

**AUSTIN ENERGY'S
2022 BASE RATE REVIEW**

§ **BEFORE THE CITY OF AUSTIN**
§
§ **IMPARTIAL HEARING EXAMINER**



REBUTTAL TESTIMONY

OF

BRIAN T. MURPHY

ON BEHALF OF AUSTIN ENERGY

JULY 7, 2022

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	3
II. TREATMENT OF TRANSMISSION RATES	5
III. BILLING UNITS—WINTER STORM URL.....	9
IV. CLASS REVENUE DISTRIBUTION	10
V. RESIDENTIAL RATES—CONSERVATION PRICE SIGNALS.....	21
VI. RESIDENTIAL CUSTOMER CHARGE	35
VII. RESIDENTIAL RATES—LOW INCOME CUSTOMERS.....	53
VIII. RESIDENTIAL BILL IMPACTS	56
IX. PRI-2 HIGH LOAD FACTOR CLASS.....	60
X. CONCLUSION.....	62

EXHIBITS

BTM-1	Regulatory Resume
BTM-2	Evidence that Customer Groups of Interest Move Toward Cost

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Brian T. Murphy. My business address is 4815 Mueller Boulevard,
4 Austin, Texas, 78723.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?**

6 A. I am employed by the City of Austin (City) as Energy Analyst Supervisor, Rates at
7 Austin Energy.

8 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

9 A. I am testifying on behalf of Austin Energy.

10 **Q. DID YOU PREPARE THIS TESTIMONY?**

11 A. Yes. This testimony was prepared by me or under my direct supervision.

12 **Q. PLEASE DISCUSS BRIEFLY YOUR EDUCATIONAL BACKGROUND,**
13 **PROFESSIONAL EXPERIENCE, AND QUALIFICATIONS.**

14 A. I earned a Bachelor of Science degree from George Mason University, and a Master's
15 degree in Business Administration from Baylor University. I have been employed by
16 Austin Energy since 2020. During my time with Austin Energy, my duties have
17 included preparing cost-of-service studies, designing and calculating rates,
18 developing and administering tariffs, and analyzing ratemaking and regulatory
19 policies and legislation. I also worked in a similar capacity for (a) the Public Utility
20 Commission of Texas (PUC or Commission), (b) an energy-industry consultancy, and
21 (c) an investor-owned transmission and distribution utility. My professional
22 regulatory experience is more fully described in Exhibit BTM-1.

23 **Q. HAVE YOU PROVIDED AN ATTACHMENT THAT DETAILS YOUR**
24 **EDUCATIONAL BACKGROUND AND REGULATORY EXPERIENCE?**

1 A. Yes. I provide this information in Exhibit BTM-1 to my testimony.

2 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR REBUTTAL TESTIMONY.**

3 A. The purpose of my rebuttal testimony is (1) to respond to the positions taken by Two
4 Women Ratepayers (2WR) on the proper treatment of transmission rates, (2) to
5 respond to the positions taken by NXP witness James W. Daniel as to alleged impacts
6 of Winter Storm Uri on the billing units used in Austin Energy's Cost-of-Service
7 Study, (3) to respond to the class revenue distribution (or class revenue allocation)
8 recommendations of Independent Consumer Advocate (ICA) witness Clarence L.
9 Johnson; Texas Industrial Energy Consumers (TIEC) witness Jeffrey Pollock; and,
10 Sierra Club, Public Citizen, and Solar United Neighbors (SCPC/SUN) witness Dr.
11 Ezra D. Hausman, (4) to respond to the positions taken by Mr. Paul Robbins, Mr.
12 Johnson, and Dr. Hausman as to the strength of the conservation price signals in
13 Austin Energy's current and proposed residential rates, (5) to respond to the positions
14 taken by Mr. Johnson, Dr. Hausman, and 2WR with respect to the proper level of the
15 customer charge as a component of the residential rate design, (6) to respond to the
16 positions taken by Mr. Robbins and Dr. Hausman as to the proper treatment of low-
17 income customers in Austin Energy's residential rate design, (7) to respond to
18 residential bill impacts issues raised by Mr. Robbins, Mr. Johnson, and Dr. Hausman,
19 and (8) to respond to the Primary-2 High Load Factor (P2 HLF) class issues raised by
20 Mr. Robbins.

21 **Q. WHAT ARE YOUR RECOMMENDATIONS?**

22 A. I recommend that the Impartial Hearing Examiner (IHE) reject the recommendations
23 made by all the above witnesses on all issues that I will address in my rebuttal
24 testimony.

1 **II. TREATMENT OF TRANSMISSION RATES**

2 **Q. HOW DO YOU RESPOND TO 2WR’S COMMENTS ON “COMMINGLING”**
3 **AND TRANSMISSION RATES?**¹

4 A. First, I agree that transmission rates are outside the City Council’s jurisdiction. The
5 Texas Legislature granted the PUC jurisdiction over wholesale transmission rates in
6 Texas. Consequently, the City Council has no authority to grant to review and
7 consider issues surrounding transmission rates in this Base Rate Review, specifically
8 to “determine whether costs have been adequately identified and included
9 appropriately and whether the profits included in transmission rates should be used to
10 offset base rate or rates from other AE services,” as 2WR suggests.²

11 **Q. HAS AUSTIN ENERGY APPROPRIATELY IDENTIFIED THE COSTS OF**
12 **TRANSMISSION SERVICE TO DETERMINE THE AMOUNT TO**
13 **EXCLUDE FROM THE RETAIL REVENUE REQUIREMENT IN THIS**
14 **PROCEEDING?**

15 A. Yes. The Cost-of-Service Study performed for this Base Rate Review begins with the
16 determination of a Total Company cost of service (COS) that includes all costs to
17 provide utility services. In the functionalization of costs (as described in Chapter 5,
18 Section 5.2 of the Base Rate Filing Package), costs are assigned to the business
19 functions, including power production, transmission, distribution, and customer
20 service.

¹ Two Women Ratepayers’ (2WR) Position Statement at 4 (Jun. 22, 2022): “And the transmission rate should be reviewed not to change transmission rates. This is beyond city jurisdiction. The transmission rates should be reviewed to determine whether costs have been adequately identified and included appropriately and whether the profits included in transmission rates should be used to offset base rate or rates from other AE services.”

² *Id.*

1 Austin Energy performed the functional separation of costs carefully and
2 thoughtfully to ensure that no transmission costs are included in the retail revenue
3 requirement, and that no retail costs are included in the transmission cost of service.

4 **Q. HOW DO YOU RESPOND TO 2WR'S COMMENTS ABOUT OFFSETTING**
5 **RETAIL RATES?³**

6 A. The concern appears to be about what happens to any profits Austin Energy makes
7 from its transmission rates. This appears to be a misunderstanding. Austin Energy
8 does not earn profits.

9 **Q. WHAT DO YOU MEAN, "AUSTIN ENERGY DOES NOT EARN PROFITS?"**

10 A. Austin Energy is a municipally owned utility (MOU) operated for its customers.
11 There are no shareholders who earn profits.

12 **Q. WHAT DOES AUSTIN ENERGY DO WHEN RATE REVENUES EXCEED**
13 **THE COSTS TO PROVIDE THE SERVICES?**

14 A. Austin Energy initiates a rate review to lower rates, as it did in 2016. Austin Energy's
15 financial policies require that Austin Energy review its rates to maintain only a
16 minimum level of debt service coverage, working capital, and reserves. The 2016
17 Base Rate Review resulted in a \$42 million annual rate reduction beginning in
18 January 2017.

19 Annually, revenues in excess of revenue requirements will be managed by
20 Austin Energy to improve cash balances, add to required reserve balances, or treated
21 in some other manner to benefit Austin Energy's customers.

³ *Id.*: "whether the profits included in transmission rates should be used to offset base rate or rates from other AE services."

1 **Q. SHOULD REVENUES COLLECTED UNDER TRANSMISSION RATES BE**
2 **USED TO OFFSET COSTS IN RETAIL BASE RATES?⁴**

3 A. No. It would be an improper true-up of base rates. One of the features of base rates is
4 they are not trued-up. Actual revenues are not compared to actual costs and a
5 surcharge made for under-collections or a credit given for over-collections. The
6 proposal by 2WR indicates that 2WR does not understand how base rates work.

7 **Q. ARE AUSTIN ENERGY’S TRANSMISSION RATES BASE RATES?**

8 A. Yes. The statutory framework for wholesale transmission rates in Texas is a base-rate
9 framework. PURA § 36.051 provides:

10 Sec. 36.051. ESTABLISHING OVERALL REVENUES. In establishing an
11 electric utility's rates, the regulatory authority shall establish the utility's
12 overall revenues at an amount that will permit the utility a reasonable
13 opportunity to earn a reasonable return on the utility's invested capital used
14 and useful in providing service to the public in excess of the utility's
15 reasonable and necessary operating expenses.

16 The statute does not allow for a true-up of over- and under-collections because
17 PURA grants the utility a “reasonable opportunity”—but not a guarantee—that it can
18 earn a reasonable return. Regulatory lag occurs because Austin Energy must go
19 before the Commission to have its transmission rates updated.

20 **Q. WHO IS THE REGULATOR IN THIS RATE REVIEW?**

21 A. Although Austin Energy’s retail operations are not regulated, the Austin City Council
22 effectively functions as a regulating body.

23 **Q. WHO IS THE REGULATOR OF AUSTIN ENERGY’S TRANSMISSION**
24 **RATES?**

25 A. The PUC.

⁴ *Id.*

1 **Q. IF THE PUC BELIEVES THAT A TRANSMISSION SERVICE PROVIDER IS**
2 **EARNING EXCESS REVENUES, WHAT WOULD HAPPEN?**

3 A. The PUC might call that utility in to have its transmission rates updated.
4 Alternatively, if the problem is general across utilities, the PUC might open a
5 rulemaking to alter the ratemaking process or seek guidance from the Texas
6 Legislature to adjust the regulatory framework. Each year, Austin Energy submits an
7 Earnings Monitoring Report to the PUC. The PUC evaluates Austin Energy's
8 financial performance. If the PUC is not satisfied, it will call Austin Energy in for a
9 full Transmission Cost of Service (TCOS) proceeding.

10 **Q. HOW WOULD 2WR'S PROPOSAL DISRUPT THE PUC'S BASE-RATE**
11 **FRAMEWORK?**

12 A. First, 2WR is seeking to usurp the Commission's authority, and to transfer
13 jurisdiction over Austin Energy's transmission costs and revenues from the PUC to
14 the City Council, but without statutory basis. Second, the use of actual revenues to
15 offset base rates would be a true-up of base rates. Under a true-up, costs and revenues
16 are equilibrated.

17 **Q. ARE ACTUAL WHOLESALE TRANSMISSION REVENUES USED WHEN**
18 **THE COMMISSION CALLS A UTILITY IN FOR A TCOS PROCEEDING?**

19 A. No. Transmission rates are set based on cost of service and ERCOT billing units.
20 Actual wholesale transmission revenues are not used.⁵

21 **Q. WHAT DO YOU RECOMMEND?**

22 A. I recommend that 2WR's proposal be rejected.

⁵ The exception is export revenues. Those are credited to TCOS. But the credit is revenues earned, not revenues collected.

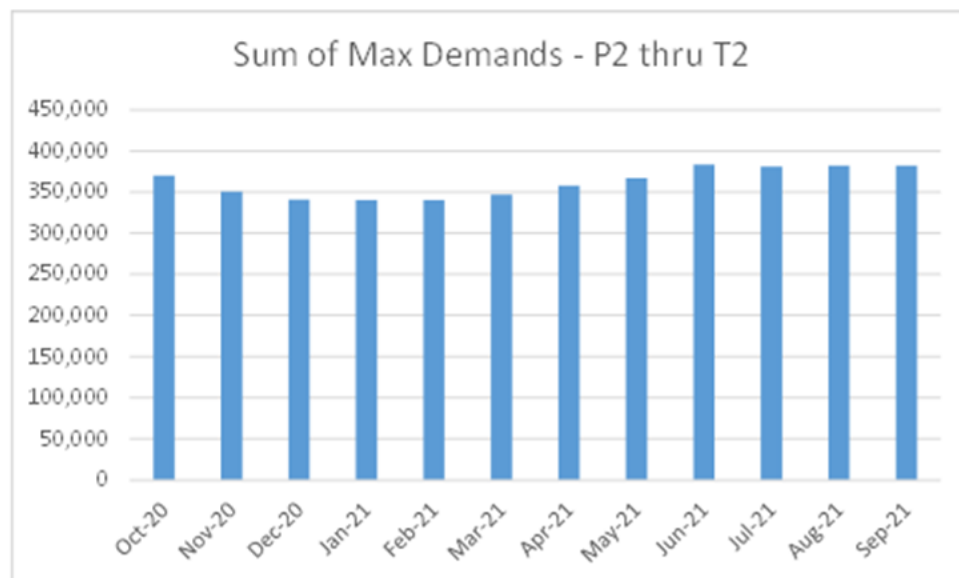
1 **III. BILLING UNITS—WINTER STORM URI**

2 **Q. FOR CLASSES NOT SENSITIVE TO WEATHER, NXP WITNESS JAMES**
3 **DANIEL RECOMMENDS MAKING ADJUSTMENTS TO TEST YEAR**
4 **REVENUES, ENERGY, AND DEMAND TO ACCOUNT FOR WINTER**
5 **STORM URI.⁶ DO YOU AGREE THAT ADJUSTMENTS SHOULD BE**
6 **MADE?**

7 A. No. Non-weather sensitive classes are industrial customers with high loads on tariffs,
8 such as Primary 3 megawatt (MW) to 20MW (PRI-2), Primary greater than 20MW
9 High Load Factor (PRI-4), and Transmission High Load Factor (TRAN-2). With
10 respect to energy, Mr. Daniel's concerns are unfounded. The PRI-2 class experiences
11 energy rates, but the rates are very low (\$.00052 per kWh). At that rate, a loss of
12 1,000,000 kWhs would correspond with \$520 in lost sales. The lost energy revenues
13 during Winter Storm Uri would not be material. The PRI-4 and TRAN-2 do not
14 experience energy rates.

15 **Q. WHAT ABOUT DEMAND?**

16 A. Demand revenues for the PRI-2, PRI-4, and TRAN-2 classes are based on customers'
17 monthly maximum peak demands. The chart below shows the sum of peak demands
18 for this group of customers. There is not an identifiable impact from the ERCOT-



6 N

).

1 mandated load shed event.

2 February and March were not significantly different from the prior or
3 subsequent months. I have not been able to detect that Winter Storm Uri had an effect
4 on customers' billable demands or demand revenues during the months when load
5 was disrupted by Winter Storm Uri. Consequently, Mr. Daniel's proposed
6 adjustments are not appropriate.

7 **IV. CLASS REVENUE DISTRIBUTION**

8 **Q. MR. JOHNSON TESTIFIES THAT UNDER HIS COS, THE RESIDENTIAL**
9 **CLASS IS NOT FURTHER FROM COST AS COMPARED TO THE**
10 **SYSTEM.⁷ HOW DO YOU RESPOND?**

11 A. Austin Energy's methodology adjusts to changes in the COS. If Mr. Johnson prevails
12 with his cost allocation recommendations, then Austin Energy's distribution of
13 revenues to the residential class will decrease.

14 **Q. MR. JOHNSON TESTIFIES THAT RATE DESIGN INVOLVES**
15 **DISTRIBUTING REVENUES TO CLASSES.⁸ HOW DO YOU RESPOND?**

16 A. Mr. Johnson is blurring the lines between revenue distribution and rate design.
17 Revenue distribution determines the share of revenues assigned to a class. Rate
18 design allocates revenues to a class's rate components.

⁷ Initial Presentation of Clarence L. Johnson, on behalf of Independent Consumer Advocate (ICA) at 51 (Jun. 22, 2002) (Johnson Presentation): "However, if AE's CCOSS is revised for my proposed CCOSS cost allocation changes, the residential class relative cost position is not above system average. This suggests that AE's proposed base revenue increase vastly overstates the residential class proportion of increased revenues. This casts considerable doubt on AE's claim that the residential class is heavily subsidized."

⁸ *Id.* at 53: "Rate design involves the following major decisions: (1) distribution of the ultimately approved rate change among customer classes; and (2) the rate components used to collect revenues from each customer class."

1 **Q. MR. JOHNSON TESTIFIES THAT REVENUE DISTRIBUTION SHOULD**
2 **INVOLVE CONSIDERATIONS OTHER THAN COST, SUCH AS**
3 **EFFICIENT BEHAVIOR.⁹ HOW DO YOU RESPOND?**

4 A. Efficient behavior is always best achieved via cost-based rates and efficiency begs for
5 100% weight to be applied to the results of the COS.

6 **Q. MR. JOHNSON TESTIFIES THAT THE COVID-19 PANDEMIC**
7 **INCREASES UNCERTAINTY AND SUPPORTS RATE MODERATION.¹⁰**
8 **HOW DO YOU RESPOND?**

9 A. The gradualist approach to revenue distribution proposed by Austin Energy
10 adequately addresses this uncertainty by avoiding assigning 100% weight to the COS.

11 **Q. MR. JOHNSON TESTIFIES THAT THE PUC HAS HISTORICALLY**
12 **SUPPORTED RATE MITIGATION.¹¹ HOW DO YOU RESPOND?**

13 A. Austin Energy's retail rates are not subject to the original jurisdiction of the PUC.
14 However, recent PUC precedent supports rate classes being set at COS, unless
15 gradualism would be appropriate to avoid rate shock.¹² Mr. Johnson's proposal is
16 close to the opposite of the Commission's recent practice. The example Mr. Johnson

⁹ *Id.* at 53: "The CCOS is only one piece of information to be considered in the distribution of the revenue increase among customer classes. Rate impact, non-cost considerations, promoting efficient behavior, and public policy are also relevant factors."

¹⁰ *Id.*: "Furthermore, the later stages of the COVID pandemic, which produced significant economic impacts, are embedded in the test year. The COVID pandemic is an exceptional circumstance, which could affect many customers' ability to pay and constrain growth in billing determinants for some classes. As a result, the potential arises that future customer class composition and capacity for revenue generation will vary significantly from test year conditions."

¹¹ Johnson Presentation at 54: "From its earliest history, the Texas PUC has recognized the principle that cost study results are subject to rate mitigation."

¹² *See, e.g., Application of Southwestern Public Service Company for Authority to Change Rates*, Docket No. 43695 (Feb. 23, 2016); and *Application of Entergy Texas, Inc. for Authority to Change Rates, Reconcile Fuel Costs, and Obtain Deferred Accounting Treatment*, Docket No. 39896 (Nov. 2, 2012).

1 cites is a four-digit docket number. Since then, there have been more than 40,000
2 dockets before the Commission.

3 **Q. MR. JOHNSON TESTIFIES THAT THE COS'S ALLOCATIONS TO MANY**
4 **DECIMAL PLACES PROVIDES A FALSE SENSE OF SECURITY.¹³ HOW**
5 **DO YOU RESPOND?**

6 A. The allocation of costs to multiple decimal places is necessary due to the magnitude
7 of the costs involved, which can run into the hundreds of millions of dollars for a
8 single category of costs. The cost study produces the best available approximation of
9 cost of service.

10 **Q. MR. JOHNSON TESTIFIES THAT ALLOCATION METHODS ARE**
11 **SUBJECTIVE.¹⁴ HOW DO YOU RESPOND?**

12 A. Subjectivity is eliminated through the rate review process, where allocation decisions
13 are subject to dispute and the most reasonable and rational method is chosen among
14 alternatives. This is not a "subjective" process.

15 **Q. MR. JOHNSON TESTIFIES THAT AUSTIN ENERGY'S "LIMITER" IS**
16 **UNFOUNDED.¹⁵ HOW DO YOU RESPOND?**

17 A. Austin Energy has not applied a limit to increases based on some multiple of the
18 system average. Austin Energy's methodology is system average increase in Step 1
19 (an intermediate step in the methodology), then halfway to cost in Step 2.

¹³ Johnson Presentation at 54: "CCOS studies are imprecise instruments. The studies will allocate costs to a multiple decimal point level, but this may provide a false sense of security about the accuracy of the studies."

¹⁴ *Id.* at 54: "First, some of the costs are classified and allocated on a disputable causal basis, and subjective judgment enters into the selection and development of allocation methods."

¹⁵ *Id.* at 56: "Although AE attempts moderation (compared to the AE CCROSS result), AE does not provide a coherent justification for a 233% limiter."

1 Q. MR. JOHNSON TESTIFIES THAT NO CLASS SHOULD GET A
2 DECREASE WHEN THE SYSTEM GETS AN INCREASE.”¹⁶ HOW DO
3 YOU RESPOND?

4 A. The reason to give a decrease to a class well above cost is fairness. Classes that are
5 above cost of service have been paying above-cost charges for many years. The fact
6 that some classes are getting increases is not a valid reason to delay other classes’
7 movement toward cost of service.

8 Q. MR. DANIEL STATES THAT AUSTIN ENERGY’S REVENUE
9 DISTRIBUTION RESULTS IN CLASS SUBSIDIES.¹⁷ HOW DO YOU
10 RESPOND?

11 A. Austin Energy’s proposal will result in some inter-class subsidization. Austin Energy
12 retains subsidies among classes reluctantly and in the interests of mitigating the
13 customer bill impacts that would result from moving all classes directly to cost. The
14 residential class would require a 25.7% increase to get to cost. I believe this would
15 promote rate shock. However, the increase Austin Energy assigns to the residential
16 class (\$52.3 million) exceeds the total increase for the system as a whole (\$48.2
17 million), and represents meaningful movement toward cost.

18 Q. MR. DANIEL STATES, “[AUSTIN ENERGY’S PROPOSED REVENUE
19 DISTRIBUTION] RESULTS IN SOME CUSTOMER CLASSES MOVING

¹⁶ *Id.* at 54: “Second, I do not agree with assigning revenue reductions to some classes at the same time overall revenues increase. In my view, given the circumstances in this case, the most equitable approach precludes a revenue reduction for any class when the overall retail system faces a significant revenue increase. Selected revenue reductions compound the severity of revenue increases confronting most customers.”

¹⁷ Daniel Direct at 5: “AE’s proposed distribution of its proposed \$48.2 million base rate increase to the customer classes results in some customer classes paying substantial subsidies to other customer classes.”

1 A. Austin Energy does not claim that its methodology represents an industry-standard
2 approach, but rather uses the term “standard” to refer to Austin Energy’s intention to
3 apply this approach as its standard methodology in each rate review beginning with
4 this one.

5 The reason Austin Energy is proposing to adopt a standard approach is that
6 the revenue distribution phase of ratemaking is typically rife with dispute and a
7 significant degree of arbitrariness. The use of a standardized approach more fairly
8 distributes revenues among the classes.

9 In my experience, parties who represent classes who are currently above cost
10 want all classes to move immediately to cost, and parties who represent classes who
11 are currently below cost typically argue that all classes should receive the system
12 average increase.

13 Austin Energy avoids assigning more weight to a class’s current position or to
14 its cost of service by moving all classes halfway to cost, with equal weight assigned
15 to present revenues and cost of service. In my experience, this approach has been
16 effective in resolving disputes in settled cases. It is fair, non-arbitrary, and repeatable.
17 If at some point classes are close enough to cost that gradualism is not necessary, all
18 classes may be brought to cost. The decision as to whether gradualism is necessary is
19 made on a case-by-case basis.

20 **Q. MR. DANIEL STATES THAT AUSTIN ENERGY’S STEP 1 IS UNUSUAL.²⁰**
21 **WHAT IS THE PURPOSE OF STEP 1?**

22 A. Step 1 is an intermediate step in the methodology. It re-calibrates a class’s current
23 position so that present revenues receive equal weight in the result. Without Step 1, a

²⁰ *Id.* at 42.

1 below-cost class's current position would not receive equal weight in the overall
2 allocation.

3 **Q. MR. DANIEL STATES THAT STEP 1 MOVES SOME CLASSES FURTHER**
4 **FROM COST.²¹ HOW DO YOU RESPOND?**

5 A. Step 1 is an intermediate step and is not intended to represent a class's final allocation
6 of revenues.

7 **Q. MR. DANIEL STATES THAT AUSTIN ENERGY DISREGARDS SYSTEM**
8 **MOVEMENT IN STEP 1.²² HOW DO YOU RESPOND?**

9 A. Austin Energy is not disregarding system movement. Step 1 represents each class's
10 position after system-wide movement.

11 **Q. WHAT ALTERNATIVE REVENUE DISTRIBUTION METHODOLOGY**
12 **DOES MR. DANIEL PROPOSE?**

13 A. Mr. Daniel also proposes a two-step approach. In Step 1, from their starting position,
14 Mr. Daniel moves all the below-cost classes 1/3rd of the way towards cost of service.
15 Classes currently above cost of service are left alone.

16 In Step 2, Mr. Daniel identifies the overall revenue surplus that exists after
17 Step 1, and allocates the surplus among above-cost classes in proportion to revenue
18 surplus.

19 **Q. HOW DO YOU RESPOND TO MR. DANIEL'S PROPOSAL?**

²¹ *Id.* at 42: "AE claims step 1 is needed "to align all customer classes in comparison to cost of service." However, for some customer classes, this step moves them further from cost of service in opposition to AE's stated goal of moving class revenues towards cost of service."

²² *Id.* at 42: "However, as stated on page 75 of the Base Rate Filing Package, AE wants to disregard the system movement in step 1 so that their methodology can be described as moving halfway to cost."

1 A. Mr. Daniel’s approach does not allow for adequate movement toward cost of service
2 for the residential class. In the Base Rate Filing Package, Austin Energy explained
3 that residential customer growth is adding costs to the system that are not avoided
4 when customers conserve energy, and that average consumption per customer is
5 declining. These factors are causing the residential class to drift away from cost
6 between rate updates, as costs to serve residential customers are increasing at a faster
7 rate than revenues collected from them.

8 In this case, the residential class needs to be assigned enough revenues so that
9 the gap is being gradually closed despite usage trends that will be expanding the gap
10 between rate reviews.

11 **Q. MR. POLLOCK USES THE TERM “REVENUE ALLOCATION” WHEREAS**
12 **AUSTIN ENERGY USES “REVENUE DISTRIBUTION.”²³ ARE THEY THE**
13 **SAME?**

14 A. Yes. Both refer to the assignment of revenues to the classes.

15 **Q. MR. POLLOCK STATES THAT GRADUALISM IS A CONCEPT TO AVOID**
16 **RATE SHOCK.²⁴ HOW DO YOU RESPOND?**

17 A. I agree with Mr. Pollock. A gradualist approach is necessary when moving directly to
18 cost would result in rate shock. In this proceeding, in my opinion the residential class
19 would experience rate shock under revenues set to cost.

²³ Direct Testimony of Jeffrey Pollock, on behalf of Texas Industrial Energy Consumers’ (TIEC) Position Statement at 40 (Jun. 22, 2022) (Pollock Direct).

²⁴ *Id.*: “Gradualism is a concept that is applied to avoid rate shock; that is, no class should receive an outsized or abrupt rate increase in a single adjustment. Thus, rates should move gradually to cost if moving rates immediately to cost would result in rate shock.”

1 **Q. MR. POLLOCK STATES THAT COST-BASED RATES PROMOTE**
2 **FAIRNESS, EFFICIENCY, AND REVENUE STABILITY.²⁵ HOW DO YOU**
3 **RESPOND?**

4 A. I agree with Mr. Pollock. I like how he distinguishes efficient rates and conservation.
5 They are not the same.

6 **Q. MR. POLLOCK STATES THAT AUSTIN ENERGY'S REVENUE**
7 **DISTRIBUTION DOES NOT FOLLOW THE COS.²⁶ HOW DO YOU**
8 **RESPOND?**

9 A. I disagree with Mr. Pollock. Austin Energy's methodology uses the cost study to
10 move all classes toward cost of service, subject to gradualism constraints imposed by
11 the rate shock that would be experienced if the residential class's revenues were set
12 directly to cost.

13 **Q. IN HIS TABLE 4, MR. POLLOCK COMPARES TIEC'S COS TO THE**
14 **RESULTS OF AUSTIN ENERGY'S REVENUE DISTRIBUTION.²⁷ HOW DO**
15 **YOU RESPOND?**

16 A. This is an inappropriate apples-to-oranges comparison.

17 **Q. HOW IS IT APPLES TO ORANGES?**

18 A. As addressed in the testimony of Austin Energy witness Burnham, Austin Energy and
19 TIEC have disagreements over cost allocation treatments in the cost study, such as

²⁵ *Id.*: "Cost-based rates are fair (because each class's rates reflect its cost to serve, no more and no less); they are efficient (because, when coupled with a cost-based rate design, customers are provided with the proper incentive to minimize their costs, which will, in turn, minimize the costs to the utility); they enhance revenue stability (because changes in revenues due to changes in sales will translate into offsetting changes in costs); and they encourage conservation (because cost-based rates will send the proper price signals to customers, thereby allowing customers to make rational consumption decisions). In addition, it may become harder to move rates toward cost over time if they are not sufficiently tracking cost-causation."

²⁶ *Id.* at 41.

²⁷ *Id.*

1 production and distribution capacity costs. Different cost allocation treatments result
2 in a different class cost of service. Because TIEC's and Austin Energy's cost-of-
3 service targets are different, it is not particularly useful to compare the results of
4 Austin Energy's revenue distribution to TIEC's cost study.

5 **Q. HAVE YOU DONE AN ANALYSIS TO ADDRESS THE APPLES AND**
6 **ORANGES PROBLEM?**

7 A. Yes. I have applied Austin Energy's revenue distribution methodology to Mr.
8 Pollock's cost study. The results are shown below.²⁸

²⁸ Please note that TIEC's cost of service results for each class were increased in equal proportion to match Austin Energy's required level of base revenues, which is necessary to avoid bias from differences in the system revenue requirement.

Table 2: Comparison of Proposed Revenue Distribution Methodology

		Distance	
	Current	from cost	
	Distance	TIEC CCOSS	Movement
	from cost	and AE	Towards
	<u>TIEC CCOSS</u>	<u>Rev Dist</u>	<u>Cost?</u>
Residential	-22.8%	-8.5%	YES
Secondary Voltage < 10 kW	-7.6%	-0.3%	YES
Secondary Voltage ? 10 < 300 kW	22.6%	15.9%	YES
Secondary Voltage ? 300 kW	27.0%	18.3%	YES
Primary Voltage < 3 MW	-11.1%	-2.2%	YES
Primary Voltage ? 3 < 20 MW	10.0%	9.2%	YES
High Load Factor Primary > 20 MW	37.7%	24.1%	YES
Transmission	-26.4%	-10.4%	YES
Transmission Voltage ? 20 MW @ 85% aLF	44.3%	27.6%	YES
City-Owned Private Outdoor Lighting	-38.0%	-16.7%	YES
Customer-Owned Non-Metered Lighting	-36.9%	-16.1%	YES
Customer-Owned Metered Lighting	-24.6%	-9.5%	YES

1 **Q. MR. POLLOCK STATES THAT AUSTIN ENERGY’S METHOD MOVES**
2 **ALL BUT TWO CLASSES TOWARD COST.²⁹ HOW DO YOU RESPOND?**

3 A. As can be seen above, after correcting for the apples to oranges problem, both
4 primary classes referenced by Mr. Pollock (in bold text above) would receive revenue
5 decreases and would be moving toward rather than away from cost of service.³⁰

6 **Q. MR. POLLOCK TESTIFIES REGARDING AN ALLOCATION TO WHAT**
7 **HE CALLS “SUBSTATION CUSTOMERS.”³¹ HOW DO YOU RESPOND?**

²⁹ Pollock Direct at 42: “As Table 4 demonstrates, AE’s proposed class revenue allocation directionally moves all but two customer classes closer to cost. The notable exceptions are the Primary \geq 3MW < 20 MW and the High Load Factor Primary \geq 20 MW classes. Based on TIEC’s corrected CCOSS, these classes should receive base rate reductions rather than base rate increases.”

³⁰ Please note that in performing this analysis, Austin Energy is not agreeing that TIEC’s measurements of class cost of service are more accurate than Austin Energy’s, and Austin Energy is not recommending that Austin Energy’s revenue distribution methodology be applied using targets from TIEC’s cost study. This analysis is provided solely for the purpose of illustrating the fallacy in Mr. Pollock’s testimony.

1 A. Austin Energy does not have any primary substation customers. In the event that the
2 City Council adopts TIEC's proposal to create a primary substation class, it would be
3 reasonable to allocate revenues to the new class following the same methodology as
4 for all other classes.

5 **V. RESIDENTIAL RATES—CONSERVATION PRICE SIGNALS**

6 **Q. A NUMBER OF PARTIES HAVE FRAMED THE RATE DESIGN**
7 **ALTERNATIVES IN THIS PROCEEDING AS CHOICES ALONG A**
8 **SPECTRUM OF ENERGY CONSERVATION, WHERE AUSTIN ENERGY'S**
9 **PROPOSAL HAS BEEN FRAMED BY CERTAIN PARTIES AS CONTRARY**
10 **TO ENERGY CONSERVATION.³² IS THIS A REASONABLE FRAMING?**

11 A. No.

12 **Q. PLEASE PROVIDE A REASONABLE FRAMING OF RATE DESIGN**
13 **ALTERNATIVES.**

14 A. The first concept to grasp is that rate design need not be connected to cost causation.

15 **Q. WHAT DO YOU MEAN?**

16 A. One misconception is that rate design follows the costs that are recovered under the
17 rates. It would be natural to think that energy rates are recovering costs that are driven
18 by energy, that demand rates are set to recover costs that increase when demand is
19 imposed, and that the customer charge is set to recover the costs of customer services
20 that do not vary with usage. Often, this is wrong.

³¹ Pollock Direct at 42: "I also note that if rates are set above cost for Primary Substation customers, that should more than compensate for the minimal costs associated with AE's investment in the dedicated radial feeders used to provide Primary Substation service."

³² See, e.g., Johnson Presentation at 8, line 40; Direct Testimony of Ezra Hausman, Ph.D., on behalf of SPCP/SUN at 17, line 16 (Jun. 22, 2022) (Hausman Direct); and, Position Statement of Paul Robbins at Section 2.1 (P. Robbins Position Statement).

1 In practice, rates may be set to recover any type of costs. The method of
2 assessment of a charge (whether on a kWh or a kW or a customer basis) need not bear
3 any relationship to the nature of the costs recovered under that rate.

4 **Q. CAN YOU PROVIDE AN EXAMPLE?**

5 A. Yes. In the Base Rate Filing Package, Austin Energy classified its base rate costs as
6 demand- and customer-related. For the residential class, about 38% of the cost of
7 service is customer-related and 62% of the cost of service is demand-related.³³

8 **Q. WHAT ABOUT ENERGY?**

9 A. Not a single dollar in Austin Energy's base rate costs is driven by energy
10 consumption. This means that any costs that are included in energy rates in this rate
11 review are disconnected from cost causation.

12 **Q. FOR THE RESIDENTIAL CLASS, WHAT COSTS ARE BEING LOADED**
13 **INTO ENERGY RATES?**

14 A. Under the current rates, 60% of customer costs and 100% of demand costs are being
15 included in the energy rates. Overall, under current rates 81% of base-rate costs to
16 serve residential customers are recovered under energy rates.³⁴ This situation is
17 depicted graphically in Figure 7-11 of the Base Rate Filing Package.

18 **Q. WHAT IS A REASONABLE WAY TO FRAME THE CURRENT RATE**
19 **DESIGN?**

³³ Austin Energy's Base Rate Filing Package, Schedule G-6 (Apr. 18, 2022) (RFP), filtered for base-rate costs. Residential demand costs = \$232.9 million. Residential customer costs = 141.4 million.

³⁴ See RFP, WP H-5.1. Current customer charge revenues are \$57.4 million, and energy charge revenues are \$240.7 million.

1 A. The rate design is an extreme conservation rate design. By loading costs into energy
2 rates, and designing the rates with steeply inclined tiers, customers are receiving a
3 distorted and somewhat brutal price signal to focus on conservation.

4 **Q. PLEASE DISCUSS THE VARIOUS TYPES OF RATE DESIGN OBJECTIVES**
5 **THAT CAN BE EMPHASIZED AND LOCATE AUSTIN ENERGY'S**
6 **CURRENT AND PROPOSED RATE DESIGNS ON THE SPECTRUM OF**
7 **ADVANCING OR FAILING TO ADVANCE THE OBJECTIVES.**

8 A. The three dominant rate design objectives are:

- 9 1. Revenue stability for the utility (termed "Capital Attraction" by Dr. James
10 Bonbright, the intellectual father of the framework);
- 11 2. Economic efficiency in the provision of service by the utility and the use of the
12 system by customers (or "production motivation and consumer rationing"); and,
- 13 3. Fairness to ratepayers (or "compensatory income transfers").

14 I will now discuss how rates might be designed to focus on one or another
15 objective.

16 **Q. WITH RESPECT TO REVENUE STABILITY, WHAT WOULD AUSTIN**
17 **ENERGY'S RESIDENTIAL RATES LOOK LIKE IF AUSTIN ENERGY**
18 **DECIDED TO PROMOTE REVENUE STABILITY ALONE?**

19 A. All costs would be loaded into customer charges—100% of customer costs, and
20 100% of demand costs. All the pass-throughs would be assessed on a customer
21 basis—the Community Benefit Charge (CBC), the Power Supply Adjustment (PSA),
22 and the Regulatory Charges.

23 Here is what Austin Energy's residential base rates would look like if Austin
24 Energy focused on revenue stability:

1

2

Table 3: Hypothetical rate design focusing on revenue stability

Type of Charge	Rate	Billing basis
Customer Charge	\$61.10	Per customer per month

3

Every residential customer would pay \$61.10 per month.³⁵

4

Q. HOW WOULD YOU EVALUATE A RATE DESIGN FOCUSED EXCLUSIVELY ON REVENUE STABILITY?

5

6

A. It would be a poor rate design. Customers would have no incentive to control use of the system. Wasteful use of the system would result. A customer could set the thermostat to 70 degrees all summer, then leave it there while out of the house on vacation. Afterall, why bother with tracking usage if the bill is always the same? Additionally, there would be no relationship between the costs to serve a customer and the customer's bill. A customer in a 300 square foot efficiency apartment would be charged the same as a customer who chooses to live in a 12,000 square foot mansion. So, there would be little fairness.

7

8

9

10

11

12

13

14

Q. WHAT WOULD AUSTIN ENERGY'S RESIDENTIAL BASE RATES LOOK LIKE IF AUSTIN ENERGY DECIDED TO ADVANCE THE ECONOMIC EFFICIENCY OBJECTIVE?

15

16

17

A. The rates would be strictly cost-based. For the residential class, the rates would be as follows:

18

³⁵ Please note that this rate design is not recommended, but rather is shown strictly for illustrative purposes.

1

Table 4: Hypothetical rate design focusing on economic efficiency

Type of Charge	Type of Charge	Billing basis
Customer Charge	\$25.00	Per customer per month
Demand rate	\$6.91	Per kilowatt of monthly maximum demand

2

3

There would be no energy rates because there are no energy costs recovered in base rates.³⁶

4

Q. WOULD THIS HYPOTHETICAL RATE DESIGN COME AT THE EXPENSE OF OTHER DESIRABLE OBJECTIVES?

5

6

A. No. It just so happens that cost-based rates advance all dominant objectives simultaneously in proper balance.

7

8

Q. EARLIER YOU SAID THAT DEMAND COSTS DOMINATE THE SYSTEM. WOULD IT NOT ADVANCE ECONOMIC EFFICIENCY EVEN MORE TO PUT ALL COSTS INTO A DEMAND RATE?

10

11

A. No. This would inflate the demand rate above the cost of service. Consequently, at the margin, some customers would choose to forego use of the system that they would have been willing to engage in if the demand rate had been accurately set. For non-residential customers, foregone use of the system means less productive output in the economy, which harms society. For residential customers, foregone use of the system means a sacrifice of comfort, convenience, safety, health, and all the other benefits that residential customers get from use of the system. For these reasons, inflating the demand rate above cost would not increase economic efficiency.

12

13

14

15

16

17

18

³⁶ Please note that this rate design is not recommended, but rather is shown strictly for illustrative purposes.

1 **Q. WHAT WOULD AUSTIN ENERGY’S RESIDENTIAL BASE RATES LOOK**
2 **LIKE IF AUSTIN ENERGY DECIDED TO ADVANCE THE FAIRNESS**
3 **OBJECTIVE?**

4 A. They would be cost-based, same as above for economic efficiency. Under cost-based
5 rates, the charges on the customer’s bill are an accurate approximation of the costs
6 incurred by the utility to provide services to the customer, which is fair. A cost-based
7 bill is only possible under cost-based rates.

8 **Q. ABOVE, YOU INCLUDED IN A PARENTHETICAL THE TERM**
9 **“COMPENSATORY WEALTH TRANSFERS.” WHAT DOES THIS REFER**
10 **TO?**

11 A. The words refer to an economic reality of utility charges. A share of the customer’s
12 wealth is transferred from the customer to the utility in return for electric service. It is
13 as if the utility is crossing the threshold into the customer’s premise and removing
14 cash from the customer’s billfold. Customers must be treated with respect and
15 deference, and care should be taken not to transfer any more wealth than is necessary
16 to compensate for the costs incurred to provide service.

17 **Q. WHAT ABOUT WEALTH TRANSFERS BETWEEN CUSTOMERS WITHIN**
18 **THE RESIDENTIAL CLASS?**

19 A. Traditional rate design frowns upon the use of utility rates to transfer wealth between
20 customers within a class, such as to redress social inequities.

21 **Q. YOU RAN THROUGH THE THREE DOMINANT RATE DESIGN**
22 **OBJECTIVES, AND YOU NEVER MENTIONED CONSERVATION. WHY**
23 **NOT?**

24 A. Energy conservation is not one of the dominant traditional objectives of rate design.
25 Demand costs (e.g., plant capacity) dominate the cost of service, not energy costs

1 (e.g., fuel). That said, energy costs should be recovered under energy rates. For
2 Austin Energy, this is the PSA. Under strict adherence to the traditional dominant rate
3 design objectives, the PSA would be an energy rate, the Regulatory Charges would be
4 demand rates, and production and distribution capacity costs would be included in
5 demand rates.

6 **Q. NOW THAT YOU HAVE IDENTIFIED THE FULL SPECTRUM OF BASIC**
7 **TYPES OF RATE DESIGN, WHERE WOULD YOU LOCATE AUSTIN**
8 **ENERGY'S CURRENT RATE DESIGN?**

9 A. Austin Energy's current residential base rate design casts aside all dominant rate
10 design objectives in favor of conservation. In the Base Rate Filing Package, Austin
11 Energy explained how fairness is not fully addressed under the current rate design.
12 Customers with higher usage and higher load factors are being punished with charges
13 well above cost of service. Economic efficiency, which for Austin Energy means
14 maximizing the system load factor, is not even in the conversation. Environmental
15 stewardship, which is a very important community value, has received total emphasis.

16 **Q. WHERE WOULD YOU LOCATE AUSTIN ENERGY'S PROPOSED RATE**
17 **DESIGN ON THIS SPECTRUM?**

18 A. Austin Energy's proposed rate design is essentially the same. The dominant focus is
19 on conservation. 100% of the demand costs are being loaded into energy rates. This
20 sends a very strong conservation price signal. The energy rates are proposed in three
21 tiers of inclining blocks of consumption, which amplifies the conservation price
22 signals. However, the proposed rate design introduces a greater emphasis on revenue
23 stability and fairness.

1 **Q. NOW THAT YOU HAVE PROPERLY FRAMED AUSTIN ENERGY’S RATE**
2 **DESIGN PROPOSAL IN THIS BASE RATE REVIEW, WHAT DO YOU**
3 **THINK OF THE CRITICISM OFFERED BY VARIOUS PARTICIPANTS**
4 **THAT AUSTIN ENERGY’S PROPOSED RATE DESIGN**
5 **“DISINCENTIVIZES CONSERVATION”?**

6 A. It is not reasonable.

7 **Q. MR. JOHNSON TESTIFIES THAT AUSTIN ENERGY’S PROPOSED RATES**
8 **WILL WEAKEN CONSERVATION PRICE SIGNALS.³⁷ HOW DO YOU**
9 **RESPOND?**

10 A. In Chapter 7 of the Base Rate Filing Package, Austin Energy explained that it
11 analyzed the relationship between the rate structure and conservation using a number
12 of different analyses and was unable to detect quantitatively any relationship between
13 changes to the rate structure and changes in conservation. Mr. Johnson has not
14 offered any criticism of Austin Energy’s quantitative analyses, and Mr. Johnson has
15 not provided any evidence that Austin Energy’s customers are responding to
16 conservation price signals.

³⁷ Johnson Presentation at 8: “AE overstates the role of the residential rate structure as a claimed cause of the proposed system revenue increase. AE’s current residential rate structure was implemented with the goal of promoting energy conservation. AE’s objection to the current rate structure is essentially that it has been too effective at promoting energy conservation. Furthermore, AE position ignores any potential long run reductions in utility cost which accompanies reduction in energy consumption. AE’s changes to the overall rate structure (including the customer charge) are likely to weaken price signals that suppress excessive and wasteful use of electricity.”

1 **Q. MR. JOHNSON TESTIFIES THAT AUSTIN ENERGY’S PROPOSAL**
2 **PRODUCES DIVERGENT CUSTOMER BILL IMPACTS.³⁸ HOW DO YOU**
3 **RESPOND?**

4 A. I address bill impacts later in this discussion. A change to the rate design always
5 produces divergent impacts. This is appropriate when one group of customers has
6 been heavily subsidizing another group of customers in the class, and a change to the
7 rate structure is needed to enhance fairness.

8 **Q. MR. JOHNSON TESTIFIES, “WHAT IS THE EFFECT OF AN EXCESSIVE**
9 **CUSTOMER CHARGE ON ENERGY EFFICIENCY? A. A HIGH**
10 **CUSTOMER CHARGE TENDS TO INHIBIT ENERGY CONSERVATION.”³⁹**
11 **HOW DO YOU RESPOND?**

12 A. Austin Energy’s proposed customer charge is set to cost, which is accurate, not
13 excessive.

14 **Q. MR. JOHNSON TESTIFIES THAT RATE DESIGN IS AN INEXPENSIVE**
15 **WAY TO PROMOTE ENERGY EFFICIENCY.⁴⁰ HOW DO YOU RESPOND?**

16 A. The strength of Austin Energy’s energy efficiency programs is another reason why it
17 is not necessary to focus exclusively on conservation in the rate structure. Austin
18 Energy spends significantly more on energy efficiency as compared to Texas’s state-

³⁸ Johnson Presentation at 9: “I disagree with AE’s proposed residential rate structure. The rate structure produces divergent customer impacts and is mis-aligned with energy conservation objectives. For inside city customers, low usage customers (<500 kWh) receive increases ranging from 51% - 84%. Medium usage customers (501 – 1,000 kWh) face increases ranging from 18% - 32%. 1,500 kWh and higher received decreases ranging from -5% - -26%.”

³⁹ *Id.* at 62.

⁴⁰ *Id.*: “At a time when electric utilities spend millions of dollars on energy efficiency programs, maintaining the fixed monthly charge at a reasonable level is a relatively inexpensive action to incentivize energy conservation.”

1 regulated utilities. The incentives are paid directly to customers and funded outside
2 base rates.

3 **Q. MR. JOHNSON TESTIFIES THAT AUSTIN ENERGY'S PROPOSAL**
4 **AMOUNTS TO A 150% INCREASE TO THE CUSTOMER CHARGE.⁴¹**
5 **HOW DO YOU RESPOND?**

6 A. This is the trick of using percentages when dollars are small to make things look
7 scary. An increase that is large on a percentage basis is still reasonable when the
8 dollars involved are relatively small. Both the current customer charge, at \$10, and
9 the proposed customer charge at \$25, represent a minority share of the customer's
10 total bill. The \$15 increase to the customer is needed to improve Austin Energy's
11 financial health and increase fairness.

12 **Q. MR. JOHNSON TESTIFIES THAT UNDER HIS COST STUDY, THE UNIT**
13 **COST IS ONLY \$15.39.⁴² HOW DO YOU RESPOND?**

14 A. I agree that the level of the customer charge should be decided in the cost study. If
15 Mr. Johnson prevails with his cost allocation recommendations, and the residential
16 unit cost is lower based on the Council-adopted adjustments to the cost study, then I
17 agree that it would be appropriate to set the customer charge to that lower level.

18 However, Austin Energy disagrees with Mr. Johnson's cost allocation
19 recommendations, as addressed by witness Burnham. Austin Energy's initial cost
20 study supports a customer unit cost of \$24.66,⁴³ which is rounded up to \$25.

⁴¹ *Id.* at 63: "YOU REFER TO MAKING A LARGER PORTION OF THE RESIDENTIAL RATE STRUCTURE INVARIANT WITH ENERGY USE. IS THIS AE'S OBJECTIVE? A. Apparently so. The residential basic customer charge is increased by 150%. The energy rates, cumulatively, are reduced by 9%. The result will be a significant weakening of the price signal for energy conservation."

⁴² *Id.*: "If my CCOSS adjustments are adopted (and the services function is included), AE's method would specify a residential customer charge of \$15.39, rather than the \$25.00 requested by AE."

⁴³ RFP, Schedule G-8.

1 **Q. MR. JOHNSON TESTIFIES, “FURTHERMORE, AE POSITION IGNORES**
2 **ANY POTENTIAL LONG-RUN REDUCTIONS IN UTILITY COST WHICH**
3 **ACCOMPANIES REDUCTION IN ENERGY CONSUMPTION.”⁴⁴ HOW DO**
4 **YOU RESPOND?**

5 A. There is no direct relationship between reductions in consumption and reductions in
6 base-rate costs. The costs are customer and demand costs, not energy costs. As
7 explained in Chapter 7 to the Base Rate Filing Package, decreases in consumption
8 have not been met with corresponding decreases in costs. As the customer base
9 grows, Austin Energy incurs significant costs to expand, operate, and maintain its
10 distribution system. The incremental costs are not avoided when customers use less.

11 Austin Energy’s policy is to lower rates when the utility achieves long-run
12 cost efficiencies. In 2016, Austin Energy initiated a Base Rate Review to lower rates.

13 **Q. MR. JOHNSON TESTIFIES, “DESPITE AE’S RECOGNITION OF THE**
14 **CITY’S GOAL OF ENERGY CONSERVATION, THE EFFORT TO RE-**
15 **STRUCTURE THE RESIDENTIAL RATES IS LIKELY TO INCREASE**
16 **FUTURE ELECTRICITY CONSUMPTION.”⁴⁵ HOW DO YOU RESPOND?**

17 A. There is no reason to think that consumption will increase. As explained in Chapter 7
18 of the Base Rate Filing Package, more efficient homes will continue to represent an
19 increasing share of the housing stock, multi-family housing continues to grow at a
20 faster rate than single-family housing, and Austin Energy’s energy efficiency and
21 demand response programs continue to shave consumption for existing homes.

⁴⁴ Johnson Presentation at 67.

⁴⁵ *Id.*, at 68.

1 **Q. MR. PAUL ROBBINS TESTIFIES THAT AUSTIN ENERGY IS LOOKING**
2 **TO ABANDON ITS PROGRESSIVE RATES.⁴⁶ HOW DO YOU RESPOND?**

3 A. The cutting edge of rate design has evolved since Austin Energy's tiered rate
4 structure was implemented. To achieve conservation, it is now understood that the
5 incline of the blocks does not need to be steep. The State of California has outlawed
6 steeply inclined block rates like Austin Energy's due to the resulting evisceration of
7 utilities' financial health there.⁴⁷

8 **Q. PAUL ROBBINS TESTIFIES THAT THE RATE STRUCTURE IS**
9 **RESPONSIBLE FOR THE DECLINING CONSUMPTION.⁴⁸ HOW DO YOU**
10 **RESPOND?**

11 A. Austin Energy has not been able to discover any empirical evidence that supports Mr.
12 Robbins' position. In fact, Austin Energy demonstrated in Figure 7.12 in the Base
13 Rate Filing Package that customers outside the City of Austin with three-tiers had the
14 same level of average reduction in consumption as customers inside the City of
15 Austin who had five-tiers.

16 **Q. DR. HAUSMAN STATES THAT CUSTOMERS NEED AN INCENTIVE TO**
17 **INVEST IN ENERGY EFFICIENCY.⁴⁹ HOW DO YOU RESPOND?**

⁴⁶ P. Robbins Position Statement, Section 2.1: "Austin Energy Seeks to Eliminate Its Progressive Residential Rates According to the annual Energy Information Agency 861 report, in 2020, Austin Energy's average consumption of 10,212 Kwh was 25% lower than the ERCOT average. Only 1% of ERCOT's 9.6 million Residential customers had lower average consumption than Austin."

⁴⁷ California Public Utility Commission, Rulemaking No. R.12-06-013, Residential Rate Reform Order Instituting Rulemaking.

⁴⁸ *Id.*, Section 2.1: "While Austin Energy has had some type of progressive Residential rate structure since 1981, it began its steeply progressive 5-tier system in 2013. Since then, there has been a profound drop in consumption of 13%. (This is not weather normalized.) While some amount of this can be attributed to the three other programs previously cited, or attributed to increase efficiency of federal appliance standards, some of it can be attributed to price elasticity of electric costs that drive consumption down."

⁴⁹ Hausman Direct at 19: "Customers must have an incentive to invest in energy-saving equipment and to adopt energy-saving practices, and must be confident that their investments will be more than repaid over a reasonable period of time through energy savings. Further, contractors can more easily promote energy-saving building upgrades and appliances if they can show customers that they are good financial investments, in addition to promoting home quality, health and comfort."

1 A. Incentives are provided outside of base rates under the energy-efficiency component
2 of the CBC.

3 I agree with Dr. Hausman that customers should be able to respond over time
4 with energy-efficiency investments that are economic, which depends on an ability to
5 expect that an energy-efficiency investment will result in a certain level of savings.
6 Austin Energy manages these expectations by implementing rate design changes
7 gradually rather than abruptly.

8 While Dr. Hausman and others have complained that the proposed changes to
9 the residential rate design in this case are abrupt and extreme, the reality is that Austin
10 Energy is retaining the essential character of the existing rate design. It is a two-part
11 rate design with a customer charge and energy rates, where most costs are recovered
12 in energy rates, and the energy rates are inclined in tiers.

13 It is also important to distinguish between savings on the bill and actual
14 avoided costs. When rates are inflated above cost, customers can experience bill
15 savings that do not correspond with actual avoided costs to the customer or to society.
16 In this situation, some energy-efficiency investments are not economic, leading to
17 poor energy decision-making.

18 **Q. UNDER TRADITIONAL RATEMAKING, IS INCENTIVIZING THE**
19 **ADOPTION OF ENERGY-EFFICIENCY MEASURES AN OBJECTIVE OF**
20 **RATE DESIGN?**

21 A. No.

22

1 **Q. DR. HAUSMAN STATES THAT ENERGY EFFICIENCY AND RATE**
2 **DESIGN CANNOT BE SEPARATED.⁵⁰ HOW DO YOU RESPOND?**

3 A. Austin Energy has not been able to find evidence that supports the hypothesis that
4 customers are responding to energy-efficiency price signals. There is no good reason
5 to think it is happening in Austin. Dr. Hausman provides no evidence that customers
6 respond to tiered rates.

7 **Q. DR. HAUSMAN STATES THAT BASED ON HIS EXPERIENCE, AUSTIN**
8 **ENERGY WOULD HARM ENERGY EFFICIENCY WITH ITS PROPOSAL.⁵¹**
9 **HOW DO YOU RESPOND?**

10 A. Dr. Hausman did not provide concrete examples from his experience. While it is true
11 that it is basic economic theory that customers will buy more of a given good or
12 service when the price goes down, it is not true that an energy efficiency investment
13 becomes more economic when rates are inflated to produce bloated payback
14 calculations.

15 **Q. DR. HAUSMAN STATES THAT AUSTIN ENERGY'S RATES SHOULD**
16 **SUPPORT DISTRIBUTED GENERATION.⁵² HOW DO YOU RESPOND?**

17 A. Dr. Hausman appears to be suggesting that it is sound ratemaking policy to distort
18 base rates to incentivize the adoption of distributed generation technology.

⁵⁰ *Id.* at 19. "Austin Energy's past success in promoting energy efficiency, and the beneficial usage trends it cites in its filing package, cannot be separated from a rate design that has effectively promoted energy efficiency and distributed generation by providing a strong price signal for reducing energy use, especially at higher monthly usage levels."

⁵¹ *Id.* at 20: "Basic economic theory, along with copious experience in energy efficiency programs, suggests that [Austin Energy's proposed rate design changes] would tend to lead to poorer performance of energy efficiency programs and investments."

⁵² *Id.* at 25: "While some modification may be appropriate, Austin Energy should retain a rate structure that provides a strong incentive for energy efficiency and customer-sited distributed generation, that is protective of vulnerable customers, and that allows those who have already implemented such beneficial practices and technologies to continue recouping their investments through reduced energy costs."

1 Incentivizing the adoption of technologies is not a traditional objective of rate
2 design and should not be emphasized over the primary objectives of fairness,
3 economic efficiency, and revenue stability.

4 Austin Energy offers generous rebates for customers who go solar, including
5 customer-sited rooftop solar, and shared solar. Austin Energy's power supply is long
6 on solar resources, and Austin Energy offers a generous Value of Solar tariff. All of
7 these practices promote the adoption of distributed generation and renewable
8 generation, but the incentives are provided outside of base rates.

9 There is no need to distort base rates to make distributed-generation
10 investments appear more economic.

11 **VI. RESIDENTIAL CUSTOMER CHARGE**

12 **Q. DR. HAUSMAN TESTIFIES THAT AUSTIN ENERGY SHOULD CLOSE**
13 **THE FAYETTE POWER PLANT,⁵³ AND EXPRESSES CONCERN THAT**
14 **THE CUSTOMER CHARGE WOULD INCREASE FOR LOW-INCOME**
15 **CUSTOMERS UNDER AUSTIN ENERGY'S PROPOSAL.⁵⁴ WHAT ARE THE**
16 **TWO MAJOR POLICY CONSIDERATIONS THAT, IN YOUR**
17 **EXPERIENCE, HAVE BEEN HISTORICALLY CITED TO SUPPORT THE**
18 **PUSH TO LIMIT CUSTOMER CHARGES FOR RESIDENTIAL**
19 **CUSTOMERS?**

20 **A.** They are (1) to protect vulnerable customers who are less able to afford a fixed
21 charge on the bill, and (2) to promote energy conservation with the end goal of
22 protecting the planet from human-induced climate change, limit the burning of fossil
23 fuels, and protect humans from the harmful health effects of carbon emissions.

⁵³ *Id.* at 25.

⁵⁴ *Id.* at 17.

1 **Q. DO THE TWO MAIN POLICY OBJECTIVES THAT SUPPORT THE PUSH**
2 **TO LIMIT THE CUSTOMER CHARGE APPLY EQUALLY TO AUSTIN**
3 **ENERGY AS COMPARED TO OTHER ELECTRIC UTILITIES?**

4 A. No, they do not. Austin Energy has an extremely generous Customer Assistance
5 Program (CAP) wherein the customer charge is waived for vulnerable customers.
6 This eliminates the concern about vulnerable customers not being able to bear a
7 higher fixed component of the bill, and not being able to otherwise avoid it, such as
8 via changes in usage.

9 Decisions regarding carbon-emitting resources are the jurisdiction of Austin
10 Energy's resource generation and climate-protection planning function, and not this
11 Base Rate Review process.

12 **Q. HOW DOES AUSTIN ENERGY'S CAP COMPARE TO OTHER UTILITIES**
13 **IN TEXAS?**

14 A. With respect to the generosity of its benefits, to my knowledge it has no peer.

15 **Q. MR. JOHNSON COMPARES AUSTIN ENERGY'S CUSTOMER CHARGE**
16 **TO SAN ANTONIO AND LUBBOCK.⁵⁵ HOW DO AUSTIN ENERGY'S**
17 **CUSTOMER ASSISTANCE PROGRAMS COMPARE TO THE PROGRAMS**
18 **IN LUBBOCK AND SAN ANTONIO?**

19 A. They are far more generous. Austin Energy waives the customer charge and CAP
20 CBC, and CPS Energy does not. Austin Energy also gives a 10% discount on
21 remaining charges. Austin Energy provided \$8.3 million in CAP discounts in Fiscal
22 Year 2021 and expects to give \$14.4 million under the proposed rates. CPS Energy
23 requires the customer to apply for enrollment, whereas Austin Energy automatically

⁵⁵ Johnson Presentation at 13.

1 enrolls customers who are already on certain federal, state, and local assistance
2 programs.⁵⁶ CPS Energy qualifies customers who are at or below 125% of Federal
3 Poverty Guidelines. Austin Energy reaches up to 200%. Lubbock Power and Light
4 does not appear to offer any assistance to vulnerable customers.

5 Austin Energy's programs are far more generous and Austin Energy is in a
6 completely different position relative to CPS Energy and Lubbock Power and Light
7 with respect to the potential impact of a customer charge on vulnerable customers.

8 **Q. WHAT IS THE OTHER MAJOR POLICY GOAL TO LIMIT THE**
9 **CUSTOMER CHARGE?**

10 **A.** It is to allow for the maximum possible conservation incentive by loading as many
11 costs as possible into energy rates, because costs that are not recovered under the
12 customer charge can be loaded into the energy rates. The purpose of the conservation
13 is to limit the utility's carbon footprint because historically, power production was
14 provided by fossil plants.

15 **Q. ARE AUSTIN ENERGY, CPS ENERGY, AND LUBBOCK POWER AND**
16 **LIGHT SIMILARLY SITUATED WITH RESPECT TO THE MIX OF**
17 **POWER PRODUCTION THAT IS ACCOMPLISHED BY FOSSIL PLANTS?**

18 **A.** No. In 2021, 28% of the power produced by Austin Energy came from carbon-based
19 resources. At CPS Energy and at Lubbock Power and Light, it was 56% fossil, or
20 twice as much.

⁵⁶ Medicaid Program, Supplemental Nutrition Assistance Program (SNAP), Children's Health Insurance Program (CHIP), Telephone Lifeline Program, Travis County Comprehensive Energy Assistance Program (CEAP), Medical Access Program (MAP), Supplemental Security Income (SSI). *See* Veterans Affairs Supportive Housing (VASH) <https://coautilities.com/wps/wcm/connect/occ/coa/util/support/customer-assistance/utility-bill-discounts>.

1 **Q. DOES AUSTIN ENERGY HAVE AN AGGRESSIVE PLAN TO ELIMINATE**
2 **CARBON-BASED GENERATION?**

3 A. Yes. Under Austin Energy's current Climate Protection Plan, 86% of Austin
4 Energy's electricity generation will be carbon-free by year-end 2025, 93% will be
5 carbon-free by year-end 2030, and all generation resources will be carbon-free by
6 2035.

7 **Q. BASED ON THE WAIVER OF THE CUSTOMER CHARGE FOR**
8 **VULNERABLE CUSTOMERS AND THE GREENING OF ITS**
9 **GENERATION MIX, ARE YOU SAYING THAT AUSTIN ENERGY SHOULD**
10 **ABANDON CONSERVATION IN ITS RATE DESIGN?**

11 A. No. I am saying that given Austin Energy's waiver of the customer charge for
12 vulnerable customers and the greenness of its generation mix, there is no need to
13 reach into the customer costs to load them into the energy rates.

14 Austin Energy's proposal to set the customer charge to cost is superior
15 because it represents a superior balance, by increasing the weight assigned to the
16 fairness and revenue stability objectives of rate design, which are meritorious
17 objectives that are assigned inadequate weight under Mr. Johnson's and Dr.
18 Hausman's proposals.

19 **Q. MR. JOHNSON STATES THAT AUSTIN ENERGY'S PROPOSED**
20 **CUSTOMER CHARGE IS HIGH COMPARED TO CPS ENERGY AND**
21 **LUBBOCK.⁵⁷ HOW DO YOU RESPOND?**

⁵⁷ Johnson Direct at 6: "AE's proposed 150% increase in the residential customer charge (\$25 proposed; \$10 current) is outside the range of residential fixed rates charged by the other two largest municipal electric utilities in Texas (San Antonio and Lubbock).

1 A. I accept the criticism that Austin Energy's proposed customer charge is higher than
2 some other MOUs in Texas. Based on the demographic trends in Austin, as explained
3 in Chapter 7 to the Base Rate Filing Package, including explosive customer growth
4 and shifts to smaller housing units, revenue stability has taken on heightened
5 importance and urgency at Austin Energy, and it is appropriate for Austin's rates to
6 be different from other MOUs in Texas. With declining average sales per customer,
7 Austin Energy must turn to the customer charge to provide financial stability.

8 Perhaps more importantly, under Austin Energy's CAP, raising the customer
9 charge to cost has the added benefit of increasing the rate relief provided to
10 vulnerable customers by increasing the value of the CAP's waiver of the customer
11 charge.

12 **Q. MR. JOHNSON STATES THAT AUSTIN ENERGY'S PROPOSED**
13 **CUSTOMER CHARGE IS HIGHER THAN INVESTOR-OWNED UTILITIES**
14 **IN TEXAS.⁵⁸ HOW DO YOU RESPOND?**

15 A. It is important to keep in mind that Mr. Johnson is comparing wires and poles utilities
16 like Oncor and CenterPoint to Austin Energy, a vertically integrated utility. The
17 difference is that in areas open to competition, many of the customer-related services
18 are provided by the retail electric provider (REP), and the costs of those services
19 would not be included in the IOU-TDU's cost of service.

20 Additionally, in Docket No. 22344, the PUC adopted a uniform rate design for
21 IOU-TDUs wherein the customer charge and metering charge are set directly to cost.
22 To my knowledge, the generic rate design has been adopted in every fully litigated

⁵⁸ *Id.* at 8: "AE's proposed residential customer charge is more than 2.7 times higher than the average customer charges of Texas investor-owned electric utilities. AE's proposed 150% increase in the customer charge is unreasonable."

1 IOU-TDU rate case since unbundling.⁵⁹ An accurate application of the generic rate
2 design would be Austin Energy’s proposal—to set the customer charge directly to
3 cost.

4 A cost-based charge cannot be called “unreasonable.” A highly granular cost
5 study is performed to identify the customer-related costs on the system. Economic
6 theory in regulatory economics strongly supports cost-based rates, as I have discussed
7 elsewhere. I do not think it is defensible to argue that a cost-based rate is
8 unreasonable.

9 **Q. MR. JOHNSON STATES THAT THE SHARE OF REVENUES UNDER THE**
10 **CUSTOMER CHARGE SHOULD STAY, AND IT SHOULD NOT BE SET**
11 **ABOVE \$13.00.⁶⁰ HOW DO YOU RESPOND?**

12 A. Mr. Johnson is arguing for no change to the proportion of revenues collected under
13 the fixed versus the variable charges. Mr. Johnson’s proposal does not address Austin
14 Energy’s need to strengthen its financial health. Mr. Johnson draws a line in the sand
15 at \$13.00, but I do not believe he has provided any reasoned basis for the limit.

16 The ICA’s role in this proceeding is to represent all residential customers, not
17 a subset who live inside the city, exhibit low usage, are not on the CAP, or some other
18 subset. Accepting Mr. Johnson’s \$13.00 customer charge would shift cost
19 responsibility onto high-usage customers.

⁵⁹ *Generic Issues Associated with Applications for Approval or Unbundled Cost of Service Rate Pursuant to PURA Section 39.201 and Public Utility Commission Subst. R. 25.344*, Docket No. 22344, Order No. 40—Interim Order Establishing Generic Customer Classification and Rate Design (Nov. 22, 2000).

⁶⁰ Johnson Presentation at 8: “If the City decides to increase the customer charge, the increase should be commensurate with the overall revenue increase percentage. Under no circumstances should the residential customer charge exceed \$13.00 in this case. An increase scaled to ICA’s overall recommendation results in a \$10.20 customer charge.”

1 **Q. MR. JOHNSON STATES THAT AUSTIN ENERGY’S COMPARISON OF ITS**
2 **PROPOSAL TO ADJACENT UTILITIES IS FLAWED BECAUSE THE**
3 **ADJACENT UTILITIES ARE RURAL.⁶¹ HOW DO YOU RESPOND?**

4 A. I addressed the benchmarking issue above.

5 Mr. Johnson argues that the customers of rural cooperatives are more costly to
6 serve due to the relatively lengthy span of overhead lines to reach a customer. Austin
7 Energy’s customers can be more costly to serve due to the extent of underground
8 lines in Austin. Underground lines are more costly to build, operate, and maintain.

9 **Q. MR. JOHNSON STATES THAT AUSTIN ENERGY’S REVENUE INCREASE**
10 **IS NOT APPLIED EVENLY TO THE RESIDENTIAL RATES.⁶² HOW DO**
11 **YOU RESPOND?**

12 A. This is just a pejorative way to say that Austin Energy is proposing changes to the
13 rate design. Anytime a change to the rate design is made, it will always be true that
14 increases and decreases will not be applied evenly or proportionately to rate elements.

15 **Q. MR. JOHNSON STATES THAT THE DIFFERENCE BETWEEN**
16 **UNBUNDLED AND BUNDLED ELECTRIC UTILITIES IN TEXAS IS THAT**

⁶¹ *Id.* at 12: “AE STATES THAT THE PROPOSED 150% CUSTOMER CHARGE INCREASE ALIGNS AE’S FIXED CHARGE RECOVERY WITH OTHER AREA ELECTRIC UTILITIES. IS THIS A VALID JUSTIFICATION? A. No. AE compares its proposed residential customer charge to the fixed charges of Georgetown’s municipal utility, and the Pedernales and Bluebonnet Electric Co-Ops. AE omits any comparison to the fixed monthly charges of investor-owned electric utilities in Texas, which on average are lower than AE’s current customer charge. Moreover, the customer charges of electric co-operatives typically are higher because those utilities serve rural areas, thus requiring longer service lines and serving lower population density than electric utilities like AE that serve major metropolitan areas. Instead of relying upon Georgetown, which is 4% of Austin’s size, as a benchmark, AE could have compared its residential customer charge to similarly sized municipal utilities’ monthly residential charge.”

⁶² *Id.* at 12: “PLEASE OUTLINE HOW AE APPLIES THE RESIDENTIAL REVENUE CHANGES TO RATE ELEMENTS? A. The significant residential class revenue increase is not proposed to be applied evenly or proportionately to rate elements.”

1 **THE GENERATION FUNCTION IS NOT PART OF THE UNBUNDLED**
2 **TDUS.⁶³ HOW DO YOU RESPOND?**

3 A. Mr. Johnson forgets about the retail function. As a vertical utility, Austin Energy
4 serves the role of the REP, and incurs all the associated customer-related costs.

5 **Q. MR. JOHNSON STATES THAT THE ACCOUNT COMPONENTS OF THE**
6 **CUSTOMER CHARGE ARE FUNCTIONALLY THE SAME FOR TDUS AND**
7 **BUNDLED ELECTRIC UTILITIES.⁶⁴ HOW DO YOU RESPOND?**

8 A. It is not enough that the accounts are the same. The question is, “what is the cost per
9 customer for each function given that more services are required at Austin Energy to
10 fulfill its REP role?”

11 **Q. MR. JOHNSON STATES THAT THE CUSTOMER CHARGE SHOULD**
12 **ONLY RECOVER COSTS THAT VARY DIRECTLY WITH NUMBER OF**
13 **CUSTOMERS.⁶⁵ HOW DO YOU RESPOND?**

14 A. I agree and Austin Energy has set the customer charge based on the results of the
15 Cost-of-Service Study. Of course, if Mr. Johnson’s logic were applied to energy rates,
16 Austin Energy would have no energy rates for residential customers because Austin
17 Energy incurs no base-rate costs that vary directly based on energy use. Mr.
18 Johnson’s positions are not internally consistent.

19 **Q. MR. JOHNSON STATES THAT THE COSTS THAT VARY DIRECTLY**
20 **WITH CUSTOMERS ARE METERS, SERVICE LINES, METER READING,**
21 **AND CUSTOMER BILLING.⁶⁶ HOW DO YOU RESPOND?**

⁶³ *Id.* at 58.

⁶⁴ *Id.* at 58.

⁶⁵ *Id.* at 59.

⁶⁶ *Id.*

1 A. Mr. Johnson is incorrect as regards service drops, which are sized by engineering
2 based on connected loads, not on a customer basis.

3 **Q. MR. JOHNSON STATES THAT THERE IS NO LOGICAL RATIONALE**
4 **FOR RECOVERING UNCOLLECTIBLE EXPENSE IN THE MONTHLY**
5 **CUSTOMER CHARGE.⁶⁷ HOW DO YOU RESPOND?**

6 A. The logical rationale is that uncollectible expenses are more customer-driven as
7 compared to energy- or demand-driven. Those are the three options, and the customer
8 classification is most consistent with cost causation because uncollectible expense is
9 caused by customers who fail to pay.

10 **Q. MR. JOHNSON STATES THAT THE FUNCTION OF THE CUSTOMER**
11 **CHARGE IS TO RATION ACCESS TO THE SYSTEM.⁶⁸ HOW DO YOU**
12 **RESPOND?**

13 A. The concept of rationing access to Austin Energy's system has no value because the
14 City of Austin requires that citizens have electric service.⁶⁹ The customer cannot
15 respond to a price signal "rationing access" and forego electric service. Moreover, the
16 waiver of the customer charge under the CAP eliminates the concern that vulnerable
17 customers might forego electric service to avoid the customer charge.

⁶⁷ *Id.* at 61.

⁶⁸ *Id.*: "WHAT ARE THE POLICY REASONS FOR ENSURING THE RESIDENTIAL CUSTOMER CHARGE IS NOT EXCESSIVE? A. An excessive customer charge can distort appropriate price signals for residential customers. The dominant economic function of a customer charge is to ration access to the utility system. That objective conflicts with the policy basis for regulating monopolies and is counter to the concept of electricity as an essential service. With the exception of its role in rationing access to the system, the customer charge provides no meaningful price signal that is relevant to resource allocation."

⁶⁹ National Fire Protection Association, Chapter 25-12 (Technical Codes) § 25-12-211, Article 9 (Property Maintenance Code), 111.1.3 Structure Unsafe for Human Occupancy: A structure is unfit for human occupancy whenever [it]... lacks illumination. 604.2 Service. In accordance with NFPA 70,...A dwelling unit must be served by an electrical service with a rating of at least 60 amperes.

1 Q. MR. JOHNSON STATES THAT COSTS VARY BY USAGE AND SO THE
2 PRICE SIGNAL SHOULD BE USAGE-BASED.⁷⁰ HOW DO YOU RESPOND?

3 A. Both under Austin Energy's current and its proposed rate designs, the vast majority of
4 charges would be usage-based. By regulating usage, the customer would retain a high
5 degree of control over the bill.

6 Q. MR. JOHNSON STATES THAT INCREASING THE CUSTOMER CHARGE
7 CAN MAKE ENERGY SAVINGS MEASURES LESS ATTRACTIVE.⁷¹ HOW
8 DO YOU RESPOND?

9 A. Mr. Johnson is apparently concerned that a cost-based customer charge will
10 disincentivize the adoption of energy-efficiency measures. Mr. Johnson's
11 recommendation to keep the below-cost customer charge and retain more steep tiers
12 will make energy-efficiency investments seem more attractive to customers who are
13 calculating bill savings.

14 An example will show how a customer can be financially harmed when
15 customer charges are deflated and energy rates are inflated to incentivize energy-
16 efficiency investments.

17 Consider a residential customer whose load characteristics match the class
18 average, but the customer consumes 2,500 kWhs per month. Using unit costs from the
19 cost study, Austin Energy's monthly base-rate costs to service the customer would be

⁷⁰ Johnson Presentation at 62: "Because the electric utility's cost structure is dominated by costs that vary with changes in demand and energy usage, the usage-sensitive rate is the primary source of meaningful price signals."

⁷¹ *Id.* at 62: "But the long-term tendency for utility management to seek increases in the customer charge can inhibit the attractiveness of energy savings measures, because a larger portion of the rate structure becomes **invariant with energy usage. This can adversely affect the payback** period and net bill savings available to customers who purchase high efficiency appliances."

1 \$146.41.⁷² Under Austin Energy's existing rates, the base-rate portion of the
2 customer's bill would be \$185.38.⁷³

3 The customer decides to make energy-efficiency investments that will shave
4 500 kWh per month off the bill, and the investments will cost the customer \$40.00
5 per month to pay off.

6 At first blush, this looks like a good investment. The customer has paid \$40.00
7 per month to save \$46.57 off the bill (500*.09314 per kWh). The bill savings exceed
8 the costs of the investment.

9 But upon closer inspection, the investment is not good. The customer's
10 electric bill with the energy-efficiency is \$138.81;⁷⁴ and, the customer is spending \$40
11 per month on the energy-efficiency investments, for a total monthly cost of \$178.81.

12 Had Austin Energy set its rates to cost, and the customer made no energy-
13 efficiency investments, the customer's bill would have been only \$146.61.⁷⁵

14 The customer is worse off financially to the tune of \$32 per month because
15 Austin Energy's above-cost energy rates and below-cost customer charge caused the
16 customer to make an uneconomic investment. The investment is uneconomic because
17 the costs of the investment (\$40 per month) exceed the value of the avoided costs of
18 the investment of \$24.39 per month.⁷⁶

⁷² Customer charge (24.66) plus energy charges (2500 x .0487799 = 121.95). The energy unit cost is \$242,464,442 in demand-related costs (Schedule G-6) divided by 4,968,587,561 energy billing units (WP H-5.1).

⁷³ Customer charge (\$10) plus tier 1 energy charges (.02801 x 500) plus tier 2 energy charges (.05832 x 500) plus tier 3 energy charges (.07814 x 500) plus tier 4 energy charges (.09314 x 1000).

⁷⁴ Base-rate bill from above less the bill savings of \$46.57.

⁷⁵ See monthly cost above at 2500 kWh per month.

⁷⁶ 500kWhs per month at Austin Energy's energy unit cost of \$.0487799, from above.

1 The key concept is that the actual avoided costs are the costs avoided on
2 Austin Energy's system (\$24.39), not on the customer's bill (\$46.57). Setting rates
3 above cost distorts customer decision-making and induces uneconomic investments.

4 The solution to this problem is to set rates closer to cost, which is Austin
5 Energy's proposal. Cost-based rates send accurate price signals that enable the
6 customer to analyze the true economic value of an energy-efficiency investment.
7 Under cost-based rates, a customer would not be willing to spend \$40 per month on
8 energy efficiency to avoid \$24 on the bill.

9 Austin Energy's proposal to set the customer charge to cost and flatten the
10 tiers is superior from the standpoint of economic efficiency, because it mitigates the
11 financial harm from inflated energy charges.

12 **Q. MR. JOHNSON STATES THAT MAINTENANCE OF THE CURRENT**
13 **CUSTOMER CHARGE WOULD BE REASONABLE.⁷⁷ HOW DO YOU**
14 **RESPOND?**

15 A. Maintenance of the existing rate design is not reasonable because it has contributed to
16 the undermining of Austin Energy's financial health and resulted in inadequate cost
17 recovery from low-usage customers. Customers are being added to the system at a
18 high rate, and the customer charge fails to recover the incremental costs to expand,
19 maintain, and operate the distribution system.

⁷⁷ Johnson Presentation at 64: "Given that the current \$10.00 customer charges exceed the Basic Customer Costs shown on Schedule CJ-6, maintaining the existing customer charge level is not unreasonable (particularly at relatively low residential base revenue increase percentages). However, the combined effect of the customer charge with the tier block energy charge rate structure is an additional consideration. A reasonable approach might seek roughly to maintain the existing relationship between customer charge and energy charge revenues."

1 **Q. MR. JOHNSON STATES THAT OTHER UTILITIES ARE FINANCIALLY**
2 **STABLE WITH LOWER CUSTOMER CHARGES.⁷⁸ HOW DO YOU**
3 **RESPOND?**

4 A. Customer growth distinguishes Austin Energy from the other utilities Mr. Johnson
5 cites. As shown in Figure 7-18 to the Base Rate Filing Package, since Austin
6 Energy's last rate review, the Austin-Round Rock-Georgetown metropolitan
7 statistical area was the fastest growing in the country among MSAs with population
8 above one million. The combination of rapid customer growth and inadequate cost
9 recovery has reached the point where financial integrity is jeopardized.

10 **Q. MR. PAUL ROBBINS STATES THAT AUSTIN ENERGY IS INCREASING**
11 **THE CAP SUBSIDY TO COMPENSATE FOR RADICAL RATE**
12 **RESTRUCTURING.⁷⁹ HOW DO YOU RESPOND?**

13 A. Austin Energy is not proposing any changes to the structure of the CAP. The
14 expected increase in benefits under the CAP is a byproduct of the changes to the
15 residential rate design.

16 **Q. DR. HAUSMAN STATES THAT AUSTIN ENERGY'S PROPOSAL WOULD**
17 **HARM ENERGY EFFICIENCY AND LOW-INCOME CUSTOMERS.⁸⁰ HOW**
18 **DO YOU RESPOND?**

⁷⁸ Johnson Presentation at 66: "IS A \$25 CUSTOMER CHARGE NECESSARY TO AVOID UNSUSTAINABLE FINANCIAL CONDITIONS? A. No. As discussed previously, AE's current customer charge is higher than the average customer charge for IOUs in Texas, as well as the customer charge of the other two large municipal electric utilities in the state. Thus, the other major electric utilities in Texas have maintained their financial integrity without charging a \$25 fixed customer charge."

⁷⁹ P. Robbins Position Statement, Section 1.4.

⁸⁰ Hausman Direct at 4: "I conclude Austin Energy's proposed restructuring of its residential electric rates, including both its proposal to more than double the monthly fixed charge per customer and its proposed modification of its five-tiered rate structure, would be detrimental to the effectiveness of its energy efficiency programs and harmful to customers, and particularly to low-income customers."

1 A. In setting the customer charge to the unit cost, Austin Energy’s proposal has no effect
2 on the energy-related costs and the demand-related costs that are targeted for
3 avoidance via energy efficiency programs.

4 **Q. DR. HAUSMAN STATES THAT THE COSTS OF AUSTIN ENERGY’S RATE**
5 **DESIGN OUTWEIGH THE BENEFITS.⁸¹ HOW DO YOU RESPOND?**

6 A. There are no incremental costs to a rate design. Austin Energy must set rates to
7 recover the assigned level of revenues, no matter the rate design.

8 **Q. DR. HAUSMAN STATES THAT AUSTIN ENERGY’S PROPOSAL IS NOT**
9 **FAIR TO LOW-USAGE CUSTOMERS.⁸² HOW DO YOU RESPOND?**

10 A. “Fairness” is open to interpretation. Austin Energy defines “fairness” as cost-based
11 rates. Cost-based rates are fair because the charges to the customer are equal to the
12 value of the resources spent by Austin Energy to provide the services, no more and no
13 less. Departures from cost-based rates ask one customer to bear in rates costs that
14 were caused by other customers, which is unfair. Currently, low-usage customers in
15 the residential class are bearing in rates roughly one half the costs of the services they
16 enjoy, while the other half of the costs are shifted onto and borne by higher usage
17 customers and customers in other classes. This is depicted visually in Figure 7-32 to
18 the Base Rate Filing Package. Dr. Hausman’s recommendation to continue this
19 practice does not adequately address fairness issues under the current rate structure.

20

⁸¹ *Id.*

⁸² *Id.* at 7.

1 **Q. DR. HAUSMAN STATES THAT MORE OF THE CUSTOMER’S BILL WILL**
2 **BE UNAVOIDABLE UNDER AUSTIN ENERGY’S PROPOSAL.⁸³ HOW DO**
3 **YOU RESPOND?**

4 A. Dr. Hausman is correct that the unavoidable portion of the bill will increase. The
5 change promotes much-needed revenue stability for Austin Energy and ultimately
6 benefits all customers.

7 **Q. DR. HAUSMAN STATES THAT AUSTIN ENERGY’S PROPOSAL WOULD**
8 **AFFECT HIGH- AND LOW-USAGE CUSTOMERS DIFFERENTLY.⁸⁴ HOW**
9 **DO YOU RESPOND?**

10 A. Dr. Hausman is correct that low-usage customers will see increases to the bill, and
11 some higher usage customers will see decreases. However, Dr. Hausman is incorrect
12 that Austin Energy’s proposal will reward certain customers and punish others. Cost-
13 based rates do not punish or reward anyone, and Austin Energy’s proposal is a move
14 in the direction of cost of service for all types of residential customers, except CAP
15 customers.

⁸³ *Id.* at 8: “Please describe how Austin Energy proposes to reconfigure its residential rates with respect to fixed vs. variable charges. A. Austin Energy currently assesses a monthly \$10 per-customer fixed charge, which is unavoidable and independent of energy usage. All other residential charges are on a per-5 kWh basis, and thus scale directly according to the customer’s electricity usage each month. The Company now proposes to increase the fixed (unavoidable) portion of each customer’s bill to \$25. Thus, while the per-kWh charge is likely to be lower for most customers (as seen in Figure 2 below), the total bill will increase for many customers, and more of the cost will be unavoidable.”

⁸⁴ *Id.*: “Would this change affect all Austin Energy ratepayers equally? A. No. Because the fixed portion of the bill would increase while the variable portion would decrease, the effect would be a large rate increase for customers who use little energy every month, coupled with a large rate decrease for those who use a large volume of energy. This would effectively be rewarding customers with large, energy-intensive homes and other large energy uses such as pool heaters and electric vehicles, while penalizing users with smaller or more energy efficient homes.”

1 **Q. DR. HAUSMAN IMPLIES THAT AUSTIN ENERGY IS SETTING THE**
2 **CUSTOMER CHARGE TO RECOVER CAPACITY COSTS.⁸⁵ IS HE**
3 **CORRECT?**

4 A. No. Austin Energy agrees with Dr. Hausman that capacity costs are not customer-
5 related. Austin Energy has classified these costs as demand-related, and has not
6 included the costs in the proposed customer charge.

7 **Q. DR. HAUSMAN STATES THAT ENERGY EFFICIENCY AND SOLAR AND**
8 **DEMAND RESPONSE CAN DELAY CAPACITY COSTS AND STATES**
9 **AUSTIN ENERGY IS CLAIMING THAT CAPACITY COSTS ARE ALL**
10 **FIXED.⁸⁶ HOW DO YOU RESPOND?**

11 A. Dr. Hausman has mischaracterized Austin Energy's position by suggesting that
12 Austin Energy considers all capacity costs to be fixed, and Dr. Hausman conflates the
13 use of the term "usage" in reference to demand with its use in reference to energy
14 consumption.

15 Both the rate at which a customer demands power (demand in kW) and the
16 amount of energy a customer consumes over time (such as kWhs in a monthly billing
17 cycle) vary, and both could be said to vary based on a customer's usage. However,
18 one needs to be careful not to switch carelessly between references to demand-related
19 usage of the system, and energy-related usage of the system.

⁸⁵ *Id.* at 10: "Do you agree with Austin Energy's allocation of costs between fixed and variable costs? No. While I agree that certain customer-related costs, such as meters, interconnections, and billing, are essentially fixed on a per-customer basis, I do not think this is a reasonable characterization of capacity costs, at least over time."

⁸⁶ *Id.* at 11: "One of the great benefits of energy efficiency, customer-sited solar, and demand response is that they can delay, reduce, or even eliminate the need for system expansion and distribution investments. Once those investments have been made and become sunk costs, it is true that they can no longer be avoided; but to say that the ongoing need for system investments is insensitive to usage is not only misleading, it is a counterproductive planning and ratemaking perspective that would lead to inefficient system investment and usage."

1 When a customer puts load on the system, it imposes demand on the system,
2 and Austin Energy must make system capacity available for the customer's use—at
3 the power plant, on the transmission system, and on the parts of the distribution
4 system that are on the feed path to the customer's load. The "usage" that is relevant to
5 system capacity costs is demand usage, the rate of power flow demanded by the
6 customer, denominated in kilowatts.

7 The challenge in residential rate design is that there are currently no demand
8 rates assessed to residential customers, and a choice must be made where demand
9 costs are to be recovered. Demand costs are the most significant category of costs on
10 the system, and the decision where to put demand costs has the most profound impact
11 on the residential rate design.

12 For residential customers, Austin Energy has proposed to recover 100% of
13 demand costs in energy rates, which is the most favorable possible treatment to
14 incentivize energy conservation. By mischaracterizing Austin Energy's position as
15 one where capacity costs are "considered fixed," Dr. Hausman is implying that Austin
16 Energy is loading these costs into the customer charge, which is not correct.

17 **Q. DR. HAUSMAN STATES THAT A CUSTOMER SHOULD BE ABLE TO**
18 **CONNECT TO THE GRID FOR NO MORE THAN THE COST OF**
19 **CONNECTING TO THE GRID.⁸⁷ HOW DO YOU RESPOND?**

20 A. Austin Energy's proposed rate design is consistent with this principle.

21 **Q. DR. HAUSMAN STATES THAT CUSTOMERS THAT SUPPLY POWER TO**
22 **THE GRID SHOULD BE FAIRLY COMPENSATED FOR THE FULL**
23 **VALUE OF THE POWER THEY SUPPLY.⁸⁸ HOW DO YOU RESPOND?**

⁸⁷ *Id.*

1 A. Austin Energy's Value of Solar tariff is designed to satisfy this principle.

2 **Q. DR. HAUSMAN STATES THAT CUSTOMERS SHOULD HAVE AN**
3 **INCENTIVE TO REDUCE PEAK USAGE.⁸⁹ HOW DO YOU RESPOND?**

4 A. Consistent with the above discussion, the "usage" Mr. Hausman is referring to here is
5 demand, the rate of power flow. The rate design that follows logically from Dr.
6 Hausman's discussion is demand rates.

7 **Q. DR. HAUSMAN STATES THAT HIGHER FIXED CHARGES PENALIZE**
8 **CUSTOMERS WHO HAVE ALREADY INVESTED IN REDUCING THEIR**
9 **ENERGY USAGE.⁹⁰ HOW DO YOU RESPOND?**

10 A. Under Austin Energy's proposal, most residential costs would continue to be
11 recovered under energy rates, and a customer who invests in energy efficiency would
12 continue to see significant bill savings from lowered consumption.

13 **Q. DR. HAUSMAN STATES THAT A HIGHER FIXED CHARGE**
14 **DISINCENTIVIZES EFFICIENT USE OF RESOURCES.⁹¹ HOW DO YOU**
15 **RESPOND?**

16 A. I strongly disagree with Dr. Hausman. The efficiency problem with residential rate
17 design is loading capacity costs into energy rates. The issue is discussed in Chapter 7,

⁸⁸ *Id.* at 11.

⁸⁹ *Id.* at 12: "Why do high fixed charges lead to less efficient utilization of, and investment in, the grid? A. Efficient grid utilization requires customers to use electricity, to the extent possible, in a way that minimizes the stress on the system. This generally means they should have a strong incentive to lower peak usage, either by reducing usage overall, or by shifting usage to times of lower overall demand such as the middle of the night. Customers can respond to these incentives by, for example, using programmable thermostats and "smart" appliances, or choosing when to charge their electric vehicles (EVs), or through investments in energy efficiency, rooftop solar, or on-site storage. Austin Energy should be focusing on rate designs that increase flexibility and help customers make beneficial energy choices; it should not be eliminating flexibility by moving costs into a fixed per-customer charge."

⁹⁰ *Id.* at 12.

⁹¹ *Id.*

1 Section 7.6 to the Base Rate Filing Package. Capacity costs dominate the cost of
2 service, so this is a significant issue.

3 **VII. RESIDENTIAL RATES—LOW INCOME CUSTOMERS**

4 **Q. A NUMBER OF PARTICIPANTS HAVE RAISED ISSUES REGARDING**
5 **THE RELATIONSHIP BETWEEN A RESIDENTIAL CUSTOMER’S**
6 **INCOME LEVEL AND THAT CUSTOMER’S CONSUMPTION OF**
7 **POWER.⁹² HAVE YOU ANALYZED THE RELATIONSHIP BETWEEN**
8 **INCOME AND CONSUMPTION?**

9 A. Yes.

10 **Q. WHAT DID YOU FIND?**

11 A. I found that there are many factors that explain a residential customer’s consumption,
12 that the role of income in driving a customer’s consumption is unclear, and there does
13 not appear to be any simple rule of thumb regarding the relationship between income
14 and consumption that would enable Austin Energy’s residential base rates to be
15 targeted to grant relief to low-income customers, if that is identified by the City
16 Council as a desirable objective.

17 To the extent the City Council finds that the level of relief under the CAP to
18 be insufficient, the City Council can increase the level of assistance under the CAP in
19 a very transparent method, rather than attempting to bolster the low-income assistance
20 by adjusting the design of the residential class’s base rates.

⁹² See, e.g., P. Robbins Position Statement, Section 1.1; Hausman Direct at 13.

1 **Q. MR. PAUL ROBBINS DEDUCES THAT CAP CUSTOMERS CONSUME**
2 **MORE DUE TO RENTING MULTI-FAMILY HOUSING.⁹³ HOW DO YOU**
3 **RESPOND?**

4 A. Although Austin Energy’s demographic information indicates that multi-family
5 residential customers consume half as much as single family, and thus multi-family
6 occupancy would deflate consumption, Austin Energy accepts the possibility that
7 CAP customers may live in households with more members in the household, and
8 that this may be a significant contributing factor to the higher consumption exhibited
9 by CAP customers.

10 **Q. MR. PAUL ROBBINS STATES THAT CAP MAY BE A POOR PROXY FOR**
11 **LOW INCOME.⁹⁴ HOW DO YOU RESPOND?**

12 A. As stated in the Base Rate Filing Package, Austin Energy does not keep income
13 information on individual customers. It is not possible to establish a direct
14 relationship between a customer’s income level and that customer’s consumption. Mr.
15 Robbins’ analysis is based on averages for zip codes and Census areas. Nonetheless,
16 income does not cause electric consumption. Some factors within a zip code will tend
17 to cause consumption to be higher, and some will cause it to be lower.

⁹³ P. Robbins Position Statement: “It is my deduction that the largest reason for the slightly higher consumption of CAP customers is that 67% of the (2021) participants live in multifamily units. According to U.S. Census American Community Survey statistics for 2020, rented units in Travis County are much more likely to be all-electrically heated than owner-occupied units.”

⁹⁴ *Id.*, Section 1.1: “However, the much larger flaw in the utility’s argument is that it assumes the 7% of customers that receive CAP benefits are representative of the consumption patterns of all poor people in the service territory, which is not the case. In discovery, Austin Energy provided me with data that quantifies how much electricity is consumed per zip code by house type (single family, multiunit housing, and apartments) for all Residential customers in 2020. Matching this consumption to income data in the American Community Survey of the U.S. Census proves an entirely different outcome: consumption tracks income.”

1 I accept that Austin's highest income residents tend to live in larger homes
2 with higher consumption, but I maintain that this is a small fraction of the Austin
3 community, and there is no clean way to incorporate this into a base-rate structure.

4 **Q. DR. HAUSMAN STATES THAT HE DOES NOT BELIEVE THAT LOW**
5 **INCOME CUSTOMERS USE MORE AND THAT THE CURRENT RATES**
6 **HURT THEM.⁹⁵ HOW DO YOU RESPOND?**

7 A. There are many high- and low-usage customers who are in high-income areas, and
8 there are many high- and low-usage customers who are in low-income areas.

9 As to whether Austin Energy's proposal benefits vulnerable customers "in any
10 way," I would note that Austin Energy's proposal increases the value of the CAP's
11 waiver of the customer charge from \$10 per month to \$25 per month, which benefits
12 vulnerable customers on the CAP.

13 **Q. DR. HAUSMAN STATES THAT NON-CAP, HIGH-ENERGY CUSTOMERS**
14 **CAN AND SHOULD BE GIVEN A STRONG INCENTIVE TO REDUCE**
15 **THEIR ENERGY USAGE, WITHOUT AFFECTING LOWER INCOME**
16 **CUSTOMERS.⁹⁶ HOW DO YOU RESPOND?**

17 A. By relying on energy rates for cost recovery, the proposed rate design strongly
18 incentivizes non-CAP customers, including those who live in large homes, to
19 conserve energy.

⁹⁵ Hausman Direct at 13: "Austin Energy suggests that based on its analysis, 'the current residential rate structure negatively impacts vulnerable customers.' Do you agree? No. I think it is very important to be aware of how rate structures affect vulnerable, lower-income customers, and to mitigate that impact when possible, but I do not believe that Austin Energy customers with high usage are low-income or vulnerable customers in general, or that its proposal would benefit low-income or vulnerable customers in any way."

⁹⁶ *Id.* at 14.

1 Q. DR. HAUSMAN TESTIFIES, “FOR EXAMPLE, IT MAY BE THAT THOSE
2 LOW-INCOME CUSTOMERS WHO HAVE HIGHER-THAN-AVERAGE
3 USAGE ARE MORE LIKELY TO APPLY FOR ENERGY ASSISTANCE
4 THROUGH CAP, WHICH WOULD STRONGLY SKEW THE COMPANY’S
5 ANALYSIS.”⁹⁷ HOW DO YOU RESPOND?

6 A. Dr. Hausman has not provided data to support his theory.

7 VIII. RESIDENTIAL BILL IMPACTS

8 Q. A NUMBER OF PARTICIPANTS EXPRESS CONCERN ABOUT BILL
9 IMPACTS TO RESIDENTIAL CUSTOMERS. WHAT SPECIFIC GROUPS
10 OF RESIDENTIAL CUSTOMERS DO PARTICIPANTS EXPRESS
11 CONCERN ABOUT?

12 A. As follows:

- 13 1. Mr. Robbins expresses concern about increases for all residential customers;⁹⁸
14 2. Mr. Johnson⁹⁹ and Dr. Hausman¹⁰⁰ express concern about the disparity in bill
15 impacts between low- and high-usage customers;
16 3. Mr. Johnson expresses concern about the disparity in bill impacts between inside-
17 city and outside-city customers;¹⁰¹
18 4. Mr. Johnson¹⁰² and Mr. Robbins¹⁰³ express concern about inside-city non-CAP
19 customers;

⁹⁷ *Id.*

⁹⁸ P. Robbins Position Statement, Issue 1.

⁹⁹ Johnson Presentation at 9.

¹⁰⁰ Hausman Direct at 8.

¹⁰¹ Johnson Presentation at 6.

¹⁰² *Id.* at 9.

1 5. Dr. Hausman expresses concern about granting bill decreases to high-income
2 customers;¹⁰⁴ and,

3 6. Mr. Robbins also expresses concern about bill increases for outside-city
4 customers, and CAP participants.¹⁰⁵

5 **Q. WHY WOULD MANY RESIDENTIAL CUSTOMERS SEE BILL INCREASES**
6 **UNDER AUSTIN ENERGY’S PROPOSAL?**

7 A. Austin Energy wants the customer’s bill to be closer to what it costs Austin Energy to
8 serve them, and to send them correct price signals. For the residential class, that
9 means (1) lessening subsidies the class has been receiving from other classes, and (2)
10 lessening subsidies within the class.

11 Because of the demographic trends discussed in Chapter 7 to the Base Rate
12 Filing Package, the residential class has been drifting further from cost and it is
13 getting to the point where a big step is required to get the class back on track toward
14 cost of service.

15 **Q. DO ALL THE CUSTOMER GROUPS WHO PARTICIPANTS EXPRESS**
16 **CONCERN ABOUT MOVE CLOSER TO COST-BASED CHARGES UNDER**
17 **AUSTIN ENERGY’S PROPOSAL?**

18 A. Yes. The cost-of-service analysis was extended into the residential class. For all
19 customer groups in the class, Test Year load data was obtained. The load data was
20 used to allocate the costs assigned to the residential class to the individual customers
21 within the class following the same allocation methodologies used to assign costs to
22 the classes. The results can be seen in Exhibit BTM-2.

¹⁰³ P. Robbins Position Statement, Issue 1.

¹⁰⁴ Hausman Direct at 15.

¹⁰⁵ P. Robbins Position Statement, Issue 1.

1 The results show that under Austin Energy’s proposed rates, all customer
2 groups that Participants have expressed concern about would experience charges that
3 are closer to Austin Energy’s costs incurred to serve the customers.

4 Groups that are experiencing increases are experiencing increases because
5 under current rates, they are being under-charged by Austin Energy relative to what it
6 costs Austin Energy to serve them. Groups that are experiencing decreases are
7 experiencing decreases because under current rates, they are being over-charged by
8 Austin Energy relative to what it costs Austin Energy to serve them. This explains
9 why customers see different impacts from the proposal.

10 **Q. HOW DO THE CUSTOMER IMPACTS UNDER AUSTIN ENERGY’S**
11 **PROPOSAL COMPARE TO THE IMPACTS UNDER MR. JOHNSON’S**
12 **PROPOSAL?**

13 A. Austin Energy’s proposal treats customers the same with respect to where they would
14 be relative to cost, whereas Mr. Johnson’s proposal seeks to preserve subsidies for
15 certain groups. The analysis supporting these conclusions can be seen in Exhibit
16 BTM-2.

17 **Q. DR. HAUSMAN STATES THAT NOT ALL CUSTOMERS WOULD FACE**
18 **THE SAME IMPACTS FROM THE PROPOSAL.¹⁰⁶ HOW DO YOU**
19 **RESPOND?**

¹⁰⁶ Hausman Direct at 15: “Finally, as noted above, not all customers would face the same rate impact of the proposal. Those residential customers with the highest usage—with large houses and heated swimming pools—would see a substantial rate decrease under the proposal, while those with the lowest usage would see a very large increase. It is clear to me that this would be very detrimental to low-income customers, to the benefit of their wealthier neighbors.”

1 A. Customers with different usage levels will see different bill impacts because they are
2 not equidistant from cost. The goal is fairness, which is achieved when the bill is at
3 cost.

4 In review of its load data, Austin Energy has not found that high-usage
5 customers represent wealthy people in large homes who have heated swimming
6 pools. I also disagree that people who are wealthy, or people who live in large homes,
7 or people who have a heated swimming pool should be punished with above-cost
8 charges.

9 **Q. DR. HAUSMAN STATES THAT CAP CUSTOMER IMPACTS SHOULD NOT**
10 **DRIVE THE RATE DESIGN.¹⁰⁷ HOW DO YOU RESPOND?**

11 A. I agree. The impact on vulnerable customers is one issue that must be considered and
12 addressed when designing rates, but it is not the driver of the proposed rates.

13 **Q. DR. HAUSMAN STATES THAT CAP CUSTOMERS ARE NOT**
14 **REPRESENTED IN THE HIGHEST LEVELS OF USAGE.¹⁰⁸ HOW DO YOU**
15 **RESPOND?**

16 A. There are not many customers at any income level at the highest levels of usage.
17 There is simply not much to be gained by targeting very high-usage customers in the
18 rate design.

¹⁰⁷ Hausman Direct at 16: “My first observation is that CAP customers comprised about 7.7% of Austin Energy’s customers in 2020. While it is essential to ensure that these customers’ energy burden is addressed, this is already the basis of the CAP program itself. It makes no sense to abandon an effective rate structure for encouraging energy efficiency among the other 92% of customers because a small number of CAP-enrolled customers also have relatively high energy use.”

¹⁰⁸ *Id.*: “My next observation is that at higher levels of energy use, the number of CAP customers drops off rapidly, as would be expected. The current tier 5 (2500+ kWh per month) had less than 4% CAP customers in 2020, and above customers using 3,000 kWh per month or more included only about 2% CAP customers. It is still concerning if any low-income customers are using such a large volume of electricity, although as noted above questions have been raised about how well CAP is restricted to low-income users, and we do not know the specific circumstances for each customer.”

1 **IX. PRI-2 HIGH LOAD FACTOR CLASS**

2 **Q. MR. ROBBINS STATES THAT THE PRI-2 HLF CUSTOMERS WOULD NOT**
3 **SEE ENERGY RATES.¹⁰⁹ HOW DO YOU RESPOND?**

4 A. Mr. Robbins is correct that the customers will see no energy base rates. This is
5 appropriate. There are no energy costs to be recovered under an energy base rate, and
6 the use of an energy rate to recover demand and customer costs creates fairness and
7 efficiency problems.

8 PRI-2 HLF customers would be charged the energy rate under the PSA. The
9 PSA represents the cost of energy, and will be assessed to PRI-2 HLF customers on a
10 per-kWh basis, same as all other customers.

11 The reason PRI-2 HLF customers will not be assessed the energy efficiency
12 rate is because they are not eligible for the programs and do not participate in the
13 programs.

14 **Q. MR. ROBBINS STATES THAT THE LACK OF AN ENERGY CHARGE FOR**
15 **PRI-2 HLF WOULD INDUCE WASTE.¹¹⁰ HOW DO YOU RESPOND?**

16 A. The flaw in Mr. Robbins' reasoning is in thinking of energy consumption by
17 commercial customers as the same as consumption by residential customers. The
18 conservation considerations are different for commercial customers as compared to
19 residential. For a commercial or industrial customer, energy consumption fuels the
20 production of goods and services and the creation of economic value. Because much

¹⁰⁹ P. Robbins Position Statement at Section 2.2: "Austin Energy Seeks to Eliminate Conservation Participation in New Commercial Rate Class. If created, the rate would charge a monthly fee, a demand charge per KW, and a fuel charge. But customers would not be charged a kwh fee for energy, nor would they be charged for energy efficiency."

¹¹⁰ *Id.* at Section 2.2: "The lack of an energy charge [for PRI-2 HLF] is a tacit encouragement of waste. The lack of an efficiency charge exempts another large swath of consumption Austin Energy consumption from contributing to clean energy through the Energy Efficiency Service surcharge."

1 of Austin Energy's energy supply is green, all customers who pay the PSA, including
2 PRI-2 HLF customers, contribute to clean energy.

3 **Q. MR. ROBBINS STATES THAT THE CREATION OF A PRI-2 HLF CLASS**
4 **WILL REINFORCE AN UNDESIRABLE PATTERN.¹¹¹ HOW DO YOU**
5 **RESPOND?**

6 A. Providing the high-load factor option to customers with load above 20MW, but not
7 for customers with load between 3MW and 20MW, is inconsistent, and could be
8 perceived as discriminatory. The proposal avoids this issue by extending the same
9 option to primary customers at lower load levels. Austin Energy seeks to mitigate
10 discrimination in the rate structure.

11 **Q. MR. ROBBINS STATES THAT EXEMPTING CUSTOMERS FROM**
12 **ENERGY EFFICIENCY LEADS TO SUBSIDIZATION.¹¹² HOW DO YOU**
13 **RESPOND?**

14 A. Mr. Robbins is not correct. Subsidization is when costs caused by one customer or
15 group of customers are instead shifted onto and borne in rates by a customer or
16 customers who did not cause the costs. Austin Energy's proposal avoids the problem
17 which would arise if PRI-2 HLF customers were assessed the energy efficiency
18 component of the CBC, causing costs to be shifted from the customers who
19 participate in the programs and cause the energy efficiency program costs onto PRI-2
20 HLF customers.

¹¹¹ *Id.* at Section 2.2: "There is already a similar rate for high-load factor customers over 20 MW, PRI-1 HLF, which represented 12% of total Austin Energy consumption in 2021, exempted from kwh fees for energy as well as energy-efficiency charges. This new rate will only reinforce the pattern."

¹¹² *Id.*: "Commercial customers allowed to eliminate participation in energy efficiency charges are being subsidized by customers that continue to participate."

Brian T. Murphy

Austin Energy
4815 Mueller Blvd.
Austin, TX 78723

REGULATORY EXPERIENCE:**Energy Analyst Supervisor**

Finance—Rates and Regulatory, Austin Energy

(January 2021 – present)

Supervise staff and functions in rates and pricing, energy analytics, and modeling for an electric utility. Supervise and assist in the preparation of rate and regulatory filings with the Public Utility Commission of Texas (PUCT) in accordance with the PUCT's rules, Texas law, and federal law. Supervise rate structure design and defend designs before the PUCT in accordance with state and federal statutory requirements. Design strategies to mitigate risk. Serve as an expert witness and presents written and oral testimony before the PUCT and other regulatory bodies. Supervise load research using statistical models in compliance with industry and PUCT standards. Supervise and assist with the analysis of load analytics and modeling; determine trends, characteristics, and resulting financial impact; and clearly communicate applicable options and strategies through the management chain. Responsible for the full range of supervisory activities including selection, training, evaluation, counseling, and recommendation for dismissal.

Energy Analyst

Finance—Rates and Regulatory, Austin Energy

(March 2020 – December 2020)

Perform highly complex analysis through research, gathering and interpretation of data relevant to energy regulated and unregulated operations. Plan, develop, and present rate filings for regulated energy services. Model the impact of current or proposed rate structures on the electric utility's financial viability including its revenues, cost structure, net margin, liquidity, and debt/equity position. Conduct financial and economic analysis. Develop models for revenue requirement and cost of service studies, recovery mechanisms, and rate design. Develop regulatory policies, objectives, and strategies on pricing and cost of service subject matter. Oversee and develop testimony, exhibits, and tariff changes filed with City Council and PUCT; provide analytical support; and negotiate and influence outcomes. Present written and oral testimony as an expert witness in rate proceedings. Respond to requests for information, appeals, and public cases before the state regulatory authority and City Council.

Senior Rate Analyst

Tariff and Rate Analysis Section, Rate Regulation Division, Public Utility Commission of Texas
(February 2019 – March 2020)

Perform analysis of tariff filings, cost allocation, and rate design. Review tariffs of regulated utilities to determine compliance with PUCT requirements. Analyze cost allocation studies and rate design issues for regulated electric utilities. Analyze policy issues associated with the regulation of the electric 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.

Management Consultant, ReSolved Energy Consulting

(April 2018 – January 2019)

Served as an expert witness in a wide range of litigated rate proceedings, providing written and oral testimony to impact the decisions and outcomes of legal proceedings.

Senior Rate Analyst, Potomac Electric Power Company

(March 2017 – April 2018)

Perform analysis of tariff filings, cost allocation, and rate design. Support regulatory filings. Build cost of service models. Testify as an expert on cost allocation and rate design.

Senior Rate Analyst, Tariff and Rate Analysis Section, Rate Regulation Division, Public Utility Commission of Texas

(October 2010 – March 2017)

See above job description.

EDUCATION:

- | | |
|---------|---|
| 1998 | Baylor University, Waco, TX
Master of Business Administration, concentration in finance. |
| 1996 | George Mason University, Fairfax, VA
Bachelor of Science. |
| 1989-91 | University of Chicago, Chicago, IL
Core Curriculum. |

BUSINESS SKILLS:

- | | |
|------|--|
| 1999 | St. Charles Training Center, St. Charles, IL.
Financial Modeling. |
|------|--|

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

Docket No. 49831—*Application of Southwestern Public Service Company for Authority to Change Rates*—February, 18, 2020 (direct) and March 10, 2020 (cross-rebuttal).

Docket No. 49189—*Application of the City of Austin dba Austin Water for Authority to Change Water and Wastewater Rates*—November 15, 2019.

Docket No. 49421—*Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates*—June 12, 2019 (direct) and June 19, 2019 (rebuttal).

Docket No. 49148—*Application of El Paso Electric Company for a Transmission Cost Recovery Factor*—April 23, 2019.

Docket No. 48439—*Review of Rate Case Expenses Incurred in Docket 48371*—April 15, 2019.

Docket No. 48401—*Application of Texas-New Mexico Power Company for Authority to Change Rates*—August 13, 2018 (direct) and August 28, 2018 (rebuttal).

Docket No. 48371—*Entergy Texas, Inc.'s Statement of Intent and Application for Authority to Change Rates*—August 1, 2018.

Docket No. 48322—*Application of El Paso Electric Company to Adjust its Energy Efficiency Cost Recovery Factor and Establish Revised Cost Cap*—July 27, 2018.

Docket No. 48422—*Application of AEP Texas, Inc. to Adjust its Energy Efficiency Cost Recovery Factor and Related Relief*—July 17, 2018.

Docket No. 48421—*Application of Oncor Electric Delivery Company LLC to Adjust its Energy Efficiency Cost Recovery Factor*—July 12, 2018.

Docket No. 45414—*Review of the Rates of Sharyland Utilities, L.P., Establishment of Rates for Sharyland Distribution & Transmission Services, L.L.C., and Request for Grant of a Certificate of Convenience and Necessity and Transfer of Certificate Rights*—March 7, 2017 (Direct) and March 16, 2017 (Cross-Rebuttal).

Docket No. 45524—*Application of Southwestern Public Service Company for Authority to Change Rates*—August 23, 2016 (Direct), September 7, 2016 (Cross-Rebuttal), and December 8 (Settlement).

Docket No. 46014—*Application of CenterPoint Energy Houston Electric, LLC to Adjust Its Energy Efficiency Cost Recovery Factor*—August 8, 2016.

Docket No. 45691—*Application of Southwestern Electric Power Company for Approval to Amend Transmission Cost Recovery Factor*—June 9, 2016.

Docket No. 44498—*Review of Rate Case Expenses Incurred by Southwestern Public Service Company and Municipalities in Docket No. 43695*—May 9, 2016.

Docket No. 44941—*Application of El Paso Electric Company to Change Rates*—December 18, 2015 (Direct) and January 15, 2016 (Cross-Rebuttal).

Docket No. 45084—*Application of Entergy Texas, Inc. for Approval of a Transmission Cost Recovery Factor*—November 24, 2015.

Docket No. 44698—*Application of Southwestern Public Service Company to Adjust its Energy Efficiency Cost Recovery Factor*— July 31, 2015 (Direct) and August 11, 2015 (Cross-Rebuttal).

Docket No. 43695—*Application of Southwestern Public Service Company for Authority to Change Rates*— May 22, 2015 (Direct) and June 8, 2015 (Cross-Rebuttal).

Docket No. 44496—*Application of Southwestern Electric Power Company for Approval to Amend its Transmission Cost Recovery Factor*— May 22, 2015.

Docket No. 42560—*Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to its Energy Efficiency Cost Recovery Factor*—August 7, 2014.

Docket No. 42448—*Application of Southwestern Electric Power Company for Approval of a Transmission Cost Recovery Factor*—July 31, 2014.

Docket No. 42454—*Application of Southwestern Public Service Company to Adjust its Energy Efficiency Cost Recovery Factor*—July 11, 2014.

Docket No. 42042—*Application of Southwestern Public Service Company for Approval of a Transmission Cost Recovery Factor*—May 1, 2014.

Docket No. 41791—*Application of Entergy Texas, Inc. for Authority to Change Rates and Reconcile Fuel Costs*—January 17 (Direct), January 31 (Cross-Rebuttal), and April 4 (Supplemental), 2014.

Docket No. 41474—*Application of Sharyland Utilities, L.P. to Establish Retail Delivery Rates, Approve Tariff for Retail Delivery Service, and Adjust Wholesale Transmission Rate*—October 28 (Direct) and December 20, 2013 (Settlement).

Docket No. 41444—*Application of Entergy Texas, Inc. for Authority to Redetermine Rates for Energy Efficiency Cost Recovery Factor*—July 26, 2013.

Docket No. 40627—*Petition by Homeowners United for Rate Fairness to Review Austin Rate Ordinance No. 20120607-05*—February 14, 2013.

Docket No. 40443—*Application of Southwestern Electric Power Company for Authority to Change Rates and Reconcile Fuel Costs*—December 17, 2012.

Docket No. 40295—*Application of Entergy Texas, Inc., for Rate Case Expenses Severed from PUC Docket No. 39896; SOAH Docket No. 473-12-2979*—November 6, 2012.

Docket No. 40020—*Application of Lone Star Transmission, LLC for Authority to Establish Interim and Final Rates and Tariffs*—June 28, 2012.

Docket No. 39590—*Petition of El Paso Electric Company for Approval to Revise Military Base Discount Recovery Factor Tariff, Pursuant to PURA § 36.354*—October 26, 2011.

Docket No. 39361—*Application of AEP Texas North Company to Adjust Energy Efficiency Cost Recovery Factor and Related Relief*—August 2, 2011.

Docket No. 39359—*Application of Southwestern Electric Power Company to Adjust Energy Efficiency Cost Recovery Factor and Related Relief*—July 29, 2011.

Docket No. 39360—*Application of AEP Texas Central Company to Adjust Energy Efficiency Cost Recovery Factor and Related Relief*—July 27, 2011.

List of Testimony filed at the Maryland Public Service Commission

Case No. 9472—*In the Matter of the Application of Potomac Electric Power Company for Adjustments to its Retail Rates for the Distribution of Electric Energy*—January 2, 2018 (Direct), February 5, 2018 (Supplemental Direct), and March 8, 2018 (Additional Supplemental Direct).

List of Testimony filed at the District of Columbia Public Service Commission

Formal Case No. 1150—*In the Matter of the Application of Potomac Electric Power Company for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service*—December 19, 2017 (Direct), and February 9, 2018 (Supplemental Direct).

Evidence that Customer Groups of Interest Move Toward Cost

Austin energy analyzed distance from cost under the proposed rates and has been able to determine that the residential class as a whole moves toward cost of service under the proposal. The following chart shows the residential class's movement toward cost of service:



The “bar and whiskers” box above on the left shows residential customers’ status with respect to cost of service under current rates. The bar and whiskers in the middle shows residential customers’ status with respect to cost under proposed rates. The bar and whiskers on the right shows where residential customers would be relative to cost of service if ICA witness Clarence L. Johnson’s rate design recommendation were applied at Austin Energy’s required level of revenues. This enables a direct comparison of Mr.

Johnson's and Austin Energy's proposed rate designs, without introducing the bias of differences in revenues.¹¹⁴

The green dots in the charts represent mean distance from cost. Under current rates, customers are an average of 22% below cost. Under Austin Energy's proposed rates, customers would be an average of 10% below cost. Under Mr. Johnson's proposed rate design at Austin Energy's revenues, customer would be an average of 9% below cost. Please note that the mean distance from cost shown above cannot be compared directly to the class's distance from cost as shown in the cost study because the CAP discount is applied in the above analysis, but not in the "Class Targets" worksheet to the cost study. Similarly, mean distance from cost, the green dots, are not equidistant from cost under Austin Energy's and Mr. Johnson's rate designs for the same reason. The CAP benefits are greater under Austin Energy's proposal, which pushes the class as a whole slightly further from cost.

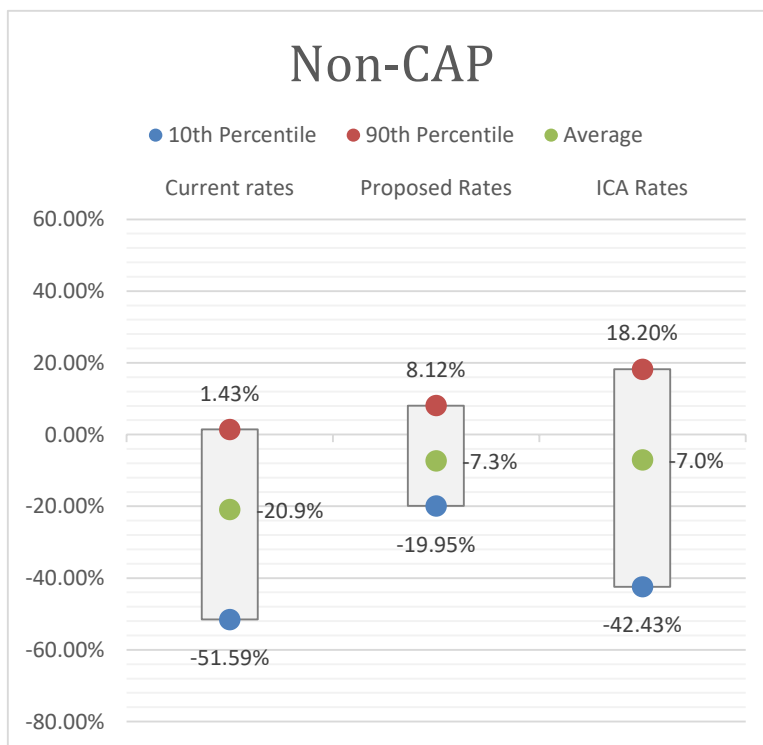
The red and blue dots in the charts show the value for percentage distance from cost at which 90% of customers have a lower value for percentage distance from cost, or "90th percentile." Similarly, the blue dots show the value for distance from cost at which only 10% of customers have a lower value for distance from cost, or "10th percentile." Together, the box shows the dispersion of values around the mean, which is similar to a confidence interval in statistics. It shows the extent to which customers vary from the mean.

For each view, the size of the box is a visual indication of the extent of the variance from the mean as compared both to current rates and to Mr. Johnson's proposal. Less variance is desirable. As shown, there is less variance under Austin Energy's proposal. The box in the middle is smaller.

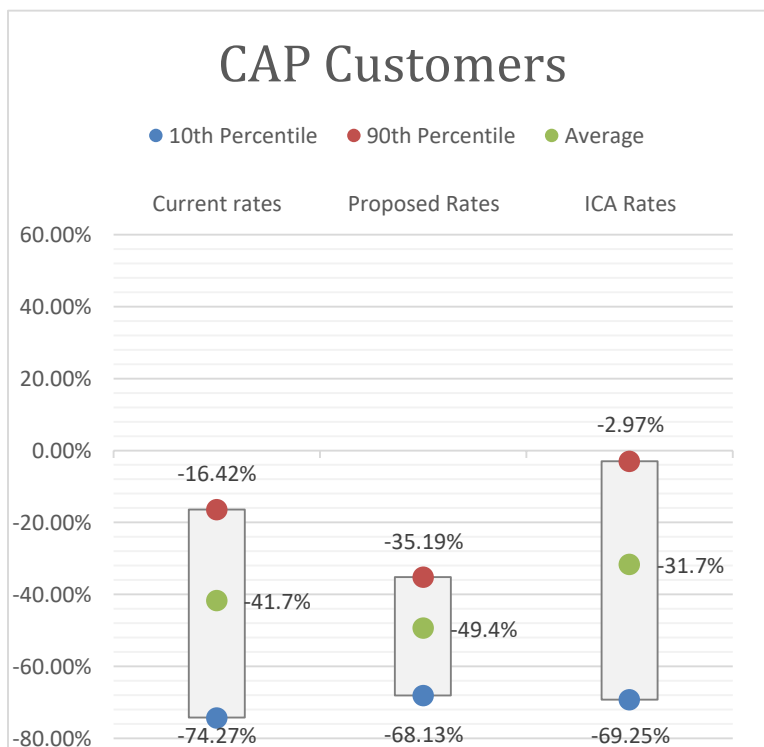
¹¹⁴ For the purpose of this analysis, Mr. Johnson's proposed rates were scaled in equal proportion to Austin Energy's revenue requirement.

The chart below shows movements toward cost for customers who are not on the CAP. They end up closer to cost as compared to all residential customers.

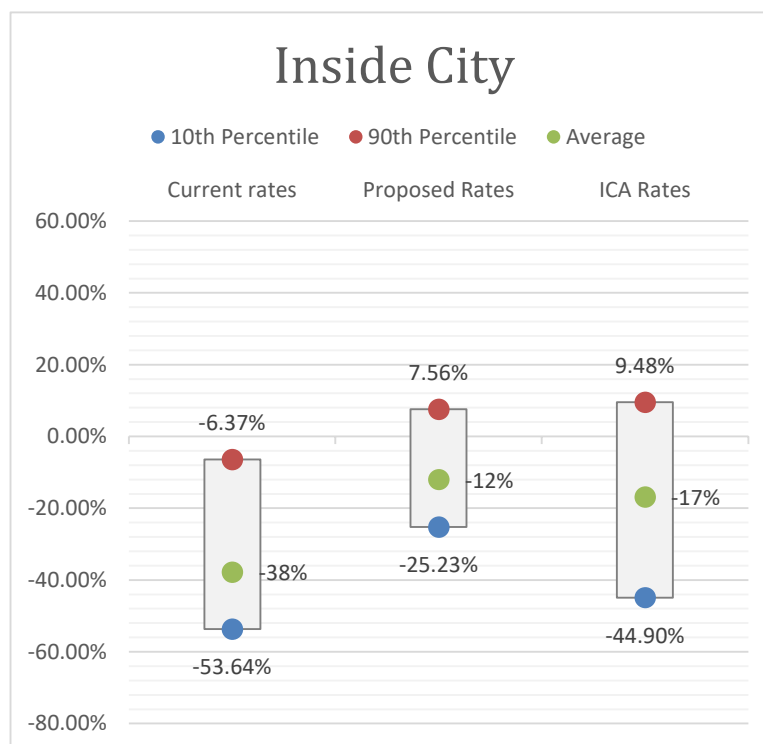
The next chart below shows how vulnerable customers on the CAP would move toward or away from cost. Under Austin Energy's proposal, CAP customers receive more



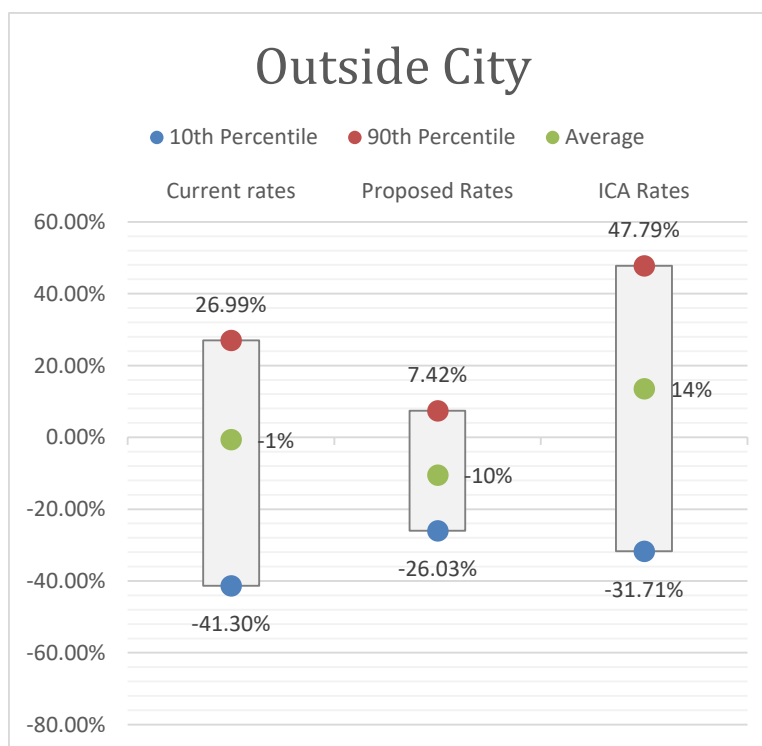
benefits than under current rates, and move further away from cost. Austin Energy's proposal is favorable to CAP customers. The green dot is lower under Austin Energy's proposal as compared to current rates. Again, the box is smaller, so there is less variation in outcomes.



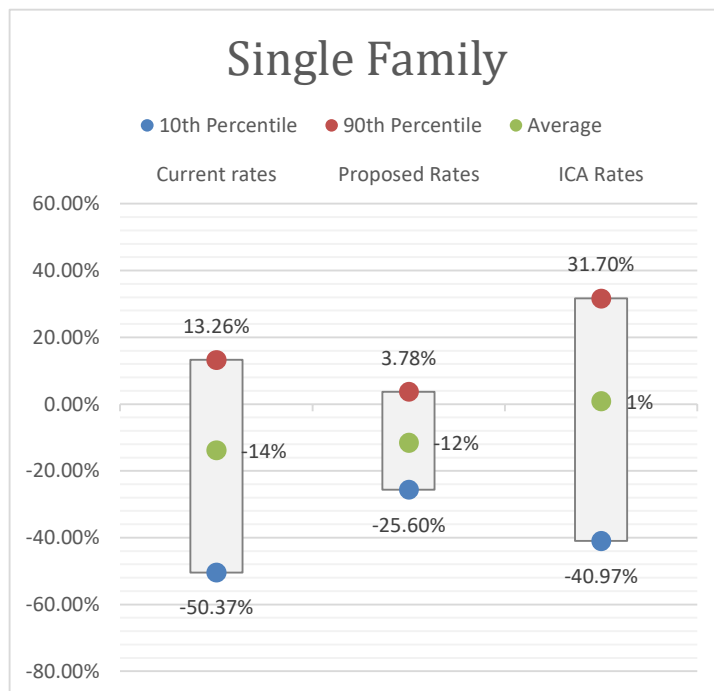
Inside-city customers are another customer group of interest. As shown below, they move closer to cost under Austin Energy's proposal and Mr. Johnson's proposal, but to a greater extent under Austin Energy's proposal.



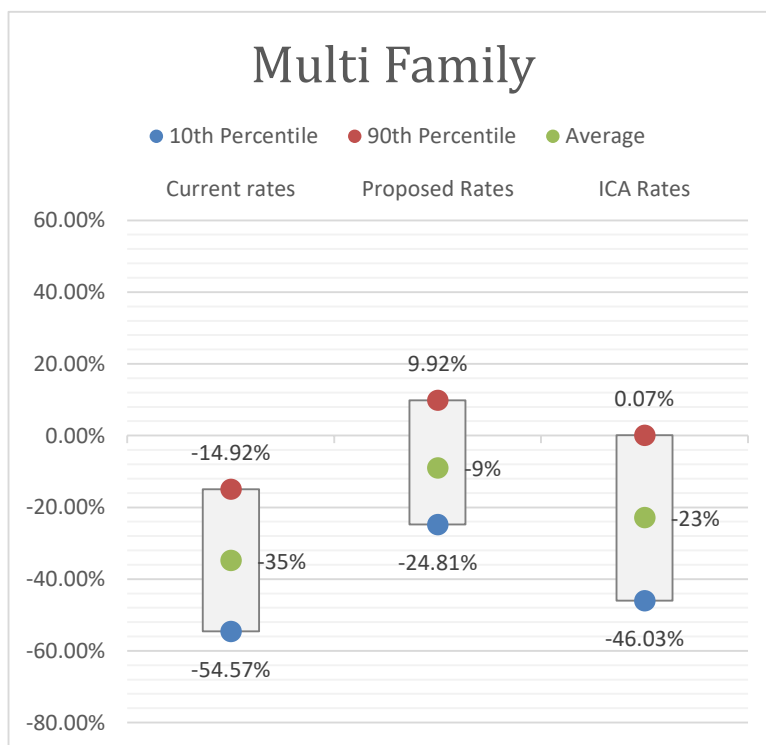
The next chart shows that under Austin Energy's proposal, outside-city customers would end up in a similar position as compared to the class as a whole, which indicates they are treated the same as other groups of customers in the class in terms of proximity to cost of service. However, under Mr. Johnson's proposal, they would end up further above cost of service. Mr. Johnson's proposed rate design is somewhat punitive to outside-city customers.



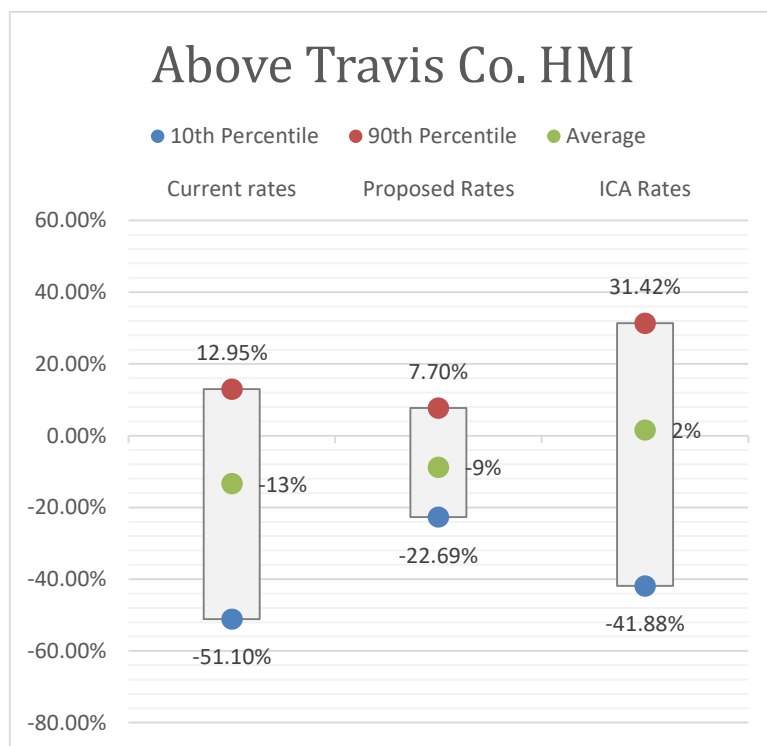
As shown in the chart below, under Austin Energy's proposal, customers in single-family homes would end up slightly closer to cost of service. Mr. Johnson's proposal brings customers in single family homes directly to cost of service.



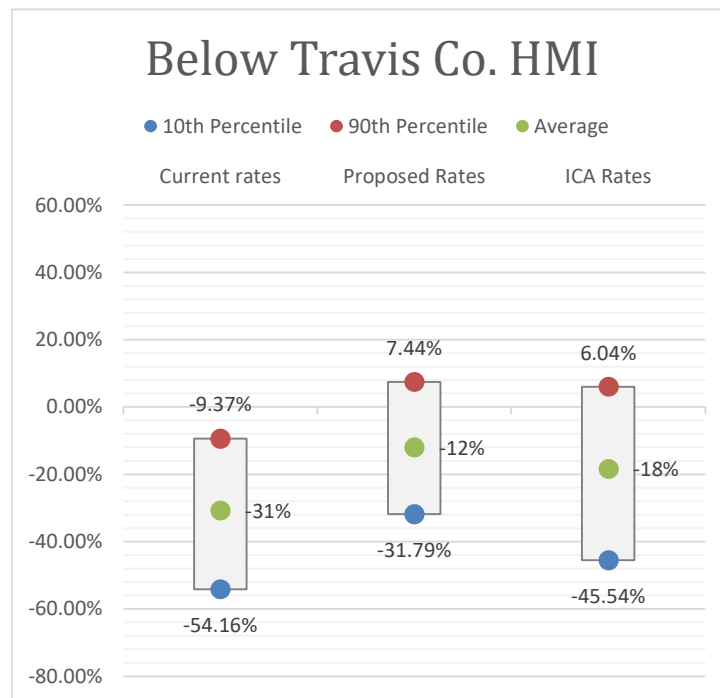
Under Austin Energy’s proposal, customers in multi-family housing fare about the same as single family, with slightly greater proximity to cost. Comparing the single-family to the multi-family charts reveals a difference based on housing type. Under Mr. Johnson’s proposal, multi-family ends up well below cost, whereas single family were brought directly to cost. Mr. Johnson’s proposal treats single-family and multi-family customers differently.



Austin Energy was also able to obtain data on income levels in Census tracts in Travis County. Under Austin Energy's proposal, customers who live in Census tracts with above-average household median income for Travis County fare about the same as the class as a whole. Under Mr. Johnson's proposal, on average they would experience above-cost charges (the green dot on the right is above 0% distance from cost).



As shown below, under Austin Energy's proposal customers who live in Census tracts where the median household income is below average for Travis County end up in a slightly better position below cost as compared to the customers in the prior graph for above-average income Census tracts, or for the class as a whole. Under Mr. Johnson's proposal, the customers are left an average of 20% below cost, whereas the prior group was brought above cost under his proposed rate design. Mr. Johnson's proposal treats people differently based on the income-levels of the other people in the area where they live.



The comparative analysis shows that Austin Energy's rate design proposal moves all customer groups closer to cost of service and treats them similarly. Mr. Johnson's proposal treats customers differently, which is a form of discrimination. Also, Austin Energy's proposal results in a lot less variance from cost of service for every customer group. The boxes are all smaller.