

AUSTIN ENERGY'S TARIFF PACKAGE:	§	2016 MAY
2015 COST OF SERVICE STUDY	§	BEFORE THE CITY OF AUSTIN
AND PROPOSAL TO CHANGE BASE	§	IMPARTIAL HEARING EXAMINER
ELECTRIC RATES	§	

INTERVENORS DATA FOUNDRY/AUSTIN CHAMBER CROSS-REBUTTAL COST ALLOCATION, REVENUE DISTRIBUTION AND RATE DESIGN PRESENTATION

INTRODUCTION

Data Foundry and the Austin Chamber of Commerce (Data Foundry/Chamber of Commerce) filed a report in this proceeding addressing cost allocation, revenue distribution and rate design. Several other parties addressed these issues as well. Data Foundry/Chamber of Commerce attempted to identify the principal areas of agreement and disagreement with those parties' presentations, but failure to identify and/or discuss a given issue does not signify acquiescence on that issue.¹

Summary

AE proposed a significant change in its method for allocating demand-related production costs. None of the parties' proposals, including AE's own, provide persuasive support for adopting a significant change in AE's previously approved A&E-4CP cost allocation method.

Parties have proposed a variety of inter-class revenue distributions. Each proposal is based on different priorities and, in some cases, different cost allocation methods. As will be discussed, several of these proposals result in inadequate movement toward cost of service, the primary consideration in developing a just and reasonable revenue distribution.

¹ Data Foundry insists that AE's wholesale-related production costs must be excluded. The following discussion nonetheless assumes, for purposes of argument and without waiver, that AE's revenue requirement will wrongly include some or all of AE's claimed production costs.

COST OF SERVICE STUDY

NXP/Samsung

NXP/Samsung recommend that production-related costs be allocated on the basis of the Four Coincident Peak Average and Excess (A&E-4CP) demand methodology.² Data Foundry/Chamber of Commerce agrees with NXP/Samsung's rationale and recommendation that production-related costs be allocated on the basis of the A&E-4CP demand methodology, consistent with other summer peaking electric utilities in Texas.

Independent Consumer Advocate

The Independent Consumer Advocate (ICA) recommends rejection of AE's proposed ERCOT 12CP for allocating demand-related production costs. ICA's witness, Mr. Clarence Johnson, instead recommends the Base-Intermediate-Peak Method (BIP) for allocating production plant among customer classes.³

First, Mr. Johnson suggests that 12CP is superior to Average & Excess, stating that "[a]t least 12 CP recognizes the reality that reliability is a concern throughout the year, and not just in the summer months." While it is true that reliability is a concern throughout the year, generation planning in Texas focuses on providing adequate generation during peak periods, which in Texas are the months of June through September, the four peak months. This time period forms the basis of Data Foundry/Chamber of Commerce's recommended A&E-4CP. Production cost allocation methodologies that do not recognize the primary reason generating plants are built, to provide adequate generation capacity during peak demand periods, are inherently flawed.

Mr. Johnson asserts that the most significant deficiency of "the 12 CP method proposed by AE is that it does not recognize the relationship between system energy use and the

² Direct Testimony and Exhibits Of Gary L. Goble, On Behalf Of NXP Semiconductor, Inc. and Samsung Austin Semiconductor, Inc., page 11.

³ Direct Testimony of Clarence Johnson, On Behalf of Independent Consumer Advocate, Austin Energy Tariff Package Update-2016 Rate Review, page 38.

⁴ Ibid.

causation of generation investment." Data Foundry/Chamber of Commerce agree that AE's proposed ERCOT 12 CP does not recognize the relationship between system energy use and the cause of generation investment. 12 CP does not give any consideration to factors other than demand. This is one of the reasons AE's proposed ERCOT 12 CP should be rejected.

Mr. Johnson goes on to say that 12 CP is "inadequate to reflect cost causation" because "12CP is a peak demand methodology and does not directly recognize the impact of energy on planning and operating generation." Data Foundry/Chamber of Commerce agree that energy consumption is an important consideration in production cost allocation. In fact, this is one of the significant characteristics of Data Foundry/Chamber of Commerce's recommended production cost allocation method, A&E-4CP.

Several generally accepted cost allocation manuals distinguish Average and Excess, an energy weighting method, from peak demand methods, such as 12CP. The National Association of Regulatory Utility Commissioners (NARUC) cost allocation manual states:

There is evidence that energy loads are a major determinant of production plant costs. Thus, cost of service analysis may incorporate energy weighting into the treatment of production plant costs. One way to incorporate an energy weighting is to classify part of the utility's production plant costs as energy-related and to allocate those cost to classes on the basis of class energy consumption.⁶

The first energy weighting method discussed in the NARUC cost allocation manual is the Average and Excess method.

In addition, the American Public Power Association's (APPA's) "Cost of Service Procedures for Public Power Systems" has this to say about the Average and Excess Demand (AED) method:

AED considers demand requirements as well as energy consumption of customer class of service in allocating demand cost to classes. AED is probably the most commonly used method for public power systems in annual average cost of

⁵ Ibid

⁶ Electric Utility Cost Allocation Manual, National Association of Regulatory Utility Commissioners, January 1992, page 49.

service studies today as it attempts to consider class of service demands as well as extent to which a class used the facilities installed for service.⁷

As can be seen from the cost allocation manuals from these respected industry associations, Average and Excess is an accepted and well regarded method for allocating electric utility production costs. The Average and Excess approach reflects the most important causative factors in production investments, namely both peak demand and customer classes' respective energy usage throughout the year.

Mr. Johnson recommends the use of a Base-Intermediate-Peak Method (BIP) for allocating production plant. Mr. Johnson analyzed two different versions of BIP. First he considers a "net plant" version (based on net plant values for generation), but he notes this approach may distort the relative values due to the timing of plant installation dates. For this reason, Mr. Johnson also prepared a "replacement cost" version of BIP, which he recommends. Both of the BIP methods presented by ICA are data-intensive. Neither version has ever been approved for allocating electric utility production costs in Texas.

Mr. Johnson states that "information regarding the ERCOT market is critical to AE's decisions to operate and make additions to its generation fleet." This statement reveals a major weakness in both AE's and ICA's proposals for allocating production cost. Production costs should be allocated based on how and why they were incurred, not how they may be incurred in the future. A proper production cost allocation factor should represent the considerations that went into AE's historical decisions about its generation, not about future additions to AE's generation fleet.

Finally, the results of Mr. Johnson's proposed BIP method differs significantly from the BIP method evaluated by AE. AE addressed production cost allocation methods that were considered but ultimately rejected by AE and provided a slide from a December 14, 2015 presentation to the Electric Utility Commission during discovery. As can be seen below, each

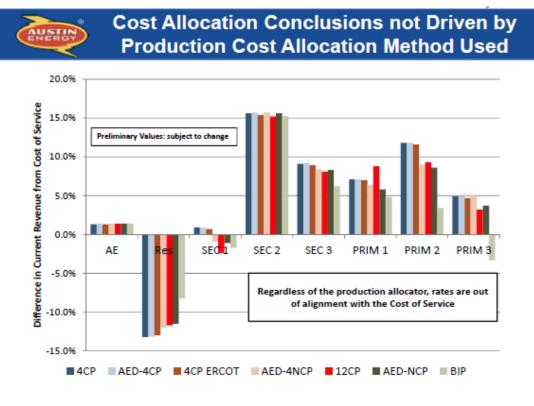
⁷ Cost of Service Procedures for Public Power Systems: A Cost Allocation Manual; American Public Power Association, page 63.

⁸ Direct testimony of Clarence Johnson, page 42.

⁹ *Ibid*, page 45.

allocation method, including BIP, showed that the Residential class is significantly below cost.

As AE noted in the slide, "Regardless of the production allocator, rates are out of alignment with the Cost of Service."



Source: AE's Response to Data Foundry RFI 1-6, Attachment 1, Page 1 of 1.

As noted, Mr. Johnson prepared two different versions of BIP, both of which yield significantly different outcomes from AE's BIP method. Mr. Johnson, however, did not provide a comparison of his proposed BIP to AE's method, nor did he explain why the two methods lead to such different outcomes.

ICA's recommended production cost allocation method should be rejected in favor of Data Foundry/Chamber of Commerce's recommended A&E-4CP. ICA's proposed BIP method is more complicated, more data intensive, unprecedented in Texas, makes some improper assumptions about the nature of the underlying production costs and can apparently provide significantly different results due to different configurations of what is purportedly the same allocation method.

Public Citizen/Sierra Club

Public Citizen/Sierra Club appear to recommend rejecting AE's proposed ERCOT 12 CP production cost allocation method in favor of one of several other methods. Public Citizen/Sierra Club suggests that "[a] BIP would more accurately measure the differing needs of residential, small commercial and other customer classes, than a method largely determined by just 12 points of high peak energy use throughout the year." They also state that AE's decision to use the ERCOT 12CP for allocating production costs "relies on the assumption that electric usage during those 12 hours is the most important factor in generation production costs."

Data Foundry/Chamber of Commerce agree that AE's proposed ERCOT 12CP is not appropriate for allocating production costs. The ERCOT 12CP provides too broad a measure to accurately represent the relationship between demand and production cost responsibility and fails to give any consideration to energy consumption.

In addition, Public Citizen/Sierra Club suggests that "BIP would enable Austin Energy to better reflect the goals of the long term generation plan, which are based on incorporating renewables and ending our reliance on coal-fired generation, while utilizing resources like demand response and storage to fill in electricity needs when renewable resources are not operating." ¹²

The purpose of a cost of service study is to allocate the ongoing costs of already-built plant. The implications of future generation or operations are entirely irrelevant to the exercise. The considerations posed by Public Citizen/Sierra Club might become germane to a cost of service study some time in the future, but they are immaterial to the adjusted test year and the imminent rate-effective period.

Data Foundry/Chamber of Commerce agrees with Public Citizen/Sierra Club that AE's proposed 12CP method is not the most accurate for allocating demand-related production costs between classes. Public Citizen/Sierra Club discuss several data-intensive alternatives to

¹⁰ Public Citizen's and Sierra Club's Position Statement/Presentation On The Issues, page 3.

¹¹ Public Citizen's and Sierra Club, page 1.

¹² *Ibid*, page 3.

AE's proposed ERCOT 12CP that they believe should be considered. However, none of Public Citizen/Sierra Club's three alternatives for allocating production costs (BIP, Hourly Dispatch and Hourly-Energy-Cost) have ever been accepted for use by an electric utility in Texas. Public Citizen/Sierra Club does not specifically recommend any specific method or provide any evidence that the underlying data necessary for any of these methods is even available, so it is difficult to fully address the contentions or potential outcomes.

ICA witness Johnson touches on data requirements when he notes that "some of the energy-based and time of use methods are more data intensive because they reflect hourly time of use costs (e.g., Probability of Dispatch method). These methods are more difficult to administer, and may not be well-suited for recognizing ERCOT dispatch." The alternative production cost allocation methods proposed by Public Citizen/Sierra Club are examples of those types of data-intensive and ill-suited methods.

Public Citizen/Sierra Club assert that a Base-Intermediate-Peak (BIP), Hourly Dispatch or Hourly-Energy-Cost cost allocation methods would better reflect true costs and be more equitable for the residential and small commercial classes. They also state that "[u]sing the BIP method, a Probability of Dispatch method, or the Hourly-Energy-Cost method will likely result in less production costs being assigned to the small commercial and residential classes." Their proposals seem to be more concerned with perceived "fairness" (e.g., lower prices however you get there) to the Residential and Small Commercial classes rather than fairness to all of AE's customers. If AE's production costs are included in the revenue requirement then the proper result is the one that is almost uniformly used for Texas retail utilities with self-owned generation that directly serves their retail customers. A&E 4CP is used more than all the others. None of the alternatives have been proven to be better after all things like simplicity, ease of administration, consistency and cost-causation are considered and balanced.

Public Citizen/Sierra Club state that "Austin Energy found most of the cost allocation methodologies they reviewed led to similar results, with the exception of the BIP methodology. The BIP methodology would have assigned a lower cost to residential and small commercial

 $^{^{13}}$ Direct Testimony of Clarence Johnson, page 38.

users and a higher cost to the very largest energy users." Like the ICA, Public Citizen/Sierra Club seem to believe that the BIP method would provide significantly different results than the other other methods evaluated by AE. However, AE's presentation to the Electric Utility Commission on December 14, 2015, (discussed above) compared these alternatives and revealed that the BIP's results are only slightly different than the other methods, including the more generally accepted A&E-4CP, which is recommended by Data Foundry/Chamber of Commerce.

Public Citizen/Sierra Club's recommendation is somewhat unclear. They appear to only suggest evaluating alternative cost allocation methods for the future. Data foundry/Chamber of Commerce would note that, in addition to these methods being unprecedented for a Texas utility, Public Citizen/Sierra Club's alternative methods for allocating demand-related production costs are "not fully-baked," leave many unanswered questions, and are, therefore, not appropriate for implementation in this proceeding.

REVENUE DISTRIBUTION

NXP/Samsung

NXP/Samsung recommend that "the rates for all customer classes be moved to full cost recovery in this rate review." Data Foundry/Chamber of Commerce agree with the need to move all classes toward their cost of service to the greatest extent possible and as quickly as possible. The complete elimination of existing large and long-standing inter-class subsidies could result in "rate shock" under certain scenarios depending on the amount that is allowed in the revenue requirement phase. If the ultimate revenue requirement award is significantly lower than AE's request but also significantly higher than that recommended by NXP/Samsung (in other words somewhere in the middle of the two) Data Foundry/Chamber of Commerce continue to recommend using the Council's "Affordability" goal of limiting rate class increases to 2% per year. All reductions made to AE's overall revenue requirement, however, should be used to make the greatest possible movement toward cost of service within this constraint.

¹⁴ Direct Testimony and Exhibits Of Gary L. Goble, On Behalf Of NXP Semiconductor, Inc. and Samsung Austin Semiconductor, Inc., page 35.

Data Foundry/Chamber of Commerce agree with NXP/Samsung that "kicking the can down the road" is no longer appropriate and that the existing subsidies be eliminated as quickly as possible within the accepted constraints. The 2% limit on affordability is an annual limit and Data Foundry/Chamber of Commerce recommend that, to the extent the 2% constrains class rate increases in this case, this maximum annual rate increase be applied in subsequent annual reviews until all classes rates reach their cost of service.

NXP/Samsung's revenue distribution proposal is based on the assumption of a significantly larger revenue decrease than was proposed by AE.¹⁵ A large enough revenue decrease would indeed allow the full transition to unity rates (all classes at cost of service and a 1.0 relative rate of return) without creating rate shock. Data Foundry/Chamber of Commerce therefore concur with NXP/Samsung's proposal to move all classes immediately to cost of service if the NXP/Samsung revenue requirement is adopted.

Independent Consumer Advocate

The ICA disagrees with AE's proposed revenue distribution in two respects, recommending that: 1) the revenue requirement reduction should be greater, and 2) the residential class should receive a rate decrease, based on the ICA's proposed class cost of service study.¹⁶

ICA reaches this recommendation by stating that the class cost-of-service study "provides useful information for developing the class revenue increases, but it should not be the sole consideration," and adds that "[n]on-cost considerations are appropriate in mitigating pure CCOS [class cost-of-service] results.¹⁷ While non-cost factors are important and often considered in developing a revenue distribution, the relationship of class revenues to cost of service is the paramount consideration. ICA does not identify any specific non-cost considerations or how they should influence the revenue distribution in this case.

¹⁵ Data Foundry and the Chamber agree with the great preponderance of NXP/Samsung's revenue requirement recommendations. Data Foundry, however, opposes inclusion of any production costs.

¹⁶ Direct Testimony of Clarence Johnson, page 73.

¹⁷ *Ibid*, page 72.

ICA contends that "the revenue decrease should be distributed broadly among the customer classes, rather than precisely linked to specific CCOS results. AE is publicly owned, and excess revenues should be broadly shared among different types of customers." Based on ICA's revenue requirement adjustments, ICA proposes to allocate \$39.8 million of base revenue decreases among customer classes. Data Foundry/Chamber of Commerce do not believe that the fact that AE is publicly owned requires excess revenues to be broadly shared. Again, the results of the cost of service study and individual classes' relationship to their cost of service should be the primary consideration in allocating revenue among classes.

ICA notes that class cost of service results may be quite sensitive to alternative classification or allocation decisions which are within the range of reasonable choices. ²⁰ ICA's revenue distribution, which recommends a rate decrease for the Residential class, is based on ICA's own cost of service study, including a BIP allocation for production cost. As discussed previously, ICA's proposed cost of service study and BIP produces significantly different results than the BIP method evaluated by AE. Unlike AE's BIP, ICA's proposed BIP-based cost of service study incorrectly indicates that the Residential class is currently paying more than its cost of service. ICA's proposed revenue distribution would likely be different under a different cost allocation method that correctly shows that Residential rates are currently significantly below cost of service.

Second, ICA witness Johnson proposes to allocate the ICA-proposed revenue decrease "on the basis of class shares of kWh consumption," which he describes as a "compromise allocation." The ICA suggests that "the resulting allocation will be more similar to AE's proposal," producing more favorable results for high load factor classes."

Allocating revenue among classes based on energy consumption is a highly unusual and inappropriate revenue distribution proposal. Data Foundry/Chamber of Commerce is unaware

¹⁸ *Ibid*, page 74.

¹⁹ *Ibid*, page 72.

²⁰ *Ibid.*, page 73.

²¹ *Ibid*, page 74.

²² *Ibid*, page 75.

of any revenue distribution in any jurisdiction that was based on class shares of kilowatt-hour consumption. There is a good reason why none use this approach. This allocation has nothing to do with cost or addressing inter-class subsidies, the two most fundamental considerations in the revenue distribution process.

ICA's revenue distribution recommendation should be rejected because it is based on a flawed cost of service study, ignores the most important consideration in revenue distribution, *i.e.*, cost of service, and is based on an inappropriate and unprecedented method for distributing revenue between classes.

Conclusion

Data Foundry/Chamber of Commerce have attempted to identify areas of agreement and significant disagreement with the other parties' presentations concerning cost allocation, and revenue distribution.

None of the other parties' cost allocation proposals, including AE's own, provide persuasive support for rejecting AE's previously approved A&E-4CP methodology for allocating production costs.

The revenue distributions proposed by other parties, including AE, are flawed and should be rejected. These other proposals are the result of inappropriate priorities and, in some cases, improper cost allocation methodologies. These revenue distributions proposals result in disproportionate movement away from cost of service and inadequate progress toward cost of service, even though reasonable progress toward cost for each class is the primary consideration for developing a just and reasonable revenue distribution.

Data Foundry/Chamber of Commerce recommend:

1. The A&E-4CP method traditionally used by the Public Utility Commission of Texas (PUCT) and adopted by the Council in the last case should be used for allocation of production costs if and to the extent production costs are included in the approved revenue requirement.

2. The revenue distribution should make as much progress toward reducing existing subsidies and eliminating existing deviations from cost of service as is possible without creating rate shock. If the revenue surplus is sufficient then all classes should be taken to unity.

Data Foundry and the Austin Chamber respectfully request that the Independent Hearing Examiner adopt the forgoing recommendations and requests.

Respectfully submitted,

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May 10, 2016

STATEMENT OF COUNSEL

I, W. Scott McCollough, represent and certify that I have been authorized to submit this Presentation on behalf of the Austin Chamber and further represent and certify that the Austin Chamber has ratified and does join in the Presentation.

W. Scott McCollough

CERTIFICATE OF SERVICE

I, W. Scott McCollough, certify that I have served a copy of this Presentation on all parties listed on the Service List for this proceeding as it exists on the date this document is filed, using the email address provided for the party representative.

W. Scott McCollough