

AUSTIN ENERGY'S TARIFF PACKAGE: §
2015 COST OF SERVICE STUDY §
AND PROPOSAL TO CHANGE BASE §
ELECTRIC RATES §

AUSTIN ENERGY
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BEFORE THE CITY OF AUSTIN
IMPARTIAL HEARING EXAMINER

DATA FOUNDRY, INC.'S PRESENTATION ON REVENUE REQUIREMENTS

Intervenor Data Foundry respectfully presents this Presentation on Revenue Requirements.¹ Data Foundry contends that AE's base revenue requirement should be reduced by \$784,030,818, or alternatively \$442,455,280. The first amount represents AE's claimed production revenue requirement for both fixed (demand) and variable (energy) production costs. The second amount represents AE's claimed variable (energy) production costs only, for which there are separate and additional reasons for disallowance. These costs are not "necessary" to the provision of retail base rate service, and recovery is not reasonable. The generation assets are not used by, or useful to, base ratepayers. AE is trying to double recover these costs from base rates and then again from sales to the ERCOT wholesale market.

I. Introduction

A large portion of AE's generation fleet was originally put in service before 1997 when SB 7 became law, or 2002 when the ERCOT wholesale market "opened."² More was likely in place before the change to a nodal approach in 2010.³ Data Foundry does not contest the prudence of the decisions surrounding placement of the pre-1997 plant. Some arguments could be made that continued operation and any expansion after 1997, 2002 or 2010 was questionable because of the risks and extraordinary changes afoot. Data Foundry does not claim, however, that AE should be denied rate base recovery of any of the costs associated with its legacy generation fleet based on a "prudence" theory.

¹ Data Foundry is separately supplying a joint Presentation on Cost Allocation, Revenue Distribution and Rate Design along with the Austin Chamber of Commerce. Although that separate presentation accepts, for argument purposes, the Austin Energy ("AE") claimed revenue requirement, Data Foundry does not agree with that number.

² Rate Filing Package p. 3-11, Bate 40 and p. 3-12, Bate 41.

³ Rate Filing Package p. 3-8, Bate 37.

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Nonetheless, the moves to a wholesale market and then to the nodal approach lead to an undeniable fact: much of AE's generation was originally dedicated to serving its native retail load but that is no longer the case. **All** of AE's generation is now entirely and inescapably dedicated to servicing the ERCOT wholesale market. **None** of the production costs are presently dedicated to directly or indirectly serving AE's native retail load. All of AE's generation is sold to the ERCOT market, and AE presumably receives revenue from those sales. AE supports its native retail customers entirely through purchased power obtained through the ERCOT market. AE's generation fleet is for wholesale services only and does not support its retail services.

AE's generation now has absolutely no direct relationship to, and does not in any way relate to, the power actually consumed by AE's retail customers. The *only* connection is that AE's wholesale "settlements" revenue is deposited in the Power Supply Adjustment ("PSA") account and serves to reduce to some extent the amount retail ratepayers contribute toward AE's purchased power costs. That is why AE's rate filing package correctly does not assert that its production assets or the operation of them are either "used by" or "useful to" AE's retail customers. They clearly are not, as a matter of fact and as a matter of law. Nor are the production costs "reasonable and necessary" costs associated with the provision of retail electric utility base service.

AE posits instead that its participation in the wholesale market provides a "benefit" to retail ratepayers because the wholesale revenue allegedly reduces the PSA prices paid by retail ratepayers. AE also claims that its generation activities can be a kind of "hedge" against radical wholesale price spikes because during price spikes AE can earn extraordinary margins that then offset some of high wholesale purchase power costs AE incurs during the same price spike.⁴ These alleged (but questionable, as shown below) benefits pertain to the PSA, however, and do not involve the base rates in

⁴ See rate filing package p. 5-4, Bate 107:

As discussed in Chapter 3, Austin Energy no longer serves its customer load with its own generation. Rather, all power is purchased in the ERCOT market and then delivered to the Austin Energy load zone. In the Nodal market, the energy generated by Austin Energy serves as a physical and financial hedge against ERCOT market power price fluctuations, providing a direct benefit to AE's customers. Specifically, Austin Energy's diverse fuel types and technologies provide AE's customers with a vital risk management strategy that guards against exposure to the volatility of the wholesale market.

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issue here. There is no benefit to **base** rates and AE admits as much since it never tries to demonstrate any benefit to the base.

AE has not carried its burden of proof that the fixed and variable production costs used exclusively for the purpose of generating sales in the wholesale market are used by or useful to **retail** base ratepayers, or that recovery of these costs through inclusion in the retail base revenue requirement and then retail base rates is just and reasonable. The costs are not reasonable or necessary for purposes of this case because they have nothing to do with the provision of retail electric utility base service. The production costs must therefore be excluded from the base revenue requirement. Longstanding, well-accepted fundamental ratemaking principles compel this result. Costs associated with AE's generation fleet must be recovered – to the extent they can or should be recovered at all – through some mechanism other than base rates.⁵

II. AE Cannot Recover Its Production Costs Through Base Rates.

A. Production Costs Generally.

Even though its production is now entirely dedicated to serving the ERCOT wholesale market AE seeks to recover \$784,030,818 in production costs from retail base rates. Production costs include fuel and purchased power expenses; certain Operating and Maintenance expenses; and expenses related to the financing, repair, and replacement of AE's power generation resources.⁶ Production resources and costs can be classified as fixed (demand related) or variable (energy related).⁷ AE claims to

⁵ Data Foundry does not contend that AE should be entirely and forever barred from recovering in any fashion all costs related to the generation it owns. It may well be that some should be recompensed in some manner. The point is that any recovery cannot occur through the base rates that flow from this proceeding. The rationale, amount and mechanism related to any recovery are outside the scope of the case.

⁶ Source: Austin Energy's Tariff Package: 2015 Cost of Service Study and Proposal to Change Base Electric Rates, January 25, 2016, page 5-5.

⁷ According to the NARUC Cost Allocation Manual, p. 35, "[p]roduction plant costs are either fixed or variable. Fixed production costs those revenue requirements associated with generating plant owned by the utility, including cost of capital, depreciation, taxes and fixed O&M. Variable costs are fuel costs, purchased power costs and some O&M expenses. Fixed production costs vary with capacity additions, not with energy produced from given plant capacity, and are classified as demand-related. Variable production costs change with the amount of energy produced, delivered or purchased and are classified as energy-related."

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have \$341,575,538 in fixed (demand related) production costs⁸ and \$442,455,280 in variable (energy related) production costs, and wants to include them in the base rates assigned to, and recovered from, its retail ratepayers. AE's Figure 5.8 in rate filing package p. 5-12, Bate 115 is reproduced below.

Figure 5.8
Cost Classification of Test Year 2014 Revenue Requirement

Description	Demand	Energy	Customers	Direct Assignment ⁽¹⁾	Total
Production (\$)	341,575,538	442,455,280	-	-	784,030,818
Transmission (\$)	116,855,952	-	-	-	116,855,952
Distribution (\$)	177,311,960	-	23,193,593	11,460,868	211,966,421
Customer Service (\$)	-	-	<u>104,374,119</u>	-	<u>104,374,119</u>
Total Cost of Service (\$)	635,743,450	442,455,280	127,567,712	11,460,868	1,217,227,310
Percentage of Total (%)	52.2	36.3	10.5	0.9	100.0

Note:

1) The Distribution direct assignment is related to Service Area Street Lighting.

AE's effort to obtain base rate recovery of its alleged wholesale production costs (and extract a 13% tax on the demand portion so city hall can fund other activities even more disconnected from retail base electric utility service) must fail. Several fundamental and longstanding ratemaking principles compel the conclusion that AE's ongoing wholesale production costs (and the surtax on top of those costs) cannot be included in a retail base rate revenue requirement. It is pretty simple. The costs are not related to plant that is used by or useful to retail ratepayers. The costs are not a reasonable and necessary part of providing retail electric utility service. Inclusion as part of the retail base revenue requirement (and then approved retail rates) is not just or reasonable; allowing them would be unjust and unreasonable, arbitrary, capricious, an abuse of discretion or unwarranted exercise of discretion.

⁸ \$44,297,706, or 12.5%, of the \$343,575,578 in alleged demand "costs" actually go toward the general fund transfer. This is 12.5% of the claimed demand production "costs" and 42.1% of the \$105,000,000 in total general fund transfers AE is proposing to recover through rates. See Schedule A, line 18, Columns A and K, Bate 767 and Schedule G-2, line 189, Columns C-I, Bate 950. Data Foundry has a very hard time understanding why it is fair to require retail base ratepayers to pay \$739,733,112 toward the costs associated with wholesale generation activities to begin with. But having to then pay an additional 13% tax on the demand portion of this non-retail utility activity in order to also subsidize other non-utility related city projects is entirely beyond the pale. It is unjust, unreasonable, arbitrary, capricious, an abuse of discretion and an unwarranted exercise of discretion that violates captive retail electric utility customers rights and sensibilities.

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This is not to say that none of the costs associated with AE's generation fleet can ever be recovered in some fashion; it is just that any recovery amount and mechanism cannot be determined in this case, or part of the base rate revenue requirement and then base rates that this case is all about. AE has made it perfectly clear that this proceeding is firmly confined to only a determination of AE's reasonable and necessary retail base rate revenue requirement and then retail base rates.⁹ It cannot now press for recovery under other theories or demand that means other than base rates be crafted in this proceeding. The Council is free to devise some other process to investigate potential rationales, amounts and methods in a separate case.

There are also problems that arise from AE's purposeful decision to violate the accounting-based "matching principle" and the accounting-based "consistency principle." AE's accounting and reporting puts its production costs (and in particular its variable energy related costs) in the retail base revenue requirement. But these costs are caused by, and incurred to produce, the electricity AE sells in the wholesale market and it recoups those costs (at least in part) from its wholesale sales revenue (ERCOT settlements). The cost causer is wholesale. The revenue generated from the cost-causing activity is wholesale revenue. But AE wrongly dumps the costs in the *retail* base requirement. To repeat: AE assigns its wholesale activities' production costs to the retail base revenue requirement, but places the wholesale sales revenue in the PSA account, which is separate from the retail base. This, again, violates basic accounting and ratemaking principles.

⁹ The style of this proceeding is *Austin Energy's Tariff Package: 2015 Cost of Service Study and Proposal To Change Base Electric Rates* (emphasis added). AE has consistently insisted that only base rates can be determined in this proceeding and it has used that argument to oppose producing information it claimed did not pertain to base rate determinations. For example, page 2 of AE's Objections to NXP/Samsung's First Request for Information (Feb. 18, 2016) forcefully claimed that "Austin Energy is only proposing changes to its base electric rates. Thus, this rate review is limited to Austin Energy's base electric rates. Discovery in this proceeding should, therefore, be limited to issues concerning Austin Energy's base electric rates and is irrelevant to the extent it seeks information not related to Austin Energy's base electric rates." See also AE's Objection to NXP/Samsung's Second Request for Information (Feb. 29, 2016) pp. 1-2 (same). AE expanded on this theme in its Response to NXP/Samsung's Motion to Compel (Mar. 1, 2016): "Austin Energy indicated in its Tariff Package that this rate review is limited to Austin Energy's base electric rates. Indeed, the very style of this proceeding states clearly that this case is a 'proposal to change base electric rates.' Additionally, while the plain text of Ordinance No. 20120607-055 may not specify that only Austin Energy's base rates should be reviewed, the Ordinance's context and history evidence Austin City Council's intent for the review to be limited to AE's base rates."

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AE – not the ratepayers – created this situation, and so it must bear the consequences. AE will have to craft some solution that does not involve base rate recovery, in a separate proceeding. AE has assiduously refused to provide detailed information regarding its wholesale activities, including its revenues, based on the argument that the information is competitively-sensitive (and thus exempt from disclosure) and it pertains to the PSA in any event. This lack of transparency means that the parties cannot determine whether AE is profiting or taking losses in its wholesale generation activities,¹⁰ and it also means that that parties cannot answer the questions that IHE Memorandum No. 11 expressly ruled are in the scope in ## 14 and 15. AE has not proven there is no double recovery of its production costs,¹¹ and it certainly has not proven that its generation activities in the wholesale market are providing a net positive benefit to retail base ratepayers. Therefore the costs cannot be recovered from retail ratepayers through base rates.

In sum, AE has not carried its burden of proof that its fixed or variable production costs are used by or useful to retail base ratepayers, are reasonable and necessary costs associated with the provision of retail electric utility service, or that recovery of these costs through base rates is just and reasonable. They must be excluded from the base revenue requirement. These costs must be recovered – if at all – through something other than base rates and it must occur in some other proceeding.

¹⁰ AE never says whether it is earning profits or taking losses with its wholesale sales activities. It does claim that retail ratepayers “benefit” from them because AE generation sales during ERCOT peaks and outages provide a hedge against large transitory spikes in the prices that retail utilities pay for the power they supply to their retail customers in the ERCOT area. AE, however, has provided only vague hints of the absolute dollar hedging benefit. AE’s “benefit” claims are not supported by the available evidence and they pertain to the PSA, not the base, in any event. AE has not shown any benefit to base rates or base ratepayers.

¹¹ See IHE Memorandum No. 12, p. 2 (Mar. 11, 2016):

... whether Austin Energy recovers costs under its Power Supply Adjustment and recovers the same costs in base rates, is relevant to determining Austin Energy's base rates. Thus, even if the amount of costs Austin Energy recovers through and the level of the rate shown in its Power Supply Adjustment, are not subject to change in this proceeding, whether Austin Energy is doubly recovering the same costs - once in base rates and again through the Power Supply Adjustment - is relevant to the level of Austin Energy's base rates. Assuming there were a double recovery, this fact would have a tendency to show that it is more probable that Austin Energy's base rates are higher than they otherwise needed to be and is a fact of consequence in determining whether Austin Energy's base rates are just and reasonable.

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B. AE's Fixed (Demand-Related) and Variable (Energy-Related) Production Costs Are Not Used By or Useful To AE's Retail Ratepayers, And Must Be Excluded From the Base Revenue Requirement.

The “used and useful” requirement for inclusion in revenue requirements is well established throughout the domestic United States and in the federal regulatory jurisdictions. It has been in place for over a hundred years,¹² and it specifically applies in Texas.¹³ Data Foundry will save the long string citation for briefing, but there can be no question that this is a fundamental requirement. If an asset is not both used by and useful to captive utility customers then the capital costs must be excluded from rate base. Any costs incurred to operate the non-used and useful assets are by definition not reasonable or necessary, so they too must be disallowed from the regulated base revenue requirement. The “used and useful” requirement and the “reasonable and necessary” criterion can admittedly be harsh to the utility, but they are black letter law and are absolutely necessary to protect captive monopoly ratepayers, who have no choice but to purchase from the regulated utility whatever the price may be. There are equally harsh rules that routinely cut against ratepayers.

AE's production plant is being “used.” It may or may not be “useful” to someone. The costs may (or may not) be reasonable and necessary for some purpose other than provision of retail electric utility base service. AE forthrightly admits that all production operations are wholly dedicated to wholesale sales rather than retail sales and so in a “wholesale” case AE might have a powerful claim for recovery based on the used and useful and reasonable and necessary tests. But AE has not shown that its production is both used by and useful to its **retail base ratepayers**. AE has not proven that incurrence of these costs is necessary in order to provide of retail electric utility base service and can therefore be reasonably recovered through base rates. The production costs must therefore be entirely “assigned” to, and recovered from, AE's wholesale endeavors. The entire \$784,030,818 in claimed production costs must be disallowed

¹² *Smyth v. Ames*, 169 U.S. 466 (1898).

¹³ See, e.g., Tex. Util. Code §36.051:

In establishing an electric utility's rates, the regulatory authority shall establish the utility's overall revenues at an amount that will permit the utility a reasonable opportunity to earn a reasonable return on the utility's invested capital used and useful in providing service to the public in excess of the utility's reasonable and necessary operating expenses.

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from the base revenue requirement and recovered, if at all, through some mechanism other than retail base rates.

C. AE Admits That It's Variable (Energy-Related) Production Costs Are Already Assigned To Wholesale and Are Recovered Through ERCOT Settlements, So Base Rate Inclusion Would Constitute a Double Recovery. AE's Retail Ratepayers Cannot Be Required to Guarantee Any Losses Suffered As a Result Of AE's Wholesale Activities.

AE is trying to book or treat its variable (energy-related) production costs as if they are a base rate item and then flow them through to retail ratepayers in the form of per-KWH energy charges:

Figure 5.13

Production Function Energy-Related Cost Allocation

Customer Class	Energy-Related Costs (\$)
Residential	146,511,353
Secondary Voltage <10 kW	9,021,373
Secondary Voltage 10 - <300 kW	93,631,520
Secondary Voltage ≥300 kW	92,885,182
Primary Voltage <3 MW	21,159,262
Primary Voltage 3 - <20 MW	24,126,518
Primary Voltage ≥20 MW	44,911,636
Transmission Voltage	769,503
Transmission Voltage ≥ 20 MW @ 85% aLF	7,638,054
Service Area Street Lighting	1,214,566
City-Owned Private Outdoor Lighting	429,363
Customer Owned Non-Metered Lighting	59,713
Customer Owned Metered Lighting	<u>97,237</u>
Total	442,455,280

Source: rate filing package p. 5-19, Bate 122

Energy-Related Costs	
Production Function	
NEFL (Recommended for Certain Costs)	kWh sold by class adjusted for system losses (i.e., energy at generation)
Kilowatt-Hours Sold (Recommended for Certain Costs)	kWh sold by class

Source: rate filing package p. 5-24, Bate 127, Figure 5.9 (partial)

AE admits that its variable (energy-related) production costs are not incurred to serve its native retail customers. It functionally admits that they are not necessary to the

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provision of retail base utility service. To the contrary: they are entirely attributable to AE's wholesale activities. AE then explains that its wholesale settlements payments are not "booked" as a credit to the base revenue requirement. Instead they credit against the PSA balance – the composition and rates for which AE insists is not part of this case:

As discussed in Chapter 3, **Austin Energy no longer serves its customer load with its own generation. Rather, all power is purchased in the ERCOT market and then delivered to the Austin Energy load zone.** In the Nodal market, the energy generated by Austin Energy serves as a physical and financial hedge against ERCOT market power price fluctuations, providing a direct benefit to AE's customers. Specifically, Austin Energy's diverse fuel types and technologies provide AE's customers with a vital risk management strategy that guards against exposure to the volatility of the wholesale market.¹⁴

...

The utility's variable operating costs are recovered through the sale of energy into the ERCOT wholesale market. Austin Energy then passes this revenue on to customers through the Power Supply Adjustment.^[note 91] **However, revenues from sales into the ERCOT wholesale market are not treated as a recovery mechanism for the fixed costs associated with AE's generation.** Instead, Austin Energy recovers these fixed costs through base retail rates assigned to its customers and the production function is used to appropriately assign the fixed operating costs to the appropriate customer classes.

^[note 91] The Power Supply Adjustment is calculated each year based on the expected net ERCOT wholesale market settlements, anticipated fuel expenditures, and net costs associated with Austin Energy's Power Purchase Agreements. These items are totaled together, adjusted for any over- or under-recovery from the prior year's PSA revenues, and then allocated to customer classes. **This rate review does not address the calculation of the PSA because the issue is addressed by the Austin City Council each year during the budget process.**¹⁵

D. AE Is Violating The Accounting-Based "Matching Principle." AE Has Not Proven There is No Double Recovery Of Energy-Related Production Costs.

GAAP and regulatory accounting have long used the "matching" and "consistency" principles which require that all related investment, expenses, and

¹⁴ Rate filing package p. 5-4, Bate 107 (emphasis added).

¹⁵ Rate filing package p. 5-5, Bate 108 (emphasis added).

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revenue be recorded in consistent fashion and in a manner that allows an auditor to identify and associate revenue with the expenditures that gave rise to the ability to recover that revenue. In our case, however, AE puts variable (energy-related) costs in the base revenue requirement, while assigning the revenue that primarily recovers those costs to the PSA fund. The wholesale revenue is presumably used to offset other purchased power costs and are not booked against any of the costs associated with the AE self-owned generation/production.¹⁶ AE does not in any manner reduce its calculated energy-related production cost amounts by offsetting them with the wholesale revenue that actually recovers those costs. It uses the revenue for other purposes that it then claims are entirely outside the scope of this case and beyond reasonable inquiry by ratepayer advocates.

AE wants to charge ratepayers \$442,455,280 in the form of per-kWh energy charges that it claims AE incurs through operation of its generation fleet that is dedicated to wholesale operations rather than retail operations. AE admits that it is getting paid for the wholesale energy that causes the costs to be incurred, but it wants to put the revenue outside the scope of this case, and has made every effort to avoid disclosing how much revenue was actually received during the test period. The bottom line is that AE wants to recover the same variable production costs twice: once from base rates, and then again from wholesale revenue.¹⁷ It tries to mask the double-recovery and win the day by using accounting trickery and claims of confidentiality. AE cannot succeed.

These are wholesale costs, not retail costs, so they do not belong in retail base rates at all. If AE's captive retail ratepayers are nonetheless wrongly required to subsidize AE's competitive endeavors in the wholesale market by including the wholesale related costs in AE's retail base rates then matching and consistency

¹⁶ See rate filing package p. 2-7, Bate 19 (emphasis added):

2.2.2.3. Power Supply Adjustment

The Power Supply Adjustment (PSA) is a dollar-for-dollar pass through of certain power supply costs, which include the net costs of ERCOT settlement (i.e., net wholesale supply costs), and the costs of purchased power agreements, fuel, transportation, and market risk mitigation. The Power Supply Adjustment can be adjusted at least annually by action of the City Council to assure improved cost recovery.

¹⁷ This issue is within the scope of the case under IHE Memo 11, ##14 and 15.

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principles and fundamental fairness require that the wholesale revenues be used as a credit against the underlying cost amount and used to reduce the base rate production (energy and demand) costs before any shortfall or deficiency that must be made up by retail ratepayers is determined.¹⁸ Even though AE has the burden of production and proof it has refused to disclose the actual number. The necessary legal conclusion is that AE is fully recovering its claimed production costs (or, in the alternative, at least its variable energy costs) through wholesale revenues. The entire claimed amount must therefore be excluded from the base revenue requirement in order to prevent double-recovery.

E. AE's Claim That Retail Ratepayers "Benefit" From AE's Wholesale Activities Is Unproven, Speculative And Likely Incorrect.

As noted, AE claims that retail ratepayers "benefit" from its wholesale activities because they operate as a hedge against wholesale price spikes.¹⁹ Data Foundry acknowledges that the concept itself might have some merit if one chooses to consider the question without regard to traditional accounting and retail ratemaking principles. In theory retail ratepayers could be said to benefit overall if AE makes an actual profit (e.g., recovery of both fixed and variable costs and then an additional amount for return or profit) from its wholesale activities. In theory there might be other benefits as well, although AE identifies none other than generally-asserted but only vaguely quantified "hedge" against rapid price spikes. AE, however, has absolutely refused to produce any real definitive information and made no effort to definitively quantify the alleged benefit. No one other than AE actually knows the extent to which – in dollar terms – AE's base ratepayers are, or are not, "benefitting" from the incurrence of these costs (even though AE's base ratepayers do not cause them) to the point that base ratepayers must contribute to their recovery. The claimed "benefit" AE describes – if there really is one – accrues to the PSA. AE does not identify *any* benefit to base rates or base ratepayers.

¹⁸ There is no evidence that the PSA credit approach serves to reduce individual classes' or individual ratepayers' PSA surcharge requirements in the same measure and in an equal amount to that which would flow from a base rate credit that operates to reduce base per-kWh energy charges. AE's approach therefore more than likely leads to inter-class differences in treatment that would not occur if the underlying costs and all of the revenues used to recover those costs are consistently accounted for and matched.

¹⁹ Rate filing package p. 5-4, Bate 107, *supra*.

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Base rate inclusion cannot be allowed merely on account of speculative and non-quantified subjective notions about benefits accruing to prices that are squarely not in issue in this case. There is no base rate benefit, and that resolves the matter. AE's executives and employees may derive joy from playing the market with other peoples' money, but base ratepayers might rightfully decide they do not wish to be the source of that money, and they have every right to object to higher base rates premised on alleged and unquantified benefits that accrue to something that is not supposed to be addressed here. Base ratepayers cannot be forcibly made to fund AE's forays into risky competitive endeavors merely because AE says they will enjoy lower prices in rates that are outside of any scrutiny in this proceeding.

Despite AE's fervent efforts to hide all of this from reasonable inquiry, some relevant information found its way into the case. Although this information is sketchy and does not allow definitive conclusions, the information that is available indicates that AE's wholesale activities may in fact be incurring substantial losses. If that is true AE is trying to force its captive ratepayers to cover its wholesale losses through retail base rates, and also pay AE a second time for whatever wholesale production costs AE is recovering. This cannot be allowed.

AE's rate filing package information clearly indicates that the "hedging" benefit, while theoretically plausible, has not in fact provided significant monetary support against retail base or even PSA passthrough rates. The theory is that when wholesale prices spike AE can employ its generation fleet to supply energy and gain very high profits that reduce the PSA. That could be possible if there were a lot of such spikes and the profits were extraordinary. AE admits, though, that there were not many spikes during the test period that allowed AE to race in and achieve huge margins over its variable costs, and there is no indication that the wholesale market will be any more "spiky" during the rate effective period.²⁰ The "hedge" benefit appears to be very small, and it applies to the PSA, not the base, in any event.

²⁰ Rate filing package p. 3-14, Bate 43:

Over the past four years, wholesale market prices have been relatively stable. Figure 3.4 shows that wholesale market prices have ranged between \$0 and \$50 per

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So the real question is whether AE is making a profit through its participation in the “relatively stable” wholesale price market. The available evidence (what little there is) is not comforting. First, as AE explains, ERCOT wholesale pricing allows AE (and almost every other wholesale generator) to recover **only** marginal costs most of the time. If one assumes that marginal costs are roughly equivalent to variable costs that means that AE can, at best, recover variable costs in the wholesale market *when its generation resources are selected during any given five minute interval*. When AE's resources are not selected it gets no money. If AE sells when the ERCOT price is below AE's marginal cost then AE may get some cash but it is nonetheless taking a significant loss. The market price targets only variable (energy-related) costs, so there is not likely to be any – or much – contribution to fixed costs, even though the fixed costs are also entirely dedicated to serving the wholesale market and AE cannot generate power without incurring the fixed costs as well. AE's wholesale activities are obviously not recovering AE's fixed and variable production costs.

The foregoing means AE is losing a ton of money in the wholesale market since it recovers variable costs only part of the time. AE can only recover fixed costs to the extent it consistently enjoys significant margins over and above variable costs and that is not happening. AE – of course – wants its retail ratepayers to cover any losses through base rates even though none of the ongoing production related costs are related to, or properly demanded from, AE's retail utility operations. That is not just, reasonable or supported by any known ratemaking principle. AE must make up its wholesale losses from some source other than base rates charged to captive, unwitting retail ratepayers.

The conclusions drawn from crunching the few available numbers also do not paint a pretty picture. We do know from the chart supplied with AE's Third Supplemental Response to NXP/Samsung's 1st RFI 1-51 that AE apparently received approximately \$174 million in settlements from its thermal generation. The same document seems to

MWh in about 32,000 of the total 35,064 operating hours in the years 2011 through 2014. Figure 3.4 also demonstrates that pricing events above the average market price occur very infrequently. Approximately 3 percent of all hours (about 1,000 hours over those four years) had wholesale prices above \$100 per MWh.

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indicate that AE's renewable generation suffered net revenue losses of \$80 million dollars. The response also says there was a net gain of \$4 million from "hedging."²¹ All told, with all assumptions in AE's favor granted, this document appears to indicate that its wholesale activities provided a "benefit" of \$131 million dollars²² applied toward PSA costs. None goes toward the production costs claimed in base revenue requirement.

But AE's production revenue requirement is said to be \$784,030,818. Fixed costs are allegedly \$341,575,538 and variable costs are \$442,455,280. The most beneficial reading of the document cited above shows that AE recovered a net \$130,000,000 from its dedicated use of its generation fleet to serve the wholesale market. That means AE **lost** \$653,030,818 during the test period. If you compare to only variable costs AE **lost** \$312,455,280. The alleged "hedging" benefit of \$4,000,000 is .5% (one-half of one percent) of its total production costs and .9% (nine-tenths of one percent) of its variable costs. With all due respect Data Foundry suspects most ratepayers would agree none of this signifies any kind of "benefit" at all. Retail base ratepayers cannot and should not be required to bear any of the costs – or losses – flowing from AE's participation in the competitive wholesale market.

One can tease some other information AE grudgingly released and possibly calculate the average fixed and variable cost AE incurred to generate a kilowatt hour during the test period, and then compare it to the average per kWh amount AE received in settlements during the same period. Rate filing package Figure 5.4²³ says that AE's

²¹ It is not clear whether "hedging" as used in this document means the same thing as the "hedging" benefit AE discusses elsewhere. If so, that is a relatively small amount of economic benefit when compared to total production costs. The \$4 million is one-half of one percent (0.5102%) of total production costs.

²² One of the components in the chart is \$33 million in positive net revenue associated with "Green Choice." Figure 5.4 on p. 5-9, Bate 109 of the rate filing package states that \$22.8 million of the Green Choice revenue comes from retail customers, so it appears that the entirety does not come from wholesale, if any of it comes from wholesale at all. To be generous, however, Data Foundry will nonetheless include the entire \$33 million in the calculation of "wholesale" benefits. If one were to pull out the \$22.8 million from the \$33 million the "benefit" is reduced from \$131 million to \$108.2 million. If all Green Choice revenue is retail and none is wholesale then the "benefit" is \$98 million, not \$131 million. Deeper objective searches for quantifiable benefits ultimately just push AE farther underwater on the wholesale side, and further reveal the extent to which AE is trying to grasp at retail base ratepayers' money to save it from wholesale drowning.

²³ Page 5-6, Bate 109. See also Schedule G-2, Cell E204 (Bate 950) and Schedule G-8, Cell H76 (Bate 993).

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claimed production costs are \$784,030,818.²⁴ Rate filing package p. 3-20 (Bate 049) says that "Austin Energy generated 8.4 billion kilowatt-hours of power for fiscal year 2014 from its owned thermal power plants." AE also disclosed on the same page that renewable energy constituted 25.5% of its generation mix. That means AE's thermal and renewable fleet generated roughly 11,275,167,785 kWh during the test year.²⁵

Divide the total fixed and variable production cost by total kWh produced (11,275,167,785) and you get \$0.06953607, or almost 7¢ per kWh. If one were to ignore fixed costs and focus only on variable costs then you use \$442,455,280 in the numerator and the same denominator. That yields \$0.03924157, or about 3.9¢ per kWh.

Now we need to know the per kWh amount AE received for the power it generated. We will, for purposes of this exercise, make the very generous assumption that AE in fact sold every kWh it claims to have generated, and then assume that it always recovered the ERCOT Average Lode Zone Settled Price disclosed in AE's response to Public Citizen/Sierra Club 1-4 and Attachment A thereto.²⁶ To get an average per kWh amount you first weight the monthly amount by recognizing the number of days in the month, (which yields a weighted \$/MWh of 39.46819178) and then divide by 1,000. The average per kWh result is \$0.039468192, or about 3.9¢. If you multiply this amount by total kWh generated (11,275,167,785) AE received total wholesale revenues equaling \$445,010,486.98.²⁷

²⁴ A completely precise calculation of the average per-kWh production cost might arguably require deduction of the amounts associated with Green Choice (\$22,772,679), Economy Purchases (\$3,646,336), ERCOT Admin Fees (\$6,838,000) and Energy Efficiency (\$33,527,875), which would yield a result of \$717,245,928. AE did not apply these amounts against total production cost or the demand/energy components, however, so they will remain in the calculation.

²⁵ $8,400,000,000 * .74.5 = 11,275,167,785$.

²⁶ This is another generous assumption. AE could have sold a lot of energy for less than the ERCOT average. Indeed, it is entirely possible that AE consistently sold at a price below its own marginal cost.

²⁷ This revenue number is obviously far more than the \$174 million AE claimed it received in "net" revenue from thermal generation in the response to NXP/Samsung's Third RFI No. 1-51, and it is highly likely that AE did not receive \$271,010,486.98 in revenue from its renewable generation. The extreme disparity can probably be explained if AE did not in fact actually sell every kWh it generated, or always did so at the average ERCOT price, contrary to the assumptions Data Foundry made immediately above. But that would just make things even worse for AE since it would mean their losses are much, much higher and therefore closer to the \$653,030,818 (fixed and variable) and \$312,455,280 (variable only) initially discussed above.

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The problem is obvious. AE is not recovering all of its wholesale production costs through wholesale revenues. Average per kWh revenue minus average per kWh fixed and variable costs is $-\$0.03006787$, which means AE suffered a loss of about 3¢ on every kWh it sold. If you focus on variable only (even though you cannot produce energy unless you have working fixed plant) then AE may have squeezed out a measly $\$0.00022662$ (two one hundredths of a cent) in margin over variable costs. When you multiply by the 11,275,167,785 kWh AE generated the loss is $-\$339,020,331.02$ if revenue is measured against fixed and variable costs. If revenue is measured against variable costs only then AE potentially recovered its variable costs and contributed only $\$2,555,206.98$ toward fixed costs. The percent margins are -43.24% (a huge loss) and 0.58% (a tiny gain), respectively.

So, if one assumes that AE sold every single kWh produced by its generation fleet at the ERCOT published price then it appears AE managed to recover its variable costs and was able to contribute a small amount toward fixed costs. Nonetheless, AE now wants base ratepayers to once again pay the entire $\$442,455,280$ in variable costs that AE already recovered and then also pay $\$341,575,538$ in fixed costs, including the $\$2,555,206.98$ that was already recovered.

AE is setting up a massive lose/lose/lose for base ratepayers. They would be charged for the variable, charged for the fixed and then double-dipped for more. AE wants to recover 100% of the costs associated with its wholesale activities from retail base ratepayers. Then AE wants to recover the same costs again from wholesale settlements. We know there will be some double recovery of at least some of the variable costs. But this is entirely backwards. AE cannot lawfully recover any of these wholesale costs from captive retail base ratepayers to begin with. AE must be required to entirely rely on wholesale revenues to recover its wholesale costs. Retail base ratepayers cannot be required to make up any shortfall if AE does not fully recover its wholesale costs from its wholesale revenues.

The actual meaning and purport of some of the characterizations assigned by AE to the input data used in the forgoing calculations may be inaccurate or imprecise. Data Foundry admits that some of the figures may not be properly usable in the manner they

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were applied herein. There may be more precise figures and bases for the calculations performed herein but if they exist they have been well-hidden or were produced using vague or opaque descriptions that prevented Data Foundry from locating them. We only have what AE grudgingly gave. But now we know why they tried so hard to avoid revealing any precise information about its wholesale misadventures.

AE surely has this information, probably down to the penny, but has refused to produce it or in any manner provide a sufficient justification or rationale for rate base inclusion. AE surely knew that it needed to do far more explaining and produce a lot more specific information to justify its effort to require its retail base ratepayers to pay entirely wholesale costs through retail base rates. AE has the burden of proof, and it failed to carry that burden. The utility must now bear the direct consequences of its obstinate, unabashed, unapologetic and impenitent failure to adequately address this problem in its direct case or discovery. The Independent Hearing Examiner and/or City Council cannot and or should not now change the rules of the game in order to save AE from the direct and necessary outcome that must flow from the choices that the utility – and the utility alone – has made.

III. Conclusion

The small amount of information that has been produced indicates that AE is losing its shirt in the wholesale market. The best case scenario is that AE recovered its variable production costs through wholesale revenues and contributed \$2.55 million dollars toward AE's fixed production costs. But that necessarily means AE is trying to double recover its variable costs and then get all of its fixed costs, including the \$2.55 million it already receives in wholesale contribution. The worst case measurement yields a loss of \$653,030,818 that, of course, AE expects its captive base ratepayers to repay. AE's claim that its generation fleet provides a benefit to retail ratepayers even though the AE generation fleet no longer serves any direct retail purpose fails in magnificent fashion. There is no benefit to the base. All that Data Foundry can discern is detriment delivered along with an insult on top of the injury.

AE has not carried its burden of proving that AE's production costs are used by and useful to AE's captive retail ratepayers, and AE has not proven that these are

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reasonable and necessary costs associated with the provision of retail electric utility service. They obviously are not any of these things since the uncontested evidence is that AE's generation fleet is entirely dedicated to the wholesale market and no longer serves retail to any extent. The costs therefore cannot be justly or reasonably included in the retail base revenue requirement. Retail ratepayers cannot be required to pay retail base rates that include compensation for AE's wholesale production costs with the result that captive, monopoly ratepayers are forced to subsidize and act as conscripted guarantors of AE's significant competitive wholesale losses. The entire \$784,030,818 of claimed fixed and variable production-related costs must be excluded from the base revenue requirement. In the alternative, the claimed \$442,455,280 in variable costs must be excluded.

Date Foundry is not saying that none of the costs associated with AE's generation fleet can ever be recovered in some fashion; it is just that any recovery amount and mechanism cannot be determined in this case, or part of the base rate revenue requirement and then base rates that this case is all about. This proceeding is firmly confined to only a determination of the base rate revenue requirement and then base rates. AE cannot be allowed to recover the excluded costs under some new theory or using some mechanism besides base rates. The Council is free to devise some other process to investigate potential rationales, amounts and methods – in a separate case. But these costs cannot justly or reasonably or lawfully be allowed as part of the base revenue requirement or in any manner recovered through base rates. They must be excluded in their entirety.

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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