IN THE MATTER OF AUSTIN ENERGY BASE RATE CASE FILING DATED APRIL 18, 2022

BEFORE THE CITY OF AUSTIN HEARING EXAMINER

DIRECT TESTIMONY OF EZRA D. HAUSMAN, PH.D.

ON BEHALF OF
SIERRA CLUB, PUBLIC CITIZEN, AND SOLAR UNITED NEIGHBORS

June 22, 2022
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I. Professional Qualifications and Purpose of Testimony

Q. Please state your name, occupation, and business address.

A. My name is Ezra D. Hausman, Ph.D. I am an independent consultant doing business as Ezra Hausman Consulting, operating from offices at 77 Kaposia Street, Auburndale, Massachusetts 02466.

Q. What is your educational and professional background?

A. I hold a BA in Psychology from Wesleyan University, an MS in Environmental Engineering from Tufts University, an SM in Applied Physics from Harvard University, and a PhD in Atmospheric Chemistry from Harvard University. I have been involved in analysis of both regulated and restructured electricity markets for over two decades. I have provided a detailed resume as Exhibit EDH-1.

I have worked as an independent consultant and expert based in energy economics and environmental science since 2014. From 2005 until early 2014, I was employed at Synapse Energy Economics, Inc., a research and consulting company located in Cambridge, Massachusetts, where I served most recently as Vice President and Chief Operating Officer. In both of these positions I served as an analyst and expert in the following areas:

- State and regional energy, capacity, and transmission planning, including both utility resource planning and long-term (multi-decadal) climate-constrained resource planning
- Electricity, generating capacity, and demand-side resource market design, analysis, and regulation
- Review and analysis of utility energy efficiency (“EE”) and transportation electrification program filings
- Electric system dispatch modeling
• Economic analysis of environmental and other regulations, including greenhouse gas regulation, in electricity markets
• Economic analysis, price forecasting, and asset valuation in electricity markets
• Quantification of the economic and environmental benefits of displaced emissions and market price impacts associated with energy efficiency and renewable energy
• Regulation and mitigation of greenhouse gas emissions from the supply and demand sides of the U.S. electricity sector.

I have provided testimony or appeared before public utility commissions and/or legislative committees in Arizona, Florida, Illinois, Idaho, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, North Carolina, New Hampshire, New Jersey, Nevada, Oregon, Pennsylvania, South Carolina, South Dakota, Utah, Vermont, Virginia, Washington, DC, Washington State, Wisconsin, and at the federal level. I have provided expert representation for stakeholders at the PJM RTO, at the Midcontinent Independent System Operator, Inc. (“MISO”), and at the Federal Energy Regulatory Commission (“FERC”).

From 1998 through 2004 I was employed as a Senior Associate at Tabors Caramanis and Associates (“TCA”) of Cambridge, Massachusetts. In 2004, TCA was acquired by Charles River Associates (“CRA”), where I remained until I joined Synapse in 2005. At TCA/CRA, I performed a wide range of electricity market and economic analyses and price forecast modeling studies. These included asset valuation studies, market transition cost/benefit studies, market power analyses, and litigation support. I have extensive experience with market simulation, production cost modeling, and resource planning methodologies and software.
Q. Have you previously testified before the Austin City Council?
A. No.

Q. What is the purpose of your testimony in this proceeding?
A. In its filing, Austin Energy (herein also “Company”) has proposed a significant redesign of its electricity rates, most dramatically for residential consumers. In my testimony I review this proposal in the context of good utility practice for residential rates, and address whether Austin Energy’s proposal is in the public interest, and will result in just and reasonable rates.

I further comment on the opacity of Austin Energy’s expenditures related to the maintenance and operations of the Fayette Power Plant, which are largely undisclosed despite their inclusion in the current rate case. I address how Austin Energy’s continued investment in and use of this plant should be evaluated in the future.

Q. What information have you reviewed in preparation of this testimony?
A. I have reviewed Austin Power’s filing package including its appendices and Schedules, and responses to discovery from all parties. I have also reviewed industry literature on rate design and its relation to successful energy efficiency programs.

Q. Are you providing any exhibits with your testimony?
A. Yes. I am providing the following Exhibits:
II. **Summary of Conclusions and Recommendations**

Q. Please summarize your conclusions and recommendations in this matter.

A. I conclude Austin Energy’s proposed restructuring of its residential electric rates, including both its proposal to more than double the monthly fixed charge per customer and its proposed modification of its five-tiered rate structure, would be detrimental to the effectiveness of its energy efficiency programs and harmful to customers, and particularly to low-income customers. I conclude that these costs outweigh the benefits identified by Austin Energy for the proposed changes, and that the Austin City Council should reject these proposals. Instead, the City Council should direct the Company to retain its existing residential base rate schedule until it can develop and file an alternative rate plan that retains these benefits and is less harmful to customers. Austin Energy should also be directed to introduce a time-of-use rate option to give customers further opportunities to control their own usage and costs, and to provide operational benefits to the Austin Energy system.

I also conclude that Austin Energy has not provided sufficient support or justification for its proposed continued capital investments in the Fayette Power Plant for
these costs to be included in rates. Further, the continued operation of the Fayette Power
Plant is inconsistent with commitments from the Company’s “Resource, Generation and
Climate Protection Plan to 2030” and the City of Austin’s “Climate Equity Plan.” Austin
Energy has failed to provide any evidence or analysis supporting its continued
investments in this resource, including investments made during the test year, or
demonstrating that such investments are prudent. Moreover, the City of Austin cannot
meet its ambitious and necessary greenhouse gas emissions goals while continuing to use
coal-fired electricity from the Fayette units. The City should direct Austin Energy to
oppose all life-extending capital investments at Fayette, including any capital investment
necessary to comply with impending environmental regulations; to take all actions
necessary to prepare to exit the plant, including ensuring the adequacy of its non-nuclear
decommissioning fund; and to continue or redouble its efforts to close the plant
permanently in favor of cleaner generation sources.

III. Residential Rate Proposal

a. Proposed change in revenue requirements for residential customers

Q. Please briefly describe Austin Energy’s proposed change to its rates overall, and in
particular to its residential rates.

A. Austin Energy proposes to increase total base rate revenue by 4.2%, or $48.2 million, in
order to fully fund its expected revenue requirements.\(^1\) It also claims that its residential
rates, in particular, are not reflective of the cost of serving residential customers – that is,
when the Company allocates its overall costs according to the cost of serving each

\(^1\) See Filing Package 4.3.1. Total base revenue requirements would be $686.8 million as proposed,
compared to $638.6 million under current rates.
customer class, it claims that its overall recovery from residential customers should be increased by about 15%, or by $76.5 million, to match the cost of service associated with these same customers.²

Austin Energy does not propose to make this entire adjustment immediately, but to make only half of the readjustment among classes in the interest of gradualism in changing rates.³ I am not offering an opinion on the reasonableness of Austin Energy’s overall allocation of costs among rate classes; however, if such a significant reallocation of costs to residential customers is justified, I believe it is appropriate for Austin Energy to implement this change gradually, as proposed.

b. Proposed change in rate structure for residential customers

Q. Please explain how Austin Energy has proposed to change its rate structure for residential customers.

A. Austin Energy currently has a $10 per month fixed charge for all residential customers, combined with an ascending variable energy rate structure that is tied to monthly kWh usage. This overall structure was initially adopted by the City Council in 2012.⁴ In 2016, as part of a previous rate case, the City Council amended this ascending block rate structure and expanded to five tiers inside the city limits, and three tiers outside the city limits, both with increasing rates as consumption increases.⁵ The idea of such a structure is to have a minimum bill for all customers that covers the cost of being connected to the

² Filing Package Table 5-O, page 73. The overall proposed increase is 4.3%, so the “needed” increase for residential customers of 15.2% is about 3.5 times as large.
³ Filing Package Section 6, page 75.
⁴ Filing Package Section 7.1, page 78 and Figure 7-1.
⁵ See Figure 1 below for a depiction of Austin Energy’s current and proposed residential energy charges.
system, but to also charge customers for the energy they use in a way that encourages
conservation.

Austin Energy’s current structure has lower costs at lower usage levels, but
imposes increased rates and more strongly encourage energy efficiency as usage
increases. It now proposes to change the current structure both within and outside the city
limits to have a much higher ($25 per month) per-customer fixed charge, and an energy
rate with only three tiers and only a small increase in rates for each tier. Austin Energy
claims that its current structure is both unduly complicated and poorly suited to current
usage patterns.6

Q. Do you agree that it is reasonable for Austin Energy to change to a three-tier rate
structure as it proposes?
A. Not necessarily. I agree that in principle, a three-tier structure could be sufficient to
protect lower-usage customers while increasing the incentive for energy efficiency for
those with higher usage. However, I do not believe that the structure proposed by Austin
Energy provides adequate incentive for energy efficiency because the proposal would
significantly decrease the marginal benefit of reducing energy use for consumers with
high levels of usage. I also find that Austin’s overall proposal is manifestly unfair to
those with lower monthly energy usage, to the benefit of those who use much more.
These issues are discussed in more detail below.

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6 See discussion in Filing Package Section 7.1
Please describe how Austin Energy proposes to reconfigure its residential rates with respect to fixed vs. variable charges.

Austin Energy currently assesses a monthly $10 per-customer fixed charge, which is unavoidable and independent of energy usage. All other residential charges are on a per-kWh basis, and thus scale directly according to the customer’s electricity usage each month. The Company now proposes to increase the fixed (unavoidable) portion of each customer’s bill to $25. Thus, while the per-kWh charge is likely to be lower for most customers (as seen in Figure 2 below), the total bill will increase for many customers, and more of the cost will be unavoidable.\(^7\)

Would this change affect all Austin Energy ratepayers equally?

No. Because the fixed portion of the bill would increase while the variable portion would decrease, the effect would be a large rate increase for customers who use little energy every month, coupled with a large rate decrease for those who use a large volume of energy. This would effectively be rewarding customers with large, energy-intensive homes and other large energy uses such as pool heaters and electric vehicles, while penalizing users with smaller or more energy efficient homes.

Has Austin Energy acknowledged this differential effect?

Yes. Schedule H-3 of Austin Energy’s filing shows the bill impact of the proposed change on various rate classes. The “Residential” section of this schedule is reproduced in Figure 1 below. As may be seen, Austin Energy projects that customers who use 1250

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\(^7\) See Filing Package Section 7.3 and Figure 7-31.
kWh per month or less will see a monthly bill increase, while those whose usage is above this level will see a bill decrease. Those with usage lower than 250 kWh per month inside the city would see an increase of around 85% in their monthly bill, while those with usage of 3500 kWh or more would see a bill decrease of 25% - and an even larger decrease for even higher monthly usage.

Figure 1. Monthly bill impact of proposed change in residential rates. (Excerpted from Schedule H-3 of the Filing Package.)

<table>
<thead>
<tr>
<th>Customer Class by Usage</th>
<th>Bill Frequency</th>
<th>Cum. Bill Frequency</th>
<th>Inside $</th>
<th>Inside %</th>
<th>Outside $</th>
<th>Outside %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 and Below (kWh)</td>
<td>0</td>
<td>0.0%</td>
<td>15.00</td>
<td>150.0%</td>
<td>15.00</td>
<td>150.0%</td>
</tr>
<tr>
<td>1 - 250 (kWh)</td>
<td>719,705</td>
<td>13.7%</td>
<td>16.26</td>
<td>84.5%</td>
<td>15.20</td>
<td>75.4%</td>
</tr>
<tr>
<td>251 - 500 (kWh)</td>
<td>1,260,836</td>
<td>37.6%</td>
<td>19.16</td>
<td>50.8%</td>
<td>15.97</td>
<td>39.5%</td>
</tr>
<tr>
<td>501 - 750 (kWh)</td>
<td>1,114,131</td>
<td>58.7%</td>
<td>19.15</td>
<td>31.9%</td>
<td>15.24</td>
<td>24.1%</td>
</tr>
<tr>
<td>751 - 1000 (kWh)</td>
<td>766,323</td>
<td>73.3%</td>
<td>15.34</td>
<td>17.8%</td>
<td>12.14</td>
<td>13.8%</td>
</tr>
<tr>
<td>1001 - 1250 (kWh)</td>
<td>492,883</td>
<td>82.6%</td>
<td>9.06</td>
<td>7.9%</td>
<td>6.20</td>
<td>5.3%</td>
</tr>
<tr>
<td>1251 - 1500 (kWh)</td>
<td>310,837</td>
<td>88.5%</td>
<td>1.18</td>
<td>0.8%</td>
<td>(1.70)</td>
<td>-1.2%</td>
</tr>
<tr>
<td>1501 - 1750 (kWh)</td>
<td>194,036</td>
<td>92.2%</td>
<td>(8.20)</td>
<td>-4.6%</td>
<td>(9.22)</td>
<td>-5.2%</td>
</tr>
<tr>
<td>1751 - 2000 (kWh)</td>
<td>122,909</td>
<td>94.6%</td>
<td>(19.46)</td>
<td>-9.1%</td>
<td>(16.74)</td>
<td>-8.0%</td>
</tr>
<tr>
<td>2001 - 2500 (kWh)</td>
<td>134,130</td>
<td>97.1%</td>
<td>(36.35)</td>
<td>-13.7%</td>
<td>(28.03)</td>
<td>-11.0%</td>
</tr>
<tr>
<td>2501 - 3000 (kWh)</td>
<td>63,582</td>
<td>98.3%</td>
<td>(62.61)</td>
<td>-18.5%</td>
<td>(43.07)</td>
<td>-13.6%</td>
</tr>
<tr>
<td>3001 - 3500 (kWh)</td>
<td>33,777</td>
<td>98.9%</td>
<td>(92.63)</td>
<td>-22.3%</td>
<td>(58.12)</td>
<td>-15.4%</td>
</tr>
<tr>
<td>3501 - 4000 (kWh)</td>
<td>19,601</td>
<td>99.3%</td>
<td>(122.65)</td>
<td>-24.9%</td>
<td>(73.17)</td>
<td>-16.7%</td>
</tr>
<tr>
<td>4001 and Above (kWh)</td>
<td>36,010</td>
<td>100.0%</td>
<td>(137.66)</td>
<td>-25.9%</td>
<td>(80.69)</td>
<td>-17.2%</td>
</tr>
</tbody>
</table>

Q. Were you able to replicate the revenue and bill impacts of the proposed change in residential rates?

A. No. I attempted to replicate the existing and projected base rate revenues shown in Table 6-A of the filing package (Columns (B) and (I), respectively) using the customer usage data for 2020 provided by Austin Energy in response to Discovery Request SCPC 3-1A. and the existing and proposed rates. I was unable to obtain results even close to these
numbers through independent calculations. In fact, when I try to calculate the total revenues for the Residential class using the old and new rates, the old rates yield significantly higher total revenues. Had the procedural schedule and discovery process allowed, I would have pursued these issues further with Austin Energy.

However, my calculations did confirm the dynamic presented in Figure 1: that customers with low usage would see a very large rate increase under Austin Energy’s proposal, and those with high usage would see a very large rate decrease. While regressive and in my opinion very unfair, this finding is both intuitively predictable from the proposal, and consistent with the Company’s own projections.

Q. What is Austin Energy’s rationale for this proposed change?

A. Austin Energy reviewed all of its costs to serve customers, and separated them into what it claimed were fixed and variable costs. In short, it classified demand-related costs (which depend on peak demands) and customer-related costs (i.e., meters and connections) as fixed costs, while energy-related costs, i.e., kWh purchased on behalf of the customer, are treated as variable costs. The Company claims that its proposed rate structure would more closely match the costs paid by customers with the underlying cost drivers, and will allow deferral of future rate cases.  

Q. Do you agree with Austin Energy’s allocation of costs between fixed and variable costs?

A. No. While I agree that certain customer-related costs, such as meters, interconnections, and billing, are essentially fixed on a per-customer basis, I do not think this is a

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8 Filing Package Section 7.3, page 111.
reasonable characterization of capacity costs, at least over time. One of the great benefits of energy efficiency, customer-sited solar, and demand response is that they can delay, reduce, or even eliminate the need for system expansion and distribution investments. Once those investments have been made and become sunk costs, it is true that they can no longer be avoided; but to say that the ongoing need for system investments is insensitive to usage is not only misleading, it is a counterproductive planning and ratemaking perspective that would lead to inefficient system investment and usage.

Q. Do you agree that it is reasonable and appropriate to recover all “fixed” costs on a fixed-charge basis, and variable costs through a per-kWh charge?

A. No. While the simplicity of such a “straight fixed/variable” billing scheme may have some intuitive appeal, it is not generally considered best practice for electric utilities. For example, the Regulatory Assistance Project has identified three principles of “modern rate design” to maximize customer benefit and efficient investment in and utilization of grid resources:

- Principle 1: A customer should be able to connect to the grid for no more than the cost of connecting to the grid.
- Principle 2: Customers should pay for grid services and power supply in proportion to how much they use these services, and how much power they consume.
- Principle 3: Customers that supply power to the grid should be fairly compensated for the full value of the power they supply.\(^9\)

Q. Why do high fixed charges lead to less efficient utilization of, and investment in, the grid?

A. Efficient grid utilization requires customers to use electricity, to the extent possible, in a way that minimizes the stress on the system. This generally means they should have a strong incentive to lower peak usage, either by reducing usage overall, or by shifting usage to times of lower overall demand such as the middle of the night. Customers can respond to these incentives by, for example, using programmable thermostats and “smart” appliances, or choosing when to charge their electric vehicles (EVs), or through investments in energy efficiency, rooftop solar, or on-site storage. Austin Energy should be focusing on rate designs that increase flexibility and help customers make beneficial energy choices; it should not be eliminating flexibility by moving costs into a fixed per-customer charge.

Moving toward higher fixed charges and lower variable costs disincentivizes beneficial energy use practices and increases payback times for customer investments in energy efficiency measures or distributed energy resources, because the customer sees less financial benefit for each unit of savings. It penalizes customers who have already invested in reducing their energy usage, and raises the bills of other low-usage customers, who may also be low-income customers. While it is true that greater reliance on fixed charges improves revenue predictability and lowers risk for the utility, it does so at a significant net societal cost by disincentivizing efficient use of resources.
Q. Are there other kinds of rate design that would improve the economic incentive to use the grid more efficiently?

A. Yes. Time-of-use pricing is one such rate structure that can encourage customers to move flexible energy use (such as smart appliances and EV charging) to off-peak periods, and I recommend that Austin Energy be directed to offer such a rate. This reduces stress on the distribution system, lowers overall energy costs, and can delay or avoid future system upgrade costs. Increasing block rates, such as Austin Energy’s current rate design, increases the incentive for energy savings as each customer’s usage goes up.

d. Impact on low-income customers

Q. Austin Energy suggests that based on its analysis, “the current residential rate structure negatively impacts vulnerable customers.” Do you agree?

A. No. I think it is very important to be aware of how rate structures affect vulnerable, lower-income customers, and to mitigate that impact when possible, but I do not believe that Austin Energy customers with high usage are low-income or vulnerable customers in general, or that its proposal would benefit low-income or vulnerable customers in any way.

Q. What is the basis of Austin Energy’s claim?

A. Austin Energy asserts, based on its review of usage of customers enrolled in Customer Assistance Program (“CAP”) vs. those who are not, that low-income CAP customers may use more energy on average than other customers.

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10 Filing package p.108.
Q. How do you respond?

A. I do not find that Austin Energy’s analysis supports its claim. Austin Energy compared only “average” usage for CAP and non-CAP customers, and did not consider, for example, the number of customers at each consumption level. It is very likely that there are many non-CAP customers who have large homes and very high monthly usage, but the overall distribution of usage that might reveal this effect is obscured by the reliance on average numbers. These non-CAP, high-energy customers can and should be given a strong incentive to reduce their energy usage, without affecting lower income customers.

Further, the Company admits that it has no data to accurately identify lower-income customers. Instead, it merely compares customers that are enrolled in CAP vs. those who are not, which is only a rough proxy for income level. For example, it may be that those low-income customers who have higher-than-average usage are more likely to apply for energy assistance through CAP, which would strongly skew the Company’s analysis. I have also seen press reports suggesting that a large number of automatically enrolled CAP recipients may even not be lower income customers.\(^\text{11}\) A better proxy for income may be whether a customer lives in a single-family or multi-family house, as higher-income customers are more likely to live in a single-family house. Figure 7-6 of the Company’s filing package shows that per-bill energy use in single-family homes is almost twice as much as in multi-family homes. It is hard to square this finding with Austin Energy’s implication that lower-income customers use more energy than higher-income customers, or that they are disproportionately hurt by the current rate structure.

Austin Energy should ensure that low-income customers are getting the full benefit of energy efficiency programs and other assistance in managing their bills. CAP-enrolled customers are already getting assistance with their monthly bills, which could partly explain their higher usage if they have less incentive to conserve. It should also not be assumed that CAP customers’ usage is representative of other low-income customers who are not enrolled in the program. It also would not serve the long-term interests of low-income customers, or any customers for that matter, to implement a rate design that will ultimately lead to less efficient investment in the distribution system.

Finally, as noted above, not all customers would face the same rate impact of the proposal. Those residential customers with the highest usage – with large houses and heated swimming pools – would see a substantial rate decrease under the proposal, while those with the lowest usage would see a very large increase. It is clear to me that this would be very detrimental to low-income customers, to the benefit of their wealthier neighbors.

Q. You stated earlier that Austin Energy’s comparison of usage for CAP and non-CAP customers in Section 7.2.3 of its filing package relied only on average usage for each group. Correct?

A. Yes.

Q. Have you reviewed the data underlying this analysis?

A. Yes. The data were provided in response to Date Request SCPC 3-1.
**Q.** What did you find?

**A.** After removing thousands of rows of apparently bad data from the dataset,¹² I looked at the number of customers in each 50-kWh/month “block” in each year, along with the number in each tier under the existing and proposed rate designs.

My first observation is that CAP customers comprised about 7.7% of Austin Energy’s customers in 2020.¹³ While it is essential to ensure that these customers’ energy burden is addressed, this is already the basis of the CAP program itself. It makes no sense to abandon an effective rate structure for encouraging energy efficiency among the other 92% of customers because a small number of CAP-enrolled customers also have relatively high energy use.

My next observation is that at higher levels of energy use, the number of CAP customers drops off rapidly, as would be expected. The current tier 5 (2500+ kWh per month) had less than 4% CAP customers in 2020, and above customers using 3,000 kWh per month or more included only about 2% CAP customers. It is still concerning if any low-income customers are using such a large volume of electricity, although as noted above questions have been raised about how well CAP is restricted to low-income users, and we do not know the specific circumstances for each customer. But in general, customers using this high volume of electricity should be given a stronger incentive to reduce their usage, regardless of their income.

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¹² Austin Energy provided the data underlying its analysis in Attachment SCPC 3-1A, in response to Data Request SCPC 3-1. The Attachment includes a significant amount of apparently erroneous data, including 8,330 “bills” with very large negative reported usage and 42,122 “bills” in a usage block identified as “99999999”, which would generally imply unknown or bad data. No explanation was provided for these values.

¹³ Austin Energy provided data for the years 2012 through 2020. According to those data, the percentage of customers enrolled in CAP declined from a high of 10.3% in 2015 to 7% in 2019 and 2020.
Q. Would Austin Energy’s proposed three-tier structure interfere with that signal?

A. Yes. Under Austin Energy’s proposal, the highest marginal cost for energy would be 4.8 cents per kWh, compared to 10.81 cents per kWh today. That means that the payback time for an energy saving investment (or for on-site generation) would be more than twice as long as it is today. Many such investments might no longer be economically beneficial to the customer at all. In addition, customers who made such investments under the good-faith understanding that their contribution to clean energy and system resiliency would be rewarded, would suddenly experience a “bait-and-switch” as their ability to control their energy costs is pulled out from under them in favor of fixed customer charges.

Austin Energy may describe its proposal as a three-tiered structure, but in fact it would be very close to a flat rate schedule. Under the proposal, over 60% of Austin Energy customers would be in the central tier, and all of them – including those with the highest usage – would have a very weak signal to conserve. In fact, at 4.8 cents per kWh, even the highest-priced tier under the proposal is 18% below the current price at Tier 2 (5.8 cents per kWh.) In other words, the price signals that are designed to encourage conservation under the current rate structure would be effectively eliminated.

Finally, under Austin Energy’s proposal, those with the lowest energy use – including low-income customers in small, multifamily homes or customers who have invested in high levels of energy efficiency or distributed generation – would see by far the highest rate increase, as their variable cost of energy would increase at the same time their fixed per-customer charge would increase by 150%, from $10 per month to $25 per month.
A comparison of the proposed vs. existing per-kWh energy price structures is shown in Figure 2. Under Austin Energy’s proposal, customers with high energy usage would receive a decrease in their monthly bills, as the per-kWh cost of energy falls by more than half, overwhelming the proposed increase in the fixed charge. Those at the lower end would see the largest increase, absorbing both the overall rate increase proposed in the current filing and the shift of costs from higher-usage customers.

**Figure 2. Existing vs. Proposed energy charge structure.** Under the proposed structure, all customers would be charged an energy rate that is between the current rates for Tiers 1 and 2. All customers would also face an increase in the fixed per-customer charge (not shown) from $10 per month to $25 per month, with the net effect being a bill increase for customers with lower usage levels.

Q. What does Austin Energy claim regarding the success of its energy efficiency programs?

A. Filing Package page 79 states that “Since 2009, Austin Energy has achieved a significant level of energy efficiency through targeted programs, in addition to gains from more
efficient appliances and building codes.” This is supported by the usage curves shown in Figure 7-2 of the Filing Package, which shows a shift from higher-usage to lower-usage monthly bills from 2009 to 2021.

As the Company acknowledges, much of this change is due to changing housing stock, building codes, and appliance standards. It is reasonable to assume that the Company’s programs have also played an important role. But together with these factors, customers must still make decisions and investments, and that’s where rate design comes into play.

Q. Please explain.

A. Customers must have an incentive to invest in energy-saving equipment and to adopt energy-saving practices, and must be confident that their investments will be more than repaid over a reasonable period of time through energy savings. Further, contractors can more easily promote energy-saving building upgrades and appliances if they can show customers that they are good financial investments, in addition to promoting home quality, health and comfort. Austin Energy’s past success in promoting energy efficiency, and the beneficial usage trends it cites in its filing package, cannot be separated from a rate design that has effectively promoted energy efficiency and distributed generation by providing a strong price signal for reducing energy use, especially at higher monthly usage levels.

14 E.g., Filing Package Figure 7-24.
Q. Are Austin Energy’s current rates consistent with good rate design in the sense of promoting energy efficiency investments and practices?
A. Yes. Rates such as Austin Energy’s current tariff, which is primarily composed of variable energy charges and has increasing per-unit costs as consumption increases, are generally considered a far better design for promoting energy efficiency15 and protecting vulnerable customers.16

Q. Are you concerned that the effectiveness of these programs, and the rate of energy savings in general, would be compromised by the proposed rate structure?
A. Yes. Customers generally have to invest some of their own money and time to achieve future energy savings. Austin Energy’s proposed rate structure would reduce the benefit of such investments and increase payback times, weakening the investment case for customers taking such actions. Basic economic theory, along with copious experience in energy efficiency programs, suggests that this would tend to lead to poorer performance of energy efficiency programs and investments.

e. Revenue stability

Q. Austin Energy claims that its proposed rate structure change “promotes stability and financial health.” How do you respond?
A. From the utility’s perspective, reducing the incentive for customers to save energy improves financial predictability because it will ultimately sell more kWh and have a

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16 For example, the National Consumer Law Center states that “High Utility Fixed Charges Harm Low Income, Elders and Households of Color.” See https://www.nclc.org/issues/energy-utilities-a-communications/utility-rate-design.html. (Accessed June 17, 2022.)
more predictable revenue stream. By relying more on fixed customer charges, however, the utility transfers risk from its shoulders onto those of its customers – at the same time eliminating the customers’ ability to reduce costs through good energy decision-making. The risk, according to Austin Energy, is that if revenue growth continues to lag customer growth, Austin Energy might need another rate adjustment “sooner than would otherwise be the case.”

Q. In your opinion, is stability and financial health more important than continued successful energy efficiency and protecting low-income customers?

A. No. In my view, the pursuit of a longer interval between rate cases must not come at the expense of these important policy requirements. Austin Energy should be tasked with finding other ways of ensuring revenue adequacy, such as carefully modeling customer behavior and asking the City Council for rate adjustments as needed. It should not be allowed to harm customers in the name of revenue predictability, as it proposes to do in this case.

IV. Capital Investments in Fayette Power Plant

Q. Are costs associated with the maintenance and operation of, and improvements to, the Fayette coal plant included in Austin Energy’s current rate request?

A. Yes. Austin Energy is including $441 million in “Production” costs in its test year revenue requirements. This broad category includes capital and operating expenses for all of Austin Energy’s plants, including the Fayette Power Plant (FPP). For FPP, not

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17 Response to Data Request SCPC 1-2.
18 See Filing Package Table 4-C.
including fuel or emissions costs, Austin Energy has identified $30.6 million in non-fuel O&M costs, $1.9 million in capital costs, and $17.8 million in depreciation costs.\textsuperscript{19}

However, despite the fact that continued expenditures on the plant fly in the face of Austin Energy’s own 2030 Generation Resource Plan,\textsuperscript{20} which states that “Austin Energy will maintain its current target to cease operation of Austin Energy’s portion of the Fayette Power Project (FPP) coal plant by year-end 2022,” and is incompatible with the City of Austin’s Climate Equity Plan,\textsuperscript{21} frustratingly little information has been provided on exactly what Austin Energy is spending on this plant, and why, and how such decisions are made and approved.

Austin Energy either has not performed or has refused to provide any studies of the economics of continued operation versus retirement of the Fayette plant, and claims that “There are no current studies with regard to current or impending environmental regulations” as they may affect the plant.\textsuperscript{22} Moreover, the Company has refused to provide any detailed information regarding future costs and operations\textsuperscript{23} or future capital expenditures.\textsuperscript{24}

\textsuperscript{19} Response to Data Request SCPC 2-1.
\textsuperscript{22} See Response to SCPC 2-3.
\textsuperscript{23} See Response to SCPC 2-5.
\textsuperscript{24} See Response to SCPC 2-8.
Q. To your knowledge, has Austin Energy evaluated the costs and risks associated with future environmental regulations that may affect the Fayette plant?

A. The Company claims that it has not evaluated the potential costs of bringing FPP into compliance with EPA’s proposed “Good Neighbor” rule\(^\text{25}\) or EPA’s Regional Haze Rule, either of which could require installation of additional NOx control equipment at the plant or the purchase of emission credits.\(^\text{26}\)

Q. Why not?

A. The Company states in both cases that “the proposed rule has not been adopted.”

Q. Does this make sense to you?

A. No. Increasingly stringent environmental regulations and associated costs and risks are a fact of life for all utilities that rely on coal-fired power plants, and it makes no sense for Austin Energy to fail to even consider these risks just because EPA has not yet adopted a final rule. Utilities are always required to do resource plans taking various kinds of uncertainty into account, and the potential for future environmental compliance costs is a very important consideration that cannot be ignored.

Q. In your experience, is it reasonable for a utility to withhold detailed cost and compliance information in a rate case such as this one?

A. In my experience, utility regulatory commissions generally would not allow costs to be included in customer rates without far more justification and proof than Austin Energy has provided that those costs are prudent, used, and useful. This justification would have


\(^\text{26}\) See Response to SCPC 3-4.
to be made in the face of existing and potential environmental regulations that can affect
the economics of the resource. As part of the regulatory compact, the burden of proof is
invariably on the utility to show that its investments are well-supported and can
reasonably be included in just and reasonable rates. This kind of detailed information and
analysis is routinely provided to stakeholders and their experts, and to the relevant
regulatory authority, under the terms of a nondisclosure agreement to prevent any
legitimately confidential information from being released to the general public. It is not
reasonable to expect ratepayers to shoulder these costs without having sufficient
information and analysis available for thorough inspection and review by both
intervenors and the City Council.

Q. What is your recommendation with regard to capital expenditures on the Fayette
Power Plant?
A. I recommend that the City Council find that Austin Energy has not met its burden of
proof that capital expenditures on FPP are reasonable or prudent, and the Company
should not be allowed to include these costs in rates. I recognize that disallowing costs
for a municipal utility may be problematic, but the principle of ensuring just and
reasonable rates must be upheld. Further, Austin Energy should be directed to
immediately provide project justification analyses for all capital expenditures at the plant
in excess of $100,000, and these analyses should be available for intervenors to review
under appropriate non-disclosure agreements. It should also be directed to evaluate the
risks and cost implications of all proposed or likely future environmental regulations on
the plant, including the Good Neighbor Rule and possible additional emissions control
requirements under the Clean Air Act.
To my understanding, Austin Energy has been in negotiations with the plant’s co-owner and operator, LCRA, to determine a way for the utility to exit the plant. This is no excuse for failing to provide full information to the Council or to other intervenors who have an interest in ensuring that Austin Energy’s ratepayers are paying only for prudent investments and are benefitting from least-cost planning and operations. In fact, Austin Energy should be required to provide to the Council any offers made or received and analyses performed as part of those negotiations, again under protection of nondisclosure agreements. As sunlight is known to be the best disinfectant, requiring this level of disclosure may also help Austin Energy in its claimed goal of freeing its customers from reliance on FPP sooner rather than later.

V. Overall Recommendation

Q. What are your recommendations in this matter?

A. I recommend that the Council reject Austin Energy’s proposal to increase its fixed per-customer charge from $10 to $25, along with its proposed revisions to its current five-tier residential rate structure. While some modification may be appropriate, Austin Energy should retain a rate structure that provides a strong incentive for energy efficiency and customer-sited distributed generation, that is protective of vulnerable customers, and that allows those who have already implemented such beneficial practices and technologies to continue recouping their investments through reduced energy costs. The Company should be directed to develop and file an alternative rate plan that retains these benefits. In addition, Austin Energy should be directed to develop and propose a Time-of-Use rate option for customers who wish to further control their energy use and costs in ways that provide overall system benefits.
I further recommend that Austin Energy be directed immediately to fully evaluate all future capital investments in the Fayette Power Plant in excess of $100,000, including potential costs associated with proposed environmental regulations, and show that continued investment in and operation of the units remain in customers’ interests. This information should be made available to intervenors under appropriate non-disclosure agreements. Absent clear and convincing evidence that continued use of the plant is beneficial to customers, Austin Energy should not be allowed to include such costs in rates. It should also be directed to oppose all life-extending capital investments in the units starting immediately, and should continue in or redouble its efforts to close the plant permanently in favor of cleaner generation sources.

Q. Does this conclude your testimony?

A. Yes.