2017).

Q. WHICH RATE CLASSES ARE NOT ELIGIBLE TO PARTICIPATE IN EPE'S ENERGY EFFICIENCY PROGRAMS?

A. Two rate classes are not eligible to participant in EPE's EE/LM programs. The first is Rate Class 10 – Military Research and Development, which as a result of Case No. 11-00047-UT, the Final Order states "shall not participate in the energy efficiency programs" and "shall not be assessed the energy efficiency rate rider"[3]. The second is Rate Class 12 – Private Area Lighting because the facilities under this rate are company-owned.

Q. ON WHAT BASIS DOES EPE EXCLUDE REVENUES FROM THESE TWO INELIGIBLE RATE CLASSES FROM ITS NEW MEXICO REVENUES FROM ITS EE/LM PROGRAM BUDGET?

A. As stated in 17.7.2.13.A NMAC, "recovery of program costs shall only be from customer classes with an opportunity to participate in approved measures and programs."

Q. IS THE EUERF NOT APPLICABLE TO ANY OTHER RATE SCHEDULES?

A. Yes. The EUERF is not applicable to Rate Schedule Nos. 21 through 24. These are rate schedules related to cogeneration, and these customers pay the EUERF through their standard rate schedule.

[3] Section G in Case No. 11-00047-UT Final Order Adopting Certification of Partial Stipulation and Recommended Decision.

Q. WHAT IS THE RESULTING THREE PERCENT USED TO CALCULATE THE EUERF?

A. As discussed above, EPE's estimated eligible revenues for 2019 are $170,454,871. Thus, three percent of the eligible revenues is $5,113,646 ($170,454,871 multiplied by 3 percent). This calculation is shown in more detail in Exhibit AH-4, page 2.

Q. WHAT UTILITY INCENTIVE PERCENTAGE IS EPE USING TO CALCULATE THE PROPOSED EUERF?

A. As addressed by EPE witness Perea, EPE is requesting continuation of the incentive mechanism approved in Case No. 16-00185-UT, without modification, resulting in a requested baseline incentive of 7.1 percent. The proposed utility incentive amounts to $363,069 ($5,113,646 multiplied by 7.1 percent) as shown in Exhibit AH-4, page 1. Consistent with the mechanism approved for 2017, any additional increment will not be added until the savings are verified after the 2019 plan year.

Q. WHAT IS EPE'S PROPOSED RATE EUERF?

A. EPE is proposing a revised EUERF of 3.0793 percent. The calculation is shown in Exhibit AH-4, page 1.

Q. WHAT COMPONENTS ARE INCLUDED IN EPE'S PROPOSED EUERF?

A. EPE's proposed EUERF of 3.0793 percent is comprised of: (1) 3.0000 percent for the 3 percent of customer billings, (2) 0.2130 percent for EPE's 2019 baseline energy efficiency utility incentive, and (3) -0.1337 percent to remove the administration costs

not recovered through the EUERF. This breakout is shown at the bottom of Exhibit AH-4, page 1.

Q. HAVE YOU PROVIDED A PROPOSED EUERF TARIFF AND ADVICE NOTICE?

A. Yes. Exhibit AH-1 contains a copy of EPE's Advice Notice 260 which EPE filed concurrent with this application containing the proposed EUERF tariff for billing in 2019.

Q. HAVE YOU MADE ANY OTHER REVISIONS TO THE PROPOSED EUERF TARIFF?

A. Yes. The tariff has been revised to clarify the applicability section as follows:

> "Electric service billed under rate schedules having an Efficient Use of Energy Recovery Factor Clause shall be subject to an Efficient Use of Energy Recovery Factor ("EUERF"). The EUERF is not applicable for private area, military, and cogeneration classes, as indicated below.
>
> Pursuant to the New Mexico Public Regulation Commission Rule 17.7.2, the EUERF allows the Company to recover the cost of energy efficiency programs from the customer classes with an opportunity to participate under such programs."

Q. ARE THERE OTHER REQUIREMENTS RELATED TO TARIFF RIDERS UNDER THE EFFICIENT USE OF ENERGY ("EUEA") ACT AND EE RULE?

A. Yes. Section 62-17-6(A) of the EUEA and 17.7.2.13(C)(2) NMAC require tariff riders, unless otherwise ordered by the Commission, to include language on customer bills explaining program benefits of EE programs. EPE proposes to revise the following language on all customer bills to address this requirement:

> "Energy Efficiency programs are designed to result in cost savings and benefit the environment. For every $1.00 spent on these programs, customers typically save more than $1.00 over time on the cost of providing electricity, and program participants will save even more. Learn more about these programs and rebates that may be available to you at www.epelectric.com."

Q. HOW DOES THE PROPOSED EUERF IMPACT A TYPICAL RESIDENTIAL CUSTOMER BILL?

A. For a typical residential customer using a monthly average of 700 kilowatt-hours, an EUERF of 3.0793 percent of pre-tax bills would represent $2.52 of the monthly bill. This is an increase of $0.01 over the current EUERF charge of $2.51, or a 0.01 percent increase relative to the current bill. The proposed EUERF of 3.0793 percent is not materially different than the current EUERF of 3.0750 percent. Bill impacts for other usage levels for residential customers and for non-residential customers are shown in Exhibit AH-5.

Q. HAS EPE PROPOSED AN EUERF FOR 2020 AND 2021?

A. No. EPE is not proposing EUERFs specifically for 2020 or 2021 in this proceeding. Because EPE relied on 2017 historical revenues (two years prior to 2019) to calculate

the 2019 EUERF, the same approach will be used to true-up or revise, if necessary, the 2020 and 2021 EUERF using the 2018 and 2019 historical revenues, respectively. In other words, the EUERF calculated in this proceeding will remain 3.0793 percent for 2020 and 2021 unless a revision is necessary.

VII. CONCLUSION

Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.

A. First, EPE questions the recommended decision in Case No. 16-00185-UT to gross-up the equity portion of the Commission-approved WACC for UCT purposes. That adjustment overstates the discount rate and makes energy efficiency programs less cost effective than they should be. Additionally, EPE reconciled its 2017 plan year and the resulting underage of $609,580 will be added to its 2019 plan year budget. Finally, EPE requests approval for its revised EUERF of 3.0793 percent.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

EL PASO ELECTRIC COMPANY

ADVICE NOTICE NO. 260

NEW MEXICO PUBLIC REGULATION COMMISSION
OF THE STATE OF NEW MEXICO

El Paso Electric Company (EPE) hereby gives notice to the public and the Commission of the filing and publishing of the following changes in its Rates, which are attached hereto:

RATES

Rate Number	Title of Rate	Cancelling Rate Number	Date Effective	
10th Revised Rate No. 17	Efficient Use of Energy Recovery Factor (EUERF)	9th Revised Rate No. 17	01/01/2019	x

Advice Notice No. 260

Signature/Title *James Schichtl*
Vice President-Regulatory Affairs

EL PASO ELECTRIC COMPANY

REVISED TABLE OF CONTENTS

RATE SCHEDULES

Rate Schedule Number	Title	
11th Revised Rate 1	Residential Service Rate	
13th Revised Rate 3	Small General Service Rate	
13th Revised Rate 4	General Service Rate	
14th Revised Rate 5	Irrigation Service Rate	
10th Revised Rate 7	City and County Service Rate	
11th Revised Rate 8	Water, Sewage, Storm Sewage Pumping or Sewage Disposal Rate	
11th Revised Rate 9	Large Power Service Rate	
13th Revised Rate 10	Military Research and Development Power Rate	
12th Revised Rate 11	Street Lighting Service Rate	
12th Revised Rate 12	Private Area Lighting Rate	
8th Revised Rate 15	Miscellaneous Service Charges	
36th Revised Rate 16	Purchased Power Service	
10th Revised Rate 17	Efficient Use of Energy Recovery Factor (EUERF)	X
19th Revised Rate 18	FPPCAC	
10th Revised Rate 19	Seasonal Agriculture Processing Service Rate	
10th Revised Rate 21	Supplementary Power Service Cogeneration and Small Power Production Facilities	
10th Revised Rate 22	Backup Power Service Cogeneration and Small Power Production Facilities	

Advice Notice No. 260

Signature/Title

James Schichtl
Vice President – Regulatory Affairs

EL PASO ELECTRIC COMPANY

REVISED TABLE OF CONTENTS

RATE SCHEDULES

10th Revised Rate 23	Maintenance Power Service Cogeneration and Small Power Production Facilities
10th Revised Rate 24	Curtailable Power Service Cogeneration and Small Power Production Facilities
8th Revised Rate 25	Outdoor Recreational Lighting Service Rate
7th Revised Rate 26	State University Service Rate
5th Revised Rate 29	Noticed Interruptible Service for Rate Large Power Service
6th Revised Rate 30	Load Retention Rate
3rd Revised Rate 32	Voluntary Renewable Energy Rate
5th Revised Rate 33	Small System Renewable Energy Certificate Purchase
4th Revised Rate 34	Medium System Renewable Energy Certificate Purchase
2nd Revised Rate 35	Large System Renewable Energy Certificate Purchase
Original Rate 37	eSmart Thermostat Program Rate
1st Revised Rate 38	Renewable Portfolio Standard (RPS) Cost Rider
Original Rate 39	Economic Development Rate
Original Rate 41	Federal Tax Credit Factor (FTCF)

Advice Notice No. 260

Signature/Title James Schichtl
Vice President – Regulatory Affairs

EL PASO ELECTRIC COMPANY
TENTH REVISED RATE NO. 17
CANCELLING NINTH REVISED RATE NO. 17

EFFICIENT USE OF ENERGY RECOVERY FACTOR (EUERF)

APPLICABILITY:

Electric service billed under rate schedules having an Efficient Use of Energy Recovery Factor Clause shall be subject to an Efficient Use of Energy Recovery Factor ("EUERF"). The EUERF is not applicable for private area, military, and cogeneration classes, as indicated below.

Pursuant to the New Mexico Public Regulation Commission Rule 17.7.2, the EUERF allows the Company to recover the cost of energy efficiency programs from the customer classes with an opportunity to participate under such programs.

TERRITORY:

Areas served by the Company in Dona Ana, Sierra, Otero and Luna Counties.

EUERF MONTHLY FACTOR:

The monthly charge for the EUERF hereunder shall be comprised of the following rate charges, not to exceed $75,000 per customer per year.

Rate No.	Description	Total EUERF per Pre-Tax Charges
1	Residential Service Rate	3.0793%
3	Small Commercial Service Rate	3.0793%
4	General Service Rate	3.0793%
5	Irrigation Service Rate	3.0793%
7	City and County Service Rate	3.0793%
8	Water, Sewage, Storm Sewage Pumping or Sewage Disposal Rate	3.0793%

Advice Notice No. 260

Signature/Title

James Schichtl
Vice President-Regulatory Affairs

EL PASO ELECTRIC COMPANY
TENTH REVISED RATE NO. 17 X
CANCELLING NINTH REVISED RATE NO. 17 X

EFFICIENT USE OF ENERGY RECOVERY FACTOR (EUERF)

9	Large Power Service Rate	3.0793%	X
10	Military Research & Development Rate	N/A	
11	Street Lighting Service Rate	3.0793%	X
12	Private Area Lighting Rate	N/A	
19	Seasonal Agriculture Processing Service Rate	3.0793%	X
21	Supplementary Power Service Cogeneration and Small Power Production Facilities	N/A	
22	Backup Power Service Cogeneration and Small Power Production Facilities	N/A	
23	Maintenance Power Service Cogeneration and Small Power Production Facilities	N/A	
24	Curtailable Power Service Cogeneration and Small Power Production Facilities	N/A	
25	Outdoor Recreational Lighting Service Rate	3.0793%	X
26	State University Service Rate	3.0793%	X
28	Instantaneous Interruptible Service Rate for Large Power Service	3.0793%	X
29	Noticed Interruptible Service Rate for Large Power Service	3.0793%	X
30	Load Retention Rate	3.0793%	X

Advice Notice No. 260

Signature/Title

James Schichtl
Vice President-Regulatory Affairs

EL PASO ELECTRIC COMPANY
2018 NEW MEXICO ENERGY EFFICIENCY FILING
WEIGHTED AVERAGE COST OF CAPITAL
APPROVED IN CASE NO. 15-00127-UT

	(a)	(b)	(c)	(d)	(e)
Line	Description	Balance	Percent of Total	Cost of Capital	Weighted Avg. Cost of Capital
1	Long-term Debt	$1,027,657,052	50.71%	5.90%	2.9931%
2	Common Equity	998,848,394	49.29%	9.48%	4.6726%
3	Total	$2,026,505,446	100.00%		7.6657%

Amounts may not add or tie due to rounding.

EL PASO ELECTRIC COMPANY
2018 NEW MEXICO ENERGY EFFICIENCY FILING
AFTER-TAX WEIGHTED AVERAGE COST OF CAPITAL
APPROVED IN CASE NO. 15-00127-UT

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Description	Balance	Percent of Total	Cost of Capital	Weighted Avg. Cost of Capital	Marginal Tax Rate (A)	Discount Rate
1	Long-term Debt	$1,027,657,052	50.71%	5.90%	2.9931%	22.87%	2.3085%
2	Common Equity	998,848,394	49.29%	9.48%	4.6726%		4.6726%
3	Total	$2,026,505,446	100.00%		7.6657%		6.9812%

(A) Marginal Tax Rate is composed of:

Arizona	0.0021
New Mexico	0.0113
Texas	0.0053
Federal	0.2100
	0.2287

Amounts may not add or tie due to rounding.

EL PASO ELECTRIC COMPANY
2018 NEW MEXICO ENERGY EFFICIENCY FILING
DISCOUNT RATE
RECOMMENDED IN CASE NO. 16-00185-UT

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Description	Balance	Percent of Total	Cost of Capital	Weighted Avg. Cost of Capital	Marginal Tax Rate (A)	Discount Rate
1	Long-term Debt	$1,027,657,052	50.71%	5.90%	2.9931%	22.87%	2.3085%
2	Common Equity	998,848,394	49.29%	9.48%	4.6726%	22.87%	6.0581%
3	Total	$2,026,505,446	100.00%		7.6657%		8.3667%

(A) Marginal Tax Rate is composed of:

Arizona	0.0021
New Mexico	0.0113
Texas	0.0053
Federal	0.2100
	0.2287

Amounts may not add or tie due to rounding.

Historical Summary

Description	(a) EUERF Program Expenses	(b) Admin. Expenses in Base	(c) Utility Incentive 7.325%	(d) EUERF Recovery	(e) Recovery Through Base	(a)+(b)+(c) -(d)-(e) Overage/ (Underage)
2017 Energy Efficiency Activity	$4,222,942	$227,942	$326,027	$5,158,549	$227,942	($609,580)
Ending Balance						($609,580)

Monthly Summary

Month	EUERF Program Expenses	Admin. Expenses Through Base	Utility Incentive 7.325%	EUERF Recovery	Recovery Through Base	Overage/ (Underage)
Jan 2017	$2,257	$18,995	$1,557	$315,767	$18,995	($311,953)
Feb 2017	118,260	18,995	10,054	309,911	18,995	(493,550)
Mar 2017	411,053	18,995	31,501	361,407	18,995	(412,403)
Apr 2017	270,085	18,995	21,175	320,537	18,995	(441,679)
May 2017	493,557	18,995	37,544	409,082	18,995	(319,660)
Jun 2017	419,782	18,995	32,140	610,677	18,995	(478,415)
Jul 2017	288,158	18,995	22,499	685,775	18,995	(853,533)
Aug 2017	238,771	18,995	18,881	566,027	18,995	(1,161,908)
Sep 2017	246,073	18,995	19,416	497,984	18,995	(1,394,402)
Oct 2017	361,800	18,995	27,893	417,228	18,995	(1,421,937)
Nov 2017	431,449	18,995	32,995	314,408	18,995	(1,271,901)
Dec 2017	941,696	18,995	70,371	349,745	18,995	($609,580)
Total	$4,222,942	$227,942	$326,027	$5,158,549	$227,942	

EL Paso Electric Company
New Mexico Energy Efficiency Revenue By Month & Rate Class
For the 2017 Program Year

2017 New Mexico EUERF Revenue By Month and Major Rate Class (Rounded)

	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
NMRT01	(163,840)	(153,648)	(168,181)	(136,415)	(179,553)	(296,448)	(364,366)	(292,762)	(251,389)	(197,105)	(136,182)	(166,203)	(2,506,092)
NMRT03	(43,404)	(43,823)	(53,219)	(48,016)	(59,644)	(78,758)	(85,200)	(72,762)	(66,712)	(60,699)	(47,923)	(48,784)	(708,944)
NMRT04	(56,345)	(59,584)	(73,431)	(67,692)	(84,316)	(111,653)	(116,512)	(100,333)	(88,580)	(85,637)	(68,186)	(69,904)	(982,173)
NMRT05	(1,526)	(2,004)	(8,017)	(13,497)	(21,473)	(23,406)	(19,503)	(10,288)	(9,950)	(12,004)	(7,595)	(4,632)	(133,895)
NMRT07	(13,416)	(14,205)	(16,778)	(14,861)	(20,435)	(25,285)	(24,255)	(22,672)	(23,062)	(21,037)	(14,521)	(14,661)	(225,188)
NMRT08	(5,424)	(5,257)	(7,385)	(6,855)	(8,285)	(11,875)	(12,271)	(8,721)	(8,264)	(7,165)	(6,322)	(6,612)	(94,436)
NMRT09	(19,929)	(23,397)	(25,910)	(23,676)	(24,725)	(43,319)	(42,264)	(39,146)	(33,790)	(21,989)	(20,249)	(23,829)	(342,223)
NMRT11	-	-	-	(1,378)	(1,375)	(1,525)	(1,484)	(1,348)	(1,304)	(944)	(905)	(956)	(11,219)
NMRT19	(5,412)	(1,371)	(392)	(248)	(253)	(1,980)	(3,851)	(3,656)	(1,997)	(1,868)	(5,246)	(6,193)	(32,467)
NMRT25	-	-	-	(208)	(197)	(304)	(238)	(177)	(199)	(274)	(213)	(213)	(2,023)
NMRT26	(3,662)	(3,653)	(4,393)	(4,375)	(5,146)	(10,347)	(10,097)	(9,541)	(8,358)	(4,990)	(3,717)	(3,936)	(72,215)
NMRT29	(2,809)	(2,969)	(3,701)	(3,315)	(3,682)	(5,777)	(5,735)	(4,621)	(4,379)	(3,516)	(3,348)	(3,822)	(47,674)
TOTAL	(315,767)	(309,911)	(361,407)	(320,536)	(409,084)	(610,677)	(685,776)	(566,027)	(497,984)	(417,228)	(314,407)	(349,745)	(5,158,549)

EXHIBIT AH-3
PAGE 2 OF 4

Programs	Administration	Marketing	M&V	Customer Incentives	Admin. Costs Not Recovered Through EUERF	Total Program Expenses
Educational						
LivingWise Program	$ -	$ -	$ -	$ 104,123	$ 7,288	$ 111,411
Residential						
Residential Comprehensive Program	$ 32,882	$ -	$ 10,545	$ 789,552	$ 57,147	$ 890,126
CFL & LED Program	$ 147,192	$ 891	$ 6,070	$ 255,489	$ 22,144	$ 431,786
ENERGY STAR New Homes Program	$ 148,771	$ -	$ -	$ 183,745	$ 16,539	$ 349,056
Low Income						
NM EnergySaver Program	$ 47,089	$ -	$ 14,989	$ 462,288	$ 23,164	$ 547,530
Commercial						
Small Commercial Comprehensive	$ 33,542	$ 636	$ 39,451	$ 384,735	$ 30,713	$ 489,077
SCORE Plus Program	$ 679,479	$ -	$ 29,453	$ 762,375	$ 70,947	$ 1,542,254
General Administration	$ 25,427	$ -		$ -		$ 25,427
Marketing for All Programs	$ -	$ 61,646	$ -	$ -		$ 61,646
Awareness Building Campaign	$ -	$ 2,571	$ -	$ -		$ 2,571
TOTAL	**$ 1,114,383**	**$ 65,743**	**$ 100,507**	**$ 2,942,309**	**$ 227,942**	**$ 4,450,884**

EXHIBIT AH-3
PAGE 3 OF 4

Line	% of retail sales	Projected annual savings (GWh)	Cumulative energy savings (GWh)	Plan Year 2017 Total Expenditures	Profit incentive % (of program costs)	Profit incentive opportunity ($)	Incremental addition ($)
1	1.28%	9	105.4	$4,450,884	7.1000%	$316,013	
2	1.29%	10	106.4	$4,450,884	7.1750%	$319,351	$3,338
3	1.31%	11	107.4	$4,450,884	7.2500%	$322,689	$3,338
4	1.32%	12	108.4	$4,450,884	7.3250%	$326,027	$3,338
5	1.33%	13	109.4	$4,450,884	7.4000%	$329,365	$3,338
6	1.34%	14	110.4	$4,450,884	7.4750%	$332,704	$3,338
7	1.35%	15	111.4	$4,450,884	7.6657%	$341,191	$8,488

EL PASO ELECTRIC COMPANY
EFFICIENT USE OF ENERGY RECOVERY FACTOR CALCULATION

Line	Description	Amount	Formula or Reference
1	2017 Total New Mexico Revenues	$182,352,013	Exhibit AH-4, Page 2
2	Less: Revenue Not Subject to EUERF	(11,897,142)	Exhibit AH-4, Page 2
3	Less: Revenue from Capped Customer	0	No Cap in 2017
4	2019 Revenues Subject to EUERF	$170,454,871	L1 + L2 + L3
5	Three Percent	3%	Per NMAC 17.7.2.13 A
6	3 Percent of Billings	$5,113,646	L4 x L5
7	Utility Incentive Baseline Percentage	7.1%	Case No. 16-00185-UT
8	Estimated Utility Incentive Recovered in EUERF	$363,069	L4 x L5
9	Less: Admin. Costs Not Recovered Through EUERF	(227,942)	2017 amount
10	Amount to be Collected through EUERF	$5,248,773	L6 + L8 + L9
11	Proposed Efficient Use of Energy Recovery Factor	3.0793%	L10 ÷ L4
	EUERF Components		
12	Customer Billings %	3.0000%	L6 ÷ L4
13	Utility Incentive %	0.2130%	L8 ÷ L4
14	Costs Not Recovered in EUERF %	-0.1337%	L9 ÷ L4
15	Proposed Efficient Use of Energy Recovery Factor	3.0793%	L12 + L13 + L14

EL PASO ELECTRIC COMPANY
2017 NEW MEXICO REVENUES

RATE CLASS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2017 TOTAL
NMRT01-RESIDENTIAL	$5,986,427	$5,614,549	$5,470,622	$4,436,974	$5,839,941	$9,641,487	$11,849,645	$9,521,827	$8,131,166	$6,410,407	$4,428,852	$5,419,997	$82,751,894
NMRT03-SMALL GENERAL	1,581,760	1,596,776	1,700,966	1,548,429	1,924,909	2,565,404	2,795,580	2,330,966	2,165,197	1,972,653	1,555,882	1,583,751	23,322,272
NMRT04-GENERAL SERVICE	2,064,831	2,183,151	2,395,061	2,214,934	2,776,552	3,636,172	3,773,352	3,305,666	2,893,762	2,787,660	2,221,152	2,262,276	32,514,569
NMRT05-IRRIGATION	55,728	73,242	262,716	438,920	698,286	761,146	634,218	334,541	323,548	390,348	246,958	150,586	4,370,237
NMRT07-CITY & COUNTY	489,484	518,569	545,287	483,172	647,001	787,721	780,817	731,072	742,410	684,135	472,205	476,770	7,358,644
NMRT08-PUMPING	197,915	191,818	239,913	222,679	270,344	386,190	399,046	283,604	268,728	233,014	205,600	215,030	3,113,881
NMRT09-LARGE POWER	796,452	930,394	946,572	841,846	881,579	1,557,924	1,500,654	1,378,632	1,246,495	792,069	725,978	855,745	12,454,340
NMRT10-MILITARY	553,010	714,436	704,280	637,515	665,981	1,577,198	1,482,520	1,370,226	1,135,089	734,553	521,180	649,146	10,745,134
NMRT11-STREET LIGHTING	43,504	45,885	47,026	44,819	44,708	49,596	48,255	43,847	42,406	30,690	29,437	31,074	501,247
NMRT12-AREA LIGHTING	92,757	96,765	98,263	95,250	96,250	104,645	102,399	94,516	90,783	91,386	92,308	96,688	1,152,008
NMRT19-SEASONAL AGRICULTURAL	197,751	50,096	12,742	8,049	8,211	64,402	125,231	118,879	64,953	60,758	170,614	201,388	1,083,073
NMRT25-OUTDOOR RECREATIONAL	3,478	4,038	6,289	6,775	6,393	9,871	7,751	5,756	6,485	8,911	6,918	6,937	79,603
NMRT26-STATE UNIVERSITY	133,793	133,482	142,874	142,274	167,345	336,480	328,370	310,289	271,798	162,285	120,892	128,004	2,377,887
NMRT29-INTERRUPTIBLE	35,259	33,867	39,783	36,873	43,153	65,995	61,247	45,609	40,373	38,295	42,349	44,422	527,225
NEW MEXICO TOTAL	$12,232,149	$12,187,067	$12,612,395	$11,158,510	$14,070,652	$21,544,230	$23,889,086	$19,875,430	$17,423,192	$14,397,164	$10,840,325	$12,121,814	$182,352,013
LESS:													
NMRT10-MILITARY	(553,010)	(714,436)	(704,280)	(637,515)	(665,981)	(1,577,198)	(1,482,520)	(1,370,226)	(1,135,089)	(734,553)	(521,180)	(649,146)	(10,745,134)
NMRT12-AREA LIGHTING	(92,757)	(96,765)	(98,263)	(95,250)	(96,250)	(104,645)	(102,399)	(94,516)	(90,783)	(91,386)	(92,308)	(96,688)	(1,152,008)
INELIGIBLE RATE CLASSES	(645,767)	(811,201)	(802,543)	(732,765)	(762,231)	(1,681,843)	(1,584,919)	(1,464,741)	(1,225,871)	(825,939)	(613,488)	(745,834)	(11,897,142)
TOTAL ELIGIBLE REVENUES	$11,586,381	$11,375,867	$11,809,852	$10,425,745	$13,308,422	$19,862,387	$22,304,167	$18,410,688	$16,197,321	$13,571,225	$10,226,837	$11,375,980	$170,454,871
	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
THREE PERCENT OF BILLINGS	$347,591.44	$341,276	$354,296	$312,772	$399,253	$595,872	$669,125	$552,321	$485,920	$407,137	$306,805	$341,279.40	$5,113,646

EXHIBIT AH-4
PAGE 2 OF 2

EL PASO ELECTRIC COMPANY

Analysis of EUERF Impacts on
Typical Bills by Rate Class

kWh	kW	Load Factor	Total Pre-Tax Bill	Current EUERF Chrg	Current Bill	Proposed EUERF Chrg	Proposed Bill	Bill Impact
RATE NO. 01 - RESIDENTIAL SERVICE								
0			$ 6.73	$ 0.21	$ 6.94	$ 0.21	$ 6.94	0.00%
100			$ 17.16	$ 0.53	$ 17.69	$ 0.53	$ 17.69	0.00%
250			$ 32.82	$ 1.01	$ 33.83	$ 1.01	$ 33.83	0.00%
500			$ 59.25	$ 1.82	$ 61.07	$ 1.82	$ 61.07	0.00%
700			$ 81.73	$ 2.51	$ 84.24	$ 2.52	$ 84.25	0.01%
1,000			$ 116.02	$ 3.57	$ 119.59	$ 3.57	$ 119.59	0.00%
2,000			$ 230.55	$ 7.09	$ 237.64	$ 7.10	$ 237.65	0.00%
RATE NO. 03 - SMALL COMMERCIAL SERVICE (0 to 50 kW)								
730	5	20%	$ 135.77	$ 4.17	$ 139.94	$ 4.18	$ 139.95	0.01%
1,460	5	40%	$ 183.87	$ 5.65	$ 189.52	$ 5.66	$ 189.53	0.01%
2,190	5	60%	$ 231.98	$ 7.13	$ 239.11	$ 7.14	$ 239.12	0.00%
2,920	5	80%	$ 280.08	$ 8.61	$ 288.69	$ 8.62	$ 288.70	0.00%
2,190	15	20%	$ 380.39	$ 11.70	$ 392.09	$ 11.71	$ 392.10	0.00%
4,380	15	40%	$ 524.70	$ 16.13	$ 540.83	$ 16.16	$ 540.86	0.01%
6,570	15	60%	$ 669.01	$ 20.57	$ 689.58	$ 20.60	$ 689.61	0.00%
8,760	15	80%	$ 813.32	$ 25.01	$ 838.33	$ 25.04	$ 838.36	0.00%
3,650	25	20%	$ 625.00	$ 19.22	$ 644.22	$ 19.25	$ 644.25	0.00%
7,300	25	40%	$ 865.52	$ 26.61	$ 892.13	$ 26.65	$ 892.17	0.00%
10,950	25	60%	$ 1,106.04	$ 34.01	$ 1,140.05	$ 34.06	$ 1,140.10	0.00%
14,600	25	80%	$ 1,346.56	$ 41.41	$ 1,387.97	$ 41.46	$ 1,388.02	0.00%
5,840	40	20%	$ 991.93	$ 30.50	$ 1,022.43	$ 30.54	$ 1,022.47	0.00%
11,680	40	40%	$ 1,376.76	$ 42.34	$ 1,419.10	$ 42.39	$ 1,419.15	0.00%
17,520	40	60%	$ 1,761.59	$ 54.17	$ 1,815.76	$ 54.24	$ 1,815.83	0.00%
23,360	40	80%	$ 2,146.42	$ 66.00	$ 2,212.42	$ 66.09	$ 2,212.51	0.00%
RATE NO. 03 - SMALL COMMERCIAL ALTERNATE (0 to 50 kW)								
1,000			$ 142.21	$ 4.37	$ 146.58	$ 4.38	$ 146.59	0.01%
2,000			$ 270.95	$ 8.33	$ 279.28	$ 8.34	$ 279.29	0.00%
4,000			$ 528.45	$ 16.25	$ 544.70	$ 16.27	$ 544.72	0.00%
6,000			$ 785.94	$ 24.17	$ 810.11	$ 24.20	$ 810.14	0.00%
RATE NO. 04 - GENERAL SERVICE RATE (secondary rate, 50 to 800 kW)								
7,300	50	20%	$ 1,197.37	$ 36.82	$ 1,234.19	$ 36.87	$ 1,234.24	0.00%
14,600	50	40%	$ 1,573.56	$ 48.39	$ 1,621.95	$ 48.45	$ 1,622.01	0.00%
21,900	50	60%	$ 1,949.75	$ 59.95	$ 2,009.70	$ 60.04	$ 2,009.79	0.00%
29,200	50	80%	$ 2,325.94	$ 71.52	$ 2,397.46	$ 71.62	$ 2,397.56	0.00%
43,800	300	20%	$ 7,059.24	$ 217.07	$ 7,276.31	$ 217.38	$ 7,276.62	0.00%
87,600	300	40%	$ 9,316.40	$ 286.48	$ 9,602.88	$ 286.88	$ 9,603.28	0.00%
131,400	300	60%	$ 11,573.56	$ 355.89	$ 11,929.45	$ 356.38	$ 11,929.94	0.00%
175,200	300	80%	$ 13,830.71	$ 425.29	$ 14,256.00	$ 425.89	$ 14,256.60	0.00%
73,000	500	20%	$ 11,748.74	$ 361.27	$ 12,110.01	$ 361.78	$ 12,110.52	0.00%
146,000	500	40%	$ 15,510.67	$ 476.95	$ 15,987.62	$ 477.62	$ 15,988.29	0.00%
219,000	500	60%	$ 19,272.60	$ 592.63	$ 19,865.23	$ 593.46	$ 19,866.06	0.00%
292,000	500	80%	$ 23,034.53	$ 708.31	$ 23,742.84	$ 709.30	$ 23,743.83	0.00%

EL PASO ELECTRIC COMPANY
Analysis of EUERF Impacts on
Typical Bills by Rate Class

kWh	kW	Load Factor	Total Pre-Tax Bill	Current EUERF Chrg	Current Bill	Proposed EUERF Chrg	Proposed Bill	Bill Impact
RATE NO. 04 - GENERAL SERVICE RATE (primary rate, 50 to 800 kW)								
7,300	50	20%	$ 1,053.59	$ 32.40	$ 1,085.99	$ 32.44	$ 1,086.03	0.00%
14,600	50	40%	$ 1,421.63	$ 43.72	$ 1,465.35	$ 43.78	$ 1,465.41	0.00%
21,900	50	60%	$ 1,789.67	$ 55.03	$ 1,844.70	$ 55.11	$ 1,844.78	0.00%
29,200	50	80%	$ 2,157.71	$ 66.35	$ 2,224.06	$ 66.44	$ 2,224.15	0.00%
43,800	300	20%	$ 6,196.60	$ 190.55	$ 6,387.15	$ 190.81	$ 6,387.41	0.00%
87,600	300	40%	$ 8,404.84	$ 258.45	$ 8,663.29	$ 258.81	$ 8,663.65	0.00%
131,400	300	60%	$ 10,613.07	$ 326.35	$ 10,939.42	$ 326.81	$ 10,939.88	0.00%
175,200	300	80%	$ 12,821.30	$ 394.25	$ 13,215.55	$ 394.81	$ 13,216.11	0.00%
73,000	500	20%	$ 10,311.01	$ 317.06	$ 10,628.07	$ 317.51	$ 10,628.52	0.00%
146,000	500	40%	$ 13,991.40	$ 430.24	$ 14,421.64	$ 430.84	$ 14,422.24	0.00%
219,000	500	60%	$ 17,671.79	$ 543.41	$ 18,215.20	$ 544.17	$ 18,215.96	0.00%
292,000	500	80%	$ 21,352.17	$ 656.58	$ 22,008.75	$ 657.50	$ 22,009.67	0.00%
RATE NO. 05 - IRRIGATION SERVICE RATE								
1,000			$ 124.63	$ 3.83	$ 128.46	$ 3.84	$ 128.47	0.01%
5,000			$ 546.28	$ 16.80	$ 563.08	$ 16.82	$ 563.10	0.00%
10,000			$ 1,073.35	$ 33.01	$ 1,106.36	$ 33.05	$ 1,106.40	0.00%
15,000			$ 1,600.41	$ 49.21	$ 1,649.62	$ 49.28	$ 1,649.69	0.00%
RATE NO. 07 - CITY AND COUNTY SERVICE								
1,460	10	20%	$ 219.47	$ 6.75	$ 226.22	$ 6.76	$ 226.23	0.00%
2,920	10	40%	$ 313.77	$ 9.65	$ 323.42	$ 9.66	$ 323.43	0.00%
4,380	10	60%	$ 408.07	$ 12.55	$ 420.62	$ 12.57	$ 420.64	0.00%
5,840	10	80%	$ 502.38	$ 15.45	$ 517.83	$ 15.47	$ 517.85	0.00%
14,600	100	20%	$ 2,043.30	$ 62.83	$ 2,106.13	$ 62.92	$ 2,106.22	0.00%
29,200	100	40%	$ 2,986.33	$ 91.83	$ 3,078.16	$ 91.96	$ 3,078.29	0.00%
43,800	100	60%	$ 3,929.36	$ 120.83	$ 4,050.19	$ 121.00	$ 4,050.36	0.00%
58,400	100	80%	$ 4,872.39	$ 149.83	$ 5,022.22	$ 150.04	$ 5,022.43	0.00%
43,800	300	20%	$ 6,096.26	$ 187.46	$ 6,283.72	$ 187.72	$ 6,283.98	0.00%
87,600	300	40%	$ 8,925.36	$ 274.45	$ 9,199.81	$ 274.84	$ 9,200.20	0.00%
131,400	300	60%	$ 11,754.45	$ 361.45	$ 12,115.90	$ 361.95	$ 12,116.40	0.00%
175,200	300	80%	$ 14,583.54	$ 448.44	$ 15,031.98	$ 449.07	$ 15,032.61	0.00%
73,000	500	20%	$ 10,149.22	$ 312.09	$ 10,461.31	$ 312.52	$ 10,461.74	0.00%
146,000	500	40%	$ 14,864.38	$ 457.08	$ 15,321.46	$ 457.72	$ 15,322.10	0.00%
219,000	500	60%	$ 19,579.54	$ 602.07	$ 20,181.61	$ 602.91	$ 20,182.45	0.00%
292,000	500	80%	$ 24,294.69	$ 747.06	$ 25,041.75	$ 748.11	$ 25,042.80	0.00%
RATE NO. 08 - MUNICIPAL WATER, SEWAGE, AND PUMPING (Secondary)								
1,000			$ 110.36	$ 3.39	$ 113.75	$ 3.40	$ 113.76	0.01%
10,000			$ 930.59	$ 28.62	$ 959.21	$ 28.66	$ 959.25	0.00%
50,000			$ 4,576.09	$ 140.71	$ 4,716.80	$ 140.91	$ 4,717.00	0.00%
100,000			$ 9,132.97	$ 280.84	$ 9,413.81	$ 281.23	$ 9,414.20	0.00%
250,000			$ 22,803.59	$ 701.21	$ 23,504.80	$ 702.19	$ 23,505.78	0.00%
500,000			$ 45,587.96	$ 1,401.83	$ 46,989.79	$ 1,403.79	$ 46,991.75	0.00%

EL PASO ELECTRIC COMPANY

Analysis of EUERF Impacts on
Typical Bills by Rate Class

kWh	kW	Load Factor	Total Pre-Tax Bill	Current EUERF Chrg	Current Bill	Proposed EUERF Chrg	Proposed Bill	Bill Impact
RATE NO. 08 - MUNICIPAL WATER, SEWAGE, AND PUMPING (Primary)								
1,000			$ 106.83	$ 3.29	$ 110.12	$ 3.29	$ 110.12	0.00%
10,000			$ 895.37	$ 27.53	$ 922.90	$ 27.57	$ 922.94	0.00%
50,000			$ 4,399.95	$ 135.30	$ 4,535.25	$ 135.49	$ 4,535.44	0.00%
100,000			$ 8,780.68	$ 270.01	$ 9,050.69	$ 270.38	$ 9,051.06	0.00%
250,000			$ 21,922.88	$ 674.13	$ 22,597.01	$ 675.07	$ 22,597.95	0.00%
500,000			$ 43,826.53	$ 1,347.67	$ 45,174.20	$ 1,349.55	$ 45,176.08	0.00%
RATE NO. 09 - LARGE POWER SERVICE (secondary, above 800 kW)								
146,000	1,000	20%	$ 22,937.78	$ 705.34	$ 23,643.12	$ 706.32	$ 23,644.10	0.00%
292,000	1,000	40%	$ 29,202.85	$ 897.99	$ 30,100.84	$ 899.24	$ 30,102.09	0.00%
438,000	1,000	60%	$ 35,467.91	$ 1,090.64	$ 36,558.55	$ 1,092.16	$ 36,560.07	0.00%
584,000	1,000	80%	$ 41,732.98	$ 1,283.29	$ 43,016.27	$ 1,285.08	$ 43,018.06	0.00%
292,000	2,000	20%	$ 45,753.48	$ 1,406.92	$ 47,160.40	$ 1,408.89	$ 47,162.37	0.00%
584,000	2,000	40%	$ 58,283.62	$ 1,792.22	$ 60,075.84	$ 1,794.73	$ 60,078.35	0.00%
876,000	2,000	60%	$ 70,813.75	$ 2,177.52	$ 72,991.27	$ 2,180.57	$ 72,994.32	0.00%
1,168,000	2,000	80%	$ 83,343.88	$ 2,562.82	$ 85,906.70	$ 2,566.41	$ 85,910.29	0.00%
438,000	3,000	20%	$ 68,569.19	$ 2,108.50	$ 70,677.69	$ 2,111.45	$ 70,680.64	0.00%
876,000	3,000	40%	$ 87,364.38	$ 2,686.45	$ 90,050.83	$ 2,690.21	$ 90,054.59	0.00%
1,314,000	3,000	60%	$ 106,159.58	$ 3,264.41	$ 109,423.99	$ 3,268.97	$ 109,428.55	0.00%
1,752,000	3,000	80%	$ 124,954.78	$ 3,842.36	$ 128,797.14	$ 3,847.73	$ 128,802.51	0.00%
RATE NO. 09 - LARGE POWER SERVICE (primary, above 800 kW)								
146,000	1,000	20%	$ 22,217.78	$ 683.20	$ 22,900.98	$ 684.15	$ 22,901.93	0.00%
292,000	1,000	40%	$ 28,339.92	$ 871.45	$ 29,211.37	$ 872.67	$ 29,212.59	0.00%
438,000	1,000	60%	$ 34,462.07	$ 1,059.71	$ 35,521.78	$ 1,061.19	$ 35,523.26	0.00%
584,000	1,000	80%	$ 40,584.21	$ 1,247.96	$ 41,832.17	$ 1,249.71	$ 41,833.92	0.00%
292,000	2,000	20%	$ 44,313.48	$ 1,362.64	$ 45,676.12	$ 1,364.55	$ 45,678.03	0.00%
584,000	2,000	40%	$ 56,557.77	$ 1,739.15	$ 58,296.92	$ 1,741.58	$ 58,299.35	0.00%
876,000	2,000	60%	$ 68,802.06	$ 2,115.66	$ 70,917.72	$ 2,118.62	$ 70,920.68	0.00%
1,168,000	2,000	80%	$ 81,046.34	$ 2,492.18	$ 83,538.52	$ 2,495.66	$ 83,542.00	0.00%
438,000	3,000	20%	$ 66,409.18	$ 2,042.08	$ 68,451.26	$ 2,044.94	$ 68,454.12	0.00%
876,000	3,000	40%	$ 84,775.61	$ 2,606.85	$ 87,382.46	$ 2,610.50	$ 87,386.11	0.00%
1,314,000	3,000	60%	$ 103,142.04	$ 3,171.62	$ 106,313.66	$ 3,176.05	$ 106,318.09	0.00%
1,752,000	3,000	80%	$ 121,508.47	$ 3,736.39	$ 125,244.86	$ 3,741.61	$ 125,250.08	0.00%

EL PASO ELECTRIC COMPANY
Analysis of EUERF Impacts on
Typical Bills by Rate Class

kWh	kW	Load Factor	Total Pre-Tax Bill	Current EUERF Chrg	Current Bill	Proposed EUERF Chrg	Proposed Bill	Bill Impact
RATE NO. 11 - STREET LIGHTING SERVICE								
O.H. Wiring System Wood								
175W MV 7,000 L - 195 Watts			$ 13.70	$ 0.42	$ 14.12	$ 0.42	$ 14.12	0.00%
250W MV 11,000 L - 275 Watts			$ 15.46	$ 0.48	$ 15.94	$ 0.48	$ 15.94	0.00%
400W MV 20,000 L - 450 Watts			$ 19.29	$ 0.59	$ 19.88	$ 0.59	$ 19.88	0.00%
150W HPS 14,400 L - 193 Watts			$ 13.73	$ 0.42	$ 14.15	$ 0.42	$ 14.15	0.00%
250W HPS 23,200 L - 313 Watts			$ 16.28	$ 0.50	$ 16.78	$ 0.50	$ 16.78	0.00%
400W HPS 45,000 L - 485 Watts			$ 20.52	$ 0.63	$ 21.15	$ 0.63	$ 21.15	0.00%
O.H. Wiring Sys Met Poles Co.Owned								
150W HPS 14,400 L - 193 Watts			$ 23.36	$ 0.72	$ 24.08	$ 0.72	$ 24.08	0.00%
250W HPS 23,200 L - 313 Watts			$ 26.48	$ 0.81	$ 27.29	$ 0.82	$ 27.30	0.04%
400W HPS 45,000 L - 485 Watts			$ 36.27	$ 1.12	$ 37.39	$ 1.12	$ 37.39	0.00%
U.G. Wiring Sys Met Poles Co Owned								
150W HPS 14,400 L - 193 Watts			$ 30.20	$ 0.93	$ 31.13	$ 0.93	$ 31.13	0.00%
250W HPS 23,200 L - 313 Watts			$ 28.94	$ 0.89	$ 29.83	$ 0.89	$ 29.83	0.00%
400W HPS 45,000 L - 485 Watts			$ 39.09	$ 1.20	$ 40.29	$ 1.20	$ 40.29	0.00%
U.G. Wiring System on Wood Poles								
150W HPS 14,400 L - 193 Watts			$ 16.52	$ 0.51	$ 17.03	$ 0.51	$ 17.03	0.00%
250W HPS 23,200 L - 313 Watts			$ 23.36	$ 0.72	$ 24.08	$ 0.72	$ 24.08	0.00%
400W HPS 45,000 L - 485 Watts			$ 28.55	$ 0.88	$ 29.43	$ 0.88	$ 29.43	0.00%
U.G. Wiring System City Owned								
175W MV 7,000 L - 195 Watts			$ 6.76	$ 0.21	$ 6.97	$ 0.21	$ 6.97	0.00%
400W MV 20,000 L - 450 Watts			$ 19.73	$ 0.61	$ 20.34	$ 0.61	$ 20.34	0.00%
150W HPS 14,400 L - 175 Watts			$ 6.08	$ 0.19	$ 6.27	$ 0.19	$ 6.27	0.00%
180W LPS 19,800 L - 250 Watts			$ 10.47	$ 0.32	$ 10.79	$ 0.32	$ 10.79	0.00%
250W HPS 23,200 L - 313 Watts			$ 10.02	$ 0.31	$ 10.33	$ 0.31	$ 10.33	0.00%
250W LPS 33,000L - 365 Watts			$ 15.09	$ 0.46	$ 15.55	$ 0.46	$ 15.55	0.00%
400W HPS 45,000 L - 485 Watts			$ 15.61	$ 0.48	$ 16.09	$ 0.48	$ 16.09	0.00%
31W-40W LED			$ 1.24	$ 0.04	$ 1.28	$ 0.04	$ 1.28	0.00%
41W-50W LED			$ 1.58	$ 0.05	$ 1.63	$ 0.05	$ 1.63	0.00%
51W-60W LED			$ 1.92	$ 0.06	$ 1.98	$ 0.06	$ 1.98	0.00%
61W-70W LED			$ 2.27	$ 0.07	$ 2.34	$ 0.07	$ 2.34	0.00%
71W-80W LED			$ 2.61	$ 0.08	$ 2.69	$ 0.08	$ 2.69	0.00%
81W-90W LED			$ 2.96	$ 0.09	$ 3.05	$ 0.09	$ 3.05	0.00%
91W-100W LED			$ 3.30	$ 0.10	$ 3.40	$ 0.10	$ 3.40	0.00%
101W-110W LED			$ 3.65	$ 0.11	$ 3.76	$ 0.11	$ 3.76	0.00%
111W-130W LED			$ 4.17	$ 0.13	$ 4.30	$ 0.13	$ 4.30	0.00%
131W-150W LED			$ 4.85	$ 0.15	$ 5.00	$ 0.15	$ 5.00	0.00%
151W-170W LED			$ 5.54	$ 0.17	$ 5.71	$ 0.17	$ 5.71	0.00%
171W-190W LED			$ 6.23	$ 0.19	$ 6.42	$ 0.19	$ 6.42	0.00%
191W-210W LED			$ 6.93	$ 0.21	$ 7.14	$ 0.21	$ 7.14	0.00%
211W-230W LED			$ 7.61	$ 0.23	$ 7.84	$ 0.23	$ 7.84	0.00%
231W-250W LED			$ 8.30	$ 0.26	$ 8.56	$ 0.26	$ 8.56	0.00%

EL PASO ELECTRIC COMPANY

Analysis of EUERF Impacts on
Typical Bills by Rate Class

kWh	kW	Load Factor	Total Pre-Tax Bill	Current EUERF Chrg	Current Bill	Proposed EUERF Chrg	Proposed Bill	Bill Impact
RATE NO. 19 - SEASONAL AGRICULTURAL PROCESSING SERVICE								
1,460	10	20%	$ 221.90	$ 6.82	$ 228.72	$ 6.83	$ 228.73	0.00%
2,920	10	40%	$ 424.58	$ 13.06	$ 437.64	$ 13.07	$ 437.65	0.00%
4,380	10	60%	$ 627.26	$ 19.29	$ 646.55	$ 19.32	$ 646.58	0.00%
5,840	10	80%	$ 829.94	$ 25.52	$ 855.46	$ 25.56	$ 855.50	0.00%
7,300	50	20%	$ 1,032.62	$ 31.75	$ 1,064.37	$ 31.80	$ 1,064.42	0.00%
14,600	50	40%	$ 2,046.01	$ 62.91	$ 2,108.92	$ 63.00	$ 2,109.01	0.00%
21,900	50	60%	$ 3,059.41	$ 94.08	$ 3,153.49	$ 94.21	$ 3,153.62	0.00%
29,200	50	80%	$ 4,072.81	$ 125.24	$ 4,198.05	$ 125.41	$ 4,198.22	0.00%
14,600	100	20%	$ 2,046.01	$ 62.91	$ 2,108.92	$ 63.00	$ 2,109.01	0.00%
29,200	100	40%	$ 4,072.81	$ 125.24	$ 4,198.05	$ 125.41	$ 4,198.22	0.00%
43,800	100	60%	$ 6,099.60	$ 187.56	$ 6,287.16	$ 187.82	$ 6,287.42	0.00%
58,400	100	80%	$ 8,126.39	$ 249.89	$ 8,376.28	$ 250.24	$ 8,376.63	0.00%
43,800	300	20%	$ 6,099.60	$ 187.56	$ 6,287.16	$ 187.82	$ 6,287.42	0.00%
87,600	300	40%	$ 12,179.98	$ 374.53	$ 12,554.51	$ 375.06	$ 12,555.04	0.00%
131,400	300	60%	$ 18,260.36	$ 561.51	$ 18,821.87	$ 562.29	$ 18,822.65	0.00%
175,200	300	80%	$ 24,340.74	$ 748.48	$ 25,089.22	$ 749.52	$ 25,090.26	0.00%
RATE NO. 25 - OUTDOOR RECREATIONAL LIGHTING								
0			$ 17.30	$ 0.53	$ 17.83	$ 0.53	$ 17.83	0.00%
100			$ 29.31	$ 0.90	$ 30.21	$ 0.90	$ 30.21	0.00%
500			$ 77.33	$ 2.38	$ 79.71	$ 2.38	$ 79.71	0.00%
1,000			$ 137.35	$ 4.22	$ 141.57	$ 4.23	$ 141.58	0.01%
5,000			$ 617.56	$ 18.99	$ 636.55	$ 19.02	$ 636.58	0.00%
10,000			$ 1,217.81	$ 37.45	$ 1,255.26	$ 37.50	$ 1,255.31	0.00%
20,000			$ 2,418.32	$ 74.36	$ 2,492.68	$ 74.47	$ 2,492.79	0.00%
RATE NO. 26 - STATE UNIVERSITY SERVICE								
1,460,000	10,000	20%	$ 164,570.57	$ 5,060.55	$ 169,631.12	$ 5,067.62	$ 169,638.19	0.00%
2,920,000	10,000	40%	$ 231,672.96	$ 7,123.94	$ 238,796.90	$ 7,133.91	$ 238,806.87	0.00%
4,380,000	10,000	60%	$ 298,775.34	$ 9,187.34	$ 307,962.68	$ 9,200.19	$ 307,975.53	0.00%
5,840,000	10,000	80%	$ 365,877.72	$ 11,250.74	$ 377,128.46	$ 11,266.47	$ 377,144.19	0.00%

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S APPLICATION FOR APPROVAL OF ITS 2019-2021 ENERGY EFFICIENCY AND LOAD MANAGEMENT PLAN, UTILITY INCENTIVE AND REVISED RATE NO. 17- EFFICIENT USE OF ENERGY RECOVERY FACTOR	)	**Case No. 18-00116-UT**
EL PASO ELECTRIC COMPANY, Applicant.	)	

AFFIDAVIT

STATE OF TEXAS)
) ss
COUNTY OF EL PASO)

Adrian Hernandez hereby deposes and states under oath that the information contained in the foregoing Direct Testimony of Adrian Hernandez, together with the statements of facts contained therein and any exhibits attached thereto, are true and accurate based on my personal knowledge and belief.

SIGNED this 27th day of June, 2018.

ADRIAN HERNANDEZ

Subscribed and sworn to before me this 27th day of June, 2018.

MARITZA PEREZ
Notary Public, State of Texas
Comm. Expires 01-25-2022
Notary ID 129590432

My Commission expires:

1-25-22