

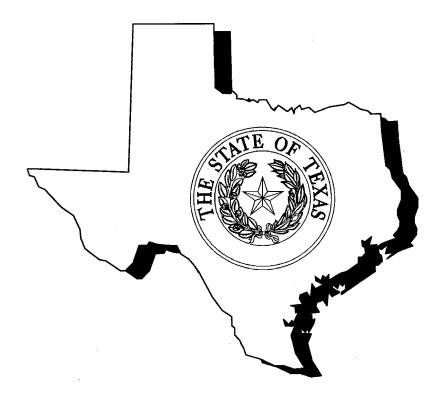
## Filing Receipt

Received - 2021-10-29 02:28:15 PM Control Number - 52195 ItemNumber - 327

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

#### APPLICATION OF EI PASO ELECTRIC COMPANY TO CHANGE RATES

\$ \$ \$ \$ BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS



**DIRECT TESTIMONY OF** 

#### ADRIAN NARVAEZ

#### **RATE REGULATION DIVISION**

#### PUBLIC UTILITY COMMISSION OF TEXAS

October 29, 2021

#### **Table of Contents**

I.	PROFESSIONAL QUALIFICATIONS	3
II.	PURPOSE AND SCOPE OF TESTIMONY	4
III.	SUMMARY OF RECOMMENDATIONS	5
IV.	CLASS ALLOCATION OF PEAKING GENERATION FACILITIES	6
V.	A&E 4CP CLASS ALLOCATION FACTOR	9
VI.	ENERGY EFFICIENCY ADJUSTMENT	12
VII.	OTHER RIDERS	23
VIII.	CONCLUSION	24

#### **ATTACHMENTS:**

Attachment AN-1	Regulatory Résumé of Adrian Narvaez
Attachment AN-2	Jurisdictional Cost of Service Summary
Attachment AN-3	Class-Functional Cost of Service Summary
Attachment AN-4	Staff's DCRF, TCRF, GCRR Baselines

1		I. <u>PROFESSIONAL QUALIFICATIONS</u>
2	Q.	Please state your name and business address.
3	A.	Adrian Narvaez, Public Utility Commission of Texas (Commission), 1701 N. Congress
4		Avenue, Austin, TX 78701.
5	Q.	By whom are you employed and in what capacity?
6	A.	I am employed by the Commission as a Rate Analyst in the Tariff and Rate Analysis
7		Section of the Rate Regulation Division.
8	Q.	What are your responsibilities as a Rate Analyst for the Commission?
9	A.	My principal responsibility is analyzing utility filings on matters relating to rate design and
10		cost allocation. My responsibilities include analyzing utility industry regulatory policy,
11		reviewing tariffs to determine compliance with Commission requirements, and preparing
12		and presenting testimony as an expert witness on cost allocation and rate design issues in
13		contested proceedings before the Commission and the State Office of Administrative
14		Hearings (SOAH).
15	Q.	Please state your educational background and professional experience.
16	A.	Attachment AN-1 contains a summary of my regulatory experience and educational
17		background.
	~	

- 18 Q. Have you previously filed testimony before the Commission?
- 19 A. Yes. Attachment AN-1 contains a listing of direct testimony I have filed at the Commission.

1			II. <u>PURPOSE AND SCOPE OF TESTIMONY</u>
2	Q.	What	is the purpose of your testimony in this proceeding?
3	A.	My te	estimony regarding El Paso Electric Company's (EPE) application will address
4		propos	sals with regards to EPE's cost allocation and rate design issues. My testimony will
5		also ac	ddress, in whole or in part, the following issues from the Commission's Preliminary
6		Order	
7		46.	What are the just and reasonable rates calculated in accordance with PURA and
8			Commission rules? Do the rates comport with the requirements in PURA § 36.003?
9		48.	What are the appropriate billing and usage date for El Paso Electric's test year?
10			a. What known and measurable changes, if any, should be used to adjust the test-
11			year data?
12		49.	What are appropriate allocations of El Paso Electric's revenue requirement to
13			jurisdictions, functions, and rate classes?
14			a. What is the appropriate allocation of El Paso Electric's expenses, invested
15			capital, and revenue to Texas retail customers?
16		53.	Has El Paso Electric proposed any rate riders? If so, should any of the proposed
17			riders be adopted? If so, what are the appropriate costs to be recovered through the
18			riders, and what are the appropriate terms and conditions of the riders?
19		57.	Should baseline amounts be determined in this proceeding for future TCRF, DCRF,
20			generation recovery factor, or interim transmission cost of service filings? If so,
21			what are the investment and expense components and amounts?

#### 1 Q. Please describe your role in this proceeding.

2	A.	In addition to the specific issues I address further in my testimony, I have prepared
3		Commission Staff's Class Cost of Service Study (CCOSS). In preparing Staff's proposed
4		CCOSS, I incorporated the recommended adjustments presented by Staff witnesses Ruth
5		Stark, Emily Sears, Heidi Graham, and Diane Hopingardner. Based on Staff's proposed
6		CCOSS, and the recommendation provided by Staff witness William Abbott, I calculated
7		Staff's proposed Texas retail rates and Staff's recommended transmission cost recovery
8		factor (TCRF), distribution cost recovery factor (DCRF), and generation cost recovery
9		rider (GCRR) baseline values based on Staff's CCOSS.
10		
11		III. SUMMARY OF RECOMMENDATIONS
10		
12	Q.	What is your recommendation?
12	<b>Q.</b> A.	
		What is your recommendation?
13		What is your recommendation? I recommend that:
13 14		<ul> <li>What is your recommendation?</li> <li>I recommend that:</li> <li>The Average and Excess Four Coincident Peak (A&amp;E 4CP) allocation factor be</li> </ul>

Staff's updated CCOSS, as shown in attachment AN-4, be adopted, and used to set 18 • 19 rates.

The Commission approve Staff's proposed TCRF, DCRF, and GCRR baselines 20 • consistent with Staff's CCOSS as shown in attachment AN-4. 21

1		• EPE's proposed adjustment to test year kWh billing determinants for energy
2		efficiency programs is not known and measurable and conflicts with Commission
3		precedent, and therefore should be rejected.
4		• The Commission reject EPE's proposal to adjust the Federal Tax Refund Factor
5		(FTRF) tariff to account for any future change in federal tax rates.
6		• The Commission approve Staff's proposed rates as seen in Attachment AN-5.
7	Q.	What material did you use to prepare your testimony?
8	A.	In preparation for my testimony, I reviewed the application submitted by EPE to the
9		Commission, the testimony of various EPE witnesses, certain discovery responses, prior
10		Commission dockets, testimony filed by other Staff witnesses in this case, and the
11		Commission's rate filing package.
12		
13		IV. <u>CLASS ALLOCATION OF PEAKING GENERATION FACILITIES</u>
14	Q.	What is EPE's proposed class allocation methodology for generating facilities?
15	A.	EPE proposed two different class allocation methodologies for generation facilities. For
16		peaking generation facilities, EPE proposed the average four coincident peak (4CP) class
17		allocation factor. For all other generation facilities, EPE proposed the A&E 4CP class
18		allocation factor.

# Q. Has the Commission approved a 4CP class allocation treatment for generation facilities in any recent base rate case?

- 3 A. Not to my knowledge. As seen in the chart below. The Commission has approved the A&E
- 4 4CP class allocation factor for all generation facilities in all the most recent fully litigated
- 5 base rate cases for vertically integrated utilities such as EPE.

Function	ETI Docket No. 39896 Commission- adopted allocation basis	SWEPCO Docket No. 40443 Commission- adopted class allocation basis	SPS Docket No. 43695 Commission- adopted class allocation basis	SWEPCO Docket No. 46449 Commission- adopted class Allocation basis	
Generating Facilities	Production	Production	Production	Production	
Commission-Approved Class	A&E 4CP	A&E 4CP	A&E 4CP	A&E 4CP	
Allocation Factor	demand	demand	demand	demand	

6

7 Q. Why has EPE proposed to use a 4CP class allocation treatment for the class allocation

8 of peaking generation facilities instead of the standard Commission-approved A&E

- 9 4CP class allocation method?
- 10 A. In his direct testimony, EPE witness Adrian Hernandez stated:

EPE's generation facilities are a mix of non-peaking and 11 peaking units. The peaking units were primarily designed to 12 be ramped up and down as needed to meet load fluctuations, 13 especially during peak summer hours. Unlike the other units, 14 15 these facilities are not designed to run for extended periods of time. Therefore, the peaking units can be expected to be 16 operating at high load during the times of EPE's system peak 17 18 and for load following, but not necessarily during native system off-peak times (such as during the night).<sup>1</sup> 19

<sup>&</sup>lt;sup>1</sup> Application, Direct Testimony of Adrian Hernandez at 10.

## Q. Do you agree with EPE's proposed methodology for the class allocation of peaking generating facilities?

3 A. No. In addition to conflicting with well-established Commission precedent, EPE's proposal is unwarranted because the A&E 4CP allocation factor already appropriately acknowledges 4 4CP peak demand. The A&E 4CP allocation factor is a composite allocation factor 5 comprised of an average component and an excess component. The average component 6 7 reflects the fact that some generating facilities are needed to provide power throughout the 8 year, while the excess component reflects the fact that additional generating facilities must be available to meet peak demand during the summer months. Therefore, EPE's proposal 9 is unnecessary because the Commission-approved A&E 4CP class allocation factor already 10 11 accounts for the fact that EPE must ramp up generation in order to meet peak demand during the summer months. 12

# Q. Does EPE's proposed departure from the standard Commission-approved A&E class allocation method conflict with EPE's stated goal of properly focusing on the need to provide peaking power?

A. Yes. As discussed in the next section of my direct testimony, EPE's proposed adjustment to the Commission-approved A&E 4CP class allocation method produces the opposite effect, by placing greater emphasis on the average demand component. In other words, there is less emphasis on the peak demand component of the A&E 4CP class allocation factor due to EPE's proposed departure from the standard Commission-approved method for calculating the A&E 4CP allocation factor.

- 22
- 23

1	Q.	What is your recommendation regarding the class allocation of generation facilities?
2	A.	I recommend that EPE's proposal to use a separate peaking facility allocator be rejected,
3		and that the standard Commission-approved A&E 4CP class allocation method be used to
4		allocate all production demand costs among the rate classes, consistent with my
5		recommended adjustment to EPE's proposed A&E class allocation factor discussed in the
6		next section of my direct testimony.
7		V. <u>A&amp;E 4CP CLASS ALLOCATION</u>
8	Q.	How did EPE calculate the load factor that it used to derive the A&E 4CP production
9		demand class allocation factors?
10	A.	EPE calculated the system load factor based on the average of the total system coincident
11		peaks in the months of June, July, August, and September (4CP months), instead of using
12		the single system peak to calculate the system load factor.
13	Q.	Is EPE's proposed change to the A&E 4CP class allocation factor calculation
14		consistent with Commission precedent?
15	A.	No. The Commission addressed the appropriate method of calculating the A&E 4CP class
16		allocation factor in Docket No. 43695. In that docket, the Commission approved the use of
17		the single total annual system peak load factor to be used in deriving the A&E 4CP
18		allocation factor, despite the fact that the utility proposed using the 4CP load factor, as EPE
19		proposes in this case. <sup>2</sup> The Commission again approved the use of the single peak load

<sup>&</sup>lt;sup>2</sup> Application of Southwestern Public Service Company for Authority to Change Rates, Docket No. 43695, Final Order at Finding of Fact 251A (Feb. 23, 2016).

	PUC	Docket No. 52195 Page 10
1		factor methodology in Southwestern Electric Power Company's last fully litigated rate
2		case, Docket No. 46449. <sup>3</sup>
3	Q.	Is EPE's system planning based on 4CP demand?
4	A.	No. In the Direct Testimony of EPE witness George Novela, he states that EPE's system
5		planning is based on forecasted system coincident peak. <sup>4</sup> This stands to reason since EPE's
6		production infrastructure must be able to meet total system peak demand at any time, and
7		not the lesser level of demand derived by averaging four monthly peak demands.
8	Q.	What is the reasoning behind EPE's decision to use a 4CP load factor to calculate the
9		A&E 4CP production demand class allocation factors?
10	A.	In his Direct Testimony, Mr. Novela states:
11		Unlike a historical CP, a forecasted CP is not a known number but rather a point estimate with a probabilistic
12 13		dispersion around it reflecting the expected value of the
15 14		peak. While the forecasted peak appears to be a single
14 15		number, it actually represents the "expected peak" which is
16		a probabilistic estimate of the maximum load EPE must
17		meet. Using the single CP from the historical test year does
18		not truly reflect a peak for planning purposes. However,
19		averaging four peaks provides a CP that more likely reflects
20		the expected value of peak conditions since it reflects a range
21		of peak values, each of which has some expectation of
22		occurring. <sup>5</sup>
23	Q.	Do you agree with Mr. Novela's reasoning?
24	A.	No. Cost allocation should reflect the cost drivers that cause the utility to incur a particular
25		cost. If class cost allocation factors reflect the cost drivers that caused a utility to incur a

26 cost, each class is allocated the amount of costs they caused the utility to incur. Such an

<sup>&</sup>lt;sup>3</sup> Application of Southwestern Electric Power Company for Authority to Change Rates, Docket No. 46449, Order on Rehearing at Finding of Fact 277 (Mar. 19, 2018).

<sup>&</sup>lt;sup>4</sup> Application, Direct Testimony of George Novela at 9.

<sup>&</sup>lt;sup>5</sup> *Id.* at 9-10.

1		approach produces cost-based rates that are sufficient, equitable, and consistent in
2		application to each class, and consistent with Commission rules. <sup>6</sup> Since system planning is
3		based on total system peak, the load factor used to derive the A&E 4CP allocation factor
4		should be calculated using EPE's total annual system peak. Mr. Novela's proposal to use a
5		4CP load factor distorts actual total system peak demand and therefore does not reflect the
6		extent to which each class contributes to EPE's total annual system peak demand.
7		Furthermore, Mr. Novela's reasoning is fundamentally incorrect on its own terms.
8		Averaging the four highest monthly peaks will always produce an average 4CP that is lower
9		than the system peak, and such 4CP averaging is thus an inappropriate method to use to
10		estimate the expected value of peak conditions.
11	Q.	What is the effect of using average 4CP rather than the single annual peak to calculate
12		the system load factor in the A&E 4CP calculation?
13	A.	This approach assigns too much weight to the average demand components of the A&E
14		4CP calculations and assigns inadequate weight to the excess components. The result is a

failure to fully allocate the costs of peaking generation units to the classes that cause the need to serve that peak load. Consequently, holding other variables constant, customers in classes that exhibit higher load factors would be allocated some of the production capacity costs that, per Commission precedent, were caused by other classes.

- 19
- 20
- 21

 $<sup>^{6}</sup>$  See 16 TAC §§ 25.234(a) and (b).

1	Q.	How do you recommend EPE's system load factor be calculated for use in the
2		production and transmission demand class allocation factors?
3	A.	Consistent with cost causation and Commission precedent, I recommend that the load
4		factor used to derive the A&E 4CP allocation factor be calculated using EPE's single total
5		annual system peak demand.
6		
7		VI. ENERGY EFFICIENCY ADJUSTMENT
8	Q.	What is EPE proposing to do regarding energy efficiency?
9	A.	EPE is proposing to reduce its test year kWh billing determinants for Texas as well as New
10		Mexico jurisdictions by an estimated amount of kWh saved during the test year due to
11		energy efficiency programs. <sup>7</sup> This adjustment artificially decreases present revenues, alters
12		various jurisdictional and class allocation factors, and increases base rates for classes that
13		participate in energy efficiency programs.
14	Q.	How does a reduction in billing determinants lead to an increase in base rates?
15	A.	At a general and highly simplified level, when establishing rates, the Commission follows
16		the basic formula below for most of the individual rates:
17		
18		$\frac{Revenue\ Requirement}{Billing\ Determinants} = Rate$
19		
20		So, for example, in establishing the Residential rate class kWh charge, the basic formula
21		might appear as such:

<sup>&</sup>lt;sup>7</sup> Application, Direct Testimony of Manuel Carrasco at 9.

1	
2	$\frac{Amount\ to\ be\ Recovered\ Through\ kWh\ Charge\ (dollars)}{Billing\ Determinants\ (kWh)} = Rate\ (dollars\ per\ kWh)$
3	
4	To continue the example with some hypothetical numbers, if the amount to be recovered
5	through the Residential kWh charge is ten million dollars, and the adjusted test-year level
6	of kWh billing determinants for the class was one hundred million kWh, the resulting
7	residential distribution delivery rate would amount to \$0.10 / kWh:
8	
9	$\frac{\$10,000,000}{100,000,000 \ kWh} = \$0.100 \ per \ kWh$
10	
11	EPE's proposed adjustment to reduce test year billing determinants based on energy
12	efficiency measures has the effect of increasing rates. This effect can be demonstrated by
13	reducing the kWh billing determinants in the denominator in my hypothetical example
14	from one hundred million kWh to approximately ninety million kWh:
15	
16	$\frac{\$10,000,000}{90,090,090 \ kWh} = \$0.111 \ per \ kWh$
17	
18	As can be seen, the adjustment to reduce the billing determinants by about ten million kWh
19	increases the resulting rate in this example by \$0.011 per kWh.
20	An important aspect of the basic ratemaking formula is that an identical rate
21	increase could be affected either by a reduction to the billing determinants denominator, as

1		shown above, or by an increase to the revenue requirement numerator. For example, the
2		same \$0.011 per kWh rate increase in the previous examples could be established by
3		increasing the revenue requirement by \$1,100,000, instead of decreasing the billing
4		determinants by about ten million kWh:
5		
6		$\frac{\$11,100,000}{100,000,000  kWh} = \$0.111  per  kWh$
7		
8		As these examples show, a recommendation to reduce billing determinants can be
9		substantively identical to a recommendation to instead increase revenue requirements.
10	Q.	Please describe the energy efficiency adjustment performed by EPE.
11	A.	EPE calculated its adjustment by using the total reported kWh saved in its Energy
12		Efficiency Plan and Report (EEPR) during the test year, as well as its energy savings goals
13		for 2021.8 The kWh savings were then annualized in order to recognize the impact of the
14		implementation of these programs. <sup>9</sup>
15	Q.	How many kWh has the Company estimated were saved during the test year?
16	A.	EPE estimates that annualized test year Texas jurisdictional energy savings were
17		21,657,352 kWh and that annualized New Mexico jurisdictional energy savings were
18		10,755,942 kWh. <sup>10</sup>
19	Q.	Should the Commission accept EPE's proposed energy efficiency adjustment?

<sup>8</sup> Id.

<sup>9</sup> Id.

<sup>&</sup>lt;sup>10</sup> *Id.* at Exhibit MC-3.

1	A.	No. EPE's proposed energy efficiency adjustment should be rejected because it is not
2		known and measurable, and it is substantially similar to previous adjustments previously
3		rejected by the Commission.

4

#### 5 EPE's Adjustment is Not Known and Measurable

# Q. Has the Company met its burden of proof for inclusion of this post-test year adjustment?

A. No. The standard for inclusion of post-test year adjustments is that the adjusted data must
be "known and measurable." In order to comport with the Commission's known and
measurable standard, the proposed change must be measurable or quantifiable. <sup>11</sup> For
example, when billing determinants are annualized for end-of-test-year number of
customers, this adjustment is based on the actual end-of-year number of customers, which
is easily measurable and quantifiable. However, it is not possible to determine actual
energy efficiency savings with this level of certainty.

While the estimated energy savings from the Evaluation, Measurement, and Verification (EM&V) process and the Texas Technical Reference Manual are sufficient for inclusion in the EEPR and Energy Efficiency Cost Recovery Factor (EECRF) applications, they do not meet the requirements to warrant a "known and measurable" adjustment in a base rate case. The energy savings data provided by EPE does not meet the burden of proof for a known and measurable adjustment because the values provided by EPE are not actual amounts of savings, only estimates.

<sup>&</sup>lt;sup>11</sup> Application of Southwestern Public Service Company for Authority to Change Rates, Docket No. 43695, Proposal for Decision at 166 - 167 (Oct. 12, 2015), citing Suburban Util Co v. Pub. Util. Com'n, 652 S.W.2d 358, 366 (Tex. 1983).

# Q. How is EPE's proposed energy efficiency adjustment different to the Customer adjustment routinely applied in rate cases?

3 A. The customer adjustment, which involves the annualization of Test Year data based on the number of customers at the end of the Test Year, is fundamentally different. The primary 4 distinction lies in the fact that the number of customers at the end of the Test Year is a 5 known and measurable quantity, whereas potential reductions to usage due to energy 6 efficiency measures are estimates, as previously discussed. Furthermore, there is an 7 8 unambiguous short-term relationship between the number of customers and the amount of expected energy usage. Customers necessarily use energy, so a greater number of 9 customers at the end of a Test Year clearly supports an upward customer adjustment to 10 Test Year energy sales, while fewer customers at the end of a Test Year clearly supports a 11 downward customer adjustment. As discussed later in my testimony, the relationship 12 13 between energy efficiency adoption and energy sales is indeterminate.

#### 14 Q. Is the Customer Adjustment included in the Rate Filing Package?

The Commission-approved Rate Filing Package ("RFP") for investor-owned 15 A. Yes. generating utilities like EPE includes Schedule O-1.1, which includes adjustments to test 16 year data due to changes in number of customers.<sup>12</sup> This schedule also includes weather 17 adjustments. These are standard adjustments included in base rate proceedings. 18 Admittedly, the RFP does require that utilities provide any information on other 19 adjustments, and therefore does not preclude a utility from requesting such adjustments; 20 21 however, the fact that the RFP includes Customer and Weather adjustments indicates that such adjustments are routine. That the RFP does not provide for energy efficiency 22

<sup>&</sup>lt;sup>12</sup> The Rate Filing Package for Investor-Owned Generating Utilities is available at: http://www.puc.texas.gov/industry/electric/forms/rfp/1992\_VI\_IOU.pdf

1		adjustments, and no such adjustments have ever been approved by the Commission,
2		indicates the extraordinary nature of EPE's request.
3	Q.	Have any Commission reports discussed the lack of precision associated with energy
4		efficiency savings estimates?
5	A.	Yes. The Commission's Report to the 85 <sup>th</sup> Legislature – Alternative Ratemaking
6		Mechanisms involved a report that included a discussion of energy efficiency adjustments
7		similar to EPE's requests to account for energy sales allegedly lost due to energy efficiency
8		measures. That report noted that:
9 10 11 12 13		Quantifying the sales lost due to conservation is problematic and controversial methods rely upon a combination of sampling, statistical analysis, and estimation of customer loads, and sometimes upon engineering estimates of the energy savings associated with particular energy efficiency investments. <sup>13</sup>
14		Regarding the engineering estimates underlying "deemed savings" values for energy
15		efficiency measures, the report noted (emphasis added):
16		Engineering estimates have dubious reliability. For example, M. Fowlie,
17		M. Greenstone, and C. Wolfram, <i>Do Energy Efficiency Investments</i>
18		Deliver? Evidence from the Weatherization Assistance Program, June 2015
19 20		reports the results of an experimental evaluation of the nation's largest
20		residential energy efficiency program conducted in Michigan on a sample
21 22		of 30,000 households. It finds that "upfront investment costs are about twice the actual [value of] energy savings," that <b>"model-projected savings</b>
22 23		are roughly 2.5 times the actual savings," and that even "when accounting
24		for the broader societal benefits of energy efficiency investments, the costs
25		still substantially outweigh the benefits; the average rate of return is
26		approximately -9.5% annually." In a widely cited study, J.A. Dubin, A.K.
27		Miedema, and R.V. Chandran, "Price effects of energy-efficient
28		technologies: A study of residential demand for heating and cooling," The
29		RAND Journal of Economics, 17(3), pp. 310–325, 1986 exploit a small field
30		experiment conducted by a Florida utility in which efficiency improvements
31		were randomly assigned. They find that consumers with improved
32		insulation and more efficient heating equipment conserve 8-13% less

<sup>13</sup> Report to the 85th Legislature – Alternative Ratemaking Mechanisms, Project No. 46046, Christensen Report at 24 (January 12, 2017).

1 2 3 4 5 6 7 8		energy than would be predicted from engineering models. More recently, L.W. Davis, A. Fuchs, and P. Gertler, "Cash for Coolers: Evaluating a Large-Scale Appliance Replacement Program in Mexico," <i>American</i> <i>Economic Journal: Economic Policy</i> , Vol. 4, No. 4, November 2014, pp. 207-38 use quasi-experimental variation to measure <i>ex post</i> realized energy savings for an appliance replacement program in Mexico. They find <b>upgrading the efficiency of air conditioners actually increased energy</b> <b>consumption</b> , which they interpret as a large rebound effect. <sup>14</sup>
9		The report further notes that energy efficiency adjustments "require controversial estimates
10		of sales lost due to conservation" and that there "is a significant risk of over-estimating
11		efficiency gains, thus over-compensating utilities and over-charging customers."15
12	Q.	Does the installation of energy efficiency measures necessarily results in lower energy
13		usage overall?
14	A.	No. The fact that an energy efficiency measure was installed during the Test Year does not
15		mean that the amount of energy reduction associated with that measure, if any, is a known
16		quantity. The Texas Technical Reference Manual is quite clear that the "savings" values
17		contained therein are estimates, not known quantities (emphasis added):
18 19 20 21 22 23 24		The purpose of the statewide Technical Reference Manual (TRM) is to provide a single common reference document for <b>estimating</b> energy and peak demand savings resulting from the installation of energy efficiency measures promoted by utility-administered programs in Texas. This document is a compilation of deemed savings values previously approved by the Public Utility Commission of Texas (PUCT) for use in <b>estimating</b> savings for energy efficiency measures. <sup>16</sup>
25		Moreover, efficiency improvements are fundamentally about getting more output for a
26		given quantity of resource input, but improvements in efficiency do not necessarily mean

<sup>&</sup>lt;sup>14</sup> *Id.* at footnote 36.

<sup>&</sup>lt;sup>15</sup> *Id.* at 30.

<sup>&</sup>lt;sup>16</sup> Public Utility Commission of Texas, Texas Technical Reference Manual, Version 6.0, Volume 1: Overview & User Guide, Program Year 2019, October 9, 2018 at 1-1. Available at http://www.texasefficiency.com/index.php/emv

that less of the resource input will be used overall. This is because consumer behavior is 1 very likely to change in response to increases in energy efficiency. It is a fundamental law 2 3 of microeconomics that as the relative price of a normal good decreases, the quantity demanded increases (the law of demand). A customer that installs energy efficiency 4 measures that give them 20% more lighting but only use 10% more energy are seeing an 5 increase in energy *efficiency* but also an increase in energy *usage*. With this example there 6 are energy efficiency "savings" in the sense that fewer kWh are being used per unit of 7 8 output, but there are not fewer kWh being consumed overall. This is sometimes referred to in the energy efficiency community as a "rebound" or "upsizing" effect – more energy 9 efficient appliances can actually induce more energy usage, or at least offset a large portion 10 of what would otherwise be energy reductions. This effect has been shown empirically, as 11 noted in the Commission report references above, which mentions a study's findings that 12 more efficient air conditioners resulted in an increase to overall energy usage. It is not 13 surprising that consumers might be willing to spend more overall when they are getting 14 better value, or "more bang for the buck." 15

## Q. If it were possible to determine actual test year energy efficiency savings due to energy efficiency programs, would it be reasonable to adjust test year billing determinants to account for these energy efficiency savings?

A. No, because any test year energy savings due to energy efficiency programs are already
 reflected in the Company's unadjusted test year data. It follows that inclusion of EPE's
 proposed adjustment would result in a double counting of energy efficiency savings.
 Additionally, because EPE's calculations of test year energy savings rely on future energy
 efficiency goals, it assumes that EPE will achieve that amount of energy savings.

1 EPE's Adjustment is Substantively Identical to Previous Adjustment Previously Rejected by 2 3 the Commission 4 **Q**. Has recovery of revenue lost from energy efficiency programs been requested in any dockets previously before the Commission? 5 Yes; in CenterPoint Energy Houston, LLC's (CEHE) EECRF Dockets 38213 and 39363, 6 A. CEHE requested recovery of lost revenue from energy efficiency programs.<sup>17</sup> In these 7 8 dockets, CEHE requested recovery of revenue losses related to the implementation of its 2009 energy efficiency programs through a Lost Revenue Adjustment Mechanism 9 (LRAM).<sup>18</sup> In preliminary orders for both cases, the Commission stated that the LRAM 10 was an issue not to be addressed because neither PURA § 39.905 nor 16 TAC § 25.181 11 allow for an LRAM through an EECRF.<sup>19</sup> 12 CEHE submitted a motion for rehearing in response the Commission's decision to 13 reject the proposed LRAM.<sup>20</sup> In the motion for rehearing on the LRAM issue, CEHE relied 14 upon the Commission's broad authority under PURA § 14.001 and § 36.204, as well as the 15 PURA § 36.051 requirement that the Commission establish a utility's revenues at an 16

<sup>&</sup>lt;sup>17</sup> Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to its Energy Efficiency Cost Recovery Factor, Docket No. 39363, Application at 4 (April 29, 2011); Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to its Energy Efficiency Cost Recovery Factor, Docket No. 38213, Application at 3 (April 30, 2010).

<sup>&</sup>lt;sup>18</sup> Docket No. 38213, Application at 3 (April 29, 2010); Docket No. 39363, Application at 4 (April 29, 2011).

<sup>&</sup>lt;sup>19</sup> Docket No. 38213, Supplemental Preliminary Order at 2; Docket No. 39363, Preliminary Order at 3 (June 6, 2011).

<sup>&</sup>lt;sup>20</sup> Docket No. 38213, CenterPoint Energy Houston Electric, LLC's Motion for Rehearing (December 2, 2010).

- 1 amount that will permit the utility a reasonable opportunity to earn a reasonable return,<sup>21</sup>
- 2 stating (citations omitted):

the Company calculates that it lost \$1,436,550 in revenue in 2009 solely 3 because of its energy efficiency efforts. In 2010 and 2011 combined, the 4 5 Company expects it will lose an additional \$7.7 million. Put differently, 6 CenterPoint Houston's \$7 million in revenue losses equate to a reduction in 7 the Company's allowed return on equity of approximately 30 basis points. CenterPoint Houston respectfully submits that where the Commission, on 8 the one hand, sets a utility's allowed rate of return in a base rate proceeding 9 (which excludes energy efficiency costs), and then on the other, issues an 10 order in a separate EECRF proceeding that essentially prohibits the utility 11 12 from earning that allowed rate of return, it acts in violation of PURA Sections 36.204 and 36.051.22 13

- 14 Rehearing on the LRAM issues was denied after the Commission expressed disfavor
- 15 towards it at an open meeting.<sup>23</sup> These decisions resulted in the LRAM being designated
- as an issue not to be addressed in CEHE's base rate case, Docket No. 39363.<sup>24</sup>
- 17 In Docket No. 49421 CEHE requested an energy efficiency adjustment to test year
- billing determinants identical to the type of adjustment that EPE is proposing in this case.<sup>25</sup>
- 19 The Proposal for Decision in that docket rejected CEHE's energy efficiency adjustments,
- 20 stating:

The Commission repeatedly rejected CenterPoint's LRAM and LRAMrelated proposals, and CenterPoint took steps to differentiate the proposed [Energy Efficiency Program] EEP adjustment from its prior LRAM proposals. However, the remaining similarities between the EEP adjustment and CenterPoint's prior LRAM proposals warrant identical treatment by the Commission in this proceeding. The evidence shows that the deemed

<sup>21</sup> *Id.* at 3.

 $^{22}$  Id. at 4.

<sup>23</sup> Open Meeting Tr. at 45-47 (December 16, 2010).

<sup>25</sup> Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates, Docket No. 49421, Proposal for Decision at 321 (Sep. 19, 2019).

<sup>&</sup>lt;sup>24</sup> Application of CenterPoint Electric Delivery Co. to Change Rates, Docket No. 38339, Preliminary Order at 6 (July 30, 2010).

1 2 3 4		savings calculation, on which the EEP adjustment is based, is inherently imprecise. As a result, the ALJs conclude it does not meet the standard ( <i>i.e.</i> , amounts that are actually realized or can be anticipated with reasonable certainty) to constitute a known and measurable change to test year data. <sup>26</sup>
5	Q.	Is EPE's proposal in this proceeding substantively identical to the previous proposals
6		rejected by the Commission in previous proceedings?
7	A.	Yes. While there are some minor differences, both proposals fundamentally involve an
8		increase to rates based on estimated reductions in energy sales due to energy efficiency
9		measures.
10	Q.	Is there any Commission precedent for recovery of lost kWh sales resulting from
11		energy efficiency programs?
12	A.	No, there is no precedent for the inclusion of a post-test year adjustment of this nature in
13		any case.
14	<u>Recon</u>	nmendation regarding EPE's proposed energy efficiency adjustment
15	Q.	What is your recommendation regarding EPE's proposed energy efficiency
16		adjustment?
17	A.	I recommend that EPE's proposed adjustment to test year kWh billing determinants for
18		revenue lost due to energy efficiency programs be rejected.
19	Q.	Do you have any other recommendations in the event the Commission rejects EPE's
20		proposed energy efficiency adjustment?
21	A.	Yes. As discussed earlier in my testimony, EPE's proposed energy efficiency adjustment
22		is substantively identical to previous adjustments previously rejected by the Commission.
23		These proposals to increase rates based on estimated energy efficiency savings have been

<sup>&</sup>lt;sup>26</sup> *Id.* at 325.

1		rejected by the Commission on at least three previous occasions, including where the
2		requests were based on the Commission's broad authority under PURA. I recommend that
3		the Commission find that EPE's proposed energy efficiency adjustment in this proceeding
4		has no reasonable basis in law, policy, or fact and is not warranted by any reasonable
5		argument for the extension, modification, or reversal of Commission precedent.
6		
7		VI. <u>OTHER RIDERS</u>
8	Q.	What is EPE's proposal with regards to EPE's FTRF rider?
9	A.	EPE proposed to use this rider to return the unamortized accumulated deferred income
10		taxes related to the Tax and Cuts and Jobs Act of 2017 from calendar years 2018 through
11		2021 to customers over a four-year period. <sup>27</sup> However, EPE also proposes that the FTRF
12		rider be used to adjust rates in the future in case corporate income tax rates were to change
13		after the final order in this proceeding. <sup>28</sup>
14	Q.	How is EPE proposing to use the FTRF rider to adjust rates in case corporate income
15		tax rates were to change?
16	A.	In his direct testimony, Mr. Carrasco stated:
17		EPE proposes that this tariff provision also be used to adjust
18		rates should there be a change in the federal corporate income
19		tax rate before EPE's next base-rate proceeding. If the federal
20		corporate income tax rate were to change after a final order in
21		this proceeding, EPE proposes that it be required to make a
22 23		filing within six months, at a minimum, to adjust this factor to account for the change in federal tax rate without the need
23 24		for a full rate proceeding. <sup>29</sup>

<sup>&</sup>lt;sup>27</sup> Application, Direct Testimony of Manuel Carrasco at 81.

<sup>&</sup>lt;sup>28</sup> *Id.* at 81-82.

<sup>&</sup>lt;sup>29</sup> Id.

1		
2	Q.	Do you agree with EPE's proposal regarding the FTRF rider?
3	A.	I do not agree with EPE's proposed requirement to adjust rates in order to address any
4		future changes in corporate income tax rates. EPE's proposal to potentially increase rates
5		through the FTRT tariff without a full rate proceeding will deprive Staff and other parties
6		the ability to ensure that any future rate adjustments are just and reasonable, consistent with
7		16 TAC § 25.234. Furthermore, EPE's proposal is unnecessary - in the event that tax rates
8		increase, EPE is free to request an increase in rates via an application to change rates. In
9		the event that tax rates decrease, the Commission is free to require EPE to adjust its rates.
10	Q.	What is your recommendation with regards to any future changes in corporate
11		income tax rates?
12	A.	I recommend that EPE's proposal that it be required to update its FTRT tariff in the event
13		that federal income taxes change in the future should be rejected.
14		VII. <u>CONCLUSION</u>
15	Q.	Are there any additional adjustments to EPE's filed case that may be reasonable?
16	A.	Yes. The recommendations above are based on my review of EPE's application and the
17		recommended adjustments of other Staff witnesses provided to me as of this date. I do not
18		imply that additional adjustments to EPE's filed case are not appropriate and should not be
19		made.
20	Q.	If you do not address an issue or position in your testimony, should that be interpreted
21		as Staff supporting EPE's position on that issue?
22	A.	No. The fact that I do not address an issue in my testimony should not be construed as
23		agreeing, endorsing, or consenting to any position taken by EPE.
24		

#### 1 Q. Does this conclude your direct testimony?

2 A. Yes.

### **Adrian Narvaez Canto**

Public Utility Commission of Texas 1701 North Congress Avenue Austin, TX 78711-3326

#### **REGULATORY EXPERIENCE**

Rate Analyst, Tariff and Rate Analysis Section

Public Utility Commission of Texas Rate Regulation Division

Employed: June 2015 to present.

Duties: Perform analysis of tariff filings, cost allocation, and rate design. Review tariffs of regulated utilities to determine compliance with Commission requirements. Analyze cost allocation studies and rate design issues for regulated electric and water utilities. Analyze policy issues associated with the regulation of the utility industry. Work on or lead teams in contested cases, reports, the development of market rules, and research concerning pricing and related issues. Prepare and present testimony as an expert witness on rate and related issues in docketed proceedings before the Commission and the State Office of Administrative Hearings.

#### **EDUCATION:**

2014The University of Texas at Austin, Austin, TXBachelor of Arts in Economics and French

#### List of Testimony Filed at the Public Utility Commission of Texas:

**Docket No. 45712** - Application of Southwestern Electric Power Company for Approval of a Distribution Cost Recovery Factor, May 4, 2016.

**Docket No. 45787** – *Application of AEP Texas Central Company for Approval of a Distribution Cost Recovery Factor*, May 23, 2016.

**Docket No. 45788** - *Application of AEP Texas North Company for Approval of a Distribution Cost Recovery Factor*, May 23, 2016.

**Docket No. 46357** - *Application of Entergy Texas for Approval to Amend its Transmission Cost Recovery Factor*, December 6, 2016.

**Docket No. 46449** - Application of Southwestern Electric Power Company for Authority to Change Rates, May 2, 2017.

**Docket No. 47235** - Oncor Electric Delivery Company LLC's Application for 2018 Energy Efficiency Cost Recovery Factor, July 20, 2017

**Docket No. 47527** - *Application of Southwestern Public Service Company for Authority to Change Rates*, Revenue Requirement Direct Testimony, May 2, 2018.

**Docket No. 47527** - *Application of Southwestern Public Service Company for Authority to Change Rates*, Cost Allocation and Rate Design Direct Testimony, May 2, 2018.

**Docket No. 47527** - *Application of Southwestern Public Service Company for Authority to Change Rates*, Cost Allocation and Rate Design Cross-Rebuttal testimony, May 22, 2018.

**Docket No. 48231** – *Application of Oncor Electric Delivery Company for a Distribution Cost Recovery Factor*, May 24, 2018.

**Docket No. 48401**- *Application of Texas-New Mexico Power Company for Authority to Change Rates*, Direct Testimony, August 20, 2018.

**Docket No. 48401**- *Application of Texas-New Mexico Power Company for Authority to Change Rates*, Cross-Rebuttal testimony, August 28, 2018.

**Docket No. 48325** - Application of Oncor Electric Delivery Company LLC for Authority to Decrease Rates Based on the Tax Cuts and Jobs Act of 2017, September 11, 2018.

**Docket No. 48325** - *Review of Rate Case Expenses Incurred by Southwestern Electric Power Company and Municipalities in Docket No. 46449*, December 14, 2018.

**Docket No. 49057** - Application of Entergy Texas for Approval of Transmission Cost Recovery Factor, March 25, 2019.

**Docket No. 49427** – *Application of Oncor Electric Delivery Company to Amend its Distribution Cost Recovery Factor*, May 30, 2019.

**Docket No. 49494 -** *Application of AEP Texas Inc. for Authority to Change Rates*, Direct Testimony, August 1, 2019.

**Docket No. 49494 -** *Application of AEP Texas Inc. for Authority to Change Rates*, Cross-Rebuttal Testimony, August 13, 2019.

**Docket No. 50200 -** *Application of Undine Texas, LLC and Undine Environmental, LLC for Authority to Change Rates,* June 10, 2020.

**Docket No. 49923 -** *Application of Corix Utilities (Texas) Inc. to Implement Federal Tax Reduction Credit Riders*, July 31, 2020.

**Docket No. 50944** - Application of Monarch Utilities I, L.P. for Authority to Change Rates, October 27, 2020.

**Docket No. 51100 -** *Application of the City of Lubbock, by and Through Lubbock Power & Light, for Authority to Establish Initial Wholesale Transmission Rates and Tariffs*, November 12, 2020.

**Docket No. 51611 -** *Application of Sharyland Utilities, L.L.C. for Authority to Change Rates, Direct Testimony,* March 12, 2021.

**Docket No. 51611 -** *Application of Sharyland Utilities, L.L.C. for Authority to Change Rates, Supplemental Testimony,* March 24, 2021.

**Docket No. 51415** - Application of Southwestern Electric Power Company for Authority to Change Rates, Direct Testimony, April 7, 2021.

**Docket No. 51415** - Application of Southwestern Electric Power Company for Authority to Change Rates, Cross-Rebuttal Testimony, April 23, 2021.

The following files are not convertible:

Attachments AN-2, AN-3, & AN-4.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.