

**AUSTIN ENERGY'S
2022 BASE RATE REVIEW PROCESS
AND PROPOSAL TO CHANGE BASE
ELECTRIC RATES**

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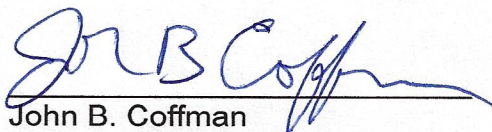
**BEFORE THE CITY OF AUSTIN
IMPARTIAL HEARING EXAMINER**

**INDEPENDENT CONSUMER ADVOCATE'S
MOTION TO LATE-FILE ITS CROSS REBUTTAL PRESENTATION**

The Independent Consumer Advocate ("ICA") hereby submits its Cross Rebuttal presentation, by its expert witness Clarence Johnson.

The procedural guidelines written by Austin Energy for this base rate review state that all documents shall be submitted by 12:00pm on the due date, unless otherwise ordered by the Impartial Hearing Examiner.¹ Unfortunately, due to technical difficulties encountered on the due date (today), the ICA was delayed several hours in being able to submit this document. Therefore, the ICA respectfully requests permission to late-file its Cross Rebuttal presentation this afternoon, and apologizes for any inconvenience to the other parties as a result of this delay.

Respectfully submitted,



John B. Coffman
Independent Consumer Advocate

Date filed: July 1, 2022

¹ Section C.1.(h).

**AUSTIN ENERGY 2022 BASE
RATE REVIEW**

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

CROSS REBUTTAL PRESENTATION

OF

CLARENCE L. JOHNSON

ON BEHALF OF

THE INDEPENDENT CONSUMER ADVOCATE

July 1, 2022

1 **I. INTRODUCTION**

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

3 A. My name is Clarence Johnson. My address is 3707 Robinson Avenue, Austin, Texas
4 78722.

5 **Q. ARE YOU THE SAME CLARENCE JOHNSON WHO PREVIOUSLY MADE**
6 **A PRESENTATION IN THIS PROCEEDING?**

7 A. Yes.

8
9 **Q. WHAT IS YOUR ROLE WITH THE INDEPENDENT CONSUMER**
10 **ADVOCATE?**

11 A. I am self-employed as a consultant who provides technical analysis and advice
12 regarding energy and utility regulatory issues. The City of Austin retained John B.
13 Coffman LLC as the Independent Consumer Advocate (ICA) with the role of
14 representing the interests of residential customers in this electric base rate review
15 process. I will briefly respond to arguments made by witnesses for NXP and TIEC.

16 **II. PRODUCTION DEMAND CLASS ALLOCATION**

17 **Q. IS THE CCROSS SENSITIVE TO THE CHOICE OF PRODUCTION DEMAND**
18 **ALLOCATION?**

1 A. Yes. The choice of production demand allocation method can dramatically shift cost
2 recovery responsibility among customer classes.

3 **Q. DO YOU AGREE WITH TIEC AND NXP THAT AVERAGE & EXCESS**
4 **DEMAND/ 4 CP (AED-4CP) IS THE APPROPRIATE PRODUCTION**
5 **ALLOCATION METHOD IN THIS CASE?**

6 A. No. Those parties propose to replace AE's 12 CP method with a formula, AED-4CP.
7 As noted in my initial presentation, my recommendation (Baseload-Intermediate-Peak)
8 differs from both those methods. In my view, the AED-4CP method produces results
9 which do not take into account the role of energy use in system planning, relies too
10 heavily on only four hours of the year to allocate almost two billion dollars of gross
11 plant generation investment, and ignores the effect of ERCOT dispatch on generation
12 cost causation. As stated in my direct testimony, my version of the Baseload-
13 Intermediate-Peak ("BIP") methodology is superior with respect to each of these
14 factors.

15 **Q. ARE TEXAS PUC DECISIONS ADOPTING AED-4CP DISPOSITIVE OF THE**
16 **APPROPRIATE ALLOCATION METHOD IN THIS PROCEEDING?**

17 A. No. Texas PUC decisions are relevant to showing how the Texas PUC has decided
18 other electric utility cases based on the facts of those cases. My assumption is that the
19 city council approved the impartial hearing process so that rate making decisions would
20 be based on the merits of the proposals presented in the hearing of this specific rate
21 review. Furthermore, the city of Austin has original jurisdiction over the retail rates
22 set in this case. The Austin city council is the regulatory authority with the
23 responsibility of determining the appropriate cost allocation applicable to Austin

1 Energy. The city council makes decision on behalf of the citizens of Austin, who are
2 also indirectly the “owners” of AE. My recommendation is that the Austin city council
3 make its determination based on the interest of its citizens, rather than cede any
4 authority to the state agency. Furthermore, to the best of my knowledge, the Texas
5 PUC has not addressed the appropriate production demand methodology for an ERCOT
6 electric utility since the ERCOT nodal market structure was put in place. I agree with
7 Austin Energy’s position that the AED-4CP method is not consistent with the ERCOT
8 dispatch system. No Texas PUC precedent exists for the appropriate production
9 demand methodology to use as a guide under the current ERCOT market structure.

10 **Q. IS IT REASONABLE TO MAKE A FACTUAL DISTINCTION BASED ON**
11 **ERCOT SERVING AS THE REGIONAL TRANSMISSION ORGANIZATION**
12 **(RTO)?**

13 A. Yes. PUC decisions in other bundled utility cases involve electric utilities within the
14 Southwestern Power Pool (SPP) or Western Electric Coordinating Council (WECC).
15 ERCOT differs from those regions in that it operates an energy-only market in which
16 the vast majority of consumption is subject to retail competition. SPP and WECC
17 involve mostly state regulated bundled electric utilities which provide rate regulated
18 retail service. As a rate regulated entity, these retail electric utilities have a
19 responsibility to prudently meet reserve margin reliability requirements for their
20 service areas. Within ERCOT, the unregulated energy market is supposed to produce
21 prices that ensure sufficient generation capacity is installed in the region.¹ Therefore,

¹ The consequences of Winter Storm Uri have led the Texas Legislature and Texas PUC to investigate whether this structure should be improved.

1 AE can look to the overall ERCOT market in deciding how to meet its capacity needs,
2 rather than focusing solely on the amount of capacity it owns to meet service area
3 demand.

4

5 **Q. HAVE YOU CONSIDERED FACTORS SPECIFIC TO AUSTIN POLICY**
6 **MAKING?**

7 A. Yes. For example, historically the city's electric utility commission (EUC) has favored
8 the probability of dispatch (POD) method. This method assigns each power plant's
9 cost to hours of dispatch, thereby relying on 8,760 hours. POD is excessively complex
10 and is more difficult to implement in the ERCOT nodal structure. However, in my
11 judgement, my recommendation (BIP) provides results which are more aligned with
12 the principles of the POD method.

13 **Q. PLEASE ELABORATE ON YOUR ASSERTION THAT THE AED-4CP**
14 **METHOD ESSENTIALLY ALLOCATES COSTS TO ONLY FOUR HOURS**
15 **OF THE YEAR.**

16 A. Although the AED-4CP formula appears to allocate costs in part on the basis of energy
17 usage (average demand), that appearance is largely a mathematical illusion, particularly
18 if coincident peak data is used, as TIEC proposes.

19 If the load factor for the AED-4CP calculation is derived from 4CP, the results
20 of A&E/4CP are the same as a straight 4CP allocator. Minor adjustments, such as
21 converting "negative" excess demands to zero (such as the Texas PUC's typical
22 formulation) or using a different load factor may cause the A&E/4CP to diverge slightly
23 from 4CP. This change is slight because it usually affects only the lighting classes.

1 Moreover, the NARUC Cost Allocation Manual (CAM) does not support the
2 AED-4CP method proposed by TIEC. The NARUC CAM cautions against the
3 insertion of coincident peaks into this formula stating that reliance upon coincident
4 peak (“CP”) demands for the Average & Excess (“A&E”) method will preclude the
5 methodology from achieving the purported aim of recognizing energy use (average
6 demand):²

7 If your objective is – as it should be using this method – to reflect
8 the impact of average demand on production plant costs, then it
9 is a mistake to allocate the excess demand with a coincident peak
10 allocation factor because it produces allocation factors that are
11 identical to those derived using a CP method.

12 **Q. CAN YOU SHOW THAT AED-4CP IS EQUIVALENT, IN PRACTICE, TO**
13 **SIMPLE 4 CP FOR AUSTIN ENERGY’S NON-LIGHTING CLASSES?**

14 A. Yes. The formula is equivalent to the chosen measure of peak demand. The proof is
15 in the results. The table below, shows the difference between the AED-4CP and 4CP
16 by rate class, at the tenth of a percentage point margin:³

² NARUC Electric Utility Cost Allocation Manual (1992) at 50.

³ Schedule F-6, AE RFP.

4CP Allocator Minus AED-4CP Allocator

	Difference (Percentage Points)
Residential	0.16%
Secondary 1	0.00%
Secondary 2	0.04%
Secondary 3	0.02%
Primary Total	0.007%
Transmission Total	0.001%

The largest difference is only 1.6 tenths of 1 percentage point, and the difference is not noticeable for most classes.

Q. DO YOU HAVE ANY OTHER OBSERVATIONS ABOUT TIEC'S RECOMMENDATION?

A. Yes. The unprecedented outages in ERCOT in February 2021 provide compelling evidence against TIEC's position that generation reliability is driven only by the four summer month peak demands. TIEC purposely excludes the February 2021 periods from its hourly comparisons. I would submit that such a conceptual framework exemplifies why the disastrous results in February 2021 occurred. Ignoring the winter period means that severe emergencies may not be subject to appropriate planning. Although TIEC ignores February 2021 as an anomaly, winter storm outages in ERCOT have occurred previously. For example, ERCOT endured rolling blackouts in February 2011 when 50 power plants were unable to operate due to ice storms; and in January 2014, ERCOT was close to rolling outages when cold weather knocked two large generators off-line.

1

2 **III. DISTRIBUTION CLASS ALLOCATION**

3

4 **Q. DO YOU AGREE THAT AE'S 12 NCP METHOD OF ALLOCATING**
5 **DISTRIBUTION COSTS SHOULD BE REPLACED?**

6 A. No. In my view, 12 NCP is within the range of reason for allocating distribution costs.
7 Class non-coincident demands (NCP) normally are used to allocate most demand
8 related distribution costs. Austin Energy applies the 12 NCP (12 monthly class peaks)
9 method to allocate poles, conductors, and substations, and TIEC proposes to replace
10 this allocator with an NCP allocator limited to the single peak hour for each class. The
11 12 NCP method used by AE is an average of class NCP for each of the 12 months. The
12 purpose of the NCP demand method is to recognize load diversity and the localized
13 nature of distribution planning. Compared to 12 NCP, TIEC's single hour NCP method
14 dilutes the recognition of both factors.

15 **Q. PLEASE DISCUSS THE RELATIONSHIP OF NCP DEMANDS TO LOAD**
16 **DIVERSITY AND LOCALIZED LOADS.**

17 A. Load diversity is an important economy of scope in the electric utility industry. When
18 class loads have a similar profile, increased demand imposes higher costs on
19 distribution facilities. However, as more and different types of loads are combined
20 within a local area served by distribution facilities, diversity benefits reduce the cost
21 associated with additional new load. Distinct types of loads can be complementary,
22 with the peak of one profile occurring outside the peak of the other type of load. Loads
23 tend to become increasingly diverse for more upstream facilities, since the local area
24 served is expanded. Local area facilities closest to the end user tend to be more

1 homogenous, even though some local areas may have a significant variety of customer
2 profiles. Given that customer classes tend to have profiles which are more
3 homogenous, class maximum demands are assumed to be most representative of the
4 most localized facilities. By restricting the NCP demand to one hour for each class,
5 TIEC's recommendation limits the recognition of diversity of loads between classes,
6 because classes with significant demands outside the single hour peak (for instance,
7 winter heating loads) are insulated from the allocation of distribution costs associated
8 with high demand periods which do not drive the single peak hour. In this respect, 12
9 NCP is superior for recognizing class load diversity.

10
11 **Q. IF TIEC'S NCP RECOMMENDATION WERE ADOPTED, WOULD YOU**
12 **PROPOSE OTHER ALLOCATION CHANGES?**

13 A. Yes. If the TIEC change is made, I recommend including a partial allocation based on
14 class energy use in the range of 10% - 30%. This would be consistent with the
15 recommendations of the Regulatory Assistance Project 2020 cost allocation manual⁴,
16 and would recognize that distribution planning must build the system to account for
17 line losses which may occur throughout the year.

18 **Q. TIEC AND NXP PROPOSE A DIFFERENT ALLOCATION FOR PRIMARY**
19 **CLASSES WHICH ARE ADJACENT TO SUBSTATIONS, ARGUING THAT**
20 **THOSE CUSTOMERS SHOULD NOT HAVE TO SHARE IN PRIMARY**
21 **VOLTAGE LINE COSTS. DO YOU AGREE?**

⁴ RAP, "Electric Utility Cost Allocation for A New Era: A Manual," January 2020.

1 A. No. AE's allocation of primary distribution facilities to all loads (other than
2 transmission) is consistent with average cost rate making principles. The complaint
3 that some industrial customers do not use all of the primary facilities is not a valid
4 reason for shifting primary voltage costs onto other customers. This is not unusual in
5 average cost rate making. Classes of customers receiving allocations of distribution
6 cost may not "use" every distribution facility on the AE system. Such a result is
7 inherent in recognizing that the distribution facilities are part of an integrated system.
8 The increased granularity sought by TIEC may overlook system or network benefits.
9 For example, most electric utilities design substations so that the facilities can provide
10 redundancy and manage additional power flows in the event of an emergency or
11 contingency event elsewhere on the system. Moreover, TIEC's proposal is a form of
12 geographic rate making, since it is based on customers' location relative to specific
13 substations. Average cost rate making is intended to avoid the complexities and
14 difficulties of geographic rate making.

15

16 **Q. DO YOU HAVE AN ADDITIONAL SUGGESTION WITH RESPECT TO**
17 **TIEC'S SUBSTATION RECOMMENDATION?**

18 A. Yes. I recommend that any revenue shifting in the proposal should be confined within
19 the primary voltage classes. Costs should be allocated in full to primary voltage
20 classes, and any revenue loss caused by discounts to substation customers should be
21 recovered within those primary classes.

22 **Q. DOES THIS CONCLUDE YOUR REBUTTAL PRESENTATION?**

23 A. Yes.

