BEFORE THE CITY OF AUSTIN IMPARTIAL HEARING EXAMINER

#### PUBLIC CITIZEN'S AND SIERRA CLUB'S RESPONSE TO AUSTIN ENERGY'S FIRST REQUEST FOR ADMISSIONS AND INFORMATION

Public Citizen and Sierra Club file this Response to Austin Energy's First Request for Admissions and Information submitted on May 6, 2016. Pursuant to agreement between these parties, this Response is timely filed.

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Respectfully submitted,

Caure & Birch

Carol S Birch Texas Bar No. 02328375 Attorney for Public Citizen and Sierra Club

#### **CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of this pleading has been served on all parties and the Impartial Hearing Examiner on the  $16^{th}$  day of May, 2016.

Cave & Birch

Carol S. Birch

#### **REQUESTS FOR ADMISSION**

## AE RFA 1-1: Please admit or deny: Austin Energy's owned and contracted resources are dispatched to meet the ERCOT wholesale market demand for energy.

<u>RESPONSE:</u> Public Citizen/Sierra Club admit in part and deny in part. This is largely true. All of Austin Energy's owned and contracted resources are dispatched to meet the ERCOT wholesale market demand for energy or to provide ancillary service obligations that are required by the market, or on occasion for Emergency Response Service (through contracted demand response resources). However, part of this market demand is utilized for Austin Energy's customers electric load as well as to meet Austin Energy's ancillary service obligations. Thus, we do not believe that all decisions are made blindly by market forces or by ERCOT's Security Constrained Economic Dispatch engine.

Austin Energy uses a variety of tools and strategies in deciding how to bid its owned and contracted resources into the ERCOT real-time and day-ahead markets. Austin Energy can bid into the real-time market, but can also bid its resources into the day-ahead market. While we do not have individual knowledge of how exactly Austin Energy bids into the market on any particular day or for any particular hour, because Austin Energy has contracts for renewable energy resources with no fuel costs, generally Austin Energy bids these contracted resources at low prices so that they are fully dispatched.

Also, Austin Energy has committed to running the Fayette coal plant less after 2020 to meet carbon dioxide goals and has indicated in public that this would be accomplished by bidding in at high prices, so the plant would be less likely to be dispatched by SCED. While technically these resources may not be serving Austin's load at the particular time they are dispatched by SCED, as a community we "count" them toward our load. Thus, the policy considerations influence how Austin Energy's resources are dispatched in the market.

If we look at our actual load totals and generation totals, while they are not equivalent, they show a consistent pattern. In the last few years (since the nodal market went into effect), Austin Energy has met roughly 85% of its total load with its owned and contracted generation resources (See Table 1). We are not claiming that every electron that is generated by our owned and contracted resources actually serve our load, but that Austin Energy uses strategies to nearly match our load as part of their policy.

	% Coal	% Nuclear	% Natural Gas	% Owned or	% Purchased Power
	(Fayette	(South Texas)	(Decker and Sand	Contracted	(Not owned or
	Power Plant)		Hill)	Renewables	contracted by AE)
2011	28.92%	21.31%	25.81%	9.5%	14.46%
2012	26.97%	21.92%	20.32%	14.95%	15.84%
2013	25.91%	22.81%	15.66%	20.68%	14.94%
2014	28.83%	24.24%	11.77%	22.59%	12.55%

#### Table 1: Generation by Fuel Type Percentage

*Source: Austin Energy, Austin Energy Annual Performance Report, Year Ended September 2014, Table 10, 16, and Table 36* 

Austin Energy also makes decisions about whether to dispatch or reserve its resources for ancillary services, looking at market conditions, and making a decision whether to contract ancillary services or self-serve its obligations. Thus, again, it is not an invisible hand of the market or an ERCOT computer

that decides how to bid Austin Energy's resources, but Austin Energy, influenced by local demand projections, renewable resource production and market prices.

In addition, there are likely times when Austin Energy dispatches owned or contracted resources even when they will not make a profit in the ERCOT market. For example, because of the time it takes to ramp energy production up and down at the Fayette Power Project and the steam generators and the Decker Power Project and the Sand Hill Energy Center are slow, Austin Energy may choose to keep these resources running even when they are losing money if the utility believes they will be profitable later in the day.

Although Austin Energy uses ERCOT market prices to guide its energy production, Austin Energy's own customer demand is not irrelevant. Austin Energy customer load patterns will be generally aligned with ERCOT demand in general – particularly in Central Texas. When ERCOT customers at large are using more electricity and causing prices to rise, Austin Energy customers are generally contributing to that trend as well. Thus, generally, Austin Energy will run its peak power plants at times when there is peak power demand.

### AE RF A 1-2: Please admit or deny: Austin Energy can choose from which resources it procures the energy it needs to serve its customers.

<u>RESPONSE:</u> Public Citizen/Sierra Club admit in part and deny in part. Specifically, Austin Energy can choose how to operate its plants and at what price to bid them into the market, subject to market rules. Austin Energy can also choose resources by entering into short or long-term bilateral contracts for energy or ancillary services to serve its customers. This is true when Austin Energy has sufficient owned and contracted resources to meet the demand of its customers. When Austin Energy customers' demand exceeds the utility's owned and contracted generation capacity, then the utility must purchase electricity from the ERCOT market and has limited or no ability to select the source. Also, Austin Energy is constrained by the various renewable energy and climate change goals that the Austin City Council has adopted for the utility

AE RFA 1-3: Please admit or deny: If Austin Energy were to propose both the summer and nonsummer PSA rates for the upcoming fiscal year during the budget process, customers would have "time to plan and budget for efficiency upgrades." If denied, please provide a detailed explanation of why they would not have ample planning time. See page 9 of Public Citizen and Sierra Club's Position Statement.

<u>RESPONSE:</u> Public Citizen/Sierra Club deny this blanket statement. Specifically, while for some families, a summer and non-summer PSA rate established at the same time may provide enough time to plan and budget for efficiency upgrades, it can take many families more than a year to plan for and implement improvements to their homes. Many people save for years to be able to pay for expensive upgrades, such as new central air conditioning units. We believe that a differential summer and winter base rate will provide more predictability and spur people to make investments to lower demand and energy use. The memorandum from NewGen Strategies & Solutions included as Attachment 1 to Austin Energy's Response to the Independent Consumer Advocate's Request for Information 1-22 speaks directly to the positive impact on energy conservation of tiered rates with a summer and winter differential and to the fact that customers react more to price signals as time goes on.

# AE RF A 1-4: Please admit or deny: If customers pay a seasonal Power Supply Adjustment with a higher summer rate than the non-summer rate and they pay a constant energy rate throughout the year, customers will pay a higher overall rate per kWh during the summer.

<u>RESPONSE:</u> Public Citizen/Sierra Club admit this statement, However, this is true based on current ERCOT wholesale market prices, but the amount of the difference between total per-kilowatt-hour costs in the summer and non-summer months each year is not known.

## AE RF A 1-5: Please admit or deny: Austin Energy uses the Power Supply Adjustment to recover the ERCOT wholesale market costs incurred to purchase the energy it needs to serve its customers.

<u>RESPONSE:</u> Public Citizen/Sierra Club admit. We agree that the Power Supply Adjustment fee is used, in part, to recover Austin Energy's ERCOT wholesale market costs. However, the PSA also incorporates the revenues earned by selling our contracted and owned generation in the market, and also incorporates the PPA prices we pay to third-parties that own renewable resources.

## AE RFA 1-6: Please admit or deny: Austin Energy's base electric rates recover its generation fleet operating costs incurred when dispatched to the ERCOT wholesale market.

<u>RESPONSE</u>: Public Citizen/Sierra Club admit this statement. Under our present rate structure, expenses related to operating our fleet of resources are recovered in base rates. However, the actual settlement prices we receive for this generation help determine the PSA that all customers pay.

## AE RF A 1-7: Please admit or deny: Austin Energy residential customers who consume more than 2,500 kWh per month pay residential tier 1 rates.

<u>RESPONSE:</u> Public Citizen/Sierra Club admit this statement. However, all residential customers pay tier 1 rates, because Austin Energy's residential rates are incremental blocks. Each customer pays for electricity in each block tier up to the level of their consumption.

#### **REQUESTS FOR INFORMATION**

AE RFI 1-1: Please provide a detailed explanation of how Austin Energy's "bidding practices" for its generation fleet and its bilateral contracting practices are practically tied to its procurement of the energy needed to serve its customers. See page 3 of Public Citizen and Sierra Club's Position Statement.

RESPONSE:

As we described in our response to AE RFA 1-1, Austin Energy customer load patterns will be generally aligned with ERCOT demand in general – particularly in Central Texas. When ERCOT customers at large are using more electricity and causing prices to rise, Austin Energy customers are generally contributing to that trend as well.

In addition, as we stated in our answer to RFI 1-1, in general over the course of a year the amount of generation from Austin Energy's owned and contracted resources follows a consistent pattern of meeting approximately 85% of Austin Energy overall consumption, with purchased market power

making up the difference. Thus, we believe that Austin Energy uses a variety of purchase and bidding strategies in the day-ahead and real-time market that help match generation to load.

Figures 1, 2, 3 and 4 below show that Austin Energy's generation patterns closely follow its load patterns.



#### Figure 1

#### Winter Covers months - Dec, Jan, Feb

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Figure 2

Hourly Average Generation & Load for 2013 Spring



Spring Covers months - Mar, Apr, May

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Hourly Average Generation & Load for 2013 Summer



#### Summer Covers months - Jun, Jul, Aug

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### Hourly Average Generation & Load for 2013 Fall

Fall Covers months – Sept, Oct, Nov INVESTING IN A CLEAN FUTURE

URE June 18, 2014

Tables 2 and 3, below, show that the reality is that Austin Energy utilization of its natural gas-fired fleet follows the same pattern as load does. The first table shows the amount of energy dispatched from our owned and contracted resources in 2013 on a monthly basis. During the peak summer months, we dispatch more of our resources to meet load. This increase comes principally from our natural gas generation, which increases its use during summer months. Table 2 show the amount that our resources ran during the top 10 peak summer days, again showing how the capacity of our units into the ERCOT market increases during our peak load time.

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Month	<b>AE</b> Generation	AE Load	Imbalance	Imbalance %
Jan_2013	751,369	992,548	241,179	24%
Feb_2013	643,377	818,125	174,748	21%
Mar_2013	848,266	920,650	72,384	8%
Apr_2013	834,519	939,671	105,152	11%
May_2013	1,030,170	1,108,383	78,213	7%
Jun_2013	1,184,552	1,300,091	115,539	9%
Jul_2013	1,230,540	1,337,525	106,986	8%
Aug_2013	1,290,192	1,413,634	123,442	9%

#### Table 2: Austin Energy Load versus Generation, 2013

Total	11,437,127	13,142,562	1,705,434	13%
Dec_2013	911,290	1,062,856	151,566	14%
Nov_2013	738,485	953 <i>,</i> 639	215,154	23%
Oct_2013	920,380	1,048,425	128,045	12%
Sep_2013	1,053,989	1,247,015	193,025	15%

*Source: Austin Energy, Investing in a Clean Future, May 28, 2014, Information provided to Austin Energy Generation Resource Planning Task Force.* 

#### Table 3. Statistics (%) -- 2013 Top 10 Summer Peaks

Unit	Average Capacity Use During Top	Median Capacity Use During Top
	10 Peaks	10 Peaks
South Texas Project (nuclear)	94%	97%
Fayette Power Project (coal)	93%`	96%
Sandhill CC (Gas)	88%`	98%
Decker Steam (Gas)	80%`	93%
Decker Gas Turbine	58%	73%
Sand Hill Gas Turbines	93%	92%
Biomass Plant	68%	100%
Webberville PV	63%	67%
West Texas Wind	7%	5%
South/Coastal Wind	47%	44%

*Source: Austin Energy, Investing in a Clean Future: April 20, 2014, Page 12, Information provided to Austin Energy Generation Resource Planning Task Force.* 

As Figure 5 below, shows, Austin Energy has clearly considers its load as a significant factor in generation planning. The utility appears to have an internal capacity goal that is linked to peak demand. If market prices were the sole consideration when determining which resources to dispatch, the relationship between Austin Energy's peak demand and its generation capacity wouldn't matter. If that were the case, the utility would simply buy as much capacity that could be expected to be profitable as it could afford to.

AE Peak Load Forecast vs. Resource Capacity Gap



Figure 5

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AE RFI 1-2: Please provide a detailed explanation of how a production cost allocation methodology impacts a resource planning process like the Austin Energy Resource, Generation and Climate Protection Plan to 2025. See page 3 of Public Citizen and Sierra Club's Position Statement.

#### RESPONSE:

We object to the mischaracterization in this request. There is no reference to the Austin Energy Resource, Generation and Climate Protection Plan to 2025 on page 3 of our Position Statement, nor did we make any claim in our Position Statement that switching to a production cost allocation methodology would impact that planning process. However, we do believe that it could impact the process because the analysis used in developing rates could also be used as a factor in choosing which resources to invest in.

AE RFI 1-3: Please provide a detailed explanation of why shifting the seasonal rates from energy rates to the Power Supply Adjustment will create "unexpectedly high bills." See page 9 of Public Citizen and Sierra Club's Position Statement.

#### RESPONSE:

Energy rates are set as part of the rate case process based on average or typical costs. Although energy rates are set to match costs in a specific test year, the test year is generally chosen to be a year with average weather patterns or is adjusted to account for exceptionally hot or cold periods. The Power Supply Adjustment (PSA) fee is much more closely linked to actual costs on a year by year basis. Therefore, the PSA fee can be reasonably expected to have greater fluctuation. That existing fluctuation will be exacerbated by separating the PSA into two seasonal fees. In a year when the PSA is already going to be high, the summer PSA would be even higher. While a large PSA could be mitigated by the use of reserve accounts or other financial tools, we are concerned about the potential short-term PSA impact on customers.

We support having higher base electric summer rates than during the rest of the year, and believe that it is fairer to structure rates so that customers have as much time as possible to plan for how to avoid high bills by improving efficiency. We also believe that it will result in greater success in getting customers to invest in efficiency.

AE RFI 1-4: Please provide a detailed explanation of why seasonal energy rates "are better aligned with established conservation goals" as compared with a seasonal Power 749/1117093470.1 4 Austin Energy's First RFI and RF A to Public Citizen/Sierra Club Supply Adjustment. See page 9 of Public Citizen and Sierra Club's Position Statement.

#### RESPONSE:

As Austin Energy's own data shows, many customers don't respond immediately to price signals to encourage conservation. Some respond immediately, while others take a year, two years or even longer to make energy efficiency investments as a response to a rate structure. This has been the response among Austin Energy residential customers to the implementation of tiered block rates.<sup>1</sup> Moving to a rate structure that will send a price signal months instead of years in advance can reasonably be expected to have less impact on energy efficiency investment decisions. In addition to lack of time to plan and budget for energy efficiency upgrades, more variation in PSA may also make it more difficult to calculate how long it will take for energy efficiency investments pay off.

AE RFI 1-5: Please provide a detailed explanation of how Austin Energy has "subdivided" the Residential customer class "based on consumption to assign cost of service." See page 13 of Public Citizen and Sierra Club's Position Statement. Please provide evidence from Austin Energy's cost of service study or Tariff Package to support the explanation.

#### RESPONSE:

Austin Energy has argued that Tier 1 and Tier 2 residential rates should be increased because the utility doesn't recover its cost of service by at the Tier 1 and Tier 2 rate and has used this as justification for increasing the Tier 1 and Tier 2 rates.<sup>2</sup> We believe that recovery of cost of service for groups of residential customers is irrelevant. What matters is that Austin Energy mostly recover its cost of service from each customer class. Low energy users are not a separate class of customers; they are part of the residential class.

<sup>1</sup> 

<sup>&</sup>lt;sup>2</sup> Tariff package

Policy direction from the Austin City Council has continually been in favor of encouraging energy conservation. Rewarding low energy users with low rates (even if they are somewhat below the cost of service) aligns with the demand reduction goals set by the City Council for Austin Energy.

AE RFI 1-6: Please provide calculations supporting the claim that "the utility's cost of service for multifamily dwellings is significantly lower ... than the cost of serving single-family residences." See pages 15-16 of Public Citizen and Sierra Club's Position Statement. Please provide the detailed calculations that demonstrate the actual cost of service for multifamily customers is \$6.00 pe month.

#### RESPONSE:

In response to our first RFI, Austin Energy said it had not done any study to see the differential cost to serve an apartment dweller versus a home dweller. In response to our second RFI, Austin Energy stated that in general apartments or condos have a lower electrical infrastructure cost per transformer. In addition, Austin Energy stated that an average home might average about \$1,900 to interconnect, while an average apartment might average \$900 to interconnect. While 100 percent of the cost of extending that services is currently paid for developers, this city council policy was not always true, so some imbedded costs of electrical service and infrastructure is being paid for through the customer service fee at a higher rate for homeowners than apartment owners, even though the costs are not the same. Also, maintenance and replacement costs for transformers and other infrastructure are paid for by the utility and are recovered in base rates.

Our suggestion for a \$6 dollar versus a \$10 dollar monthly customer fee is not based on exhaustive calculations, but came out of a suggestion by Jim Lazar in his presentation to the Electric Utility Commission.

Specifically, Jim Lazar stated:

"One important issue is the choice of customer classifications. The utility cost of service for multi-family dwellings is significantly lower (on both a per-customer and a per-kilowatt-hour basis) than the cost of serving single-family residents. Multi-family dwellings have less distribution investment, better transformer utilization, and lower line losses than single-family dwellings, simply because primary-voltage power is normally delivered to the premises, rather than at remote line transformers. In addition, where manual meter reading is used, these costs are lower for grouped meters. AE has consolidated all of these into a single "residential" class. This has the effect of over- charging multi-family dwellings relative to single-family dwellings; depending on the purpose of the inclining block rate design, it may (inadvertently) tend to offset this equity issue.

The current AE customer charge of \$10/month greatly exceeds the cost of periodic billing and collection and other customer-specific costs properly attributable to the customer charge. Once the smart grid, monthly billing, 3-1-1, and administrative costs are properly allocated, my experience has been that these costs approximate about \$6.00/month for urban utilities. One approach for the residential portion of this base rate decrease would be to restore this charge to the previous level. Another approach would be to bifurcate the rate design between multi-family and single-

family homes, recognizing the dramatically lower cost of service associated with serving multi-family buildings. Either would allow the preservation of the current block rates, so that large customers do not see an increased incentive to consume, an action that is contrary to the rate principles to encourage conservation."<sup>3</sup>

Thus, our recommendation was based in part on Lazar's analysis that the true monthly cost to residential customers was only \$6 per month. Rather than lower the monthly customer fee for all residential customers we were suggesting only lowering it for apartment and condo dwellers, which we believe would be more equitable. We recognize that more analysis may be needed to calculate the true cost of serving residential apartment dwellers.

<sup>&</sup>lt;sup>3</sup> Jim Lazar, "Observations on Austin Energy Cost of Service and Rate Design Report," February 2, 2016, Presenation made to Electric Utility Commission, February 22, 2016.