

PUCO EXHIBIT FILING

Date of Hearing: May 8, 2018

Case No. 15-1830-EL-AIR - 15-1831-EL-ARM
& 15-1832-EL-ATA

PUCO Case Caption: _____

IMO: Public Hearing for Dayton Power and Light Company
for an Increase in Electric Distribution Rates
for Accounting Authority and for Approval
of Revised Tariffs

List of exhibits being filed:

Sign-in Sheets and witness statements

00:00:17

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.

Technician pe Date Processed 5/17/18

Reporter's Signature: Cynthia L. Cunningham
Date Submitted: 5/17/18

Date Submitted: 5/17/18



PUBLIC HEARING SIGN-IN SHEET

COMPANY: DP+L CASE NO.: 15-1830-EL-AIR
DATE: 5/8/18 LOCATION: Dayton City Hall

If you would like to provide testimony,
please **PRINT** your name and address below.

No.	NAME	ADDRESS
1	Charles Shauk	1062 Hollowcreek CT Miamisburg Ohio Citizen Team Cincinnati
2	Rachael Belz	2330 Victory Pkwy #401 45206
3	Melissa Zvolist	2330 Victory Pkwy #401 45206 Cincinnati
4	Michael Roediger	258 456 BELMONT E PK DAYTON 45405
5	Jeff Hoagland	40 N. Main St, Dayton OH
6	Joe Fulford	219 ORCHARD DR 45419
7	Matt Currie	130 W. 2nd St, Suite 700 45402
8		
9		
10		
11		
12		
13		
14		
15		



PUBLIC HEARING SIGN-IN SHEET

COMPANY: DP&L

CASE NO.: 15-1830-EL-AIR

DATE: 5/8/18

LOCATION: Dayton City Hall

If you would like to provide testimony,
please **PRINT** your name and address below.

No.	NAME	ADDRESS
1	Philip Leppia	27 W. McPherson St.
2	CARLY LEPPIA	6780 Farnsworth Pk.
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

May 8, 2018

Chairman Asim Z. Haque
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215

Case No. [REDACTED] 15-1830-EL-AIR

Dear Chairman Haque:

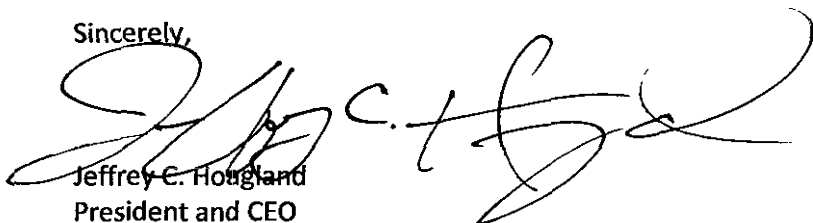
I am writing to you today to ensure that the PUCO and all interested parties in Dayton Power & Light's current rate proceeding are aware of the company's critical role as an economic development supporter in the Dayton Region of Ohio.

DP&L has been working with the Dayton Development Coalition since its beginning in 1994. The company's executives have worked with our team and other regional leaders to help build the strategy that is revitalizing the Dayton Region. We are seeing evidence of growth in the Region that was extremely hard hit by the economic downturn in the late 2000's.

DP&L has been involved with or invested in business retention and attraction activities throughout our region including supporting the state's largest single site employer – Wright-Patterson Air Force Base (over 27,500 employees at Wright-Patt). DP&L has been instrumental in the Region's attraction of the GE EPISCenter and Emerson's Helix facility. They were also a critical partner with the attraction of Fuyao Glass America who now has over 2,300 employees and have invested over \$600M to date. DP&L has been a key partner in our business retention and expansion efforts with companies like NuVasive, Clopay, CareSource, Tenneco Automotive, MAHLE Behr, Inteva, Taylor Communications and many more.

I am concerned about the outcome of DP&L's current rate proceeding. DP&L has been a tireless supporter of the Region for over 100 years. The Dayton Region needs to know that DP&L will be able to be a strong corporate employer and partner in the community well into the future. DP&L has been instrumental in helping the Dayton Development Coalition work toward its goals of attracting new businesses, business retention and workforce development. The military continues to look for ways to be more efficient and reduce costs as another Base Realignment Closure (BRAC) is more evident than ever. DP&L played a major role in the Region's successful 2005 BRAC and they will be a required partner in any future BRAC.

Sincerely,


Jeffrey C. Hougland
President and CEO

JCH/pck

JOE FULFORD
219 ORCHARD DR
OAKWOOD OH 45419
fulford.joseph@gmail.com

BACKGROUND

Source #1:

Ohio Long-Term Forecast of Energy Requirements 2017-2036

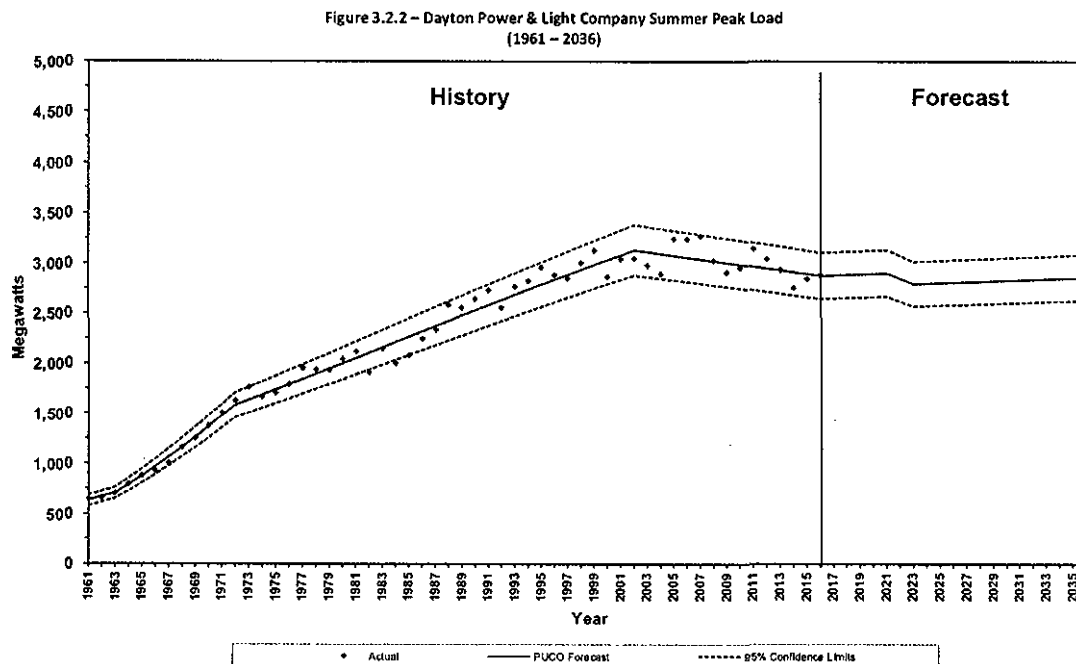
A report by the staff of the

Public Utilities Commission of Ohio May 7, 2018

Background Main Points (i.e. What are DP&L's concerns?):

1. Summer peak load trend flat out to 2036
2. Residential sector demand in Ohio slow but steady decline (52.5 MWhr in 2016; 51.8 MWhr in 2021; 51.8 MWhr in 2024; 51.6 MWhr in 2036)
3. DP&L revenues therefore down – a problem for the long-term health of our grid

24



Source: PUCO, Office of the Federal Energy Advocate

MAY 8th 2018
TESTIMONY

PUCO STAFF SOLUTION

Source #2:

PUCO website: DP&L Distribution Rate Case <https://www.puco.ohio.gov/be-informed/consumer-topics/dp-l-distribution-rate-case/>

DP&L Request and PUCO Staff Recommendation:

What is DP&L requesting in its application?

DP&L requested an increase in the customer charge from \$4.25 to \$13.73 per month. **(a bit more than a 3x increase)**

What did the PUCO staff recommend?

On March 12, 2018 the PUCO staff recommended the proposed customer charge increase to \$7.88 per month. **(slightly less than a 2x increase)**

The Commission is not bound by these staff recommendations and I hope will perhaps consider some other ideas to keep DP&L healthy, while not harming its lower income customers. If you went to the grocery for your monthly supply of breakfast cereal and the grocer said “You’re in luck were only going to charge you twice as much as before instead of three times”, I’m afraid most of us would still have a funny look on our faces.

Source #3:

Caught in a Fix

The Problem with Fixed Charges for Electricity

https://www.consumerreports.org/content/dam/cro/news_articles/home_garden/Caught_in_a_Fix_The_Problem_with_Fixed_Charges_for_Electricity.pdf

Prepared for Consumers Union

February 9, 2016

AUTHORS

Melissa Whited

Tim Woolf

Joseph Danie

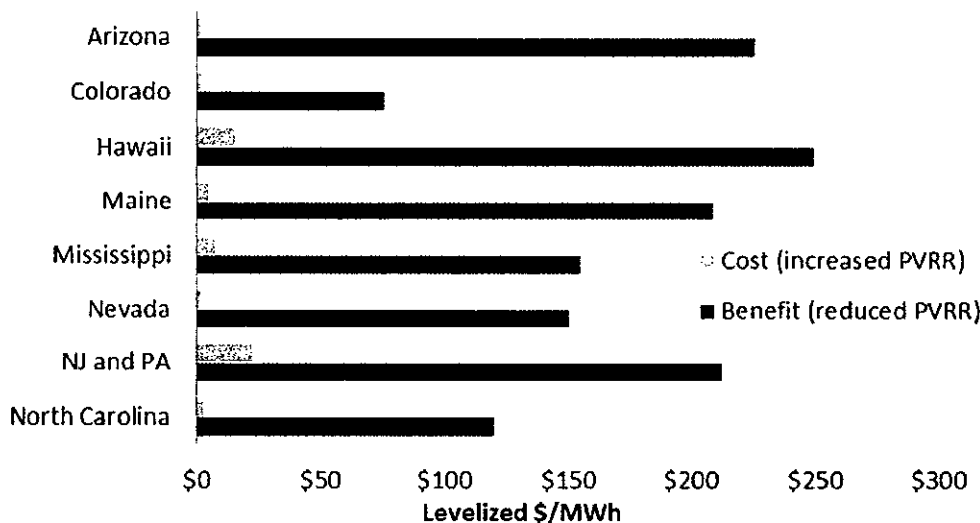
Problems with PUCO Staff's Solution:

- 1. Disproportionate Impacts on Low-Income Customers (regressive impact)**
- 2. Low-Usage Customers Hit Hardest (investments in Energy Star appliances and Solar disincentivized)**
- 3. Reduced Customer Control (consume less, pay less is not as true)**

And, Some Common Myths They May Have Heard for Increased Fixed Charges:

- 1. Fixed charges should recover distribution costs:** Much of the distribution system is sized to meet customer maximum demand – the maximum power consumed at any one time. For customer classes without a demand charge (such as residential customers),¹ utilities have argued that these distribution costs should be recovered through the fixed charge. This would allocate the costs of the distribution system equally among residential customers, instead of according to how much energy a customer uses.
- 2. Fixed charges are necessary to mitigate cost-shifting caused by distributed generation:** Concerns about potential cost-shifting from distributed generation resources, such as rooftop solar, are often dramatically overstated. While it is true that a host distributed generation customer provides less revenue to the utility than it did prior to installing the distributed generation, it is also true that the host customer provides the utility with a source of very low-cost power. In eight studies, benefits outweighed costs from 9:1 to 113:1!

Figure 10. Recent studies indicate the extent to which distributed generation benefits exceed costs



Utility Commissions in many states have largely rejected utility proposals to increase the fixed charge, citing a variety of reasons, including rate shock to customers and the potential to undermine state policy goals. In conclusion, the push to significantly increase the fixed charge has largely been rejected by regulators across the country as unnecessary and poor public policy. Nevertheless, utilities continue to propose higher fixed charges, as any increase in the fixed charge helps to protect the utility from lower revenues associated with reduced sales, whether due to energy efficiency, distributed generation, or any other reason. In addition, in late 2015, it appeared that some utilities were beginning to propose new demand charges for residential customers instead of increased fixed charges.

¹ There are several reasons that demand charges are rarely assessed for residential customers. These reasons include the fact that demand charges introduce complexity into rates that may be inappropriate for residential customers; residential customers often lack the ability to monitor and respond to demand charges; and that residential customers often do not have more expensive meters capable of measuring customer demand.

ALTERNATIVE SOLUTIONS

Source #4:

PUCO's Power Forward effort on Ratemaking and Regulation

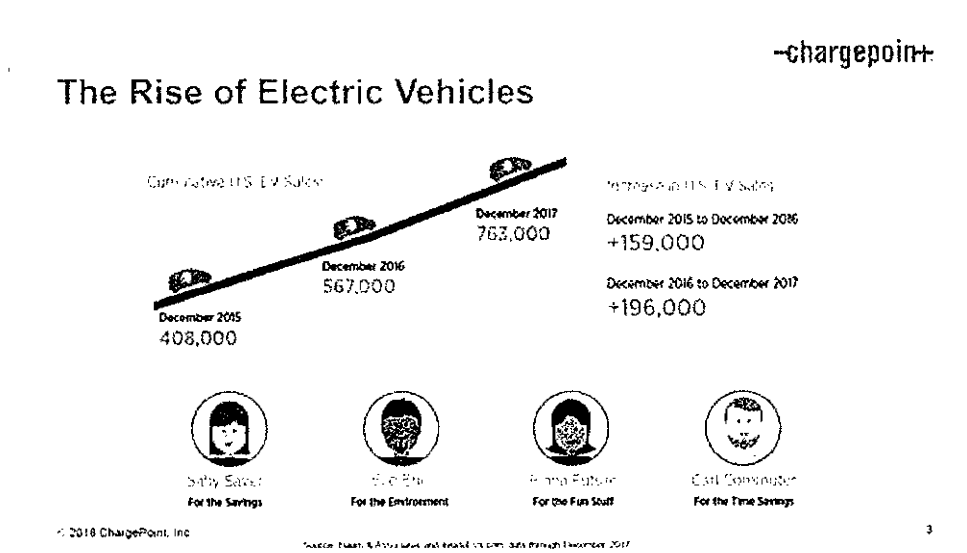
March 2018

<https://www.puco.ohio.gov/industry-information/industry-topics/powerforward/phase-3-ratemaking-and-regulation/ratemaking-and-regulation-day-two-recap/>

So what are some other solutions?

1. Adopt time of use residential rates
2. Incentivizing purchase of plug-in electric vehicles (not a new idea to increase revenue side of the equation, while helping our summer ozone problem in the Miami Valley!)
3. Incentivize time-of-use so peak load is after 10 pm

EV's are coming so it is best to get in front of the peak demand load!



Source #5:

Sigrin, Ben, and Mooney, Meghan. April 2018. *Rooftop Solar Technical Potential for Low-to-Moderate Income Households in the United States*. Golden, CO: National Renewable Energy Laboratory. NREL/TP-6A20-70901. <https://www.nrel.gov/docs/fy18osti/70901.pdf>

4. Incentivize rooftop solar for low income households

Potential electric bill savings from rooftop solar would have the greatest material impact on the lives of low-income households as compared to their high-income counterparts and could help mitigate the energy burden faced by these households. This report ultimately seeks to provide objective data for regulators, policymakers, nonprofits, and project developers to make informed decisions that are best for their own communities.



Rooftop Solar Technical Potential for Low-to-Moderate Income Households in the United States

Benjamin Sigrin and Meghan Mooney
National Renewable Energy Laboratory

**NREL is a national laboratory of the U.S. Department of Energy
Office of Energy Efficiency & Renewable Energy
Operated by the Alliance for Sustainable Energy, LLC**

This report is available at no cost from the National Renewable Energy
Laboratory (NREL) at www.nrel.gov/publications.

Technical Report
NREL/TP-6A20-70901
April 2018

Contract No. DE-AC36-08GO28308

NOTICE

This report was prepared as an account of work sponsored by an agency of the United States government. Neither the United States government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States government or any agency thereof.

This report is available at no cost from the National Renewable Energy Laboratory (NREL) at www.nrel.gov/publications.

Available electronically at SciTech Connect <http://www.osti.gov/scitech>

Available for a processing fee to U.S. Department of Energy and its contractors, in paper, from:

U.S. Department of Energy
Office of Scientific and Technical Information
P.O. Box 62
Oak Ridge, TN 37831-0062
OSTI <http://www.osti.gov>
Phone: 865.576.8401
Fax: 865.576.5728
Email: reports@osti.gov

Available for sale to the public, in paper, from:

U.S. Department of Commerce
National Technical Information Service
5301 Shawnee Road
Alexandria, VA 22312
NTIS <http://www.ntis.gov>
Phone: 800.553.6847 or 703.605.6000
Fax: 703.605.6900
Email: orders@ntis.gov

Cover Photos by Dennis Schroeder: (left to right) NREL 26173, NREL 18302, NREL 19758, NREL 29642, NREL 19795.

NREL prints on paper that contains recycled content.

PowerForward

Ohio

Public Utilities
Commission

PowerForward Day 2: The Future of Electric Vehicles



Ratemaking and Regulation day two recap

By Matthew Schilling

COLUMBUS, OH (March 7, 2018) - Are electric cars green? After all, they use electricity generated primarily from fossil fuels.

According to Sierra Club attorney Joe Halso, the answer is yes. He cited data that in Ohio an electric vehicle's carbon footprint would be similar to a traditional vehicle averaging about 44 miles per gallon.

Of course, there is more to electric vehicles, or EVs, than emissions.

PowerForward: Ratemaking and Regulation spent the majority of the day focusing on the benefits and challenges EVs pose to the electric system.

Phil Jones, executive director of the Alliance for Transportation Electrification (and former Washington state utility regulator) lead by framing the discussion on EVs. According to Jones, several factors are contributing to the growing EV market, including lithium ion batteries becoming cheaper and faster. Grid modernization is deploying technology that allows EVs to take full advantage of their strengths, supply chain improvements (Tesla Gigafactory, anyone?), and perhaps most importantly “the customer is engaged today like never before.”

A panel on market development focused on how the Public Utilities Commission of Ohio (PUCO) can facilitate EV growth. Jones cited that while Ohio is home to 11.6 million people, there are only about 8,400 EVs in Ohio right now, but showing positive signs of growth.

In fact, General Motors Director of Advanced Vehicle Commercialization Policy Britta Gross noted that 2017 EV sales surpassed 2016 sales by 26 percent.

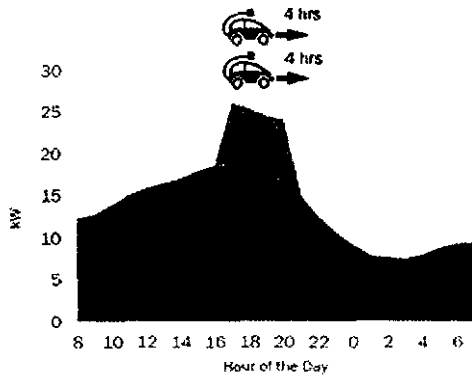
With all these new cars on the road, where will the power come from? Gross cited studies GM has done that showed 78 percent of its customers commute 40 miles or less per day, a statistic which inspires EV design, but also gives clues to how to best design and locate charging stations.

Charging stations come in various forms and are used by drivers differently. For example, a level 1 charger (essentially your standard 120 volt outlet most Americans are familiar with) is the simplest, yet slowest way to charge a car. A level 2 uses higher voltages and charges faster, and a direct current fast charger will charge your car in minutes.

Almost all of the 11 speakers talking about EVs noted one of the major benefits EVs can provide to the power system is flexibility as it relates to drawing power off the grid. Several speakers cited data that the majority of charging takes place at home or at work, typically when a car is parked for an extended period of time.

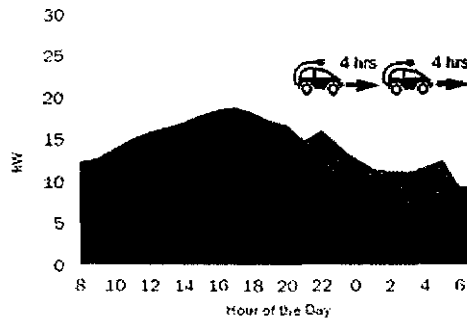
EVs as a grid burden¹

An unprepared grid will be burdened by increased load demand at peak times, such as when drivers return home in the evenings



EVs as a grid benefit

A grid prepared with smart charging and off-peak incentive rates can adjust EV loads to off-peak hours, optimizing the grid²



AEP: How EV load can be spread overnight to reduce peak demand

American Electric Power Manager of EV & Technology Policy Dan Francis highlighted the benefits and challenges at-home charging presents. With today's "dumb" grid, drivers return home from work and immediately begin to charge, thereby creating a large load spike to the grid.

However, if regulators and utilities can adopt rate designs to take advantage of time-of-use rates (aka changing power prices throughout the day), coupled with smart grid technologies, drivers and grid operators can leverage the flexibility and rates to spread increased that load throughout the night.

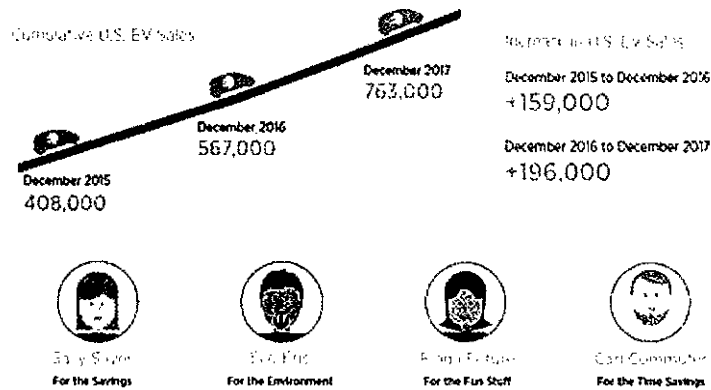
Spreading the load overnight, when power prices are traditionally lower, can reduce power costs for all customers.

As Electric Research Policy Institute (EPRI)'s Dan Bowermaster noted, most people would not mind if car stops charging for a period overnight, so long as you wake up in the morning and your car is fully charged.

Not only that, but "increasing load during off peak hours allows for better optimization of traditional grid assets," noted Francis.

In order to advance EV markets, and have the appropriate charging infrastructure in place, the participants were nearly unanimous in agreeing the distribution utilities have a major role to play in owning and operating charging stations—apparently to the surprise some of the commissioners.

The Rise of Electric Vehicles



© 2018 ChargePoint, Inc.

Source: Edmunds and IHS Markit's EV data through December 2017

3

Sam Spofforth, executive director with Clean Fuels Ohio highlighted a few of the challenges Ohio faces for continued EV growth. He cited less-than-desirable availability of EV models in Ohio compared to other states like California and Georgia, perhaps due to many other states offering incentives to purchase EVs not offered by Ohio.

Another factor mentioned by Spofforth was poorly informed sales staff; a problem Clean Fuels Ohio has been trying to correct through dealer education programs.

PUCO Chairman Asim Z. Haque asked panelist how state commissions like the PUCO can facilitate EV growth. Gross responded by saying that having state commissions act as a convener of stakeholders to come up with policies is a great start. Jones added some type of formal planning study, similar to the way many states plan generation resources.

Commissioner Tom Johnson asked how advancing EV policy would affect customers of varying incomes. Gross and Spofforth were quick to point out that there is a burgeoning used EV market offering affordable options for lower income customers. Many others cited that the flexible load of EVs, if properly spread throughout the day, will have a downward affect on power prices, further benefiting customers.

PowerForward veteran Jeff Taft of Pacific Northwest National Laboratory teed up the next discussion about energy storage as a distribution resource. For years much of the discussion about energy storage has been referred to as “behind the meter,” with the intent to solely serve that customer. That sentiment has been changing in recent years as storage has proven to be a resource to the grid itself, not just specific customers.

While noting that storage comes in all shapes and sizes, EPRI Program Manager Ben Kaun laid out some of those grid advantages. Storage can be a flexible resource that can charge and discharge its load rather quickly. This has obvious advantages in service as backup power during outages, but can also be used to shave peak load during times of high-energy use. Storage can also serve to balance voltage levels to maintain the service reliability customers depend on.

Kaun also noted some of the challenges of using storage on the distribution grid, “when you generate at the edge of the grid, it’s important to know you have upstream impacts.” He continued to note the need to analyze and plan.

Tim Ash, market director for Fluence cited a few examples of storage in action. An AES system in Chile was able to balance frequency on the grid when a traditional generator unexpectedly went offline, eliminating the need for local brownouts. Systems like that were able to save ratepayers in Chile an approximate \$30 million per year, according to Ash.

Similarly, Arizona Public Service found using storage was about half the cost of upgrading a local transmission line that had reached its thermal limits, thereby reducing costs to its ratepayers.

The panel stressed that storage as a distribution system resource is still in its early stages and the much studying is needed.

Day 2 of PowerForward: Ratemaking and Regulation was filled with content that just simply can’t be captured in a few hundred words, so we encourage you to watch the archived footage on the [PUCO’s website](#).

We hope to see you at PowerForward at 9 a.m. tomorrow morning!

Caught in a Fix

The Problem with Fixed Charges for Electricity

Prepared for Consumers Union

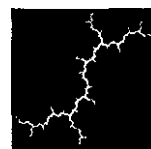
February 9, 2016

AUTHORS

Melissa Whited

Tim Woolf

Joseph Daniel



Synapse
Energy Economics, Inc.

485 Massachusetts Avenue, Suite 2
Cambridge, Massachusetts 02139

617.661.3248 | www.synapse-energy.com

Acknowledgements: This report was prepared by Synapse Energy Economics, Inc. for Consumers Union. We are grateful for the information, suggestions, and insights provided by numerous colleagues, including Consumers Union and John Howat of the National Consumer Law Center. We also relied heavily upon the data on recent fixed charges proceeding provided by other colleagues working to address fixed charges in rate proceedings nationwide, and information provided by Kira Loehr. However, any errors or omissions are our own. The views and policy positions expressed in this report are not necessarily reflective of the views and policy positions of the National Consumer Law Center.



CONTENTS

EXECUTIVE SUMMARY	1
1. INTRODUCTION	5
2. TROUBLING TRENDS TOWARD HIGHER FIXED CHARGES	8
What's Happening to Electric Rates?.....	8
What is Behind the Trend Toward Higher Fixed Charges?.....	12
3. HOW FIXED CHARGES HARM CUSTOMERS	14
Reduced Customer Control	14
Low-Usage Customers Hit Hardest	14
Disproportionate Impacts on Low-Income Customers.....	15
Reduced Incentives for Energy Efficiency and Distributed Generation.....	16
Increased Electricity System Costs	18
4. RATE DESIGN FUNDAMENTALS.....	20
Guiding Principles	20
Cost-of-Service Studies	20
Rate Design Basics	21
5. COMMON ARGUMENTS SUPPORTING HIGHER FIXED CHARGES.....	22
"Most Utility Costs Are Fixed"	22
"Fixed Costs Are Unavoidable"	23
"The Fixed Charge Should Recover Distribution Costs".....	23
"Cost-of-Service Studies Should Dictate Rate Design"	25
"Low-Usage Customers Are Not Paying Their Fair Share"	26
"Fixed Charges Are Necessary to Mitigate Cost-Shifting Caused by Distributed Generation"	26
6. RECENT COMMISSION DECISIONS ON FIXED CHARGES	30
Commission Decisions Rejecting Fixed Charges	30
Commission Decisions Approving Higher Fixed Charges	32

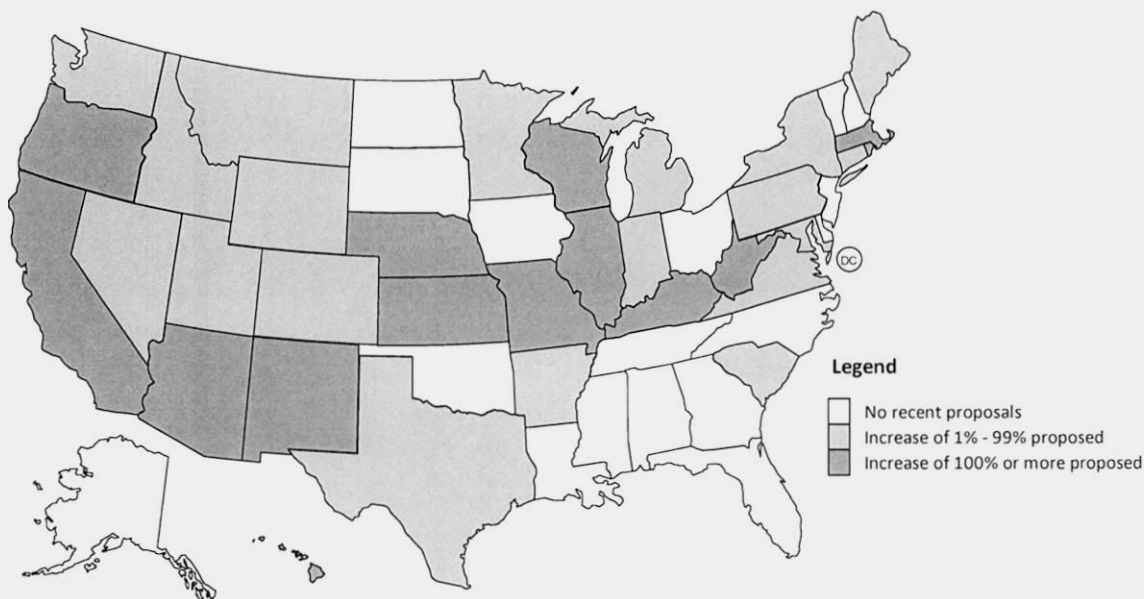
Settlements	33
7. ALTERNATIVES TO FIXED CHARGES	34
Rate Design Options	34
8. CONCLUSIONS.....	41
APPENDIX A – BONBRIGHT’S PRINCIPLES OF RATE DESIGN	42
APPENDIX B – RECENT PROCEEDINGS ADDRESSING FIXED CHARGES	43
APPENDIX C – NET METERING IMPACTS ON UTILITY COSTS	48
GLOSSARY.....	52

EXECUTIVE SUMMARY

Recently, there has been a sharp increase in the number of utilities proposing to recover more of their costs through mandatory monthly fixed charges rather than through rates based on usage. Utilities prefer to collect revenue through fixed charges because the fixed charge reduces the utility's risk that lower sales (from energy efficiency, distributed generation, weather, or economic downturns) will reduce its revenues.

However, higher fixed charges are an inequitable and inefficient means to address utility revenue concerns. This report provides an overview of (a) how increased fixed charges can harm customers, (b) the common arguments that are used to support increased fixed charges, (c) recent commission decisions on fixed charges, and (d) alternative approaches, including maintaining the status quo when there is no serious threat to utility revenues.

Figure ES 1. Recent proposals and decisions regarding fixed charges



Source: See Appendix B

Fixed Charges Harm Customers

Reduced Customer Control. Since customers must pay the fixed charge regardless of how much electricity they consume or generate, the fixed charges reduce the ability of customers to lower their bills by consuming less energy.

Low-Usage Customers Hit Hardest. Customers who use less energy than average will experience the greatest percentage jump in their electric bills when the fixed charge is raised. There are many reasons a



customer might have low energy usage: they may be very conscientious to avoid wasting energy; they may simply be located in apartments or dense housing units that require less energy; they may have small families or live alone; or they may have energy-efficient appliances or solar panels.

Disproportionate Impacts on Low-Income Customers. Data from the Energy Information Administration show that in nearly every state, low-income customers consume less electricity than other residential customers, on average. Because fixed charges tend to increase bills for low-usage customers while decreasing them for high-use customers, fixed charges raise bills most for those who can least afford the increase.

Reduced Incentives for Energy Efficiency and Distributed Generation. By reducing the value of a kilowatt-hour saved or self-generated, a higher fixed charge directly reduces the incentive that customers have to invest in energy efficiency or distributed generation. Customers who have already invested in energy efficiency or distributed generation will be harmed by the reduced value of their investments.

Increased Electricity System Costs. Holding all else equal, if the fixed charge is increased, the energy charge (cents per kilowatt-hour) will be reduced, thereby lowering the value of a kilowatt-hour conserved or generated by a customer. With little incentive to save, customers may actually increase their energy consumption and states will have to spend more to achieve the same levels of energy efficiency savings and distributed generation. Where electricity demand rises, utilities will need to invest in new power plants, power lines, and substations, thereby raising electricity costs for all customers.

Common Myths Supporting Fixed Charges

“Most utility costs are fixed.” In accounting, fixed costs are those expenses that remain the same for a utility over the short and medium term regardless of the amount of energy its customers consume. Economics generally takes a longer-term perspective, in which very few costs are fixed. This perspective focuses on efficient investment decisions over the long-term planning horizon. Over this timeframe, most costs are variable, and customer decisions regarding their electricity consumption can influence the need to invest in power plants, transmission lines, and other utility infrastructure. This longer-term perspective is what is relevant for economically efficient price signals, and should be used to inform rate setting.

“Fixed costs are unavoidable.” Rates are designed so that the utility can recover past expenditures (sunk costs) in the future. Utilities correctly argue that these sunk costs have already been made and are unavoidable. However, utilities should not, and generally do not, make decisions based on sunk costs; rather, they make investment decisions on a forward-looking basis. Similarly, rate structures should be based on forward-going costs to ensure that customers are being sent the right price signals, as customer consumption will drive future utility investments.

“The fixed charge should recover distribution costs.” Much of the distribution system is sized to meet customer maximum demand – the maximum power consumed at any one time. For customer classes



without a demand charge (such as residential customers),¹ utilities have argued that these distribution costs should be recovered through the fixed charge. This would allocate the costs of the distribution system equally among residential customers, instead of according to how much energy a customer uses. However, customers do not place equal demands on the system – customers who use more energy also tend to have higher demands. While energy usage (kWh) is not a perfect proxy for demand (kW), collecting demand-related costs through the energy charge is far superior to collecting demand-related costs through the fixed charge.

“Cost-of-service studies should dictate rate design.” Cost-of-service studies are used to allocate a utility’s costs among the various customer classes. These studies can serve as useful guideposts or benchmarks when setting rates, but the results of these studies should not be directly translated into rates. Embedded cost-of-service studies allocate *historical* costs to different classes of customers. However, to provide efficient price signals, prices should be designed to reflect *future* marginal costs. Rate designs other than fixed charges may yield the same revenue for the utility while also accomplishing other policy objectives, such as sending efficient price signals.

“Low-usage customers are not paying their fair share.” This argument is usually untrue. As noted above, distribution costs are largely driven by peak demands, which are highly correlated with energy usage. Further, many low-usage customers live in multi-family housing or in dense neighborhoods, and therefore impose lower distribution costs on the utility system than high-usage customers.

“Fixed charges are necessary to mitigate cost-shifting caused by distributed generation.” Concerns about potential cost-shifting from distributed generation resources, such as rooftop solar, are often dramatically overstated. While it is true that a host distributed generation customer provides less revenue to the utility than it did prior to installing the distributed generation, it is also true that the host customer provides the utility with a source of very low-cost power. This power is often provided to the system during periods when demand is highest and energy is most valuable, such as hot summer afternoons when the sun is out in full force. The energy from the distributed generation resource allows the utility to avoid the costs of generating, transmitting, and distributing electricity from its power plants. These avoided costs will put downward pressure on electricity rates, which will significantly reduce or completely offset the upward pressure on rates created by the reduced revenues from the host customer.

Recent Commission Decisions on Fixed Charges

Commissions in many states have recently rejected utility proposals to increase mandatory fixed charges. These proposals have been rejected on several grounds, including that increased fixed charges

¹ There are several reasons that demand charges are rarely assessed for residential customers. These reasons include the fact that demand charges introduce complexity into rates that may be inappropriate for residential customers; residential customers often lack the ability to monitor and respond to demand charges; and that residential customers often do not have more expensive meters capable of measuring customer demand.

will reduce customer control, send inefficient prices signals, reduce customer incentives to invest in energy efficiency, and have inequitable impacts on low-usage and low-income customers.

Several states have allowed utilities to increase fixed charges, but typically to a much smaller degree than has been requested by utilities. In addition, there have been many recent rate case settlements in which the utility proposal to increase fixed charges has been rejected by the settling parties.

Nevertheless, utilities continue to propose higher fixed charges, as any increase in the fixed charge helps to protect the utility from lower revenues associated with reduced sales, whether due to energy efficiency, distributed generation, or any other reason.

Alternatives to Fixed Charges

For most utilities, there is no need for increased fixed charges. Regulators who decide there is a need to address utility revenue sufficiency and volatility concerns should consider alternatives to increased fixed charges, such as minimum bills and time-of-use rates.

