

<b>AUSTIN ENERGY 2022 BASE RATE REVIEW</b>	<b>§ § §</b>	<b>BEFORE THE CITY OF AUSTIN HEARING EXAMINER</b>
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Cross-Rebuttal Testimony

of

**Jeffry Pollock**

On Behalf of

**Texas Industrial Energy Consumers**

July 1, 2022



**J . P O L L O C K**  
**I N C O R P O R A T E D**

AUSTIN ENERGY 2022 BASE RATE REVIEW	§ § §	BEFORE THE CITY OF AUSTIN HEARING EXAMINER
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**AFFIDAVIT OF JEFFRY POLLOCK**

State of Missouri     )  
                                  )  
County of St. Louis   )     SS

Jeffry Pollock, being first duly sworn, on his oath states:

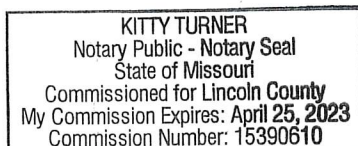
1. My name is Jeffry Pollock. I am President of J. Pollock, Incorporated, 12647 Olive Blvd., Suite 585, St. Louis, Missouri 63141. We have been retained by Texas Industrial Energy Consumers to testify in this proceeding on its behalf;


2. Attached hereto and made a part hereof for all purposes is my Cross-Rebuttal Testimony which has been prepared in written form for introduction into evidence before the Austin City Council Impartial Hearings Examiner.

3. I hereby swear and affirm that my answers contained in the testimony are true and correct.

  
\_\_\_\_\_  
Jeffry Pollock

Subscribed and sworn to before me this 15<sup>th</sup> day of July 2022.



  
\_\_\_\_\_  
Kitty Turner, Notary Public  
Commission #: 15390610

My Commission expires on April 25, 2023.

## GLOSSARY OF ACRONYMS

Term	Definition
<b>4CP</b>	Four Coincident Peak
<b>12CP</b>	Twelve Coincident Peak
<b>AE</b>	Austin Energy
<b>AED-4CP</b>	Average and Excess Four Coincident Peak
<b>BIP</b>	Base-Intermediate-Peak
<b>CCOSS</b>	Class Cost-of-Service Study
<b>EE</b>	Energy Efficiency
<b>EES</b>	Energy Efficiency Services
<b>ICA</b>	Independent Consumer Advocate
<b>kWh</b>	Kilowatt-Hour
<b>PUCT</b>	Public Utility Commission of Texas
<b>SCPCSUN</b>	Sierra Club, Public Citizen, and Solar United Neighbors
<b>TIEC</b>	Texas Industrial Energy Consumers

**CROSS-REBUTTAL TESTIMONY OF JEFFRY POLLOCK**

1 **Introduction and Summary**

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

3 A Jeffry Pollock; 12647 Olive Blvd., Suite 585, St. Louis, MO 63141.

4 **Q ARE YOU THE SAME JEFFRY POLLOCK WHO PREVIOUSLY SUBMITTED**  
5 **DIRECT TESTIMONY IN THIS PROCEEDING ON BEHALF OF TEXAS**  
6 **INDUSTRIAL ENERGY CONSUMERS (TIEC)?**

7 A Yes.

8 **Q WHAT IS THE PURPOSE OF YOUR CROSS-REBUTTAL TESTIMONY?**

9 A I will address the recommendations made by Mr. Clarence L. Johnson on behalf of the  
10 Independent Consumer Advocate (ICA) and Dr. Cyrus Reed on behalf of the Sierra  
11 Club, Public Citizen, and Solar United Neighbors (SCPCSUN).

12 **Q DOES THE FACT THAT YOU ARE NOT ADDRESSING EVERY PROPOSAL**  
13 **RAISED BY THESE AND OTHER PARTIES CONSTITUTE AN ENDORSEMENT OF**  
14 **THEIR RECOMMENDATIONS?**

15 A No.

16 **Q PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.**

17 A My findings and recommendations are as follows:

18 **Allocation of Production Plant Costs**

- 19 • Mr. Johnson's proposal to use the Base-Intermediate-Peak (BIP) method  
20 would allocate 83% of AE's production plant costs on an energy basis. Such  
21 an extreme energy-based allocation is not consistent with either cost-  
22 causation principles or utility economics.
- 23 • Similar to his past allocation proposals, which were uniformly rejected by the  
24 Public Utility Commission of Texas (PUCT), Mr. Johnson's application of the  
25 BIP method is also internally inconsistent because he did not apply the same  
26 economic principles to the allocation of fuel and purchased power expenses.

- BIP has never been proposed or adopted for any regulated electric utility in Texas.
- Accordingly, the Council should reject Mr. Johnson's CCOSS.

SCPCSUN

- Dr. Reed's proposal to extend Austin Energy's (AE's) Energy Efficiency Services (EES) fee to all customer classes ignores that high load factor customers do not need utility assistance to pursue cost-effective energy efficiency (EE) investments because minimizing their energy costs is necessary to remain competitive. TIEC members have every incentive to invest in reasonable EE improvements, and the TIEC member in the AE service area has made specific investments in that vein.
- The Legislature and the PUCT have recognized this strong incentive, authorizing exemptions for transmission-level customers and allowing distribution-level industrial customers to opt-out of utility EE programs.
- The Council should not change how EES fees are currently allocated and recovered from customers.

**Allocation of Production Plant Costs**

**Q HAVE YOU REVIEWED THE TESTIMONY OF MR. JOHNSON ON BEHALF OF ICA?**

**A** Yes. Mr. Johnson recommends that the Council adopt the BIP method for AE to determine class revenue allocation in this proceeding.<sup>1</sup>

**Q HOW DOES THE BASE-INTERMEDIATE-PEAK METHOD ALLOCATE PRODUCTION PLANT COSTS?**

**A** As discussed in Mr. Johnson's testimony:

- The BIP method allocates the original (undepreciated) cost of power plants based on Mr. Johnson's (arbitrary) classification of capacity as serving either Base, Intermediate, or Peak load.

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<sup>1</sup> Initial Presentation of Clarence Johnson at 20.

- The cost of capacity he designates as serving “Base” load is allocated to classes using class Average Demand. Because Average Demand is the same as energy (*i.e.*, kWh consumption), the BIP method presumes that “Base” load capacity has zero value in meeting peak demand.
- The cost of capacity he designates as serving “Intermediate” is allocated partially on an energy basis and partially on an ERCOT twelve coincident peak (12CP) basis. The annual capacity factor for each plant determines which portion of the capacity is deemed to be energy related, while the remaining costs are allocated on an ERCOT 12CP basis. Again, this assumes that a significant portion of the Intermediate capacity, under Mr. Johnson’s categorization, has no value in meeting actual peak demand.
- The cost of capacity he designates as serving “Peaking” load is allocated based on an ERCOT four coincident peak (4CP) basis.<sup>2</sup>

**Q DOES THE BASE-INTERMEDIATE-PEAK METHOD BETTER REFLECT COST CAUSATION THAN THE AVERAGE AND EXCESS DEMAND - FOUR COINCIDENT PEAK METHOD?**

**A** No. As described in my direct testimony, the Average and Excess Demand – Four Coincident Peak (AED-4CP) method best tracks cost causation because it reflects that summer peak demand is a primary driver for all production plant investment in Texas. However, in allocating a portion of the costs on Average Demand, it also recognizes that a utility’s generation fleet must have both base load and load-following capabilities that are sized, in total, to meet peak demand so that electricity is both reliable and affordable. This best reflects the drivers of generation investment for Texas utilities, including Austin Energy.

The BIP method does not reflect cost causation. Mr. Johnson’s use of the original (undepreciated) plant investment to determine which facilities serve base, intermediate, or peak loads results in allocating 83% of AE’s production plant-related

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<sup>2</sup> *Id.* at 24, 26.

1 costs on an energy basis, rather than peak demand basis.<sup>3</sup> In other words, Mr.  
2 Johnson asserts that 83% of these costs were incurred solely to reduce fuel costs,  
3 rather than to serve the maximum expected load on the system. This is premised on  
4 the theory of “Capital Substitution,” which presumes that any new capital investments  
5 that are more costly than a peaking unit are designed to reduce year-round fuel costs.  
6 This theory has been routinely and consistently rejected in Texas. Further, Mr.  
7 Johnson did not apply the same BIP method to allocate fuel and purchased power  
8 costs, which contradicts the Capital Substitution theory underlying his BIP method.

9 **Q SHOULD ANY PRODUCTION PLANT-RELATED COSTS BE ALLOCATED BASED**  
10 **ON ENERGY USAGE DURING ALL HOURS OF THE YEAR UNDER COST-**  
11 **CAUSATION PRINCIPLES?**

12 **A** No. The BIP method mistakenly assumes that all hours are equally significant to a  
13 utility in selecting the type of generation plant it will build. However, not all of the  
14 expected output produced from a specific plant determines the type of capacity to  
15 install. This can be illustrated with the following simplified example.

16 Suppose two drivers are required to rent cars from a fleet that contains only  
17 two types of cars, “**Car P**” and “**Car B**”:

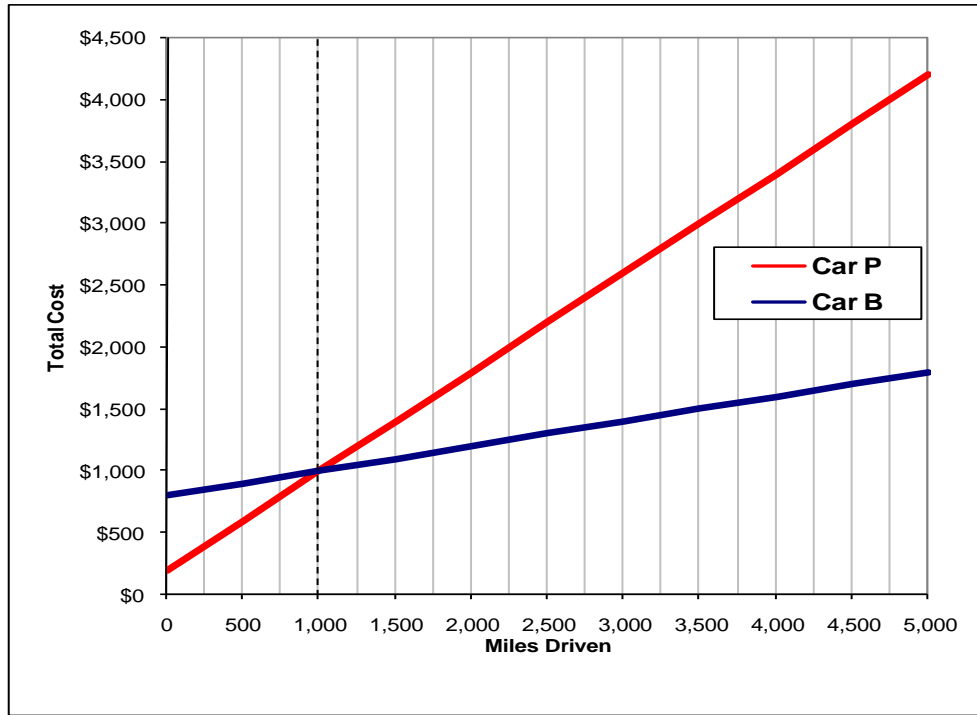
	<b>Car P</b>	<b>Car B</b>
Fixed Charge	\$200	\$800
Mileage Charge	80¢	20¢

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<sup>3</sup> *Id.* at 26-27. The 83% includes 100% of AE’s investment in the South Texas Nuclear and Fayette Power Plants, which together comprise 79.8% of AE’s total production plant investment and 3.7% of the Sand Hill Combined Cycle Turbine investment, which is 9.4% of AE’s total production plant investment, the energy portion of which is based on a 39% capacity factor (*i.e.*, 79.8% + (9.4% \* 39%) = 83.466%).



- 1 **Car B** has a high fixed charge and gets high mileage (like a base load plant), while  
2 **Car P** has a low fixed charge but gets poor mileage (like a peaker). The graph below  
3 shows total cost of both cars over a range of miles driven.



- 4 The total cost is also calculated in the following table.

Miles Driven	Total Cost		Best Choice
	Car P	Car B	
0	\$200	\$800	P
500	\$600	\$900	P
1,000	\$1,000	\$1,000	P or B
1,500	\$1,400	\$1,100	B
2,000	\$1,800	\$1,200	B
2,500	\$2,200	\$1,300	B
3,000	\$2,600	\$1,400	B
3,500	\$3,000	\$1,500	B
4,000	\$3,400	\$1,600	B
4,500	\$3,800	\$1,700	B
5,000	\$4,200	\$1,800	B

1 As can be seen, the *break-even point* between **Car P** and **Car B** is 1,000 miles. That  
2 is, **Car B** has a lower total cost per mile than **Car P** if it is operated more than 1,000  
3 miles. If one customer needed to drive 1,500 miles and a second customer needed to  
4 drive a car 4,500 miles, both customers would choose to drive **Car B**. In other words,  
5 the decision to drive **Car B** was based on whether the car would be driven at least  
6 1,000 miles. It doesn't matter how many miles over 1,000 it will be driven.

7 The same break-even construct applies to generation investment, and  
8 undermines the Capital Substitution theory as applied by Mr. Johnson. For example,  
9 assume the break-even point between base load and peaking capacity is 1,000 hours  
10 per year—at an expected run time below 1,000 hours per year, peaking capacity is  
11 more economic, and at run times above 1,000 hours per year, base load capacity is  
12 more economic. It doesn't matter whether a base load plant will operate 5,000 hours,  
13 6,000 hours, or 8,000 hours per year—anything over 1,000 supports the base load  
14 plant economics. Thus, **load duration** can affect the decision of whether to install  
15 base load or peaking capacity. Once the decision is made, operating beyond the  
16 break-even point (*i.e.*, total energy production) is irrelevant.

17 In recommending a BIP allocation, Mr. Johnson ignores this fundamental  
18 planning construct and allocates all base load and some load-following plant on year-  
19 round energy usage—*i.e.*, based on usage above the break-even point that  
20 determines what type of plant to install. Instead, incremental investment in base load  
21 generation can be justified by load duration *up to the economic break-even point*  
22 between base load and peaking capacity, but after that energy production is irrelevant  
23 to the plant's economics. That is, once a utility decides that additional production  
24 capacity is needed to meet demand, if that new capacity is expected to run only a  
25 limited number of hours total, then costs are minimized by the choice of a peaker plant.

1 On the other hand, if it is projected that a unit will run for a sufficient number of hours,  
2 then a base load unit would be more economical.

3 Therefore, overall annual energy usage does not drive plant investment  
4 decisions, as presumed by Mr. Johnson's BIP method. Load duration up to the break-  
5 even point may influence plant investment decisions, but beyond the break-even point,  
6 energy usage is no longer a factor and should not be the basis for production plant  
7 allocation.

8 **Q IS THE AED-4CP METHOD COMPATIBLE WITH THIS "BREAK-EVEN" PLANNING**  
9 **CONSTRUCT?**

10 A Yes. AED-4CP appropriately allocates cost to reflect this planning construct. It does  
11 so by: (a) allocating a portion of plant investment based on Average Demand (energy),  
12 to reflect that base load plants run during most hours, and (b) allocating a portion of  
13 plant investment based on Excess Demand (*i.e.*, Peak Demand less Average  
14 Demand), to reflect the incremental investment needed to supply load following and  
15 peaking capacity operating with shorter run times.

16 **Q ARE THERE OTHER PROBLEMS UNDERLYING THE BASE-INTERMEDIATE-**  
17 **PEAK METHOD?**

18 A Yes. First, BIP mistakenly assumes that load-following (*i.e.*, intermediate) capacity is  
19 caused by both year-round energy and system peak demands in all twelve months of  
20 the year. Thus, it ignores the economic break-even construct as previously discussed.

21 Second, the assumption that load-following requirements in the eight non-  
22 summer months are twice as likely to cause AE to install additional capacity as load-  
23 following requirements during the four summer months is incorrect. As explained in  
24 my direct testimony (see pages 19-20), AE is a summer peaking utility and once

1 sufficient load-following capacity has been installed to meet summer peak demands,  
2 AE will automatically have enough capacity to meet demand in other periods, which  
3 will be lower. Thus, meeting demands in the non-summer months is a by-product of  
4 capacity investments, not a cost-causer.

5 Third, I also disagree with the artificial distinction between intermediate and  
6 peaking capacity. Both simple cycle turbines (which Mr. Johnson characterizes as  
7 peaking units), and combined cycle gas turbines (which Mr. Johnson characterizes as  
8 intermediate units), provide load-following capability. This capability is essential in  
9 allowing AE to balance loads and available resources in real time. For this reason, it  
10 follows that all investment in load-following capacity, regardless of duty cycle, should  
11 be allocated relative to the portion of summer peak demand *in excess* of Average  
12 Demand (*i.e.*, Excess Demand). This is precisely how the AED-4CP method allocates  
13 costs. In stark contrast to BIP, AED-4CP appropriately recognizes the need for both  
14 base load and load-following capabilities.

15 **Q YOU PREVIOUSLY MENTIONED THAT MR. JOHNSON'S APPLICATION OF THE**  
16 **BASE-INTERMEDIATE-PEAK METHOD CONTRADICTS THE UNDERLYING**  
17 **THEORY OF CAPITAL SUBSTITUTION. PLEASE EXPLAIN.**

18 **A** Mr. Johnson's application of the BIP method fails to allocate fuel and purchased power  
19 costs in a manner consistent with Capital Substitution theory. Under this theory,  
20 decisions to add capacity that requires investing more capital than the cost of a  
21 peaking unit are made *solely* for the purpose of saving fuel costs. This is an over-  
22 simplified description of system planning decision-making. The reality is that decisions  
23 to add capacity are driven, first and foremost, by the need to meet expected peak  
24 demand, and second, to minimize *total* costs.

1           However, to be consistent with his application of Capital Substitution theory,  
2           fuel and purchased power costs would also have to be reallocated (in addition to  
3           generating capacity costs) to recognize when the purported fuel savings materialize—  
4           *i.e.*, during on-peak periods. This concept is referred to as “fuel symmetry.” Low  
5           capital cost plants have higher fuel costs, and vice versa. A symmetrical fuel allocation  
6           means allocating more of the high fuel cost/low capital cost plants to peak periods  
7           while allocating more of the low fuel cost/high capital cost plants to non-peak periods.  
8           A symmetrical allocation would lower the fuel costs allocated to the customers who  
9           are assigned a larger share of the capital costs.

10           By not reallocating the Power Supply Adjustment (the charge by which AE  
11           passes fuel and purchased power costs through to customers) to reflect these capital  
12           cost/fuel cost tradeoffs, Mr. Johnson’s application of the BIP method (which assigns  
13           the higher capital costs to customer classes without also reallocating the lower  
14           associated fuel costs) is internally inconsistent, thereby producing unreasonable  
15           results. As a result of this bias and allocating 83% of AE’s production plant-related  
16           costs on an energy basis, Mr. Johnson’s CCROSS shifts significant costs from low load  
17           factor customers, who contribute the most to peak demand, to high load factor  
18           customers.

19   **Q       HAS THE LACK OF FUEL SYMMETRY BEEN PREVIOUSLY CITED AS A REASON**  
20   **FOR REJECTING MR. JOHNSON’S PRODUCTION COST ALLOCATION**  
21   **PROPOSALS?**

22   **A**Yes. The PUCT has repeatedly found that Capital Substitution advocates such as Mr.  
23           Johnson seek to shift greater costs onto high load factor customers, but make no  
24           attempt to credit those customers with the lower fuel cost associated with base load

1 generation.<sup>4</sup> The fuel symmetry problem was one of the primary reasons cited by the  
2 PUCT in rejecting Capital Substitution allocation methods like Mr. Johnson's in rate  
3 cases throughout the 1980s and 1990s.

4 For example, in Docket No. 7460, the PUCT adopted the Hearing Examiner's  
5 Report, which cited the apparent lack of fuel symmetry in rejecting an energy-based  
6 capital substitution allocation method of another witness:

7 The examiners find that the most important flaw in Dr. Johnson's capital  
8 substitution methodology is the lack of symmetry, both as to fuel and as to  
9 operations and maintenance expense. To the extent that relative class energy  
10 consumption becomes the primary factor in apportioning capacity costs as  
11 between customer classes, as is the case with Dr. Johnson's proposal, ... the  
12 high load factor classes, which will bear higher cost responsibility for base load  
13 units, will not also receive the benefit of the lower operating costs and lower  
14 fuel costs associated with those units.<sup>5</sup>

15 **Q HAS THE BASE-INTERMEDIATE-PEAK METHOD BEEN PREVIOUSLY**  
16 **APPROVED FOR AUSTIN ENERGY?**

17 A No.<sup>6</sup>

18 **Q HAS THE BASE INTERMEDIATE-PEAK METHOD BEEN PREVIOUSLY**  
19 **APPROVED BY THE PUBLIC UTILITY COMMISSION OF TEXAS?**

20 A No. The PUCT has never approved the BIP method. This was also acknowledged by  
21 Mr. Johnson in discovery.<sup>7</sup>

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<sup>4</sup> *Application of Gulf States Utilities for a Rate Increase*, P.U.C. Docket No. 5560, 10 P.U.C. Bull. 405 (July 13, 1980); *Application of El Paso Electric Company for Authority to Change Rates*, Docket No. 5700, 10 P.U.C. Bull. 1071 (Oct. 26, 1984; on modification Dec. 7, 1984); *Application of El Paso Electric for Authority to Change Rates*, P.U.C. Docket No. 7460 and 7172, 14 P.U.C. Bull. 929 (June 16, 1988); *Application of Lower Colorado River Authority for Authority to Change Rates*, P.U.C. Docket No. 8032, 14 P.U.C. Bull. 1566 (Sept. 22, 1988).

<sup>5</sup> Consolidated Docket Nos. 7460 and 7172, *Examiner's Report* at 193.

<sup>6</sup> ICA Response to TIEC 1-1. See also, Initial Presentation of Clarence Johnson at 29-30.

<sup>7</sup> ICA Response to TIEC 1-1.

1   **Q     PLEASE SUMMARIZE YOUR ASSESSMENT OF THE BASE-INTERMEDIATE-  
2     PEAK METHOD.**

3   A     The BIP method does not reflect cost causation, and further, Mr. Johnson neglected  
4     to fully apply BIP by reallocating the costs recovered in the Power Supply Adjustment  
5     in a manner consistent with the underlying (Capital Substitution) theory that utilities  
6     incur higher capital costs solely to reduce fuel costs. Thus, his version of the BIP  
7     method results in an asymmetrical allocation of base load plant and the associated  
8     lower fuel costs to high load factor customers.

9             Finally, the BIP method has not previously been approved for AE, nor has the  
10     PUCT approved the BIP method for any investor-owned utility in Texas. For all of  
11     these reasons, the Council should reject the BIP method.

12   **Energy Efficiency Services Fee**

13   **Q     HOW IS DR. REED PROPOSING TO CHANGE THE RECOVERY OF ENERGY  
14     EFFICIENCY SERVICES?**

15   A     Dr. Reed proposes that all customer classes should pay AE's EES fee through a  
16     volumetric per-kilowatt hour (kWh) fee.<sup>8</sup> In other words, Dr. Reed opposes AE's  
17     current practice of exempting high load factor customer classes from paying an EES  
18     fee.

19   **Q     WHY DOES DR. REED ARGUE THAT NO CUSTOMER CLASS SHOULD BE  
20     EXEMPT FROM AUSTIN ENERGY'S ENERGY EFFICIENCY SERVICES FEE?**

21   A     Dr. Reed asserts that AE's EES programs benefit all customers because they reduce  
22     the need for AE to purchase power, defer transmission and distribution upgrades, and

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<sup>8</sup> Direct Testimony of Cyrus Reed, Ph.D. at 5.

1           reduce fees paid to ERCOT.<sup>9</sup> Thus, he believes all customers should pay for AE's  
2           EES programs.

3   **Q       DOES THIS REASONING SUPPORT DR. REED'S PROPOSAL?**

4   A       No. Dr. Reed ignores the private investments made by large high load factor  
5           customers to minimize their energy costs, which include sophisticated and often costly  
6           energy efficiency measures. Under his theory, other AE customers also benefit from  
7           the investments large customers make in energy efficiency—but AE's other customers  
8           pay none of the costs. Thus, Dr. Reed's proposal would require large high load factor  
9           customers to pay twice for energy efficiency – both for the costs of their own self-  
10          directed measures and the EES costs incurred by AE to fund measures that directly  
11          benefit other customers.

12   **Q       DO LARGE HIGH LOAD FACTOR CUSTOMERS HAVE STRONG INCENTIVES TO**  
13          **INVEST IN ENERGY EFFICIENCY?**

14   A       Yes. As large users of electricity in competitive businesses, high load factor industrial  
15          customers have every incentive to reduce their energy usage as much as possible.  
16          This is especially important for large energy-intensive customers that operate in  
17          commodity-based industries (e.g. metals, fertilizer, pulp and paper, air separators,  
18          semi-conductors).

19   **Q       WHY IS THAT THE CASE?**

20   A       Electricity is a significant operating cost. It is often in the top three production costs  
21          for large industrial facilities, alongside taxes and labor. These customers face strong

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<sup>9</sup> *Id.* at 8.



1 domestic and global competition, and they must do everything possible to minimize  
2 costs in order to remain competitive. Thus, to remain competitive, an energy-intensive  
3 customer must examine every aspect of its manufacturing process and the supporting  
4 infrastructure to identify and implement cost-effective measures that will increase  
5 operating efficiency and lower production costs. Lowering energy costs by installing  
6 more energy-efficient equipment helps to accomplish this objective and allows the  
7 customer to remain competitive.

8 **Q DO TIEC MEMBERS INVEST IN ENERGY EFFICIENCY?**

9 A Yes. I am advised that the TIEC member in the AE service area have invested  
10 significantly in various EE measures, such as LED lighting and more efficient chillers  
11 so that their facilities conserve electricity. These are in addition to investments in state  
12 of the art manufacturing technology designed to ensure their processes are efficient  
13 and cost-effective, which minimizes overhead costs such as power.

14 **Q IS THIS WHY THE LEGISLATURE AND THE PUCT HAVE EXEMPTED**  
15 **INDUSTRIAL CUSTOMERS FROM ENERGY EFFICIENCY CHARGES?**

16 A Yes. In HB 3693 (2007), the Texas Legislature defined EE goals and programs as  
17 oriented to residential and commercial customers, which are responsible for bearing  
18 the cost of the programs. Industrial customers were exempted. However, in  
19 implementing amended rule §25.181 in 2008, the PUCT excluded only transmission-  
20 voltage customers.<sup>10</sup> Through Project No. 39674, the PUCT enshrined the  
21 Legislature's intent in PURA § 39.905 by defining "industrial customer" in § 25.181 as:

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<sup>10</sup> *Amendments to Energy Efficiency Rules and Templates*, Project No. 33487, Order Adopting the Repeal of §25.181 and §25.181 and of new §25.181 as Approved at the March 26, 2008 Open Meeting at 21 (Apr. 14, 2008).

1 [A] for-profit entity engaged in an industrial process taking service at  
2 transmission voltage, or taking service at the distribution voltage if it qualifies  
3 for a tax exemption under Tax Code § 151.317...<sup>11</sup>

4 Furthermore, the PUC added language for an Identification Notice that provides for an  
5 opt-out provision for industrial customers taking service at distribution voltage as  
6 follows:

7 An industrial customer taking electric service at distribution voltage may submit  
8 a notice identifying the distribution accounts for which it qualifies...[and] shall  
9 not be charged for any costs associated with programs provided under this  
10 section...nor shall the identified facilities be eligible to participate in utility-  
11 administered energy efficiency programs during the term.<sup>12</sup>

12 **Q DO ENERGY EFFICIENCY PROGRAMS, WHETHER DIRECTED BY THE UTILITY**  
13 **OR SELF-DIRECTED, BENEFIT ALL CUSTOMERS?**

14 **A** Yes. The benefits of EE flow irrespective of who implements and funds the programs.  
15 Thus, a self-directed EE program by an individual customer can provide the same  
16 benefits to the utility's other customers as a corresponding EE program funded by the  
17 utility. Accordingly, exempting high load factor customers because they already have  
18 a strong incentive to enact self-directed EE programs is a reasonable policy.

19 **Q DO ALL CUSTOMERS BENEFIT FROM ENERGY EFFICIENCY PROGRAMS**  
20 **EQUALLY?**

21 **A** No. The benefits of EE programs do not flow equally to all customers on a per-kWh  
22 basis. This is because EE programs also provide some capacity savings. Capacity-

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<sup>11</sup> *Rulemaking Proceeding to Amend Energy Efficiency Rules*, Project No. 39674, Order Adopting Amendments to § 25.181 as Approved at the September 28 2012 Open Meeting at 54 (Oct. 17, 2012).

<sup>12</sup> The provided section is from the current §25.181(u) which is nearly identical to the provision as originally approved in Project No. 39674, *Order Adopting Amendments to § 25.181 as Approved at the September 28 2012 Open Meeting* at 281 (Oct. 17, 2012).

1 related costs are not caused by kWh usage. Thus, a proper allocation of capacity cost  
2 savings to customer classes would not result in an equal per kWh benefit. Additionally,  
3 the energy cost savings from EE programs are more significant during on-peak hours,  
4 because this is when the utility typically incurs higher fuel costs than during the off-  
5 peak hours. Customers that operate at high load factors use much less of their energy  
6 during on-peak hours. Thus, they would receive less of the benefits of EE programs  
7 than customers that use more electricity during on-peak hours.

8 Accordingly, although it may generally be the case that all customers benefit  
9 from cost-effective EE programs, it is not the case that benefits from utility-funded EE  
10 programs flow equally on a per-kWh basis.

11 **Q WILL EXCLUDING HIGH LOAD FACTOR CUSTOMERS SHIFT COSTS AND**  
12 **PLACE UNDUE BURDEN ON THE REMAINING CUSTOMERS?**

13 **A** No. Excluding high load factor customers from AE's EES fee will not adversely affect  
14 AE's remaining customers. The only circumstance in which customers could be  
15 impacted is if AE ignores the EE savings from high load factor customers and  
16 continues to incur the same level of EE program costs. This, however, would not be  
17 prudent. Excluding high load factor customers from paying EES fees would not cause  
18 a death spiral or threaten the integrity of AE's EES programs.

19 **Q DOES THIS CONCLUDE YOUR CROSS-REBUTTAL TESTIMONY?**

20 **A** Yes.