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APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

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CEP 9-1:

Please provide refrigerated air conditioning vs. evaporative cooling appliance saturation in the residential class for each of the prior 10 years. What is the expected increase per year?

RESPONSE:

El Paso Electric Company ("EPE") does not survey the cooling type for each of its residential customers; however, please see the table below which shows the survey results of the Residential Appliance Saturation Studies (RASS) conducted biennially by EPE over the last 10 years. The RASS table below shows the sample saturation rate of cooling systems by type in EPE's service territory.

	2011	**2013**	**2015**	**2019**
Evaporative Cooling - Central	58.3%	49.7%	46.4%	55.4%
Refrigerated Air - Central	34.1%	45.1%	46.0%	36.3%
Evaporative Cooling - Window	2.6%	1.2%	2.4%	3.8%
Refrigerated Air - Window	2.8%	1.3%	2.6%	3.2%
Heat Pump	1.2%	1.7%	0.9%	1.1%
Other	0.3%	0.6%	1.8%	0.2%
None	0.0%	0.4%	0.0%	0.0%

To reduce possible response bias, EPE conducted a Saturation of Air Conditioning Study (SACS) in 2014, 2015, 2017 and 2019. The SACS consists of an analyst performing site visits to verify the cooling type for randomly selected sampled customers in order to obtain a statistically significant estimate of the saturation of residential customers in El Paso and Las Cruces that have refrigerated air conditioning. The table below summarizes the results of the SACS.

	2014	**2015**	**2017**	**2019**
Evaporative Air	60.2%	60.1%	51.5%	49.1%
Refrigerated Air	36.1%	37.0%	46.8%	46.6%
Window	2.6%	2.8%	1.7%	4.3%
Mixed	0.6%	0.0%	0.0%	0.0%
None	0.6%	0.0%	0.0%	0.0%

EPE estimates a linear equation to forecast future saturation rates of refrigerated air. The calculated slope of 0.013 indicates an expected growth of 1.31 percentage points each year.

Preparer: Raul Estrada Title: Economist – Staff

Sponsor: George Novela Title: Director – Economic & Rate Research

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CEP 9-2:

Please explain how the increasing penetration of refrigerated air conditioning is taken into account during the weather normalization process. How does EPE ensure that refrigerated cooling increases are not a confounding impact for estimating CDD usage impact during the historic normalization period.

RESPONSE:

El Paso Electric Company ("EPE") has a historical data set of the saturation of refrigerated air conditioning systems that can be used as an input in the econometric models for the use per customer residential model in the weather normalization process. EPE has used this variable in past weather normalization models when it proved to provide superior econometric models. However, the air conditioning saturation rate variable was not employed as an independent variable in the final 2021 models since it had an insignificant impact in the models and therefore there is no compounding impact attributed to the increase of refrigerated cooling.

Preparer:	Enedina Soto	Title:	Manager – Load Research and Data Analytics
Sponsor:	George Novela	Title:	Director – Economic & Rate Research

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CEP 9-3:

Please state EPE's estimate of the elasticity of demand (electricity) for residential and commercial customers (separately stated) in the EPE service area.

RESPONSE:

El Paso Electric Company ("EPE") does not maintain a set of official elasticity values for the elasticity of demand. The derivation of an estimate for the elasticity of demand is a complex exercise that requires a control group to calculate the change in demand of customers who chose to participate in a time-of-day ("TOD") rate option. Furthermore, the results are dependent on the level of participation as well as price signals, so there may be varying elasticities based on various scenarios. EPE has analyzed demand elasticities for residential customers using the residential elasticity coefficient of -0.065 derived from a publication by Dr. Ahmad Faruqui: "Arcturus 2.0: A Meta-Analysis of Time-Varying Rates for Elasticity". EPE has not estimated demand elasticities for commercial customers. Please see CEP 9-3, Attachment 1 for the referenced publication. Test year billing determinants were not adjusted based on elasticity of demand.

Preparer: David Macias — Title: Economist – Staff

Sponsor: George Novela — Title: Director – Economic & Rate Research

Submitted, The Electricity Journal

***Arcturus 2.0*: A Meta-Analysis of Time-Varying Rates for Electricity**

Ahmad Faruqui, Sanem Sergici, and Cody Warner[1]

With the rapid deployment of smart meters, utilities and regulators across the globe are considering the deployment of time-varying rates for residential customers. Ontario, Canada, has deployed time-of-use rates in the province for several years. California plans to deploy time-of-use rates as the default tariff beginning in 2019. However, many observers still disagree on the magnitude of demand response that would be induced by time-varying rates, such as time-of-use rates, critical peak pricing rates, peak time rebates and real-time pricing. Our analysis of the impact of several studies of time-varying rates from across the globe finds that much of the discrepancy in results across the studies goes away once demand-response is expressed as a function of the peak to off-peak price ratio. We find that customers do respond to higher peak to off-peak price ratios by lowering their peak demand, and this effect is amplified by the presence of enabling technologies. We also find that there are diminishing returns to dialing up the peak to off-peak price ratio beyond a certain threshold.

Introduction

The first wave of time-varying rates studies began in the 1970s when twelve pricing experiments were carried out in the US. They were administered by the Federal Energy

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[1] The authors are economists with The Brattle Group. They are grateful for comments on early drafts of the paper by several people, including Neil Lessem, Ryan Hledik and Phil Hanser. They are also very grateful to the authors of the studies whose results made it possible to build the Arcturus database and to carry out the meta-analysis that is presented in the paper. This paper reflects the views of the authors and not necessarily the views of their employer. Comments can be directed to ahmad.faruqui@brattle.com.

Administration, a predecessor to the U.S. Department of Energy.[2] Approximately 7,000 customers were enrolled in the first wave. Although the results were promising, the quality of the experimental designs in many cases left much to be desired and thus the results were not of immediate use by regulators, policy makers and utilities.

The second wave of studies came in the mid-1980s, when the Electric Policy Research Institute (EPRI) reexamined the results of the five most promising pilots from the first wave and found consistent evidence of demand response across the five studies. However, in the absence of smart meters, the momentum was lost. As the industry began to restructure in the mid-to-late 1990s, time-varying rates were given low priority and next to nothing happened for two decades.

California's energy crisis of 2000-01 triggered renewed interest in the topic. Time-varying rates were judged by many experts and the regulators in California in particular to be a good way to link retail and wholesale markets and prevent a recurrence of the energy crisis. The argument was made that if customers had an incentive to reduce usage during costly peak periods, demand and supply would come into balance automatically and avert the need for administrative solutions to avert a crisis.

In the third wave, the pilots were expanded to include enabling technologies like smart thermostats and in-home displays. The third wave also incorporated dynamic rate designs that went beyond the traditional time-of-use (TOU) structure, such as critical-peak pricing (CPP), peak-time rebate (PTR), and variable-peak pricing (VPP).

The fourth wave of pilots will likely evolve to incorporate demand charges. Over 30 utilities in the U.S. currently offer residential demand charges, and more utilities are interested in expanding them to their residential customer base. In a recent general rate case, Arizona Public

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[2] Faruqui, Ahmad and J. Robert Malko, "The residential demand for electricity by time-of-use: A survey of twelve experiments with peak load pricing," *Energy* 8:10, 1983, pp. 781-795.

Service, which has about 10% of its customers on a demand charge, had proposed deploying demand charges on a default basis for its residential customers. Earlier, Oklahoma Gas & Electric had made a similar proposal for all those customers but who were on the company's Smart Hours program, a VPP rate.

Over time, we have built a database of the results from dynamic pricing deployments from around the globe. It is called Arcturus, since the results take the form of arcs of price response. We believe this is the largest repository of time-varying rate designs in the world. Its contents are drawn mostly from the third wave, whose studies feature almost 1.4 million customers, compared to the first wave's 7,000 customers. It also includes the results from Ontario's default deployment of TOU rates to the four million customers in the province. Results are also included from a study that was done on Italy's default TOU rate deployment to some 25 million customers.[3]

Arc 1.0 and Arc 2.0 Comparison

Faruqui and Sergici published the first analysis of the Arcturus database in this journal in 2013.[4] Due to growing industry interest in dynamic pricing, Arcturus has more than doubled in size since then. In 2013, Arcturus 1.0 contained 163 experimental pricing treatments from 34 pilots. Arcturus 2.0 contains 337 treatments from 63 pilots. Arcturus 2.0 also contains information from two additional countries. Arcturus 2.0 features new categorical information

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[3] Presented by Walter Graterri and Simone Maggiore, "Impact of a Mandatory Time-of-Use Tariff on the Residential Customers in Italy," Ricerca Sisterna Energetico, November 14-16, 2012, available: http://www.ieadsm.org/wp/files/Content/14.Espoo_IEA_DSM_Espoo2012_SimoneMaggiore_RSE.pdf

[4] Faruqui, Ahmad and Sanem Sergici, "Arcturus: International Evidence on Dynamic Pricing," *The Electricity Journal*, August/September 2013.

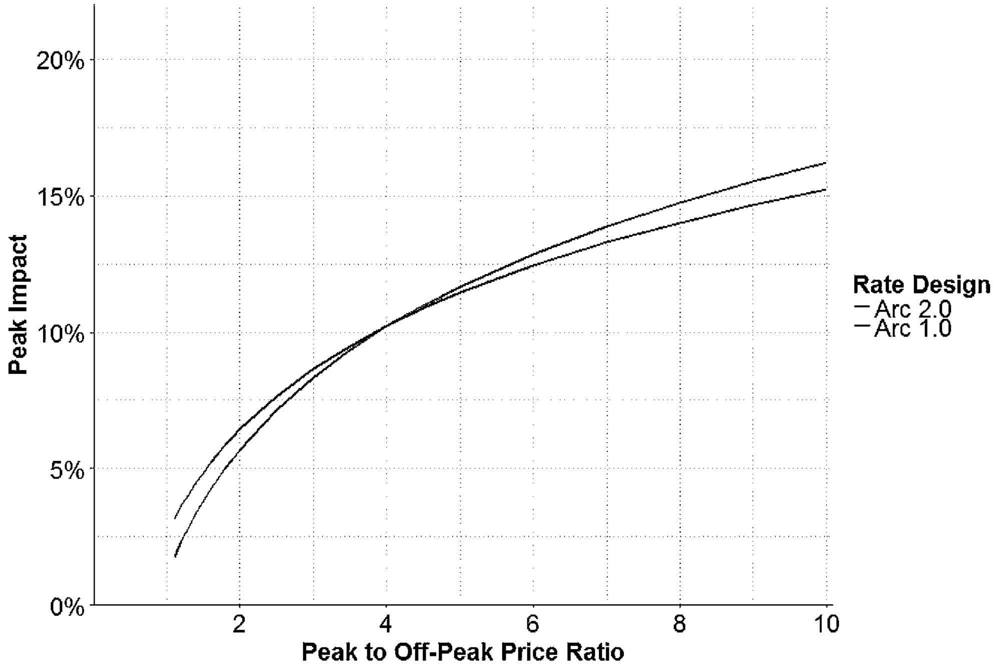
about the pilots as well, including details on the duration of each rate design's peak hours, whether the pilot was administered on an opt-in or opt-out basis, and if the pilot measured impacts in the summer, winter, or both. Finally, it contains pilots that offer the latest types of enabling technologies. For example, in 2016, San Diego Gas & Electric offered the Ecobee Smart Si thermostat to customers on its peak-time rebate program.[5] The Ecobee Smart Si thermostat allows a residential customer to monitor and control his or her energy usage remotely from a smartphone or computer. Additionally, some Ecobee thermostats are compatible with Amazon's voice-enabled home assistant, Alexa. This allows customers to more easily set their thermostats' cycling tendencies.

For comparison, the results of Arcturus 1.0 and Arc 2.0 are plotted together in **Figure 1**. The curves were estimated using regression analysis, and the estimation is described in further detail later in this paper. **Figure 1** shows that the slope of Arcturus 2.0 is slightly steeper than its predecessor. This implies there are greater gains to customer load-shifting from incremental increases in the peak-to-off-peak price ratio. However, the intercept on Arcturus 1.0 is higher than Arcturus 2.0, which means Arcturus 1.0 estimates greater peak reductions than Arcturus 2.0 until a price ratio of approximately four.

[5] Itron, Inc., "2016 Impact Evaluation of San Diego Gas & Electric's Residential Peak Time Rebate and Small Customer Technology Deployment Programs," March 20, 2017, available: http://www.calmac.org/publications/SDGE_PTR_2016_Final_Report.pdf

Figure 1: Comparison of Arcturus 1.0 (2013) and Arcturus 2.0 (2017)

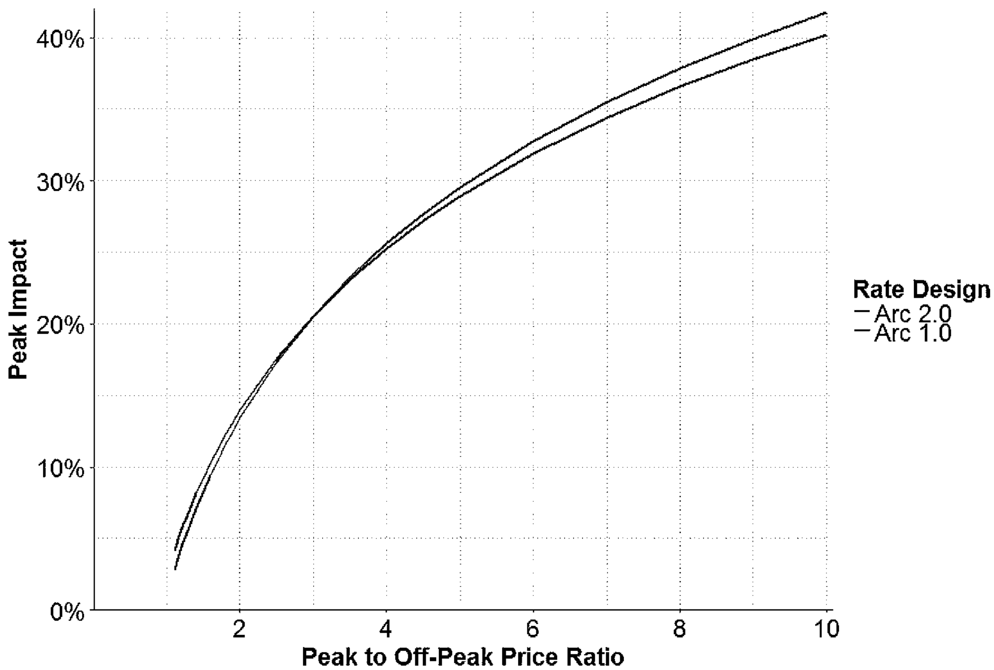
Experimental Treatments without Enabling Technology



The curves in **Figure 1** do not include the effect of enabling technologies like smart thermostats. As discussed later in this paper, enabling technologies enhance a customer's ability to reduce peak demand. Similar to **Figure 1, Figure 2** compares Arcturus 1.0 and Arcturus 2.0 for treatments that feature enabling technology. Just like **Figure 1**, the slope of Arcturus 2.0 is slightly steeper than Arcturus 1.0.

Figure 2: Comparison of Arcturus 1.0 (2013) and Arcturus 2.0 (2017)

Experimental Treatments with Enabling Technology



One notable difference between Arcturus 1.0 and the model presented in this paper is the incremental impact of enabling technology. Arcturus 1.0 estimates, on average, that a customer assisted by enabling technology will reduce his or her peak usage by 5.4% more than a customer without enabling technology. In contrast, Arcturus 2.0 estimates an incremental effect of 4.6%, which is almost a percentage point less than the original Arcturus. The details of the Arcturus 2.0 estimation, including summaries of the dataset and the model specification, are discussed in the following sections.

The Studies

Spanning four continents, Arcturus contains 337 experimental and non-experimental pricing treatments from over 60 pilots. The pricing experiments typically take the form of a treatment group that is enrolled on a time-varying rate and a control group that remains on a standard residential rate. The purpose of the experiment is to measure how much customers reduce their electricity usage during peak-hours in comparison to a control group.

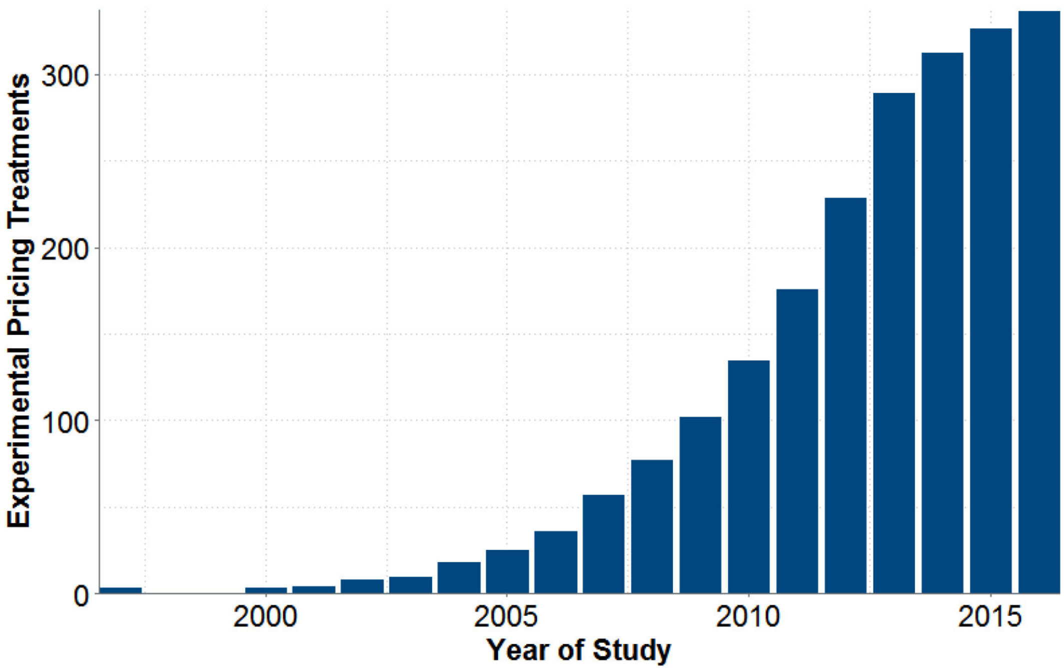
The studies begin as early as 1997, and the most recent study was published in 2017. Only pilots that adhere to the rigorous standards of experimental research design are added to the database. Similarly, results from pricing treatments that are not statistically significant at acceptable levels are deemed to have no effect.[6] **Figure 3** shows how interest in time-varying pricing experiments has grown considerably over the last twenty years. Specifically, **Figure 3** plots the number of cumulative pricing treatments by year. Each pilot consists of one or more pricing treatments. For example, Xcel Energy carried out a pilot from October 2010 to September 2013 that introduced customers in Boulder, Colorado to a variety of TOU, CPP, and PTR pricing treatments.[7] The single pilot reported impacts for sixteen pricing treatments.

[6] These pricing experiments are excluded from the model's estimation of customer impacts but are included in the bar charts below.

[7] Gouin, Andre and Craig Williamson, "SmartGridCity Pricing Pilot Program: Impact Evaluation Results, 2011 – 2013," prepared for Xcel Energy, December 6, 2013, available: http://s3.amazonaws.com/dive_static/diveimages/SGC_Pricing_Pilot_Evaluation_Report_FINAL-1.pdf

Figure 3: Cumulative Pricing Treatments

Arcturus Database



Arcturus contains four different types of time-varying rate designs: TOU, CPP, PTR, and VPP, with the majority being TOU rate designs. These types of designs break up the day into two or more periods and charge a higher price per kWh in one period in comparison to the other(s). The higher price period is known as the peak-period and the lower price period is known as the off-peak period. The differential between prices in the peak-period and off-peak period are typically designed to reflect the marginal costs a utility incurs for producing electricity. TOU rate designs may also break up the calendar year into seasons and charge a higher price in the summer months and a lower price in the winter months for summer-peaking utilities.

The second and third rate designs contained in Arcturus are CPP and PTR. These two differ from TOU designs in that the higher price periods are not known well in advance. Under a

CPP or PTR structure, the utility notifies customers a day in advance and sometimes on the day of the event. In much of the U.S., peak events typically coincide with the hottest days of the summer when load from residential air-conditioning drives up forecasted peak demand. Many of the pilots planned to hold at least ten event days during the study period and at most fifteen. Sometimes, the study period was uncharacteristically cool, leading to fewer event days during the study period. On an event day, CPP charges customers a peak price that is often several multiples of the off-peak price. In some cases, the critical peak price exceeds $1 per kilowatt-hour. Similarly, a PTR rate design resembles CPP, except customers receive a rebate for shifting on-peak usage to the off-peak hours rather than paying a higher rate. No discount is offered during the off-peak periods and the standard tariff applies during all hours.

VPP is the fourth and final rate design contained in Arcturus. During the peak period, customers are charged a rate that varies by the utility and usually mimics the wholesale price of electricity. In this way, VPP is a hybrid of a TOU rate design and real-time pricing. Because peak-prices mimic the market prices for electricity, VPP rate designs more accurately match the utility's cost of producing electricity. As seen in **Figure 4**, there are fewer VPP rate designs than TOU, CPP, and PTR rate designs.

Figure 4: Summary of Rate Designs

Arcturus 2.0

		Season			Recruitment		
Rate Design	**N**	**Summer Only Rate**	**Winter Only Rate**	**Annual Rate**	**Opt-In**	**Opt-Out**	**Peak Hours Greater Than 4**
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
TOU	153	59%	19%	22%	75%	25%	64%
CPP	105	70%	6%	25%	90%	10%	36%
PTR	64	91%	5%	5%	91%	9%	52%
VPP	15	87%	7%	7%	100%	0%	60%
All	337	69%	12%	19%	84%	16%	53%

Nearly three-quarters of the studies in Arcturus were conducted during the summer months. Often, utilities conduct these pilots during the summer months because they are summer-peaking utilities and can benefit most from peak reductions in the summer months. However, there are winter-peaking utilities in New Zealand and Ontario that have conducted their studies during winter months.

Figure 4 also shows that 84% of the treatments are based on an opt-in recruitment design. It is politically challenging to administer a pilot on an opt-out (or default) design because customers may be resistant to enrollment on an experimental rate without prior consent. This is an important point because the peak impacts of a full-scale deployment are more likely to resemble the effects of an opt-out design rather than opt-in. Under an opt-in design, the customers who enroll in the experimental rate are typically more conscious of their energy usage and are typically more conservation-minded. Faruqui, Hledik, and Lessem (2014) show that although default rate designs result in smaller impacts per customer, the aggregate peak impacts are higher compared to opt-in rate designs.[8] The higher aggregate impacts come from the higher enrollment rates under a default rate. Under a default rate, customers are less likely to actively opt-out of the dynamic rate design and thus stay on the rate by default. In contrast, opt-in rates require utilities to actively market the rate product and recruit customers for enrollment. This is a costly process and results in aggregate enrollment rates that are lower than default rate designs. The Smart Pricing Options Pilot administered by Sacramento Municipal Utility District includes a detailed study of the impacts of default TOU and CPP rate designs.[9]

Arcturus also contains data on each pricing treatment's peak period duration. **Figure 4** shows that half of the experimental treatments feature peak periods that are greater than four hours. On average, the duration of CPP rates are much shorter than the other types of rate designs. Only a third of CPP rate designs feature peak periods lasting more than four hours. For the most part, each pilot's peak period lasted from three to five hours. However, in rare cases, some pilots featured peak periods lasting more than ten hours.

Research Hypothesis

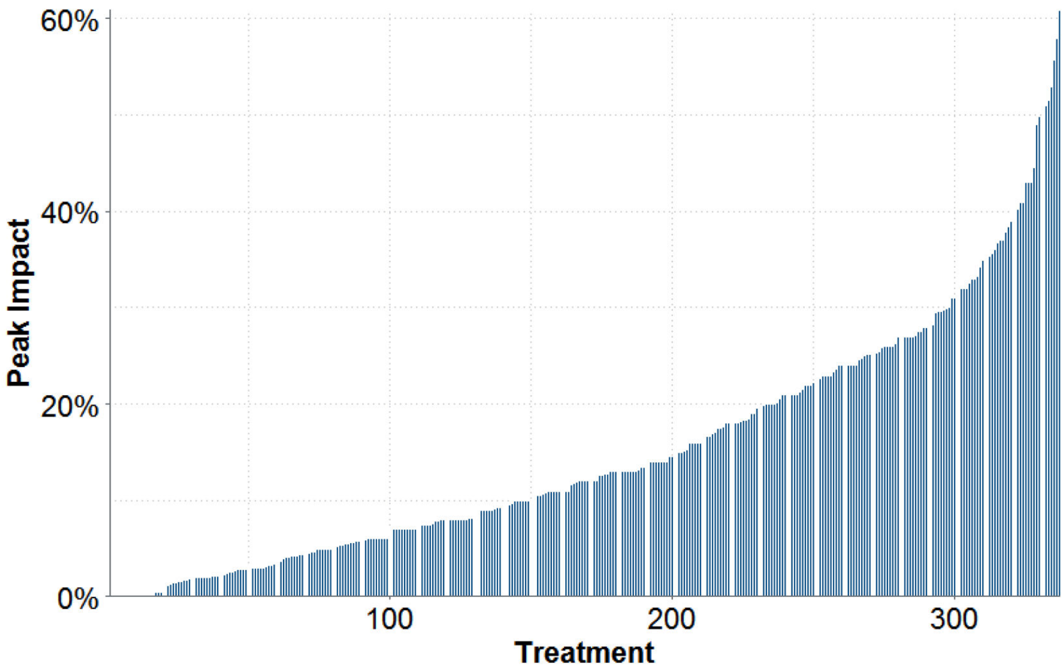
Our meta-analysis examines two fundamental questions. First, do customers respond to dynamic pricing by reducing their peak usage? Second, if customers do respond, is the treatment effect stronger in the presence of enabling technology? The depth of Arcturus allows us to explore such a hypothesis. **Figure 5** ranks the peak impact of each experimental treatment from lowest to highest. It is clear that there is a wide range of peak impacts in Arcturus. For this

[8] Ahmad Faruqui, Ryan Hledik, and Neil Lessem, "Smart by Default," *Public Utilities Fortnightly*, August 2014, available: https://www.fortnightly.com/fortnightly/2014/08/smart-default

[9] Potter, Jennifer M., Stephen S. George, and Lupe R. Jimenez, "SmartPricing Options Final Evaluation," prepared for U.S. Department of Energy, September 5, 2014, available: https://www.smartgrid.gov/files/SMUD_SmartPricingOptionPilotEvaluationFinalCombo11_5_2014.pdf

reason, the results shown in **Figure 5** do not provide conclusive answers to our research questions. Several peak impacts are no more than two percent while others exceed fifty percent.

Figure 5: Pricing Treatments by Rank



After grouping the treatments by those that use enabling technology and those that do not, it is easier to detect a pattern in the results. Enabling technologies include devices that provide a customer with the ability to actively manage their electricity usage, particularly during the peak period. For example, Australia's Smart Grid Smart City project used Energy Aware's in-home display to communicate usage amounts and real-time prices to households.[10] The utility could send text messages to the display to inform the customer about price changes and peak events. Additionally, the display shows the current price of electricity and enables the customer to reduce peak usage when prices are high. **Figure 6** shows the distribution of peak impacts

[10] AEFI Consulting Consortium, "Smart Grid, Smart City: Shaping Australia's Energy Future, National Cost Benefit Assessment," July 2014.

among treatments without enabling technology, and **Figure 7** shows the distribution of peak impacts among treatments with enabling technology.

Figure 6: All Treatments without Enabling Technology

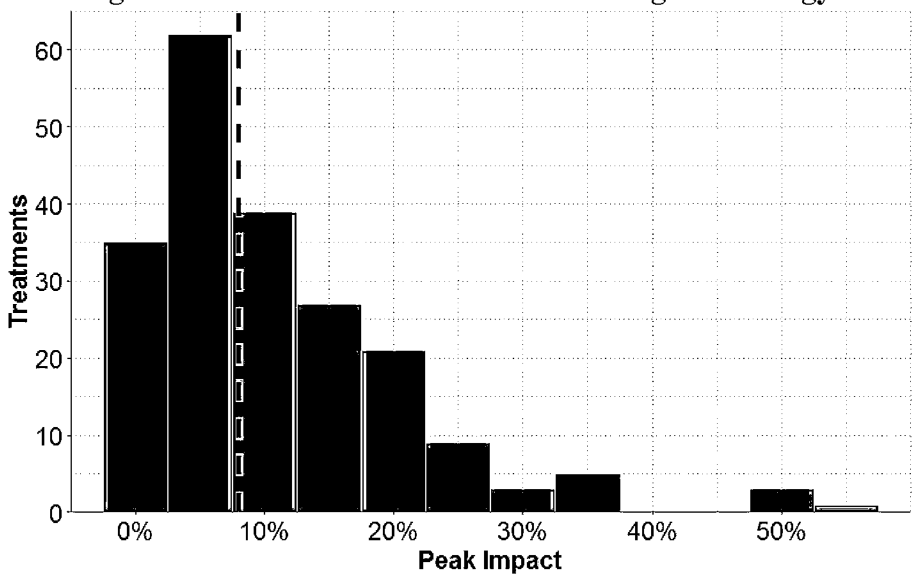
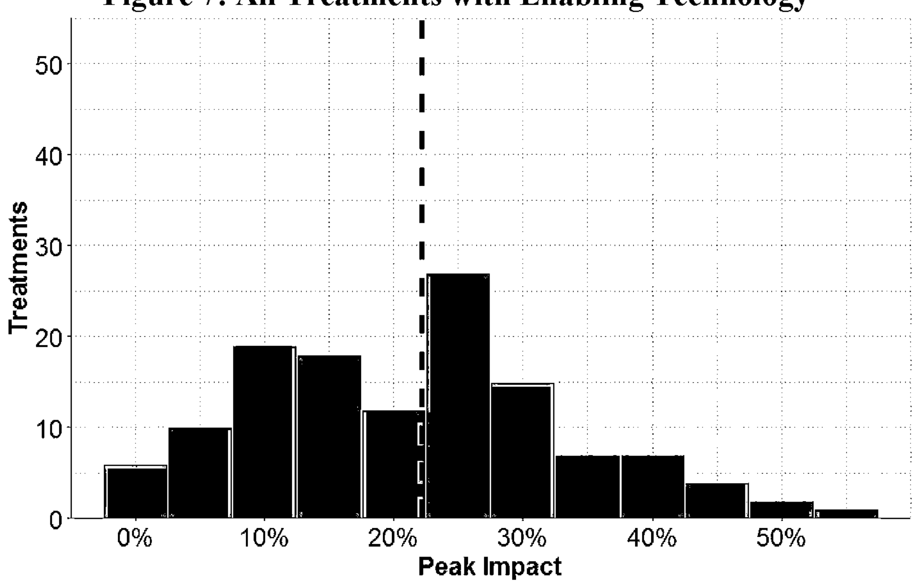
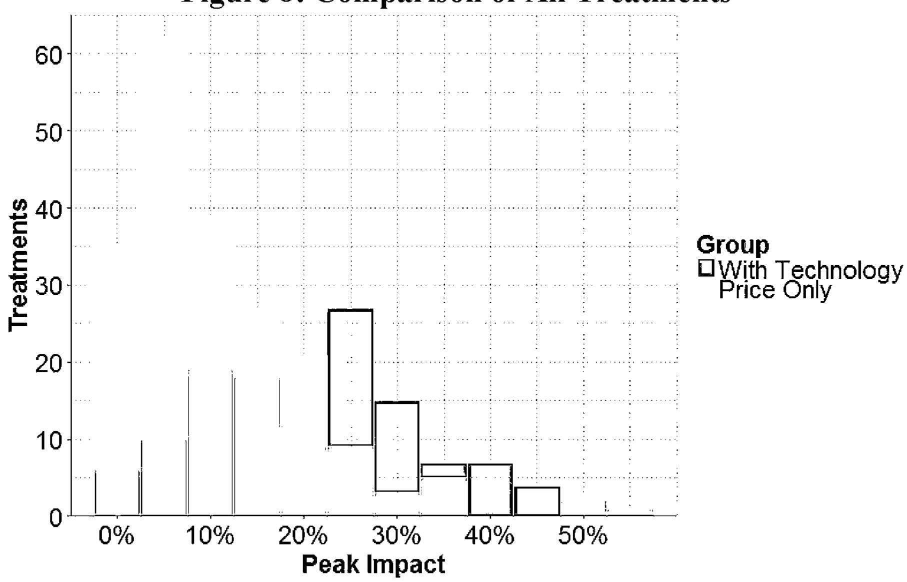


Figure 7: All Treatments with Enabling Technology



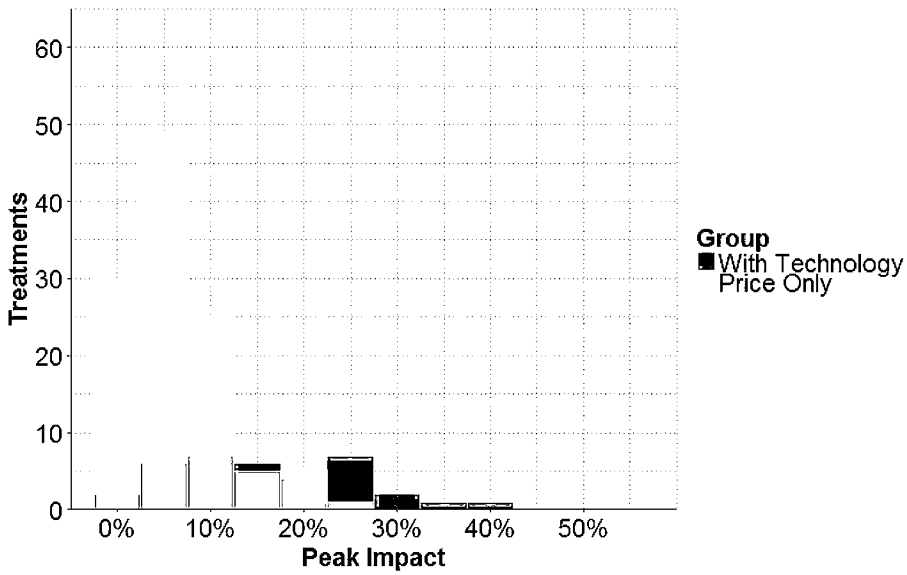
In **Figure 6**, the distribution of peak impacts is clustered below a peak impact of twenty percent. In contrast, **Figure 7** features a wider distribution of peak impacts that are not clustered closely together like in **Figure 6**. This can be partly explained by the variation in the enabling technologies as well as the control strategies adopted in different experiments. The wider distribution in **Figure 7** is also consistent with the hypothesis that enabling technology increases a customer's response to a price signal. **Figure 8** overlays both of these distributions and shows that there is a clear distinction between the two types of treatments.

Figure 8: Comparison of All Treatments



This hypothesis is verified within each type of rate design as well. **Figure 9** compares the distributions of peak impacts for TOU rate designs with and without enabling technology. TOU rate designs that do not implement enabling technology result in peak impacts that are clustered at the ten percent mark or lower. In contrast, TOU rates that feature enabling technology result in a wider distribution of peak impacts. The intuition behind these results is that a customer with an in-home display is more likely to turn down his or her air-conditioning unit during peak hours than a customer without an in-home display.

Figure 9: TOU Treatment Comparison



This relationship between enabling technology and peak reductions is also found within CPP and PTR rate designs. **Figure 10** shows the distribution of CPP treatments and **Figure 11** shows the distribution of PTR treatments.

Figure 10: CPP Treatment Comparison

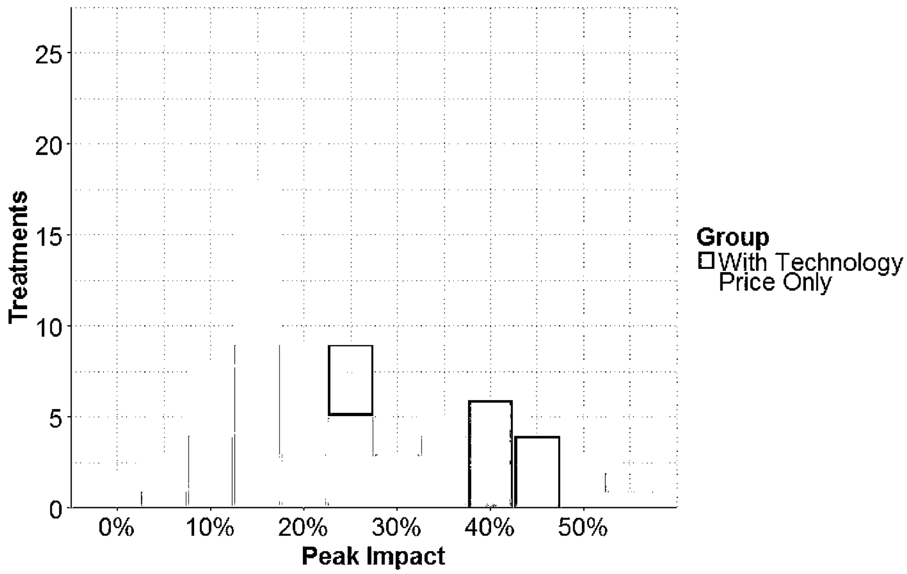
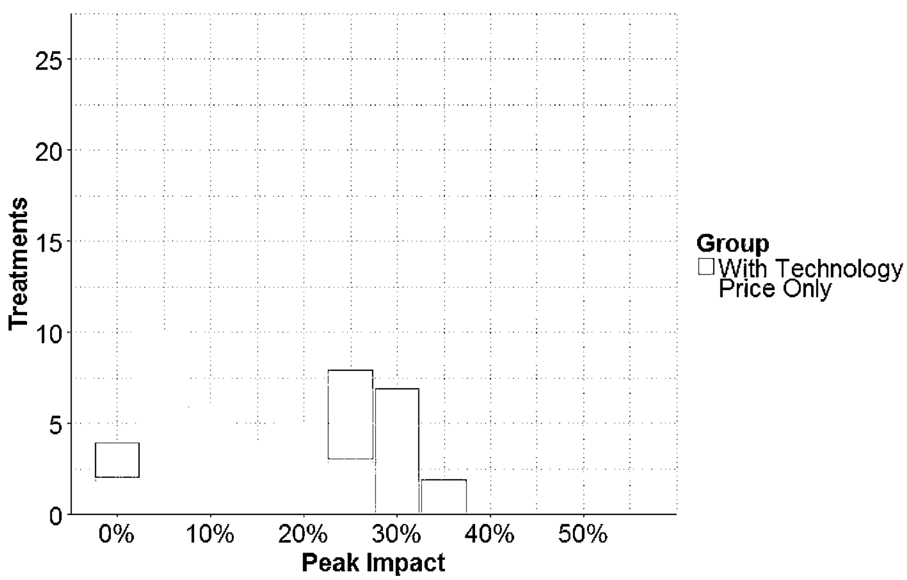


Figure 11: PTR Treatment Comparison



Again, comparing the pricing treatments by technology appears to confirm part of our hypothesis. In the next section, we build a simple econometric model that applies a statistical test to answer the two research questions.

The Arc of Price Responsiveness

Our hypothesis is two-fold. First, customers respond to a price signal by reducing their peak electricity usage. If a customer faces a stronger price signal (a higher on-peak price), then he or she will reduce peak electricity usage even further. Second, if a rate design is accompanied by enabling technology, he or she will reduce his or her peak electricity usage even more. To test this hypothesis, we constructed a simple linear regression model that estimates the effects of the peak to off-peak price ratio and the use of enabling technology. The model is simple because it assumes the peak to off-peak ratio is the primary determinant of variations in peak usage. Other factors, such as weather or income, may influence peak usage but are not included here. However, the simplicity of the model is also one of its strengths. It is easy to interpret and presents peak usage as a simple function of the peak to off-peak price ratio.

The model takes the form of a log-linear specification, in which the amount of the peak reduction is a function of the log of the price ratio.

$$y = a + b * \ln(price\ ratio) + c * \ln(price\ ratio * tech)$$

where *y*: peak demand reduction expressed as a percentage;

ln(*price ratio*): natural logarithm of the peak to off-peak price ratio;

ln(*price ratio* * *tech*): interaction of the ln(*price ratio*) and *tech* dummy variable where *tech* takes a value of 1 when enabling technology is offered with price.

Figure 12 presents the results of the model. The coefficient on the log of the price ratio is negative, indicating an inverse relationship between the price ratio and peak usage. Similarly, the coefficient on the interaction between the log of the price ratio and the presence of enabling technology is negative. The value of the coefficient on the log of the price ratio signifies that a 10% increase in the price ratio would result in a 6.5% decrease in peak usage. The same interpretation holds for the coefficient on the technology interaction term. In the presence of enabling technology, a 10% increase in the price ratio results in a 4.6% *incremental* decrease in peak usage, for a total reduction of 11.1%.

The standard errors of the estimated coefficients suggest this relationship is statistically significant. In other words, it is very unlikely that the estimated coefficients are simply a random estimate not statistically distinguishable from zero. The R-squared value indicates that over half of the variation in the percent reduction in peak demand (i.e., demand response) can be explained by the independent variables.

Figure 12: Primary Regression Results

	Dependent variable:
	Peak Impact
Log of Peak/Off-Peak Ratio	-0.065***
	(0.007)
Log of Peak/Off-Peak Ratio x Technology	-0.046***
	(0.008)
Constant	-0.011
	(0.007)
Observations	335
R^2	0.569
Adjusted R^2	0.566
Residual Std. Error	0.064 (df = 332)
Note:	*p<0.1; **p<0.05; ***p<0.01

The model was estimated using a robust regression technique that down-weights outlying observations. By using MM-estimation, the model ensures that the estimated coefficients are not influenced by pilots that report substantially higher peak impacts.[11] In this analysis, we used the "robustbase" package available through the open-source programming language R to apply the weights to each observation. Also, two pilots tested price ratios that exceeded 35 to 1. Because these ratios are on the extreme end of the sample, they were dropped from the analysis.

In addition to the model specification shown in **Figure 12**, we tested a model that included a binary if the rate design was administered on an opt-out basis. Based on Faruqui, Hledik, and Lessem's (2014) analysis we would expect peak impacts to be lower under an opt-

[11] Yohai, Victor J., "High Breakdown-Point and High Efficiency Robust Estimates for Regression," *The Annals of Statistics* 15:20, 1987, pp. 642-656, available: https://projecteuclid.org/download/pdf_1/euclid.aos/1176350366;

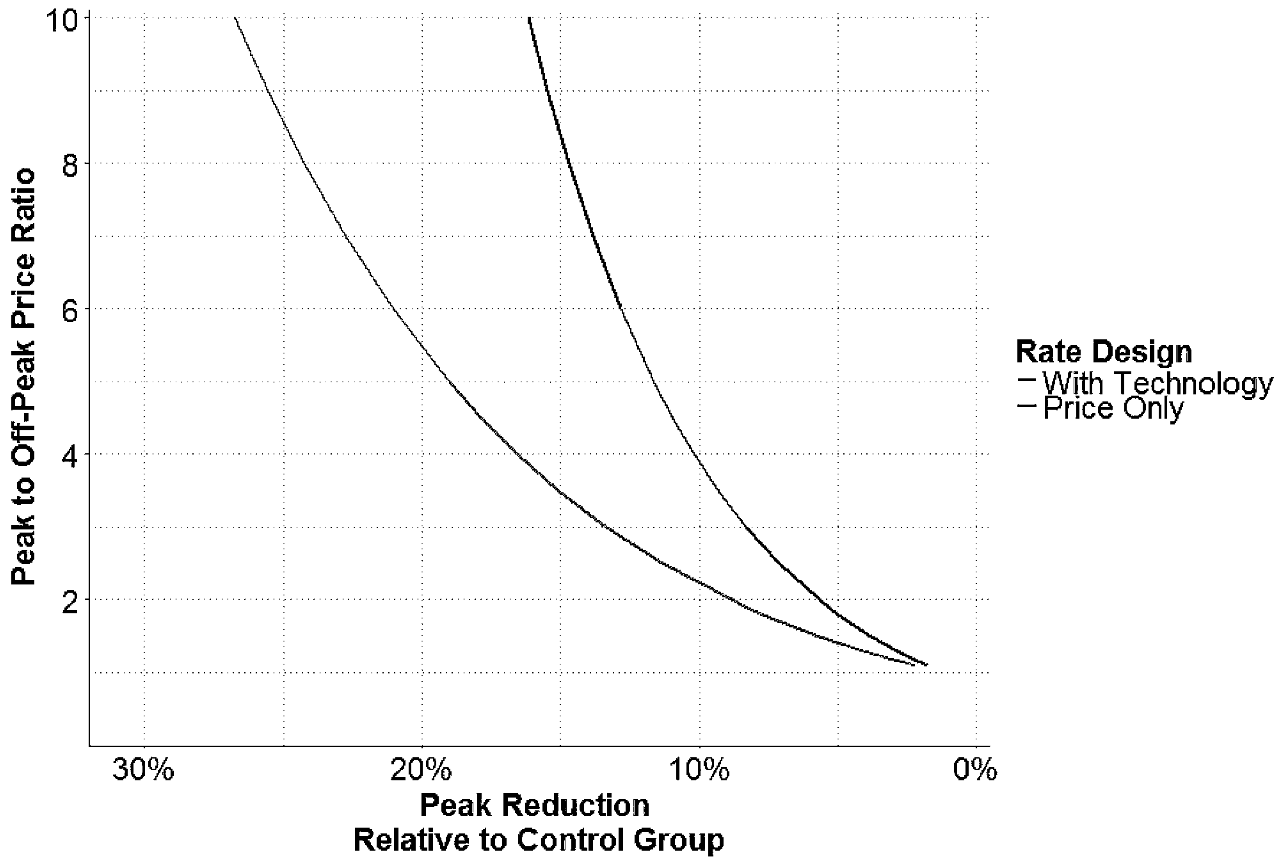
Martin Maechler, Peter Rousseeuw, Christophe Croux, Valentin Todorov, Andreas Ruckstuhl, Matias Salibian-Barrera, Tobias Verbeke, Manuel Koller, Eduardo L. T. Conceicao and Maria Anna di Palma, robustbase: Basic Robust Statistics R, package version 0.92-7, 2016, available: http://CRAN.R-project.org/package=robustbase out rate design. Indeed, the coefficients on the opt-out binaries in **Figure 13** demonstrate that opt-out designs have a positive impact of 3.9% on peak usage in comparison to opt-in designs. The coefficients on the log of the price ratio and the technology interaction term are still negative and significant under the alternative specification. This implies the treatment effect is robust even after adding additional control variables. Other specifications and controls were tested as well, including a binary if the duration of the peak period lasted more than four hours and a binary if the impacts were measured in the summer or in the winter. However, the coefficients were not significant. For this reason, they are not reported.

Figure 13: Alternative Regression Results

	Dependent variable:	
	Peak Impact	
	(1)	(2)
Log of Peak/Off-Peak Ratio	-0.065***	-0.058***
	(0.007)	(0.007)
Log of Peak/Off-Peak Ratio x Technology	-0.046***	-0.047***
	(0.008)	(0.008)
Opt-Out Binary		0.039***
		(0.009)
Constant	-0.011	-0.028***
	(0.007)	(0.009)
Observations	335	335
R^2	0.569	0.588
Adjusted R^2	0.566	0.584
Residual Std. Error	0.064 (df = 332)	0.063 (df = 331)
Note:		*p<0.1; **p<0.05; ***p<0.01

Using the estimated coefficients in **Figure 12**, **Figure 14** plots estimated % reductions in peak demand (i.e., demand response), against the peak to off-peak price ratios. The relationship between the price ratio and the % peak reduction has an arc-like shape, which has let us name the database Arcturus.

Figure 14: The Arc of Price Responsiveness



The Arc of Price Responsiveness shows that, on average, a customer facing a peak-to-off-peak price ratio of 2:1 will drop his or her demand by 5% and consume 95% of his or her typical peak usage. As this ratio increases to 4:1, the customer will consume 90% of his or her typical peak usage. The "With Enabling Technology" line in **Figure 14** shows that in the presence of enabling technology this effect is even stronger. At a ratio of 2:1, a customer with enabling technology will consume 91% of his or her typical peak usage, and he or she will consume 84% as the ratio increases to 4:1. The arc-like shape of the curve suggests additional increases in the peak-to-off-peak price ratio result in smaller changes to peak-shifting behavior.

Conclusion

The third wave of studies with time-varying rates has greatly expanded the body of evidence on residential customers' load-shifting behaviors. Arcturus 2.0 allows us to carry out a meta-analysis of the results from 63 pilots containing a total of 337 pricing treatments in nine countries located on four continents. We have shown beyond the shadow of a doubt that customers do reduce their peak load in response to higher peak to off-peak price ratios. Price-based demand response is real and predictable. It can be relied upon by utilities, regulators, independent system operators and other market participants to plan their activities. The magnitude of demand response is even stronger when the customer is provided with enabling technology such as smart thermostats and in-home displays. We expect the next wave of pilots might include other types of rate designs that combine time-varying rates with demand charges, demand subscription service, and transactive energy featuring peer-to-peer transactions. It is our intention to include the results of those studies in Arcturus 3.0.

Bibliography

AEFI Consulting Consortium, "Smart Grid, Smart City: Shaping Australia's Energy Future, National Cost Benefit Assessment," July 2014.

Faruqui, Ahmad and J. Robert Malko, "The residential demand for electricity by time-of-use: A survey of twelve experiments with peak load pricing," *Energy* 8:10, 1983, pp 781-795.

Faruqui, Ahmad, Hung-po Chao, Vic Niemeyer, Jeremy Platt, and Karl Stahlkopf, "Analyzing California's Power Crisis," *The Energy Journal* 22:4, 2001, pp 29–52.

Faruqui, Ahmad, William D. Bandt, Tom Campbell, Carl Danner, Harold Demsetz, Paul R. Kleindorfer, Robert Z. Lawrence, David Levine, Phil McLeod, Robert Michaels, Shmuel S. Oren, Jim Ratliff, John G. Riley, Richard Rumelt, Vernon L. Smith, Pablo Spiller, James Sweeney, David Teece, Philip Verleger, Mitch Wilk, and Oliver Williamson, "2003 Manifesto on the California Electricity Crisis," May 2003.

Faruqui, Ahmad and Stephen S. George, "Quantifying Customer Response to Dynamic Pricing," *The Electricity Journal*, May 2005.

Faruqui, Ahmad and Jackalyne Pfannenstiel, "California: Mandating Demand Response," *Public Utilities Fortnightly*, January 2008, pp. 48-53, available: http://www.fortnightly.com/display_pdf.cfm?id=01012008_MandatingDemandResponse.pdf.

Faruqui, Ahmad and Sanem Sergici, "Dynamic pricing of electricity in the mid-Atlantic region: econometric results from the Baltimore gas and electric company experiment," *Journal of Regulatory Economics* 40:1, August 2011, pp. 82-109.

Faruqui, Ahmad and Jennifer Palmer, "Dynamic Pricing of Electricity and its Discontents," *Regulation* 34:3, Fall 2011, pp. 16-22, available: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1956020.

Faruqui, Ahmad, Ryan Hledik, and Jennifer Palmer, *Time-Varying and Dynamic Rate Design*, Global Power Best Practice Series, The Regulatory Assistance Project (RAP), 2012.

Faruqui, Ahmad, Sanem Sergici, and Lamine Akaba, "Dynamic Pricing of Electricity for Residential Customers: The Evidence from Michigan," *Energy Efficiency* 6:3, August 2013, pp. 571–584.

Faruqui, Ahmad and Sanem Sergici, "Arcturus: International Evidence on Dynamic Pricing," *The Electricity Journal* 36:7, August/September 2013, pp. 55-65, available: http://www.sciencedirect.com/science/article/pii/S1040619013001656.

Faruqui, Ahmad, Sanem Sergici and Lamine Akaba, "Dynamic Pricing in a Moderate Climate: The Evidence from Connecticut," *The Energy Journal* 35:1, pp. 137-160, January 2014.

Faruqui, Ahmad, Ryan Hledik, and Neil Lessem, "Smart by Default," *Public Utilities Fortnightly*, August 2014, available: https://www.fortnightly.com/fortnightly/2014/08/smart-default.

Faruqui, Ahmad, Toby Brown and Lea Grausz, "Efficient Tariff Structures for Distribution Network Services," *Economic Analysis and Policy*, 2015, available: http://www.sciencedirect.com/science/article/pii/S0313592615300552.

Faruqui, Ahmad, Wade Davis, Josephine Duh, and Cody Warner, "Curating the Future of Rate Design for Residential Customers," *Electricity Daily*, 2016, available: https://www.electricitypolicy.com/Articles/curating-the-future-of-rate-design-for-residential-customers.

Faruqui, Ahmad, Neil Lessem and Sanem Sergici "Dynamic pricing works in a hot, humid climate: evidence from Florida," *Public Utilities Fortnightly*, May 2017, available: https://www.fortnightly.com/fortnightly/2017/05/dynamic-pricing-works-hot-humid-climate.

Faruqui, Ahmad and Henna Trewn, "Rethinking Customer Research in the Utility Industry," *Public Utilities Fortnightly*, July 2017, available: https://www.fortnightly.com/fortnightly/2017/07/rethinking-customer-research.

Faruqui, Ahmad and Henna Trewn, "Enhancing Customer-Centricity," *Public Utilities Fortnightly*, August 2017, available: https://www.fortnightly.com/fortnightly/2017/08/enhancing-customer-centricity.

Faruqui, Ahmad and Mariko Geronimo Aydin, "Moving Forward with Electric Tariff Reform," *Regulation*, Fall 2017, available: https://object.cato.org/sites/cato.org/files/serials/files/regulation/2017/9/regulation-v40n3-5.pdf.

Faruqui, Ahmad, "Innovations in Pricing," *Electric Perspectives*, September/October 2017, available: https://mydigimag.rrd.com/publication/?i=435343&ver=html5&p=42#{"page":42,"issue_id":435343}

Gouin, Andre and Craig Williamson, "SmartGridCity Pricing Pilot Program: Impact Evaluation Results, 2011 – 2013," prepared for Xcel Energy, December 6, 2013, available: http://s3.amazonaws.com/dive_static/diveimages/SGC_Pricing_Pilot_Evaluation_Report_FINAL-1.pdf.

Itron, Inc., "2016 Impact Evaluation of San Diego Gas & Electric's Residential Peak Time Rebate and Small Customer Technology Deployment Programs," March 20, 2017, available: http://www.calmac.org/publications/SDGE_PTR_2016_Final_Report.pdf.

Lessem, Neil, Ahmad Faruqui, Sanem Sergici, and Dean Mountain, "The Impact of Time-of-Use Rates in Ontario," *Public Utilities Fortnightly*, February 2017, available: https://www.fortnightly.com/fortnightly/2017/02/impact-time-use-rates-ontario.

Martin Maechler, Peter Rousseeuw, Christophe Croux, Valentin Todorov, Andreas Ruckstuhl, Matias Salibian-Barrera, Tobias Verbeke, Manuel Koller, Eduardo L. T. Conceicao and Maria Anna di Palma, robustbase: Basic Robust Statistics R, package version 0.92-7, 2016, available: http://CRAN.R-project.org/package=robustbase

Potter, Jennifer M., Stephen S. George, and Lupe R. Jimenez, "SmartPricing Options Final Evaluation," prepared for U.S. Department of Energy, September 5, 2014, available: https://www.smartgrid.gov/files/SMUD_SmartPricingOptionPilotEvaluationFinalCombo11_5_2014.pdf

Presented by Walter Graterri and Simone Maggiore, "Impact of a Mandatory Time-of-Use Tariff on the Residential Customers in Italy," Ricerca Sisterna Energetico, November 14-16, 2012, available: http://www.ieadsm.org/wp/files/Content/14.Espoo_IEA_DSM_Espoo2012_SimoneMaggiore_RSE.pdf

Yohai, Victor J., "High Breakdown-Point and High Efficiency Robust Estimates for Regression," *The Annals of Statistics* 15:20, 1987, pp. 642-656, available: https://projecteuclid.org/download/pdf_1/euclid.aos/1176350366

Appendix A: List of Pilots Included in the Arcturus Database

	Utility, Municipality, or Pilot	Year(s) of Study	Type of Rate	Country	U.S. State
[1]	Automated Demand Response Sytem Pilot	2004 - 2005	TOU, CPP	United States	CA
[2]	Ameren Missouri	2004 - 2005	CPP	United States	MO
[3]	Anaheim Public Utilities	2005	PTR	United States	CA
[4]	Ausgrid	2006 - 2008	TOU, CPP	Australia	-
[5]	Baltimore Gas & Electric Company	2008 - 2011	CPP, PTR	United States	MD
[6]	BC Hydro	2008	TOU, CPP	Canada	-
[7]	British Gas; Northern Powergrid	2012 - 2013	TOU	United Kingdom	-
[8]	California Statewide Pricing Pilot	2004 - 2005	TOU, CPP	United States	CA
[9]	City of Fort Collins	2015	TOU	United States	CO
[10]	City of Kitakyushu	2012 - 2013	CPP, VPP	Japan	-
[11]	City of Kyoto	2012 - 2014	CPP	Japan	-
[12]	Commonwealth Edison Company	2011, 2015	TOU, CPP, PTR	United States	IL
[13]	Connecticut Light & Power Company	2009	TOU, CPP, PTR	United States	CT
[14]	Consumers Energy	2010	CPP, PTR	United States	MI
[15]	Country Energy	2005	CPP	Australia	-
[16]	Department of Public Utilities in Los Alamos County	2013	CPP, PTR	United States	NM
[17]	Detroit Edison Company	2013	CPP	United States	MI
[18]	EDF Energy; E.ON; Scottish Power; Southern Energy	2007 - 2010	TOU	United Kingdom	-
[19]	Energex; Ergon	2011 - 2013	CPP	Australia	-
[20]	FirstEnergy Corporation	2012 - 2014	PTR	United States	OH
[21]	Florida Power & Light Company	2011	CPP	United States	FL
[22]	GPU, Inc.	1997	TOU	United States	NJ
[23]	Green Mountain Power	2012 - 2013	CPP, PTR	United States	VT
[24]	Gulf Power Company	2000 - 2002	TOU, CPP	United States	FL
[25]	Hydro One Limited	2007	TOU	Canada	-
[26]	Hydro Ottawa	2007	TOU, CPP, PTR	Canada	-
[27]	Idaho Power Company	2006	TOU, CPP	United States	ID
[28]	Integral Enegy	2007 - 2008	CPP	Australia	-
[29]	Ireland	2010	TOU	Ireland	-
[30]	Italy	2010 - 2012	TOU	Italy	-
[31]	Kansas City Power and Light Company	2012 - 2014	TOU	United States	KS/MO
[32]	Marblehead Municipal Electric Light Department	2011 - 2012	CPP	United States	MA
[33]	Mercury NZ	2008	TOU	New Zealand	-
[34]	Newmarket - Tay Power Distribution Limited	2009	TOU	Canada	-
[35]	Newmarket Hydro	2007	TOU, CPP	Canada	-
[36]	Northern Ireland	2003 - 2004	TOU	United Kingdom	-
[37]	NV Energy	2013 - 2015	TOU, CPP	United States	NV
[38]	Oklahoma Gas & Electric Energy Corporation	2011	TOU, VPP	United States	OK
[39]	Olympic Peninsula Project	2007	CPP	United States	WA/OR
[40]	Ontario Power Authority	2012 - 2014	TOU	Canada	-
[41]	Pacific Gas & Electric Company	2009 - 2016	TOU, CPP	United States	CA
[42]	PacifiCorp	2002 - 2005	TOU	United States	OR
[43]	PECO	2014	TOU	United States	PA
[44]	Portland General Electric	2002 - 2003, 2011 - 2013	TOU, CPP	United States	OR
[45]	Potomac Electric Power Company	2010	CPP, PTR	United States	DC
[46]	PSE&G	2006 - 2007	TOU, CPP	United States	NJ
[47]	Puget Sound Energy	2001	TOU	United States	WA
[48]	Sacramento Municipal Utility District	2011 - 2013	TOU, CPP	United States	CA
[49]	Salt River Project	2008 - 2009	TOU	United States	AZ
[50]	San Diego Gas & Electric Company	2011, 2015 - 2016	TOU, CPP, PTR	United States	CA
[51]	SmartGrid SmartCity Pilot	2012 - 2014	CPP	Australia	-
[52]	Southern California Edison Company	2016	TOU	United States	CA
[53]	Southwestern Ontario	2011 - 2012	TOU	Canada	-
[54]	Sun Valley Electric Supply Company	2011	CPP	United States	ND
[55]	UK Power Networks	2013	TOU	United Kingdom	-
[56]	Vermont Electric Cooperative	2013-2014	VPP	United States	VT
[57]	Xcel Energy, Inc.	2011 - 2013	TOU, CPP, PTR	United States	CO

Notes:
The results of one time-varying pilot are not public, so it is excluded in the above table but still included in Arcturus 2.0.
Some utilities have tested multiple pilots that report separate results. These pilots include:

City of Kitakyushu (Kato et al. study; Ito et al. study);
Commonwealth Edison Company (2011 TOU, CPP, PTR study; 2015 PTR study);
Portland General Electric (2002 TOU Pilot; 2011 CPP Pilot);
San Diego Gas & Electric (Residential Peak Time Rebate and Small Customer Technology Deployment Program, Voluntary Residential CPP and TOU Rates);
SMUD (Residential Summer Solutions; Smart Pricing Options Pilot).

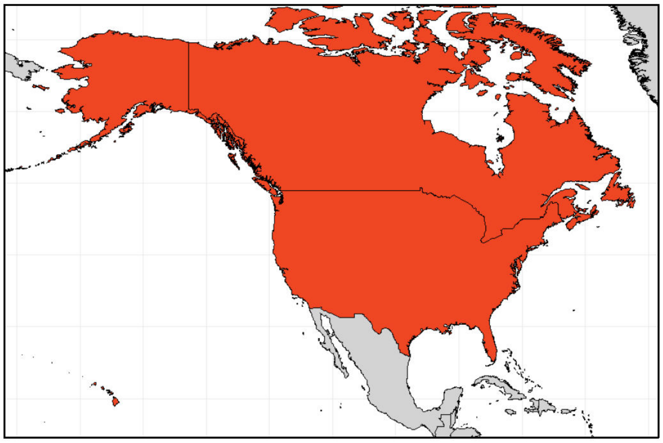
Including the pilots noted above brings the total count to 63 pilots.

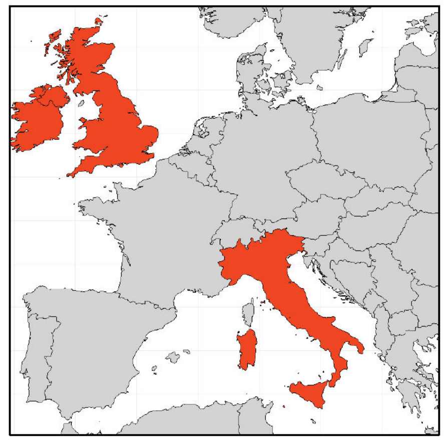
Appendix B: Peak Period Duration and Season of Pilots in Arcturus 2.0

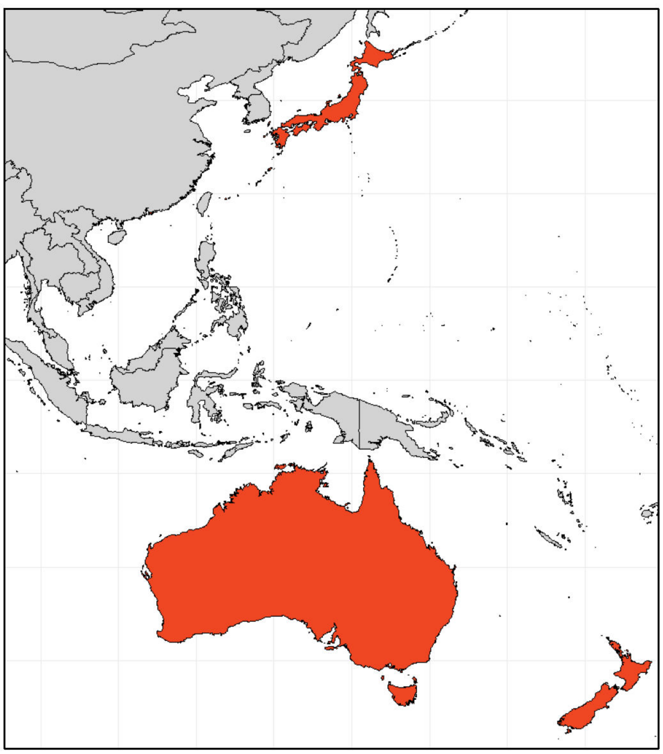
			Seasons Included in Pilot		
	Utility or Municipality	Average Peak Duration (Hours)	Summer	Winter	Annual
[1]	Automated Demand Response Sytem Pilot	5	No	No	Yes
[2]	Ameren Missouri	4	Yes	No	No
[3]	Anaheim Public Utilities	6	Yes	No	No
[4]	Ausgrid	4	Yes	Yes	Yes
[5]	Baltimore Gas & Electric Company	5	Yes	No	No
[6]	BC Hydro	6	No	Yes	No
[7]	British Gas; Northern Powergrid	4	No	No	Yes
[8]	California Statewide Pricing Pilot	5	Yes	No	Yes
[9]	City of Fort Collins	0	Yes	No	No
[10]	City of Kitakyushu	4	Yes	No	No
[11]	City of Kyoto	4	No	No	Yes
[12]	Commonwealth Edison Company	4	Yes	No	No
[13]	Connecticut Light & Power Company	5	Yes	No	No
[14]	Consumers Energy	4	Yes	No	No
[15]	Country Energy	2	No	No	Yes
[16]	Department of Public Utilities in Los Alamos County	3	Yes	No	No
[17]	Detroit Edison Company	4	Yes	No	No
[18]	EDF Energy; E.ON; Scottish Power; Southern Energy	3	No	No	Yes
[19]	Energex; Ergon	4	No	No	Yes
[20]	FirstEnergy Corporation	4	Yes	No	No
[21]	Florida Power & Light Company	4	No	No	Yes
[22]	GPU, Inc.	3	Yes	No	No
[23]	Green Mountain Power	5	Yes	No	Yes
[24]	Gulf Power Company	9	Yes	No	No
[25]	Hydro One Limited	6	Yes	No	No
[26]	Hydro Ottawa	7	Yes	Yes	Yes
[27]	Idaho Power Company	6	Yes	No	No
[28]	Integral Enegy	4	No	No	Yes
[29]	Ireland	2	No	No	Yes
[30]	Italy	11	No	No	Yes
[31]	Kansas City Power and Light Company	4	Yes	No	No
[32]	Marblehead Municipal Electric Light Department	6	Yes	No	No
[33]	Mercury NZ	12	No	Yes	No
[34]	Newmarket - Tay Power Distribution Limited	6	No	No	Yes
[35]	Newmarket Hydro	5	Yes	No	Yes
[36]	Northern Ireland	-	No	No	Yes
[37]	NV Energy	5	Yes	No	No
[38]	Oklahoma Gas & Electric Energy Corporation	5	Yes	No	No
[39]	Olympic Peninsula Project	4	No	No	Yes
[40]	Ontario Power Authority	6	Yes	Yes	No
[41]	Pacific Gas & Electric Company	5	Yes	Yes	Yes
[42]	PacifiCorp	6	Yes	Yes	No
[43]	PECO	4	Yes	No	No
[44]	Portland General Electric	6	Yes	Yes	No
[45]	Potomac Electric Power Company	4	Yes	No	No
[46]	PSE&G	5	Yes	No	Yes
[47]	Puget Sound Energy	-	No	No	Yes
[48]	Sacramento Municipal Utility District	3	Yes	No	No
[49]	Salt River Project	3	Yes	No	No
[50]	San Diego Gas & Electric Company	6	Yes	No	No
[51]	SmartGrid SmartCity Pilot	3	No	No	Yes
[52]	Southern California Edison Company	5	Yes	No	No
[53]	Southwestern Ontario	6	No	No	Yes
[54]	Sun Valley Electric Supply Company	4	Yes	No	No
[55]	UK Power Networks	6	No	No	Yes
[56]	Vermont Electric Cooperative	5	Yes	Yes	Yes
[57]	Xcel Energy, Inc.	6	Yes	Yes	No

Notes:
Pilots report customer impacts either during the summer months, winter months, or for the entire year. In some cases, pilots report all three. The corresponding columns in Appendix B have a value of "Yes" if any of the pilot's experimental pricing treatments reported impacts for that corresponding season.

Appendix C: Maps of Countries included in Arcturus 2.0







Note: For confidentiality, one Asian utility is not included in the above map.

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO	§	BEFORE THE STATE OFFICE
ELECTRIC COMPANY TO CHANGE	§	OF
RATES	§	ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-4:

Please provide reports from the Palo Verde management during the past two years which show salaries and wages by FERC account.

RESPONSE:

Please refer to CEP 9-4, Attachment 1 for the Palo Verde management salaries and wages by FERC account from 2019 - 2020. Reports for Palo Verde are not available in the requested format.

Preparer: Victor Martinez

Title: Manager – Resource Planning, Resource Management Regulatory & Quality Assurance

Sponsor: David C. Hawkins
Todd A. Horton

Title: Vice President – Strategy & Sustainability
Senior Vice President – Site Operations (Palo Verde Generating Station)

2019 Resource Category	Resource Category Description	Account	Account Description	Fiscal Year	Total Plant Amount	Total EPE Amount
111	Straight Time Non-Management	5170000	Nuclear Power-Supv and Engnrg	2019	$37,160,158.42	$5,871,305.03
111	Straight Time Non-Management	5190000	Nuclear Pwr-Coolants and Water	2019	$7,888,888.69	$1,246,444.41
111	Straight Time Non-Management	5200000	Nuclear Pwr-Steam Expenses	2019	$13,503,520.56	$2,133,556.25
111	Straight Time Non-Management	5230000	Nuc Pwr-Electric Expenses	2019	$21,101,221.43	$3,333,992.99
111	Straight Time Non-Management	5240000	Nuclear Power-Misc Nuclear Pwr	2019	$66,304,632.89	$10,476,132.00
111	Straight Time Non-Management	5280000	Nuc Pwr-Maint Supv and Engnrg	2019	$4,335,411.25	$684,994.98
111	Straight Time Non-Management	5290000	Nuc Pwr-Maint of Structures	2019	$1,589,634.45	$251,162.24
111	Straight Time Non-Management	5300000	Nuc-Maint of Reactor Plt Equip	2019	$8,188,159.27	$1,293,729.16
111	Straight Time Non-Management	5310000	Nuc Pwr-Maint of Electric Plt	2019	$12,246,528.33	$1,934,951.48
111	Straight Time Non-Management	5320000	Maint of Misc Nuclear Plant	2019	$3,944,758.92	$623,271.91
112	Straight Time Management	5170000	Nuclear Power-Supv and Engnrg	2019	$18,151,337.44	$2,867,911.32
112	Straight Time Management	5190000	Nuclear Pwr-Coolants and Water	2019	$654,856.59	$103,467.34
112	Straight Time Management	5200000	Nuclear Pwr-Steam Expenses	2019	$297,792.91	$47,051.28
112	Straight Time Management	5230000	Nuc Pwr-Electric Expenses	2019	$220,551.09	$34,847.07
112	Straight Time Management	5240000	Nuclear Power-Misc Nuclear Pwr	2019	$4,845,804.16	$765,637.06
112	Straight Time Management	5280000	Nuc Pwr-Maint Supv and Engnrg	2019	$228,734.42	$36,140.04
112	Straight Time Management	5320000	Maint of Misc Nuclear Plant	2019	$130,250.07	$20,579.51
					$200,792,240.89	$31,725,174.06
2020						
111	Straight Time Non-Management	5170000	Nuclear Power-Supv and Engnrg	2020	$35,766,242.14	$5,651,066.26
111	Straight Time Non-Management	5190000	Nuclear Pwr-Coolants and Water	2020	$7,531,555.43	$1,189,985.76
111	Straight Time Non-Management	5200000	Nuclear Pwr-Steam Expenses	2020	$12,306,696.24	$1,944,458.01
111	Straight Time Non-Management	5230000	Nuc Pwr-Electric Expenses	2020	$20,532,753.33	$3,244,175.03
111	Straight Time Non-Management	5240000	Nuclear Power-Misc Nuclear Pwr	2020	$67,498,387.38	$10,664,745.21
111	Straight Time Non-Management	5280000	Nuc Pwr-Maint Supv and Engnrg	2020	$3,742,154.76	$591,260.45
111	Straight Time Non-Management	5290000	Nuc Pwr-Maint of Structures	2020	$1,599,458.17	$252,714.39
111	Straight Time Non-Management	5300000	Nuc-Maint of Reactor Plt Equip	2020	$7,597,258.88	$1,200,366.90
111	Straight Time Non-Management	5310000	Nuc Pwr-Maint of Electric Plt	2020	$11,810,064.50	$1,865,990.19
111	Straight Time Non-Management	5320000	Maint of Misc Nuclear Plant	2020	$3,447,747.34	$544,744.08
112	Straight Time Management	5170000	Nuclear Power-Supv and Engnrg	2020	$19,051,252.17	$3,010,097.84
112	Straight Time Management	5190000	Nuclear Pwr-Coolants and Water	2020	$528,889.94	$83,564.61
112	Straight Time Management	5200000	Nuclear Pwr-Steam Expenses	2020	$225,280.89	$35,594.38
112	Straight Time Management	5230000	Nuc Pwr-Electric Expenses	2020	$419,485.90	$66,278.77
112	Straight Time Management	5240000	Nuclear Power-Misc Nuclear Pwr	2020	$3,455,136.42	$545,911.55
112	Straight Time Management	5280000	Nuc Pwr-Maint Supv and Engnrg	2020	$261,275.30	$41,281.50
112	Straight Time Management	5300000	Nuc-Maint of Reactor Plt Equip	2020	$3,011.65	$475.84
112	Straight Time Management	5310000	Nuc Pwr-Maint of Electric Plt	2020	$3,011.65	$475.84
112	Straight Time Management	5320000	Maint of Misc Nuclear Plant	2020	$125,729.23	$19,865.22
					$195,905,391.32	$30,953,051.83

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO	§	BEFORE THE STATE OFFICE
ELECTRIC COMPANY TO CHANGE	§	OF
RATES	§	ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-5:

Provide any budgetary or reporting data regarding the composition of non-fuel O&M expense incurred at Palo Verde Nuclear Station.

RESPONSE:

Please refer to El Paso Electric Company's response to CEP 6-21, Attachment 1, for the Palo Verde operations and maintenance budget variance reports for each month of the Test Year period.

Preparer: Victor Martinez — Title: Manager – Resource Planning, Resource Management Regulatory & Quality Assurance

Sponsor: David C. Hawkins — Title: Vice President – Strategy & Sustainability
Todd A. Horton — Senior Vice President – Site Operations (Palo Verde Generating Station)

SOAH DOCKET NO. 473-21-2606
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APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

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CEP 9-6:

With respect to 2019 and 2020 EPE programs, are any of the EE energy efficiency programs new or redesigned programs? If yes, please identify the programs and the nature of the changes or a description of the new program.

RESPONSE:

This question is still under negotiation between counsel for El Paso Electric Company and counsel for the City of El Paso.

Preparer: James Schichtl   Title: Vice President – Regulatory & Governmental Affairs

Sponsor: James Schichtl   Title: Vice President – Regulatory & Governmental Affairs

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CEP 9-7:

With respect to EPE's energy efficiency program, please provide monthly variances between budgeted and actual expended incentives for 2018 – 2020 program years. Provide the information in excel spreadsheet format.

RESPONSE:

This question is still under negotiation between counsel for El Paso Electric Company and counsel for the City of El Paso.

Preparer: James Schichtl — Title: Vice President – Regulatory & Governmental Affairs

Sponsor: James Schichtl — Title: Vice President – Regulatory & Governmental Affairs

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CEP 9-8:

RESPONSE:

The City of El Paso did not include a discovery request for CEP 9-8.

Preparer: Judith M. Parsons Title: Senior Regulatory Case Manager

Sponsor: James Schichtl Title: Vice President – Regulatory and Governmental Affairs

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CEP 9-9:

With respect to Schedule P-4, provide a description and breakdown of costs in A920 – A923 which are directly assigned as customer, production, distribution, transmission, and general. Describe the activities associated with specific costs, and describe how the amount of the functional component was determined (particularly for employees or contractors who perform work on more than one function).

RESPONSE:

El Paso Electric Company's ("EPE" or "Company") cost of service model uses "Reg Accounts" created from the Company's accounting records which provide further detail within the primary FERC accounts. EPE is not "directly assigning" these Administrative and General ("A&G") expense accounts, but is instead allocating them to their respective DEC component (Demand, Energy, Customer). Refer to the "DEC Components Allocation" tab in EPE's cost of service model to see the detailed account descriptions, the allocator assigned to each account, and how these A&G expenses in accounts 920 through 923 are allocated among the DEC components.

Preparer:	Adrian Hernandez	Title:	Senior Rate Analyst – Rates
Sponsor:	Adrian Hernandez	Title:	Senior Rate Analyst – Rates

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CEP 9-10:

Provide the amounts and descriptions of any Palo Verde costs included in A920-926 (separately shown by account). Provide the classification and allocation of the costs.

RESPONSE:

The only costs included in these accounts by El Paso Electric Company ("EPE") were the costs of EPE's oversight of Palo Verde Generating Station ("Palo Verde"). These costs are shown below by account. All costs billed to EPE by Palo Verde are included in nuclear operations and maintenance expense.

Account	Texas Amount	DEC Component
921000-PVSVC-OFFICE SUPPLIES & EXP	$45	Demand Production
924000-PVT-PROPERTY INSURANCE	$1,029	Demand Transmission
925000-PVSVC-INJURIES AND DAMAGES	$384	Demand Production
925000-PVT-INJURIES AND DAMAGES	$353	Demand Transmission
926000-PVSVC-PENSIONS & BEN	$50,612	Demand Production

Refer to the "DEC Components Allocation" tab in EPE's cost of service model.

Preparer: Adrian Hernandez Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez Title: Senior Rate Analyst – Rates

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CEP 9-11:

Identify, describe, and quantify any A&G or customer service expenses which are incurred to attract, maintain or increase the consumption of key account customers.

RESPONSE:

El Paso Electric Company ("EPE") does not incur costs to attract or maintain key account customers beyond the normal labor costs of commercial account representatives and Economic Development specialists. EPE does not engage in efforts to increase the consumption of key account customers.

Preparer: James Schichtl Title: Vice President – Regulatory and Governmental Affairs

Sponsor: James Schichtl Title: Vice President – Regulatory and Governmental Affairs

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CEP 9-12:

Please provide the amounts, by FERC account, associated with major account representatives who are solely assigned to provide assistance and customer service to large commercial and industrial customers.

RESPONSE:

The Texas jurisdictional amounts are below.

FERC Account	Amount
903000	$338,408
926000	$51,985

Preparer: Adrian Hernandez Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez Title: Senior Rate Analyst – Rates

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APPLICATION OF EL PASO	§	BEFORE THE STATE OFFICE
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CEP 9-13:

(a) For each program year since 2015, provide the projected and actual kWh and kW savings achieved by each energy efficiency program. Please provide this information in excel spreadsheet format. (b) For each program year since 2015, provide the projected and actual program participants for each energy efficiency program. Please provide this information in excel spreadsheet format.

RESPONSE:

This question is still under negotiation between counsel for El Paso Electric Company and counsel for the City of El Paso.

Preparer: James Schichtl — Title: Vice President – Regulatory & Governmental Affairs

Sponsor: James Schichtl — Title: Vice President – Regulatory & Governmental Affairs

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CEP 9-14:

For each of the last five program years, provide the amount of any unexpended funds for any energy efficiency program, and the unexpended funds as a percentage of program spending.

RESPONSE:

This question is still under negotiation between counsel for El Paso Electric Company and counsel for the City of El Paso.

Preparer: James Schichtl   Title: Vice President – Regulatory & Governmental Affairs

Sponsor: James Schichtl   Title: Vice President – Regulatory & Governmental Affairs

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CEP 9-15:

Please provide all analyses, including assumptions, associated with projecting annual kWh and kW savings associated with each energy efficiency program.

RESPONSE:

This question is still under negotiation between counsel for El Paso Electric Company and counsel for the City of El Paso.

Preparer: James Schichtl Title: Vice President – Regulatory & Governmental Affairs

Sponsor: James Schichtl Title: Vice President – Regulatory & Governmental Affairs

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CEP 9-16:

Please provide the amounts, by FERC account, associated with economic development programs. Describe the activities in the programs and identify any customers (and the associated customer class) successfully attracted by the programs.

RESPONSE:

There is no FERC account that is specific to El Paso Electric Company's ("EPE") economic development efforts. Costs related to responding to potential customer's questions regarding line extensions and rate estimates are not specifically tracked by EPE.

Preparer: Cynthia Piña Ortwein   Title: Regional Vice President

Sponsor: James Schichtl   Title: Vice President – Regulatory & Governmental Affairs

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CEP 9-17:

Describe and explain each change in allocation or classification methods for the class cost of service study (CCOSS) compared to the Company's filing in Docket No. 46831.

RESPONSE:

The only changes to allocation or classification methodology are:

- El Paso Electric Company ("EPE") changed its allocation of peaking generation facilities (see direct testimony of EPE witness Adrian Hernandez, page 10).

- EPE also changed the allocation methodology for assigning production O&M expenses (see direct testimony of EPE witness Adrian Hernandez, page 14, lines 13 through 19).

Although there were other changes to allocators (mostly due to the addition of new functional dynamic allocators), the methodology through which the allocators were assigned remained the same. Refer to Schedule P-13 for further detail.

Preparer: Adrian Hernandez   Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez   Title: Senior Rate Analyst – Rates

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CEP 9-18:

Please provide the components of the residential customer charge, by FERC account, as requested in this filing.

RESPONSE:

See CEP 9-18, Attachment 1. Further detail can be found in the "DEC Components Allocation" tab in the Excel worksheet "EPE Regulatory Case Working Model – As Filed – Dkt 52195." Users must first unprotect the worksheet (click on "Unprotect Sheet" under the Review menu). In the "DEC Components Allocation" tab, for each account row labeled as "R01-Residential TX" (filter by excel column D), see the applicable customer-related costs in the DEC components columns labeled "Cust" (excel columns L though S). Filter by "Account type" in excel column A to differentiate between rate base, expenses, etc.

Preparer: Adrian Hernandez — Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez — Title: Senior Rate Analyst – Rates

El Paso Electric Company
Customer Component Costs
For the Residential Rate Class
Summarized by FERC Account

SOAH Docket No. 473-21-2606
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CEP's 9th, Q. No. CEP 9-18
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FERC Account	Cust 369-Servs	Cust 370-Ms	Cust 902-M Read	Cust 903-C R C	Cust Deposits	Cust Other
131000	($5,054.00)	($53,327.21)	($19,851.57)	($134,568.12)	($209.32)	($8,015.77)
154100	$354,926.27	$3,725,290.54	$0.00	$0.00	$0.00	$0.00
163000	($83.46)	($103.72)	$0.00	$0.00	$0.00	$0.00
165000	$55,595.10	$370,168.00	$119,990.94	$688,741.47	$0.00	$0.00
182300	$68,404.41	$105,567.76	$21,292.95	$122,236.57	$0.00	$0.00
182399	$51,705.44	$79,796.42	$16,094.89	$92,396.02	$0.00	$0.00
190000	$676,020.75	$1,757,974.66	$462,090.23	$2,652,460.71	$0.00	$0.00
235001	$0.00	$0.00	$0.00	$0.00	($4,974,187.50)	$0.00
252000	($624,570.80)	($776,181.72)	$0.00	$0.00	$0.00	$0.00
254300	($1,207,201.85)	($1,863,061.08)	($375,778.21)	($2,157,232.42)	$0.00	$0.00
282000	($2,271,611.85)	($3,772,795.33)	($537,299.03)	($3,084,367.86)	$0.00	$0.00
283000	($47,613.97)	($73,482.11)	($14,821.29)	($85,084.69)	$0.00	$0.00
303000	$61,359.41	$639,412.69	$3,217,563.68	$18,468,560.63	$0.00	$0.00
369000	$17,910,648.50	$0.00	$0.00	$0.00	$0.00	$0.00
370000	$0.00	$22,343,558.94	$0.00	$0.00	$0.00	$0.00
37XXXX	($105,976.19)	($131,701.30)	$0.00	$0.00	$0.00	$0.00
389000	$5,282.36	$56,427.14	$21,050.07	$120,825.74	$0.00	$0.00
390000	$321,330.88	$3,432,513.76	$1,280,494.86	$7,349,939.03	$0.00	$0.00
391000	$1,970.61	$21,050.45	$7,852.84	$45,074.71	$0.00	$0.00
391100	$38,373.48	$409,912.31	$152,917.26	$877,732.96	$0.00	$0.00
392000	$68,913.90	$736,150.57	$274,620.03	$1,576,297.19	$0.00	$0.00
393000	$5.38	$57.44	$21.43	$123.00	$0.00	$0.00
394000	$14,955.47	$159,756.99	$59,597.14	$342,082.87	$0.00	$0.00
395000	$11,377.24	$121,533.73	$45,338.00	$260,236.54	$0.00	$0.00
396000	$10,805.00	$115,420.95	$43,057.64	$247,147.42	$0.00	$0.00
397000	$74,509.21	$795,920.66	$296,917.18	$1,704,281.10	$0.00	$0.00
398000	$12,995.77	$138,823.15	$51,787.80	$297,257.86	$0.00	$0.00
399100	$217.85	$2,327.11	$868.13	$4,982.98	$0.00	$0.00
39XXXX	($2,912.38)	($31,110.51)	($11,605.74)	($66,616.01)	$0.00	$0.00
407300	$8,763.24	$93,610.49	$34,921.27	$200,445.33	$0.00	$0.00
408100	$316,339.84	$695,177.05	$141,851.45	$814,979.62	($57,917.87)	($136.44)
410100	$275,514.29	$660,529.27	$166,323.88	$954,733.50	$0.00	$0.00
411100	($273,635.98)	($569,265.54)	($132,971.49)	($763,296.26)	$0.00	$0.00
411109	$13.65	$145.78	$54.38	$312.15	$0.00	$0.00
450000	$0.00	$0.00	$0.00	$0.00	$0.00	($862,937.48)
451000	($26,751.92)	($1,552,697.32)	($20,943.23)	($120,212.49)	$0.00	$0.00
454000	($30,093.69)	($316,635.44)	($16,549.71)	($94,994.00)	$0.00	$0.00
580000	$20,158.63	$214,186.58	$0.00	$0.00	$0.00	$0.00
586000	$0.00	$881,135.73	$0.00	$0.00	$0.00	$0.00
587000	$93,116.62	$115,469.99	$0.00	$0.00	$0.00	$0.00
588000	$150,512.24	$1,599,201.11	$0.00	$0.00	$0.00	$0.00
589000	$6,083.09	$7,559.73	$0.00	$0.00	$0.00	$0.00
590000	$0.00	($1.07)	$0.00	$0.00	$0.00	$0.00
597000	$0.00	$59,884.44	$0.00	$0.00	$0.00	$0.00
901000	$0.00	$0.00	$106.38	$833.90	$0.00	$0.00
902000	$0.00	$0.00	$1,314,644.13	$0.00	$0.00	$0.00
903000	$0.00	$0.00	$0.00	$10,474,493.78	$0.00	$0.00
904000	$0.00	$0.00	$0.00	$0.00	$0.00	$1,171,352.87
905000	$0.00	$0.00	$0.00	$0.00	$0.00	$21,845.53
909000	$0.00	$0.00	$0.00	$0.00	$0.00	$87,674.40
920000	$89,067.23	$951,424.59	$354,772.16	$2,036,364.12	$0.00	$0.00
921000	$14,301.41	$152,768.64	$56,956.44	$326,925.45	$0.00	$0.00
923000	$47,878.84	$511,450.27	$190,795.87	$1,095,153.17	$0.00	$0.00
924000	$17,003.06	$181,629.71	$67,756.73	$388,918.26	$0.00	$0.00
925000	$10,687.25	$114,044.09	$42,234.78	$242,424.31	$0.00	$0.00
926000	$61,286.74	$639,362.85	$232,067.43	$1,332,048.68	$0.00	$0.00
928000	$9,428.81	$100,720.26	$37,573.56	$215,669.28	$0.00	$0.00
930100	$0.00	$0.00	$0.00	$0.00	$0.00	$1,048,755.86
930200	$12,970.06	$138,548.50	$51,685.34	$296,669.75	$30,246.37	$0.00
9302XX	$309.80	($18,909.66)	($7,697.15)	($44,180.45)	$0.00	$0.00
931000	$1,280.22	$13,675.37	$5,098.99	$29,267.78	$0.00	$0.00
935000	$29,117.63	$311,038.56	$120,343.69	$690,763.24	$0.00	$0.00

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CEP 9-19:

Provide the Company's stated residential customer charge at cost in the Docket No. 46831 filing. Please show the components by FERC account to compare with the information provided in response to No. 17 above.

RESPONSE:

Since El Paso Electric Company's ("EPE") last rate case resulted in a "blackbox" settlement, EPE does not have the exact customer components of the residential customer charge by FERC account.

However, EPE has provided the requested information from EPE's rebuttal cost of service from Docket No. 46831. See the table below for the residential customer charge at cost and see CEP 9-19, Attachment 1.

FROM REBUTTAL COST OF SERVICE	**Docket**
	No. 46831
CUSTOMER COMPONENTS ($/ANNUAL CUSTOMERS)	**Rate 01**
CUSTOMER OTHER	$1.755
CUSTOMER DEPOSITS	(0.162)
CUSTOMER 369-SERVICES	0.733
CUSTOMER 370-METERS	1.766
CUSTOMER 371-INSTALL ON CUST PREM	0.000
CUSTOMER 373-STREET LIGHTS	0.000
CUSTOMER 902-METER READING EXP	0.868
CUSTOMER 903-CUST REC AND COLLECTIONS	5.484
	$10.445

Preparer: Adrian Hernandez Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez Title: Senior Rate Analyst – Rates

From EPE's Rebuttal Cost of Service (Docket No. 46831)

FERC Account	Cust 369-Servs	Cust 370-Ms	Cust 902-M Read	Cust 903-C R C	Cust Deposits	Cust Other
131000	($2,723.45)	($25,218.46)	($11,362.47)	($56,819.22)	($72.75)	($10,532.37)
154100	$238,589.28	$298,165.67	$0.00	$0.00	$0.00	$0.00
163000	($115.86)	($144.79)	$0.00	$0.00	$0.00	$0.00
165000	$27,643.58	$97,300.31	$57,584.22	$316,891.51	$0.00	$17,380.28
165010	$978.87	$1,554.57	$216.28	$1,202.01	$0.00	$1,287.44
165020	$1,216.88	$1,932.56	$268.87	$1,494.28	$0.00	$1,600.48
182300	$82,093.32	$130,374.81	$18,138.30	$100,807.16	$0.00	$107,971.73
190000	$563,893.49	$1,698,787.90	$891,687.83	$4,907,383.70	$0.00	$402,640.58
235001	$0.00	$0.00	$0.00	$0.00	($4,660,216.88)	$0.00
252000	($343,093.09)	($428,764.38)	$0.00	$0.00	$0.00	$0.00
254300	($52,050.01)	($82,662.15)	($11,500.31)	($63,915.24)	$0.00	($68,457.82)
282000	($2,432,884.54)	($3,535,253.20)	($429,726.10)	($2,388,287.22)	$0.00	($1,738,351.96)
283000	($51,397.09)	($81,625.23)	($11,356.05)	($63,113.48)	$0.00	($67,599.08)
303000	$70,964.66	$50,077.31	($35,597.31)	($195,768.78)	$0.00	$19,331,215.98
369000	$13,674,269.06	$0.00	$0.00	$0.00	$0.00	$0.00
370000	$0.00	$18,491,708.96	$0.00	$0.00	$0.00	$0.00
37XXXX	($71,960.49)	($89,929.22)	$0.00	$0.00	$0.00	$0.00
389000	$2,762.50	$31,865.27	$26,197.69	$144,075.22	$0.00	$1,361.49
390000	$141,903.18	$1,636,844.76	$1,345,714.51	$7,400,809.41	$0.00	$69,936.60
391000	$737.34	$8,505.22	$6,992.48	$38,455.41	$0.00	$363.40
391100	$18,888.60	$217,878.94	$179,126.85	$985,115.10	$0.00	$9,309.20
392000	$29,230.64	$337,173.70	$277,203.77	$1,524,492.94	$0.00	$14,406.24
393000	$12.87	$148.49	$122.08	$671.36	$0.00	$6.34
394000	$3,367.13	$38,839.67	$31,931.62	$175,609.19	$0.00	$1,659.48
395000	$4,315.89	$49,783.58	$40,929.04	$225,090.85	$0.00	$2,127.08
396000	$5,248.69	$60,543.38	$49,775.09	$273,740.07	$0.00	$2,586.80
397000	$26,259.98	$302,907.26	$249,031.99	$1,369,561.11	$0.00	$12,942.16
398000	$4,834.39	$55,764.35	$45,846.07	$252,132.25	$0.00	$2,382.61
39XXXX	($400.18)	($4,616.01)	($3,795.00)	($20,870.77)	$0.00	($197.23)
408100	$194,943.32	$409,064.36	$138,608.23	$765,232.92	($48,956.00)	$225,991.44
410100	$772,104.78	$1,350,262.24	$303,560.88	$1,678,231.06	$0.00	$849,911.67
411100	($632,066.04)	($1,112,977.31)	($263,473.74)	($1,455,875.08)	$0.00	($634,315.90)
442500	($9,926.38)	($17,641.18)	($3,616.40)	($20,083.18)	$4,256.00	($15,312.90)
445000	($3,018.55)	($5,364.57)	($1,099.72)	($6,107.17)	$1,294.22	($4,656.55)
450000	($4,700.36)	($8,353.50)	($1,712.45)	($9,509.84)	$2,015.31	($7,251.00)
451000	($4,956.79)	($2,701,819.39)	$0.00	$0.00	$0.00	($201,770.09)
454000	($31,133.02)	($56,939.49)	($16,626.53)	($91,438.28)	$0.00	($864.08)
580000	$12,718.47	$121,584.79	$0.00	$0.00	$0.00	$0.00
586000	$0.00	$1,061,559.12	$0.00	$0.00	$0.00	$0.00
587000	$129,016.45	$161,232.21	$0.00	$0.00	$0.00	$0.00
588000	$236,351.61	$2,259,451.49	$0.00	$0.00	$0.00	$0.00
589000	$2,666.33	$3,332.12	$0.00	$0.00	$0.00	$0.00
590000	$0.00	$0.28	$0.00	$0.00	$0.00	$0.00
597000	$0.00	$34,392.96	$0.00	$0.00	$0.00	$0.00
902000	$0.00	$0.00	$1,227,694.41	$0.00	$0.00	$0.00
903000	$0.00	$0.00	$0.00	$9,102,887.36	$0.00	$0.00
904000	$0.00	$0.00	$0.00	$0.00	$0.00	$929,256.84
905000	$0.00	$0.00	$0.00	$0.00	$0.00	$134,493.56
909000	$0.00	$0.00	$0.00	$0.00	$0.00	$140,799.69
920000	$46,393.66	$531,326.42	$436,442.60	$2,400,233.08	$0.00	$22,526.25
921000	$6,358.65	$72,951.34	$59,936.68	$329,624.11	$0.00	$4,017.60
923000	$23,347.24	$262,125.91	$214,786.48	$1,181,226.60	$0.00	$29,693.95
924000	$5,014.25	$57,839.08	$47,551.79	$261,512.90	$0.00	$2,471.26
925000	$6,619.35	$61,607.20	$49,176.61	$270,448.68	$0.00	$35,923.03
926000	$48,847.29	$171,738.48	$102,063.42	$561,301.73	$0.00	$1,302,242.67
928000	($21.26)	($245.22)	($201.60)	($1,108.73)	$0.00	($10.48)
930100	$0.00	$0.00	$0.00	$0.00	$0.00	$263,688.33
930200	$4,752.95	$54,825.05	$45,073.83	$247,885.28	$19,572.59	$844,303.95
931000	$391.22	$4,503.47	$3,701.56	$20,356.85	$0.00	$192.37
935000	$9,254.72	$106,589.57	$87,615.18	$481,843.12	$0.00	$18,307.08

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO	§	BEFORE THE STATE OFFICE
ELECTRIC COMPANY TO CHANGE	§	OF
RATES	§	ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-20:

What production and demand allocation factors are used by FERC for EPE costs within that jurisdiction?

RESPONSE:

El Paso Electric Company's FERC jurisdiction uses a formula rate calculation based upon total company numbers from the FERC Form 1. It does not use allocation factors similar to the cost of service in this case.

Preparer: Adrian Hernandez Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez Title: Senior Rate Analyst – Rates

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-21:

Please set out the allocation methods used by the Western Electricity Coordinating Council to assign costs to member electric utilities.

RESPONSE:

Please see sections 11.1.1, 11.1.2 and 11.1.3 of the WECC bylaws.

https://www.wecc.org/Corporate/WECC%20Bylaws.pdf

Preparer: Michael J. Sahs — Title: Manager – System Dispatch

Sponsor: David C. Hawkins — Title: Vice President – Strategy & Sustainability

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-22:

Please describe the method for assigning monthly demand costs for EPE's transmission facilities to FERC jurisdiction customers who purchase point-to-point or network transmission service from EPE.

RESPONSE:

FERC customers receiving point-to-point or network transmission service pay demand costs in the form of charges assessed under El Paso Electric Company's ("EPE") Open Access Transmission Tariff ("OATT"). The charges are invoiced monthly.

For point-to-point transmission services under the OATT, the demand charges are based upon the customer's total reserved capacity (hourly, daily, weekly, monthly or yearly, depending on the type of delivery service the customer has chosen) on a per kW basis.

For network transmission service under the OATT, the customer pays a monthly demand charge that is based on the customer's load ratio share (the ratio of the customer's network load to EPE's total load).

Preparer: Michael J. Sahs — Title: Manager – System Dispatch

Sponsor: David C. Hawkins — Title: Vice President – Strategy & Sustainability

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-23:

Please provide information regarding the impact of the February 2021 winter storm on generation reserve margins and transmission constraints. Please show the MW amount of available generation, February actual demand in MW, forced outages in MW, generation MWs and lost due to fuel deliverability. Provide internal reports which summarize the impact of the winter storm on the EPE system.

RESPONSE:

Generation reserve margins, available generation, forced outages and actual demand associated with the February 2021 winter storm, for dates 2/14 to 2/16, are provided in the following attachments:

- CEP 9-23 Attachment 1: Generation Reserve Margins spreadsheet
- CEP 9-23 Attachment 2: Forced outages, unit derates, and economy, planned and maintenance outages spreadsheet
- CEP 9-23 Attachment 3: Actual demand in MWs spreadsheet, average load per hour

There were no transmission constraints from 2/14 to 2/16.

There were no internal reports summarizing the impact of the February 2021 winter storm on the El Paso Electric Company ("EPE") system.

Despite the challenges caused by the extremely inclement weather, EPE neither curtailed nor called for interruptions of any retail customer from 2/14 to 2/16.

Preparer:	Abel Bustillos	Title:	Director – System Operations
Sponsor:	David C. Hawkins J Kyle Olson	Title:	Vice President – Strategy and Sustainability Manager – Power Generation Engineering

DATE	Hour Ending	Contingency Reserve Requirement	Contingency Reserve Actual	MARGIN
2/14/2021	1	91	470	379
2/14/2021	2	92	470	378
2/14/2021	3	91	470	379
2/14/2021	4	92	470	378
2/14/2021	5	92	470	378
2/14/2021	6	91	470	379
2/14/2021	7	63	458	395
2/14/2021	8	25	329	304
2/14/2021	9	40	218	178
2/14/2021	10	97	171	74
2/14/2021	11	100	156	56
2/14/2021	12	104	147	43
2/14/2021	13	107	188	81
2/14/2021	14	110	237	127
2/14/2021	15	107	161	54
2/14/2021	16	90	159	69
2/14/2021	17	12	69	57
2/14/2021	18	19	62	43
2/14/2021	19	31	29	-2
2/14/2021	20	48	140	92
2/14/2021	21	92	208	116
2/14/2021	22	94	218	124
2/14/2021	23	94	211	117
2/14/2021	24	94	235	141
2/15/2021	1	94	208	114
2/15/2021	2	94	204	110
2/15/2021	3	94	205	111
2/15/2021	4	93	231	138
2/15/2021	5	91	218	127
2/15/2021	6	90	192	102
2/15/2021	7	87	218	131
2/15/2021	8	85	284	199
2/15/2021	9	89	207	118
2/15/2021	10	94	212	118
2/15/2021	11	99	208	109
2/15/2021	12	101	236	135
2/15/2021	13	102	252	150
2/15/2021	14	54	218	164
2/15/2021	15	45	233	188
2/15/2021	16	16	229	213
2/15/2021	17	96	284	188
2/15/2021	18	92	302	210

DATE	Hour Ending	Contingency Reserve Requirement	Contingency Reserve Actual	MARGIN
2/15/2021	19	90	186	96
2/15/2021	20	92	174	82
2/15/2021	21	92	209	117
2/15/2021	22	90	219	129
2/15/2021	23	92	233	141
2/15/2021	24	92	251	159
2/16/2021	1	94	258	164
2/16/2021	2	95	249	154
2/16/2021	3	96	241	145
2/16/2021	4	95	252	157
2/16/2021	5	96	248	152
2/16/2021	6	94	284	190
2/16/2021	7	90	322	232
2/16/2021	8	89	339	250
2/16/2021	9	94	294	200
2/16/2021	10	99	225	126
2/16/2021	11	100	228	128
2/16/2021	12	101	241	140
2/16/2021	13	102	190	88
2/16/2021	14	99	235	136
2/16/2021	15	99	206	107
2/16/2021	16	98	163	65
2/16/2021	17	93	219	126
2/16/2021	18	91	225	134
2/16/2021	19	89	144	55
2/16/2021	20	85	230	145
2/16/2021	21	86	247	161
2/16/2021	22	87	248	161
2/16/2021	23	87	249	162
2/16/2021	24	88	285	197

PLANT	UNIT	START DATE	COMPLETED DATE	LENGTH	OUTAGE TYPE	DESCRIPTION OF INITIATING EVENT.	MW Max	De-rate Amount
Copper	Copper	2/1/21 0:00	3/1/21 0:00	**672:00:00**	FO	Major	66	66
Newman	ST5	2/14/2021 6:40	2/14/2021 11:57	**5:17:00**	FO	Cold Weather	140	140
Newman	GT3	2/14/2021 6:50	2/14/2021 11:09	**4:19:00**	FO	Cold Weather	70	70
Newman	GT4	2/14/2021 7:34	2/14/2021 8:43	**1:09:00**	FO	Cold Weather	70	70
Newman	ST5	2/14/2021 14:25	2/15/21 16:00	**25:35:00**	FO	Cold Weather	140	140
Newman	GT1	2/14/2021 15:51	2/14/2021 17:40	**1:49:00**	FO	Cold Weather	73	73
Newman	GT2	2/14/2021 15:51	2/14/2021 17:41	**1:50:00**	FO	Cold Weather	73	73
Newman	ST4	2/14/2021 15:51	2/16/2021 13:00	**45:09:00**	FO	Cold Weather	90	90
Newman	U3	2/14/2021 16:06	2/16/2021 1:29	**33:23:00**	FO	Cold Weather	103	103
Newman	GT4	2/14/2021 16:46	2/14/2021 21:54	**5:08:00**	FO	Cold Weather	70	70
Newman	GT3	2/14/2021 17:28	2/14/2021 18:10	**0:42:00**	FO	Cold Weather	70	70
Newman	GT1	2/14/2021 18:43	2/14/2021 19:15	**0:32:00**	FO	Cold Weather	73	73
Newman	GT2	2/14/2021 18:43	2/14/2021 19:13	**0:30:00**	FO	Cold Weather	73	73
Newman	GT3	2/14/2021 22:54	2/15/2021 0:20	**1:26:00**	FO	Cold Weather	70	70
Rio Grande	U8	2/14/2021 17:23	2/14/21 19:32	**2:09:00**	FO	Drum Level Transmitter showing false values due to the FREEZE	150	150
Montana	U4	2/15/21 13:27	2/15/21 16:17	**2:50:00**	FO	Low pressure compressor discharge pressure sensor frozen. P-23	90	90
					FO			
						Unit De-rates		
Newman	GT2	2/14/2021 19:13	2/20/21 14:41	**139:28:00**	FDR	ST4 off line due to cold weather, Running in DRY MODE	73	43
Newman	GT1	2/14/2021 19:15	2/20/21 14:35	**139:20:00**	FDR	ST4 off line due to cold weather, Running in DRY MODE	73	43
					FDR			
					PDR			
					PDR			
					FDR			
					PDR			
					FDR			
					PDR			
						Economy, Planned and Maintenance Outages		
Newman	U1	2/1/21 0:00	3/1/21 0:00	**672:00:00**	PO	Summer Prep and Valve Inspection	82	82
Newman	U2	2/1/21 0:00	2/17/21 7:00	**391:00:00**	PO	Summer Prep	82	82
Newman	ST4	2/16/2021 13:00	2/22/21 7:02	**138:02:00**	RS	Reserve Shutdown, Lack of Fuel	90	90
Newman	GT3	2/16/21 13:21	2/21/21 11:20	**117:59:00**	RS	Reserve Shutdown, Lack of Fuel	70	70
Newman	GT4	2/16/21 13:23	2/20/21 14:12	**96:49:00**	RS	Reserve Shutdown, Lack of Fuel	70	70
Newman	ST5	2/15/21 16:00	3/1/21 0:00	**320:00:00**	PO	Summer Prep, HRSG Inspection	140	140
Rio Grande	U6	2/1/2021 0:00	3/1/2021 0:00	**672:00:00**	INACT	Inactive Reserve	45	45
Rio Grande	U7	2/6/21 8:00	3/1/21 0:00	**544:00:00**	PO	Summer Prep	45	45

Date and Hour Ending	Hourly Average
14-Feb-21 00:00:00	762.6797485
14-Feb-21 01:00:00	741.7397461
14-Feb-21 02:00:00	723.8614502
14-Feb-21 03:00:00	728.6622925
14-Feb-21 04:00:00	733.9839478
14-Feb-21 05:00:00	748.4379272
14-Feb-21 06:00:00	778.3574219
14-Feb-21 07:00:00	816.9372559
14-Feb-21 08:00:00	869.7714233
14-Feb-21 09:00:00	922.7715454
14-Feb-21 10:00:00	948.1506348
14-Feb-21 11:00:00	958.2486572
14-Feb-21 12:00:00	974.5603027
14-Feb-21 13:00:00	1000.002502
14-Feb-21 14:00:00	1001.044861
14-Feb-21 15:00:00	1001.925781
14-Feb-21 16:00:00	998.1854858
14-Feb-21 17:00:00	1041.20874
14-Feb-21 18:00:00	1120.623779
14-Feb-21 19:00:00	1144.783936
14-Feb-21 20:00:00	1131.323608
14-Feb-21 21:00:00	1108.032593
14-Feb-21 22:00:00	1059.498657
14-Feb-21 23:00:00	993.2333984
15-Feb-21 00:00:00	935.0516968
15-Feb-21 01:00:00	902.746521
15-Feb-21 02:00:00	877.519104
15-Feb-21 03:00:00	878.3428955
15-Feb-21 04:00:00	881.9745483
15-Feb-21 05:00:00	901.8676758
15-Feb-21 06:00:00	937.25177
15-Feb-21 07:00:00	984.4207764
15-Feb-21 08:00:00	1029.011597
15-Feb-21 09:00:00	1060.768066
15-Feb-21 10:00:00	1080.630859
15-Feb-21 11:00:00	1092.827515
15-Feb-21 12:00:00	1073.288208
15-Feb-21 13:00:00	1046.021851
15-Feb-21 14:00:00	1014.503113
15-Feb-21 15:00:00	977.2547607
15-Feb-21 16:00:00	977.6938477
15-Feb-21 17:00:00	1005.31189

Max	1144.78
Min	723.86

Date and Hour Ending	Hourly Average
15-Feb-21 18:00:00	1105.559448
15-Feb-21 19:00:00	1143.630859
15-Feb-21 20:00:00	1131.096436
15-Feb-21 21:00:00	1098.677124
15-Feb-21 22:00:00	1049.22876
15-Feb-21 23:00:00	970.2428589
16-Feb-21 00:00:00	919.7061157
16-Feb-21 01:00:00	883.0762329
16-Feb-21 02:00:00	863.2757568
16-Feb-21 03:00:00	861.0617065
16-Feb-21 04:00:00	871.0275269
16-Feb-21 05:00:00	905.8637085
16-Feb-21 06:00:00	969.5854492
16-Feb-21 07:00:00	1021.517273
16-Feb-21 08:00:00	1063.283325
16-Feb-21 09:00:00	1091.123779
16-Feb-21 10:00:00	1073.36377
16-Feb-21 11:00:00	1060.780518
16-Feb-21 12:00:00	1086.29248
16-Feb-21 13:00:00	1053.756958
16-Feb-21 14:00:00	1006.459412
16-Feb-21 15:00:00	1018.066895
16-Feb-21 16:00:00	986.8986206
16-Feb-21 17:00:00	994.7495728
16-Feb-21 18:00:00	1053.28186
16-Feb-21 19:00:00	1082.107056
16-Feb-21 20:00:00	1064.040039
16-Feb-21 21:00:00	1034.929688
16-Feb-21 22:00:00	966.2254639
16-Feb-21 23:00:00	888.9539185

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-24:

Please provide a comparison which shows how Average & Excess/4 CP was calculated in Docket No. 46831 and the calculation method which EPE proposes in this case.

RESPONSE:

The calculation method of the 4 Coincident Peak-Average and Excess ("4CP-A&E") allocators used by El Paso Electric Company ("EPE") is the same in Docket No. 46831 and in this case. However, EPE changed the load factor used in its calculation of the 4CP-A&E allocators. In Docket No. 46831, EPE employed a load factor in its calculation of the 4CP-A&E based on the single highest peak demand ("1CP"). However, in this case EPE has determined that it is proper to return to its past practice of using a load factor based on the four peak months ("4CP") in its calculation of the 4CP-A&E. Please refer to the direct testimony of EPE witness George Novela, page 7, line 30 through page 10, line 5 for a detailed explanation on load factor difference.

Preparer: Juan Cardenas — Title: Economist – Staff

Sponsor: George Novela — Title: Director – Economic & Rate Research

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-25:

Please provide the monthly capacity factor for each EPE generation plant.

RESPONSE:

Please see table below for monthly capacity factors by plant during the test year:

Month	Copper	Montana	Newman	Rio Grande	Palo Verde
January	0.4%	21.5%	44.2%	16.1%	99.9%
February	10.7%	34.4%	25.6%	29.7%	89.4%
March	10.1%	22.1%	35.9%	31.8%	93.8%
April	5.7%	32.1%	38.6%	34.0%	69.3%
May	6.9%	28.6%	49.9%	49.3%	92.9%
June	14.4%	35.3%	62.3%	28.9%	98.9%
July	20.5%	43.0%	64.4%	56.3%	98.3%
August	3.2%	41.1%	58.2%	57.6%	98.0%
September	0.0%	23.4%	59.8%	47.1%	98.7%
October	0.0%	17.7%	40.4%	30.7%	75.3%
November	0.0%	14.7%	37.6%	25.9%	66.4%
December	0.0%	15.3%	37.1%	27.4%	94.4%

Preparer: Aaron A. Arzaga — Title: Sr. Data Scientist & Business Intelligence Analyst

Sponsor: J Kyle Olson — Title: Manager – Power Generation Engineering
David C. Hawkins — Vice President – Strategy & Sustainability

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S NINTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-26:

Please provide all supporting documents for development of EPE's incremental generation capacity costs as applied to EPE's interruptible credits. Provide the source for all assumptions, including the forecasted construction cost of peak generation.

RESPONSE:

Please see El Paso Electric Company's ("EPE") responses to VS 1-23 and UTEP 2-7.

Forecasted construction cost of peak generation was not considered in the development of the incremental generation capacity costs.

Preparer: Manuel Carrasco Title: Manager – Rate Research

Sponsor: Manuel Carrasco Title: Manager – Rate Research

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CEP 9-27:

Please specify the criteria (including any numerical thresholds) for identifying generation capacity which is subject to the 4CP allocation method.

RESPONSE:

El Paso Electric Company did not use any numerical thresholds. The only criteria used in the cost of service for demand-related generation costs subject to the 4-Coincident Peak ("4CP") allocator is if the demand-related costs are from a peaking generation facility. Refer to page 11, lines 2 through 8, of Adrian Hernandez's direct testimony for a list of the peaking facilities.

Preparer: Adrian Hernandez Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez Title: Senior Rate Analyst – Rates

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CEP 9-28:

Are interruptible loads excluded from the E1ENERGY allocation factor for both jurisdictional allocation and retail class allocation? Please explain why interruptible loads are excluded from the E1ENERGY allocation factor. Does the Company contend that interruptible customers receive no benefit from the generation output supported by non-fuel production O&M expense? Please explain this answer.

RESPONSE:

Yes. The E1ENERGY allocator excludes interruptible (non-firm) kilowatt-hours ("kWh") in both jurisdictional and rate class allocations. The E1ENERGY allocator is used to allocate energy-related generation operation and maintenance ("O&M") expenses in the cost of service. Since the results of these allocations in the cost of service are used to determine EPE's firm base rates, then non-firm kWh should not be included in allocating O&M production expenses. Therefore, just like non-interruptible customers, interruptible customers receive the same treatment by using only their firm kWh in determining the production O&M costs included in their firm base rates.

Preparer: Adrian Hernandez Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez Title: Senior Rate Analyst – Rates

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QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-29:

Please provide all workpapers supporting the development of the interruptible credit.

RESPONSE:

Please see El Paso Electric Company's response to VS 1-29.

Preparer: Manuel Carrasco Title: Manager – Rate Research

Sponsor: Manuel Carrasco Title: Manager – Rate Research

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CEP 9-30:

For the previous 10 years, identify the number of Large C&I customers who made bankruptcy filings or became insolvent by year. Provide dollar amounts of annual electric bills for those customers.

RESPONSE:

The following reflects El Paso Electric Company's ("EPE") Large C&I Customers who formally notified EPE of bankruptcy filings or became insolvent by year. Large C&I Customers are defined by the FERC Uniform System of Accounts as those customers which have demands generally of 1000 kw or larger.

Year	Number of C&I Large Customers	Annual Electric Bills
2011	0	0
2012	0	0
2013	0	0
2014	0	0
2015	0	0
2016	0	0
2017	0	0
2018	0	0
2019	0	0
2020	1	363,166
Total	1	363,166

Preparer: Mayte Luna — Title: Supervisor – Revenue Collection

Sponsor: James Schichtl — Title: Vice President – Regulatory and Government Affairs

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CEP 9-31:

Please identify (by FERC account) the production demand expenses allocated on the DPROD12 allocation factor.

RESPONSE:

FERC ACCOUNT	Total Company Amount	Texas Amount
556000-System Control & Load Dispatching	$955,122	$778,768

Preparer: Adrian Hernandez Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez Title: Senior Rate Analyst – Rates

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QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-32:

Please provide details regarding the costs included in Miscellaneous Distribution Expense.

RESPONSE:

Costs included in Account 588000-Miscellaneous Distribution Expenses are the cost of labor or materials incurred in the distribution system not provided for elsewhere. This includes labor related to updating physical characteristics of distribution lines and substations, joint use pole maps, distribution voltage and load records, keeping service interruption and trouble records, office supplies, communication and software hosting services, and safety and training expenses for distribution crews. In this proceeding, this account also includes a credit amount related to the COVID 19 adjustment. See table below:

Account	Total Company Amount	Texas Amount
588000- COVID-19 ADJ ONLY	($77,018)	($48,900)
588000-DISTR-MISC DISTR EXP	$1,655,419	$1,051,053
588000-DISTR-MISC DISTR EXP-LABOR	$114,328	$72,589
588000-NMDIS-MISC DISTR EXP	$210,904	$0
588000-NMDIS-MISC DISTR EXP-LABOR	$604,190	$0
588000-TXDIS-MISC DISTR EXP	$1,540,966	$1,540,966
588000-TXDIS-MISC DISTR EXP-LABOR	$4,588,023	$4,588,023
	$8,636,813	$7,203,731

Preparer: Adrian Hernandez — Title: Senior Rate Analyst – Rates
Darcy Welch — Supervisor – T&D Financial Analysis & Planning

Sponsor: Adrian Hernandez — Title: Senior Rate Analyst – Rates
R. Clay Doyle — Vice President – Transmission & Distribution

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QUESTION NOS. CEP 9-1 THROUGH CEP 9-43

CEP 9-33:

Please identify the components of major account representative expense as discussed by witness Hernandez at 24. Explain the basis for allocating these costs on a customer basis to non-residential classes. Provide the job description of major account representatives, particularly as it relates to defining the customer classes they assist.

RESPONSE:

To the extent the question is asking about demand, energy, and customer ("DEC") components, they fall under "Customer - 903 Customer Rec & Collections." The major account representative expense includes the payroll and benefits (allocated to Texas) for the major account representatives. See El Paso Electric Company's ("EPE") response to CEP 9-12.

The basis for allocating these costs on a customer-based allocator to non-residential classes came from EPE's 2015 rate case. See CEP 9-33, Attachment 1.

See EPE's response to OPUC 7-2, Attachment 2, for the job descriptions.

Preparer: Adrian Hernandez — Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez — Title: Senior Rate Analyst – Rates

he makes no reference to the Four Corners Generation Station which APS also operates on behalf of EPE).

EPE believes that it is properly applying the correct allocator to Account 920, namely a labor allocator, which is properly calculated and consistent with NARUC's recommendation. Additionally, EPE believes it is not reasonable to "cherry-pick" Account 920's allocator and to leave intact all the other accounts that use the labor allocator. Therefore, Mr. Johnson's recommendation to use an overall plant in service allocator for Account 920 should be rejected.

Q. CEP WITNESS JOHNSON BELIEVES THAT GENERAL ADVERTISING COSTS SHOULD BE ALLOCATED ON A PLANT BASIS INSTEAD OF ON A CUSTOMER BASIS. DO YOU AGREE WITH THIS RECOMMENDATION?

A. No. Account 930.1 (General Advertising) expenses are incurred to educate customers on billing practices, services, and rates. They are also incurred to educate customers on energy conservation and electrical safety. Therefore, allocation based on number of customers is reasonable for these expenses, and it is also recommended by the NARUC Manual. For these reasons, and similar to my discussion on Account 920 above, Mr. Johnson's recommendation for a plant allocator for Account 930.1 should be rejected.

Q. MR. MARCUS PROPOSES TO CHANGE THE WAY THE COMPANY ALLOCATES COSTS OF ITS MAJOR ACCOUNT REPRESENTATIVES. INSTEAD OF ALLOCATING THE COST BY NUMBER OF CUSTOMERS, HE WOULD DIRECTLY ASSIGN THE COSTS TO LARGE CUSTOMERS. WHAT IS YOUR OPINION OF THIS PROPOSAL?

A. EPE currently has four (4) Major Account Representatives assigned to serve large customers. Some of these large customers may have several accounts, all of which may be served under more than one rate class and at different voltages within those rate classes. The ideal example of such a customer is the City of El Paso, which takes service under several rate schedules (including Small General Service, General Service, and Large Power rate schedules that the City & County rate class is proposed to migrate to). I agree with Mr. Marcus' suggestion that allocating costs of major account representatives to the rate classes that utilize their services is reasonable and consistent with cost causation principles. I disagree, however, that an arbitrary weighting factor of 0.1 should be applied to smaller general service customers, because those customers are subject to the services provided by the major accounts representatives. The commitment of time in providing service to a smaller general service customer may be similar to the time involved in providing service to an industrial customer. For these reasons, EPE will segregate the costs of the major account representatives group[4] from Account 903 (Customer Records & Collections) and allocate those costs based on a customer count that is net of any rate class that a domestic type of customer may take service under (e.g., in the current filing, Residential Rate 01, Partial Requirements Rate 03, Water Heating Rate WH, and Private Area Lighting).

Q. OPUC WITNESS MARCUS PROPOSES TO USE PRODUCTION LABOR COSTS TO ALLOCATE EMPLOYEE-RELATED COSTS FOR THE GENERATION FUNCTIONAL ALLOCATION OF A&G EXPENSES. HE CLAIMS THAT THE COMPANY'S USE OF PRODUCTION DEMAND FACTORS TO ALLOCATE THESE

[4] Mr. Marcus identifies that EPE incurred $306,954 (total company) for major account representatives in the Test Year in FERC Account 903, and refers to EPE's response to OPUC RFI No. 4-26.

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CEP 9-34:

Please specify the items and amounts included in other operating revenues and miscellaneous service revenues. Explain the class allocation methods applied to other operating revenues and miscellaneous service revenues.

RESPONSE:

Account	Amount	Allocator	Explanation
450000-TEXAS-FORFEITED DISCOUNTS	($1,276,178)	UNCOLL_REVS	Allocated similar to uncollectible expense.
451000-TEXAS-MISC SVC REV-CUST	($168,071)	CUSTLABOR	Allocated according to Workpaper Q-3.3.
451000-TEXAS-MISC SVC REV-DIST	($773,062)	DISTLABOR	Allocated according to Workpaper Q-3.3.
451000-TEXAS-MISC SVC REV-METER	($1,507,881)	METER	Allocated according to Workpaper Q-3.3.
451000-TEXAS-MISC SVC REV-OTHER	($420,645)	DISTLABOR	Related to interconnection fees.
454000-GENL-RENT FROM ELEC PROP-TX	($1,040,745)	LABOR	Related to General plant.
454000-TRANS-RENT FROM ELEC PROP - TX	($39,619)	D2TRAN	Related to Transmission plant.
454000-TXDIS-RENT FROM ELEC PROP	($1,228,774)	DISTPLT	Related to Distribution plant.
456000-TX FUEL-OTHER ELECTRIC REV	($504,721)	D1PROD	Related to Production.
456000-TX OTHER ELEC REVENUES	($452,399)	D1PROD	Related to Palo Verde.
456100-TX TRANS OF ELECTRIC OTHERS	($19,509,898)	D2TRAN	Related to Transmission.
OTHER OPERATING REVENUES*	**($26,921,992)**		

*As shown in Schedule A-1, line 11.

Preparer: Adrian Hernandez — Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez — Title: Senior Rate Analyst – Rates

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CEP 9-35:

To the extent feasible, for each of the revenue components provided in response to No. 33 above, provide the percentages paid by residential, C&I, and public authorities.

RESPONSE:

To the extent the question is asking about demand, energy, and customer ("DEC") components, please refer to schedule P-6 to see how the DEC Component (Customer - 903 Customer Rec & Collections) is assigned across rate classes. Otherwise, El Paso Electric Company does not have the information requested.

Preparer: Adrian Hernandez Title: Senior Rate Analyst – Rates

Sponsor: Adrian Hernandez Title: Senior Rate Analyst – Rates

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CEP 9-36:

Provide a full explanation of the circumstances pertaining to the interruptible customer penalized due to non-compliance as stated on page 11 of Mr. Carrasco's testimony. Please explain whether this customer had previously failed to comply with an interruption requirement. Did this customer comply with any interruption requirements in 2021?

RESPONSE:

On August 13, 2020, El Paso Electric Company ("Company") provided notice to its interruptible customers requesting curtailment of power requirement to firm levels. On August 18, 2020, the Company again provided notice to its interruptible customers requesting curtailment of power requirement to firm levels. Except for a sole interruptible customer, the interruptible customers responded to both notices pursuant to their agreement with the Company.

The non-compliant customer, having not responded to both notices, became subject to the Non-Compliance provision of Schedule No. 38 Noticed Interruptible Power Service. That provision states that "During the same calendar year, the second occasion in which the Customer fails to comply with a request for curtailment shall result in the Customer being re-billed at the Retail Rate for the period from January 1 of such calendar year through the end of the month in which such second failure occurred (less amounts previously remitted by Customer for such period) with an additional five percent (5%) charge applied to the additional base portion of the recalculated monthly bills (less amounts previously remitted by Customer for such period)."

To date, the Company has not required any interruptions in 2021.

Preparer: Manuel Carrasco   Title: Manager – Rate Research

Sponsor: Manuel Carrasco   Title: Manager – Rate Research

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CEP 9-37:

Provide correspondence pertaining to the interruptible penalty discussed on page 11 of Mr. Carrasco's testimony.

RESPONSE:

See CEP 9-37 Attachment 1 - Highly Sensitive Protected Materials.

Preparer: Manuel Carrasco Title: Manager – Rate Research

Sponsor: Manuel Carrasco Title: Manager – Rate Research

PUBLIC

CEP 9-37 Attachment 1 is a CONFIDENTIAL and/or HIGHLY SENSITIVE PROTECTED MATERIALS and VOLUMINOUS attachment.

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CEP 9-38:

Has EPE imposed any interruptible penalties in years prior to 2020? If yes specify the amounts by year.

RESPONSE:

Yes.

Year	Schedule No. 38 Interruptible Penalties
2016	$224,188.91
2017	$236,450.24
2018	$217,484.08
2019	$0.00

Preparer: John Zacarias Title: Supervisor – Billing

Sponsor: Manuel Carrasco Title: Manager – Rate Research

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CEP 9-39:

Referring to Carrasco at 34, l. 9-15, provide a customer charge comparison which includes the investor owned TDUs in ERCOT.

RESPONSE:

El Paso Electric Company's ("EPE") has not performed a customer charge comparison that includes the investor-owned transmission and distribution utilities ("TDU") in ERCOT. EPE does not believe the customer charges for TDUs in ERCOT are comparable because they do not have a direct relationship with the customer.

Preparer: Manuel Carrasco Title: Manager – Rate Research

Sponsor: Manuel Carrasco Title: Manager – Rate Research

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CEP 9-40:

For each class, provide the dollar amount of the summer/winter differential (i.e., the summer adder) if the differential is set at (a) the current one cent, or (b) the proposed two cents. Please explain how the cost of the low income rider is recovered.

RESPONSE:

El Paso Electric Company ("EPE") has not performed a calculation to determine the dollar amount of the summer/winter differential. The dollar amount of the summer/winter differential, however, can be calculated by multiplying the differential by the summer kilowatt-hour ("kWh") sales.

The cost of the low-income rider is recovered through the energy charge assessed to all Residential Service customers.

Preparer: Manuel Carrasco Title: Manager – Rate Research

Sponsor: Manuel Carrasco Title: Manager – Rate Research

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CEP 9-41:

With respect to EPE's proposal to require TOD pricing for new General Service customers, as discussed by Carrasco at 51, please provide any internal reports or analyses of this policy.

RESPONSE:

El Paso Electric Company's ("EPE") proposal to require time-of-day ("TOD") pricing for new General Service customers is a management decision aligned with the Company's 20-year rate initiative (see EPE's response to CEP 8-6). EPE did not prepare internal reports or analyses regarding this proposed policy.

EPE's proposal in this proceeding continues with the Commission-approved policy implemented in EPE's 2017 Texas Rate Case, which is to require new General Service customers with a load estimated to be greater than 400 kilowatts ("kW") to take service under the TOD rate option. In the current proceeding, the threshold is lowered to 200 kW. At that proposed threshold, EPE is making gradual movement toward the mandatory (or opt-out) TOD pricing enabled by implementation of its advanced metering system. Customers with loads exceeding 200 kW will have the pricing signal to make efficient and economic decisions regarding their consumption during EPE's periods of critical system loads, with the intended consequence of improving EPE's system load factor.

Preparer: Manuel Carrasco — Title: Manager – Rate Research

Sponsor: Manuel Carrasco — Title: Manager – Rate Research

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CEP 9-42:

Currently, what percentage of General Service customers opted to participate in the optional TOD program.

RESPONSE:

As of the end of the test year, 158 General Service customers opted to participate in the optional time-of-day ("TOD") program. This represents 2.2 percent of the total General Service customer count.

Preparer: Manuel Carrasco		Title: Manager – Rate Research

Sponsor: Manuel Carrasco		Title: Manager – Rate Research

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CEP 9-43:

Will General Service mandatory TOD customers incur meter costs in excess of the standard service rate? If yes, please explain the monthly increase in cost.

RESPONSE:

No.

Preparer: Manuel Carrasco Title: Manager – Rate Research

Sponsor: Manuel Carrasco Title: Manager – Rate Research

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CONFIDENTIALITY STATEMENT UNDER SECTION 4 OF THE PROTECTIVE ORDER

The undersigned attorney for El Paso Electric Company (EPE) submits this statement under the section 4 of the Protective Order entered in this case. Material provided in the response to CEP 9-37, Attachment 1 HSPM of the City of El Paso's ninth set of discovery is exempt from public disclosure pursuant to sections 552.101 the Public Information Act (PIA) and section 32.101(c) of the Public Utility Regulatory Act. The response contains customer information that is considered highly sensitive trade secrets. The undersigned counsel for EPE has reviewed the information described above sufficiently to state in good faith that the information is exempt from disclosure under the PIA and merits the confidential designation given to it.

Respectfully submitted,

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By:______________________________
Matthew K. Behrens

ATTORNEYS FOR EL PASO ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I certify that a true and correct copy of this document was served by email on all parties of record on September 13, 2021.

Matthew K. Behrens

The following files are not convertible:

CEP 09-04_Attachment 01.xlsx
CEP 09-23_Attachment 01.xlsx
CEP 09-23_Attachment 02.xlsx
CEP 09-23_Attachment 03.xlsx

Please see the ZIP file for this Filing on the PUC Interchange in order to access these files.

Contact centralrecords@puc.texas.gov if you have any questions.