*OCC EXHIBIT NO. \_\_\_\_\_\_*

**BEFORE**

**THE PUBLIC UTILITIES COMMISSION OF OHIO**

|  |  |  |
| --- | --- | --- |
| In the Matter of the Application ofOhio Power Company for Authority to Establish a Standard Service OfferPursuant to Section 4928.143, Revised Code,In the Form of an Electric Security Plan.In the Matter of the Application ofOhio Power Company for Approval of Certain Accounting Authority. | )))))))) | Case No. 16-1852-EL-SSOCase No. 16-1853-EL-AAM |

**DIRECT TESTIMONY**

**OF**

**ROBERT B. FORTNEY**

**On Behalf of the**

**The Office of the Ohio Consumers’ Counsel**

*10 West Broad Street, Suite 1800*

*Columbus, Ohio 43215-3485*

**May 2, 2017**

***Q1. PLEASE STATE YOUR NAME, ADDRESS AND POSITION.***

***A1.*** My name is Robert B. Fortney. My business address is 10 West Broad Street, Suite 1800, Columbus, Ohio 43215-3485. I am employed by the Office of the Ohio Consumers’ Counsel (“OCC”) as a Rate Design and Cost of Service Analyst.

***Q2. WHAT ARE YOUR RESPONSIBILITIES AS A RATE DESIGN AND COST OF SERVICE ANALYST?***

***A2***. I am responsible for investigating utility applications regarding rate and tariff activities related to tariff language, cost of service studies, revenue distribution, cost allocation, and rate design that impact the residential consumers of Ohio. My primary focus is to make recommendations to protect residential consumers from unnecessary utility rate increases and unfair regulatory practices.

***Q3. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.***

***A3***. I earned a Bachelor of Science degree in Business Administration from Ball State University in Muncie, Indiana in 1971. I earned a Master of Business Administration degree from the University of Dayton in 1979.

***Q4. PLEASE SUMMARIZE YOUR PROFESSIONAL BACKGROUND AS IT RELATES TO UTILITY REGULATION.***

***A4.*** From July 1985 to August 2012, I was employed by the Public Utilities Commission of Ohio (“PUCO”). During that time I held a number of positions (e.g., Rate Analyst, Rate Analyst Supervisor, Public Utilities Administrator) in various divisions and departments that focused on utility applications regarding rates and tariff issues. In August 2012, I retired from the PUCO as a Public Utilities Administrator 2, Chief of the Rates and Tariffs Division, which focused on utility rates and tariff matters. The role of that division was to investigate and analyze the rate- and tariff-related filings and applications of the electric, gas, and water utilities regulated by the PUCO and to make Staff recommendations to the PUCO regarding those filings.

***Q5. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE PUCO?***

***A5.*** Yes. I have testified on numerous occasions to advocate to the PUCO the positions of the PUCO Staff. Over the course of my career at the PUCO, I often recommended to the PUCO cost allocation methodologies needed to develop a reasonable distribution of revenues. I also was responsible for recommending reasonable rate designs needed to recover the revenue requirement, by class of service and in total. In addition, I testified for the OCC in three proceedings since joining its staff. A list of proceedings that I have submitted testimony to the PUCO is provided in Attachment RBF-1 to this testimony.

***Q6. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?***

***A6***. My focus is on the issue of using a Partial Straight Fixed Variable (SFV) rate design to create rates for residential customers, as proposed by the Ohio Power Company (“the Utility” or “AEP-Ohio”) in this proceeding. The Utility proposes to increase its Customer Charge for a standard residential customer by $5.00 (from $8.40 to $13.40) effective with the Order in this filing. The Utility further proposes to increase the Customer Charge by an additional $5.00 (from $13.40 to $18.40) on January 1, 2018. The increases in the Customer Charge would be accompanied by corresponding decreases in the volumetric charge to ensure revenue neutrality for the Residential class. Utility Witness Andrea Moore addresses the rationale for the change in her testimony.

***Q7.******WHAT IS THE RATIONALE OFFERED BY THE UTILITY FOR ITS PARTIAL SFV RATE DESIGN PROPOSAL?***

***A7*.** The Utility has proposed what I would characterize as a “partial” Straight-Fixed Variable (“SFV”) rate design for residential customers. A “full” SFV rate design would have only a customer charge with no volumetric charges. Even though in this case there is still a volumetric energy charge per kWh, the Utility has proposed to significantly increase its Customer Charge for its residential customers.

 Beginning on page 13 of her pre-filed direct testimony, AEP- Ohio Witness Moore has cited her rationale for moving the rate design towards a SFV: “Distribution costs are incurred by sizing the distribution system to meet customer(s) peak kW demand usage. These costs vary by peak demand requirements, not by kWh usage or simply by connecting a customer to the system. These costs would ideally be collected through a demand charge, but this cannot be done for all customers due to the current limitations of the Company’s metering infrastructure. In addition, by removing a portion of the fixed costs from the energy charge, some customers will see less volatility in bills from high usage months, especially customers who use electric heat. Another benefit from this design is that Percentage of Income Payment Plan customers in 2014 and 2015 have used on average slightly over the breakeven kWh for the customer charge of 1,030 kilowatt hours. This proposal will lower the Percentage of Income Payment Plan (“PIPP”) bills, therefore lowering the future revenue requirement of the Universal Service Fund.[[1]](#footnote-2)

***Q8. ISN'T IT THE PUCO'S POLICY TO "ENCOURAGE" THE USE OF A SFV RATE DESIGN FOR ELECTRIC DISTRIBUTION UTILITIES?***

***A8.***  Yes. The PUCO found in Case No. 10-3126-EL-UNC that “the Commission encourages electric utilities to file their next base rate cases utilizing the SFV rate design” and “if a utility files a base rate case that does not utilize the SFV rate design, the Commission directs Staff to include in its Staff Report an alternative rate design that includes SFV principles.” [[2]](#footnote-3)

 In its Opinion and Order of March 31, 2016 in Case No. 14-1297-EL-SSO on page 93, the PUCO stated “**Implementation of SFV rate design** removes disincentives to electric utilities to promote energy efficiency, is more consistent with principles of cost causation, and **has been a policy goal for the Commission for some time**. *In the Matter of Aligning Elec. Distribution Utility Rate Structure with Ohio’s Public Policies to Promote Competition, Energy Efficiency and Distributed Generation*, Case No. 10-3126-EL-UNC, Finding and Order (Aug, 21, 2013).” [[3]](#footnote-4)

***Q9.******SO, IN LIGHT OF WHAT THE PUCO HAS INDICATED TO BE “A POLICY GOAL,” DO YOU OBJECT TO THE UTILITY’S MOVEMENT TOWARDS A SFV RATE DESIGN IN THIS CASE?***

***A9***. Yes. I am recommending that the PUCO reject the partial SFV proposal. For the reasons I will expand upon, I recommend that the PUCO reconsider its policy goal of requiring SFV distribution rates for residential electric customers. It should not mandate what rate design a utility files in its application, but should treat each case individually, and weigh the comments and evidence filed in each case.

***Q10.******HASN’T THE PUCO ALREADY RULED ON THIS ISSUE?***

***A10.*** Not exactly While the PUCO indicated that it "encourages" electric utilities to utilize a

 SFV rate design in base distribution cases, it nonetheless did not foreclose parties from presenting alternatives to or opposing the SFV rate design in such cases. The PUCO has indicated that “any interested party will have a full and fair opportunity to address whether the proposed SFV should be implemented and to raise any other issues specific to the Companies’ service territories” [[4]](#footnote-5) and that “nothing in the Order precludes any party from commenting on or presenting evidence regarding a specific rate design that is proposed as part of a utility’s distribution rate case by the utility, Staff or any other party”.[[5]](#footnote-6)

The Company has proposed a SFV rate design in this SSO proceeding. I am providing comments that raise some legitimate issues that I hope the PUCO will consider.

***Q11.******SHOULD THE PUCO RECONSIDER ITS POLICY GOAL?***

***A11.*** Yes.Utilities and State Utility Commissions should be cautious before adopting a particular method of rate design on the basis of what may be a superficial appeal. And more important, we should avoid a situation where a costing method, once adopted, becomes the predominant and unchallenged determinant of rate design.[[6]](#footnote-7) Based upon my experience in rate-making and upon my review of various source documents related to the SFV rate design (Attachment RBF-2), I believe that the SFV rate design is flawed and I point out those flaws to the PUCO.

***Q12.******WHAT ARE THE FLAWS YOU WISH TO POINT OUT?***

***A12.*** The PUCO adopted a modified SFV rate design for all four major natural gas utilities in Ohio because (A) the SFV rate design will produce more stable bills for customers; (B) the SFV rate design would be easier to understand; (C) the SFV would produce a more accurate price signal; and (D) the SFV rate design would assure a more equitable allocation of distribution system costs to cost causers. The PUCO believes that these same characteristics could be applicable to an SFV rate design for electric utilities.[[7]](#footnote-8)

 In its Opinion and Order of March 31, 2016 in Case No. 14-1297-EL-SSO (FirstEnergy, ESP IV case), the PUCO reiterates that implementation of SFV rate design (A) removes disincentives to electric utilities to promote energy efficiency, (B) is more consistent with principles of cost causation, and (C) has been a policy goal of the Commission for some time and restates that transition to a SFV rate design balances the elimination of disincentives for the utilities to promote energy efficiency and conservation programs with the promotion of cost causation.[[8]](#footnote-9)

***Q13.******DO YOU AGREE WITH THE PUCO’S POLICY TO ADOPT A MODIFIED SFV RATE DESIGN FOR RESIDENTIAL CUSTOMERS OF AN ELECTRIC DISTRIBUTION COMPANY?***

***A13.*** I do not dispute that, at least in theory, a SFV rate design, along with other mechanisms that allow the recovery of the costs of energy efficiency and peak demand reduction initiatives, reduces the disincentive for electric utilities to promote energy efficiency. High fixed rate structures, however, actually promote additional consumption because a consumer’s price of incremental consumption is less than what an efficient price structure would otherwise be. In his testimony in an Indianapolis Power & Light Company case, expert witness for the Indiana Office of Utility Consumer Counselor, Glenn A. Watkins, agrees that “a pricing structure that is largely fixed, such that customers’ effective prices do not vary with consumption, promotes the inefficient utilization of resources.”[[9]](#footnote-10)

 A clear example of this principle is exhibited in the natural gas transmission pipeline industry. As discussed in its well-known Order 636, the Federal Energy Regulatory Commission’s (“FERC”) adoption of a SFV pricing method was a result of national policy to encourage increased use of domestic natural gas by promoting additional interruptible (and incremental firm) gas usage. The FERC’s SFV pricing mechanism greatly reduced the price of incremental natural gas consumption. This resulted in significantly increasing the demand for, and use of natural gas in the United States after Order 636 was issued in 1992.[[10]](#footnote-11) With specific regard to the SFV rate design adopted in Order 636, FERC stated “… The Commission (i.e. FERC) believes it is beyond a doubt that it is the national interest to promote the use of clean and abundant gas over alternative fuels such as foreign oil. SFV is the best method for doing that.[[11]](#footnote-12)

 So, while the PUCO seems to believe that because rates have been historically volumetric based, there has been a disincentive for utilities to promote conservation, or encourage reduced consumption, I question that reasoning. In support of my doubts, Watson points out that FERC’s objective in adopting SFV pricing suggests the exact opposite. The price signal that results from SFV pricing is meant to promote additional consumption, not reduce it.[[12]](#footnote-13)

 Watson further concurs that one of the most important and effective tools that any regulatory agency has to promote conservation by customers is by developing rates that send proper pricing signals to conserve and utilize resources efficiently.[[13]](#footnote-14) Pricing structures that are weighted heavily on fixed charges are much more inferior from a conservation and energy efficiency standpoint than pricing structures that require consumers to incur more costs with additional consumption.

***Q14.******WHY ARE PRICING STRUCTURES THAT ARE WEIGHTED HEAVILY ON FIXED CHARGES INFERIOR (FROM A CONSERVATION BASIS) TO THOSE THAT ARE MORE VOLUMETRIC BASED?***

***A14.*** Energy efficiency and distributed generation (“DG”) are widely viewed as important tools for helping reduce energy costs, create jobs, and improve economic competitiveness. Increasing fixed charges to customers can significantly reduce incentives for customers to reduce consumption through energy efficiency, DG, or other means. By reducing the value of a kWh saved or self-generated, a higher fixed charge to customers directly reduces the incentive that customers have to lower their bills by reducing consumption. Customers should not be penalized for being efficient and conservative.[[14]](#footnote-15)

***Q15.******IS THE IMPLEMENTATION OF SFV RATE DESIGN MORE CONSISTENT WITH PRINCIPLES OF COST CAUSATION THAN A CUSTOMER CHARGE THAT ELECTRIC UTILITIES HAVE TRADITIONALLY USED TO COLLECT CERTAIN MINIMUM COSTS FROM CUSTOMERS?***

***A15****.* Rate design necessarily involves tying cost causation to the type of rate used to recover that cost from customers. In the case of customer costs, the cause of costs focuses on those costs that vary with the number of customers served. This includes such costs as metering, billing, collection and customer assistance. The fixed charge for residential service should not exceed the customer-specific charges attributable to an incremental customer. For urban and suburban residential customers, this is the cost of a service drop, the portion of the meter costs directly related to billing for usage, plus the cost of periodic billing and collection.[[15]](#footnote-16)

 Yes, high fixed charges as part of a SFV rate design can stabilize utility revenues in the near term and are easy to administer.[[16]](#footnote-17) This approach, however, deviates from the long-established rate design principles, which hold that only customer-specific charges (those that actually change with the number of customers served) properly belong in fixed monthly fees. It also deviates from the accepted economic theory of pricing on the basis of long-run marginal costs.[[17]](#footnote-18)

***Q16****.* ***WHAT DO LONG-RUN MARGINAL COSTS HAVE TO DO WITH RATE-MAKING?***

***A16*.** Watkins concurs that the policy that the fixed costs of an electric distribution company should be collected from customers through fixed monthly charges is incorrect.[[18]](#footnote-19) First of all, distribution costs are NOT fixed: investment in distribution is constant and growing, and unavoidable.[[19]](#footnote-20) Inevitably, the utility will have to make new capital investments; customer growth may require new generating equipment or distribution lines to be upgraded;[[20]](#footnote-21) investments will be made for reliability purposes and to replace existing systems;[[21]](#footnote-22) and, investments will be made to account for losses, heat build-up and overloads.[[22]](#footnote-23)

 Watkins further concurs that proper pricing should reflect a utility’s long-run costs, wherein all costs are variable or volumetric in nature, and users requiring more of the utility’s products or services should pay more than the customers who use less of the same products and services. Stated more simply, those customers who conserve or are otherwise more energy efficient, or those who use less of the commodity for any reason, should pay less that those who use more.[[23]](#footnote-24) While it may be true that kWh usage has no effect on the costs an electric distribution utility previously expended to build its system (i.e. sunk costs) (even that is questionable – distribution losses, heat build-up and frequency of overloads are aspects of energy use that affect distribution investment and operations and, thus, are marginal energy costs in distribution[[24]](#footnote-25)), the notion that a volumetric price should reflect only those costs which vary with usage is misleading.

 The relevant economic costs are those that vary over the long-run, not the short-run. The practically achievable benchmark for efficient pricing is more likely to be a type of average long-run incremental cost, computed for a large, expected incremental block of sales, instead of a short-run marginal cost, estimated for a single sale. In the long-run, all costs are variable. While increased electricity use does not affect the cost of existing capacity, it very well may affect the need for new capacity. If regulators want to promote efficient resource allocation, they will set the volumetric rate to reflect long-run cost causation.[[25]](#footnote-26) “As setting a general base of minimum public policy utility rates and of rate relationships, the more significant marginal or incremental costs are those of a relatively long-run variety – of a variety that treats even capital costs or capacity costs as Variable costs.”[[26]](#footnote-27)

 While it may be argued that sunk costs have already been made and are unavoidable, utilities should not, and generally do not, make decisions based on sunk costs; rather, they make 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.[[27]](#footnote-28)

***Q17.******EVEN IF A COST IS FIXED IN THE SHORT-RUN, WHY IS IT NOT GOOD POLICY THAT IT SHOULD BE COLLECTED IN A FIXED CHARGE FROM CUSTOMERS?***

***A17*.** Investments in plant are made to provide a supply of safe and reliable electricity, and the costs should be collected in proportion to how much of that electricity a customer uses. A new 5,000 sq. ft. home, with possibly an electric vehicle charging station, requires more local distribution system capacity than a new 500 sq. ft. efficiency apartment. Given a choice between the fixed charge and the variable charge, the volumetric charge is the more appropriate mechanism to collect those capacity costs from customers. If they are allocated to the fixed charge, the signal is that all residential customers require the same amount of system capacity, regardless of the size of the residence (or, even more important, the size of the connected load).[[28]](#footnote-29)

***Q18.******CAN (AND SHOULD) THE PUCO TAKE INTO ACCOUNT LONG-TERM COSTS IN RATE DESIGN?***

***A18*.** Yes. In fact in its Entry of December 29, 2010 in Case No. 10-3126-EL-UNC, the PUCO states: “Finally, we are cognizant of our own obligation to initiate programs that will promote and encourage conservation of energy and a reduction in the growth rate of energy consumption, promote economic efficiencies, and take into account long-run incremental costs.” (Section 4905.70, Revised Code).[[29]](#footnote-30) As noted above, a SFV rate design takes into account only historic sunk costs and does nothing to recognize the long-run incremental costs.

***Q19.******THE PUCO ADOPTED A MODIFIED SFV RATE DESIGN FOR ALL FOUR MAJOR NATURAL GAS UTILITIES IN OHIO BECAUSE (A) THE SFV RATE DESIGN WILL PRODUCE MORE STABLE BILLS FOR CUSTOMERS; (B) THE SFV RATE DESIGN WOULD BE EASIER TO UNDERSTAND; (C) THE SFV WOULD PRODUCE A MORE ACCURATE PRICE SIGNAL; AND (D) THE SFV RATE DESIGN WOULD ASSURE A MORE EQUITABLE ALLOCATION OF DISTRIBUTION SYSTEM COSTS TO COST CAUSERS. THE PUCO BELIEVES THAT THESE SAME CHARACTERISTICS COULD BE APPLICABLE TO AN SFV RATE DESIGN FOR ELECTRIC UTILITIES. ARE THESE CHARACTERISTICS EQUALLY APPLICABLE FOR ELECTRIC UTILITIES?***

***A19*.** No.

***Q20. DOES THE SFV RATE DESIGN PRODUCE MORE STABLE BILLS FOR CUSTOMERS?***

***A20*.** Consumer bills that include a revenue neutral SFV rate design may be less volatile than those based strictly on consumption. However, it is generally preferable that individual customers make their own consumption decisions.[[30]](#footnote-31) The PUCO apparently not only wants to micro manage the electric distribution company by making them propose a SFV rate design, but also wants to micro manage its customers. If a customer wants year-around stable electric bills the customer can opt to enroll in budget billing with its electric company. Also, a residential customer who heats with gas and cools with electricity already has ~~a~~ built-in stability (as a result of higher electric bills in the summer due to cooling and higher gas bills in the winter due to heating) in its total gas and electric utility bills, which a SFV rate design destabilizes. It should be the customer’s choice to best manage its utility payments.

***Q 21. IS THE SFV RATE DESIGN EASIER TO UNDERSTAND?***

***A21.*** No. I have worked with electric rates for over 27 years and I still don’t understand why a customer who lives in a 5,000 square feet house, heats with electricity, has a hot tub, a heated pool, an electric vehicle, and a multitude of electric appliances and gadgets should pay the same distribution bill as a customer living in a 500 square feet apartment with gas heat. A fixed charge is no easier to understand than a rate per kWh that charges a set amount for each kWh used. In fact, because that is how most items are purchased (on a per unit basis), a usage charge is, quite probably, easier to understand for the customer (i.e., the fewer units consumed the lower the charge). The complexity of today’s utility bills is not due to the customer charge and the volumetric charges, it is due to the multiple riders to which each customer is subjected.

***Q22. DOES THE SFV RATE DESIGN PRODUCE A MORE ACCURATE PRICE SIGNAL TO CUSTOMERS?***

***A22***. No. If the price signal the PUCO wants to send is “usage doesn’t matter,” then the SFV rate design is appropriate. Fixed, recurring, unavoidable charges tell a consumer little about the costs that his or her consumption imposes on the system. In fact, these charges offer consumers no information at all about the scarcity and costs of distribution capacity.[[31]](#footnote-32)

***Q23. DOES THE SFV RATE DESIGN ASSURE A MORE EQUITABLE ALLOCATION OF DISTRIBUTION COSTS TO CUSTOMERS WHO CAUSE THE COST?***

***A23.*** No. Those who make greater use of the network should bear a proportionately greater share of its costs and pay usage-based rates because those who use more of the service should cover proportionately more of its costs.[[32]](#footnote-33)

 ***Q24.******BUT THE SFV RATE APPLIES ONLY TO THE DISTRIBUTION PORTION OF A CUSTOMER’S BILL, RIGHT?***

***A24*.** The original rationale for public utility regulation was to protect customers from the monopoly power of utilities.[[33]](#footnote-34) In spite of the fact that the electric utility industry in Ohio was unbundled and restructured, that goal should remain. The distribution network, which normally accounted for anywhere from ten to forty percent of a vertically-integrated utility’s total investment, has now become the object of central concern to firms who no longer own generation assets.[[34]](#footnote-35) The fact that significant other revenue may be collected volumetrically through generation rates, transmission rates, trackers and riders does not lessen the need for the reasonable design of base distribution rates.[[35]](#footnote-36) It’s the principle that counts.

***Q25.******ARE THERE OTHER ISSUES THAT THE PUCO SHOULD CONSIDER?***

***A25*.** Yes. Residential customers who use less energy than the average residential consumer will experience the greatest percentage jumps in their electric bills when the fixed charge is raised, because the billings are based less on usage and more on a flat fee structure.[[36]](#footnote-37) The larger the customer charge, the lower the percentage increase (or greater the percentage decrease) in total bills for above-average use customers.[[37]](#footnote-38) This can be readily seen in the typical bills presented by AEP Ohio Witness Gill in his Exhibit DRG-7 (pages 1 of 16 and 9 of 16) attached to his testimony. At the proposed rates, a residential non-heating customer in the AEP Ohio rate zone using 30 kWh a month would see an increase in its monthly **total** bill of 45.40%. On the other hand, a residential non-heating customer using 2000 kWh a month would see a **decrease** in its monthly **total** bill of 1.72%. The break-even point (where a customer would see the same total bill) is slightly over 1,200 kWh. There are many reasons a customer might have low energy usage – they may have energy efficient appliances, they may have DG, they may be conscientious in avoiding the wasteful use of electricity, or they may also be located in smaller homes or apartments and therefore impose lower distribution costs on the grid.[[38]](#footnote-39)

***Q26.******DOES A SFV RATE DESIGN IMPOSE DISPROPORTIONATE RATE IMPACTS ON LOW-INCOME CUSTOMERS?***

***A26.*** I have seen studies which equate low users with low income consumers. I have also seen studies that imply there is little or no correlation. However, to the degree there are low-use customers who are also low-income, the SFV rate design raises those bills disproportionately to those who can least afford it.[[39]](#footnote-40) Even seemingly small changes in rate design can have significant consequences for customers.[[40]](#footnote-41)

***Q27.******DIDN’T THE UTILITY’S COST OF SERVICE STUDY INDICATE THAT THE PROPOSED MOVEMENT TO SFV RATE DESIGN IS WARRANTED?***

***A27.*** No. AEP Ohio Witness Moore points out on page 13, lines 2 -4 of her testimony, that the Utility filed, in Case No. 11-351-EL-AIR, an updated cost of service study showing that a “full” customer charge (without an energy charge) should be $27.42 for a standard residential customer. She further explains that distribution costs are incurred by sizing the distribution system to meet customer(s) peak kW demand usage; but, since demand costs cannot be determined for most residential customers due to meter limitations, those costs, because they are fixed, are best reflected in the customer charge.[[41]](#footnote-42) The $27.42 charge assumes that all demand-related charges should be included in the customer charge.[[42]](#footnote-43). In the absence of any demand, no such system would be built at all.[[43]](#footnote-44) There is a positive and significant correlation between monthly kWh usage and maximum monthly demand, which strongly suggests that some portion and possibly all demand-related costs allocated to the residential class should be recovered through the energy charge.[[44]](#footnote-45) Cost of service studies are used to allocate a utility’s historic costs among the various customer classes. These studies can, and do, serve as useful guidelines or benchmarks when setting rates, but the results of these studies should not be directly translated into rates. To provide efficient price signals, prices should be designed to reflect ***future*** marginal costs.[[45]](#footnote-46)

***Q28.******PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THIS PROCEEDING?***

***A28.*** I am recommending that the PUCO reject the SFV proposal. I recommend the Company maintain the current Customer Charge of $8.40 and a volumetric charge of $0.182747 for the standard Residential class.

 I recommend that the PUCO reconsider its policy goal of **requiring** SFV distribution rates for residential electric customers. I urge the PUCO to reconsider its SFV rate design policy and adopt a pricing and rate-setting policy that serves the long-term public interests: fairness, economic efficiency, innovation and environmental protection. In the distribution system, this calls for usage-based pricing.[[46]](#footnote-47) Further, instead of mandating a SFV rate design, the PUCO should be encouraging utilities to consider other innovative rate designs (e.g. time-of-use-rates).

***Q29. DID THE UTILITY CONDUCT A BILL FREQUENCY ANALYSIS?***

***A29*.** No. In response to OCC-INT-2-277(c) the Utility stated “The Company has not performed a bill frequency data analysis.” As a rate analyst, I find this to be disturbing. To make radical changes in rate design which affect customers differently based on the energy they use, I believe it is vital in the analytical process to view the frequency of the actual usage in ranges. Without that analysis, the number of customers negatively or positively impacted is unknown. This is another reason that I recommend the partial SFV proposed by the Utility be rejected.

 I highly recommend that the PUCO require bill frequency analyses to be included and provided with any application to implement a SFV rate design, prior to approving any such proposal.

***Q30.******DOES THAT CONCLUDE YOUR TESTIMONY?***

***A30*.** Yes, it does. However, I reserve the right to incorporate new information that may subsequently become available. I also reserve the right to supplement my testimony in the event the Utility or any other party submits new or corrected information in connection with this proceeding.

**CERTIFICATE OF SERVICE**

It is hereby certified that a true copy of the foregoing *Direct Testimony of Robert B. Fortney on Behalf of The Ohio Consumers’ Counsel* was served via electronic transmission this 2nd day of May 2017.

 */s/ William J. Michael*

 William J. Michael

 Assistant Consumers’ Counsel

**SERVICE LIST**

|  |  |
| --- | --- |
| Bojko@carpenterlipps.comperko@carpenterlipps.commfleisher@elpc.orgcmooney@ohiopartners.orgpaul@carpenterlipps.commleppla@theOEC.orgtdougherty@theOEC.orglhawrot@spilmanlaw.comdwilliamson@spilmanlaw.comcharris@spilmanlaw.comibatikov@vorys.comwhitt@whitt-sturtevant.comcampbell@whitt-sturtevant.comglover@whitt-sturtevant.comtony.mendoza@sierraclub.orgdborchers@bricker.comeakhbari@bricker.comsechler@carpenterlipps.comcpirik@dickinsonwright.comtodonnell@dickinsonwright.comwvorys@dickinsonwright.comwerner.margard@ohioattorneygeneral.govRobert.eubanks@ohioattorneygeneral.gov | stnourse@aep.commsmckenzie@aep.comfdarr@mwncmh.commpritchard@mwncmh.comKurt.Helfrich@ThompsonHine.comStephanie.Chmiel@ThompsonHine.comMichael.Austin@ThompsonHine.commkurtz@BKLlawfirm.comkboehm@BKLlawfirm.comjkylercohn@BKLlawfirm.comrick.sites@ohiohospitals.orgmwarnock@bricker.comdparram@bricker.comrdove@attorneydove.comrsahli@columbus.rr.commjsettineri@vorys.comglpetrucci@vorys.comibatikov@vorys.comjoliker@igsenergy.commdortch@kravitzllc.comamy.spiller@duke-energy.comElizabeth.watts@duke-energy.com joe.halso@sierraclub.org |

Attorney Examiner:

Greta.see@puc.state.oh.us

Sarah.parrot@puc.state.oh.us

Attachment RBF-1

Robert Fortney

Proceedings with Testimony Submitted to the Public Utilities Commission of Ohio

|  |  |  |
| --- | --- | --- |
| Company | Docket No. | Date |
| Cleveland Electric Illuminating Company | 85-675-EL-AIR | 1986 |
| Cleveland Electric Illuminating Company | 86-2025-EL-AIR | 1987 |
| Toledo Edison Company | 86-2026-EL-AIR | 1987 |
| Ohio Edison Company | 87-689-EL-AIR | 1987 |
| Cleveland Electric Illuminating Company | 88-170-EL-AIR | 1988 |
| Toledo Edison Company | 88-171-EL-AIR | 1988 |
| Ohio Edison Company | 89-1001-EL-AIR | 1990 |
| Cincinnati Gas & Electric Company | 91-410-EL-AIR | 1991 |
| Columbus Southern Power Company | 91-418-EL-AIR | 1992 |
| Cincinnati Gas & Electric Company | 92-1464-EL-AIR | 1993 |
| Ohio Power Company | 94-996-EL-AIR | 1994 |
| Toledo Edison Company | 94-1987-EL-CSS | 1995 |
| Cleveland Electric Illuminating Company | 94-1964-EL-CSS | 1995 |
| Toledo Edison Company | 95-299-EL-AIR | 1995 |
| Cleveland Electric Illuminating Company | 95-300-EL-AIR | 1996 |
| All Electric Companies (Rulemaking Proceeding) | 96-406-EL-COI | 1998 |
| Cleveland Electric Illuminating Company | 97-358-EL-ATA | 1998 |
| Toledo Edison Company | 97-359-EL-ATA | 1998 |
| Cleveland Electric Illuminating Company | 97-1146-EL-COI | 1998 |
| Toledo Edison Company | 97-1147-EL-COI | 1998 |
| FirstEnergy | 96-1211-EL-UNC | 1998 |
| Columbus Southern Power Company | 01-1356-EL-ATA | 2002 |
| Columbus Southern Power Company | 01-1357-EL-AAM | 2002 |
| Rulemaking Proceeding | 01-2708-EL-COI | 2002 |
| FirstEnergy  | 01-3019-EL-UNC | 2002 |
| Ohio Power Company | 01-1358-EL-ATA | 2002 |
| Ohio Power Company | 01-1359-EL-AAM | 2002 |
| The Dayton Power and Light Company  | 02-0570-EL-ATA | 2003 |
| Dayton Power and Light Company | 02-2364-EL-CSS | 2003 |
| Dayton Power and Light Company | 02-2879-EL-AAM | 2003 |
| Dayton Power and Light Company | 02-2779-EL-ATA | 2003 |
| FirstEnergy Corporation  | 03-2144-EL-ATA | 2004 |
| Cincinnati Gas & Electric Company | 03-0093-EL-ATA | 2004 |
| Cincinnati Gas & Electric Company | 03-2079-EL-AAM | 2004 |
| Cincinnati Gas & Electric Company | 03-2081-EL-AAM | 2004 |
| Monongahela Power Company | 04-0880-EL-UNC | 2004 |
| Monongahela Power Company | 05-0765-EL-UNC | 2005 |
| Dayton Power and Light Company | 05-0276-EL-AIR | 2005 |
| FirstEnergy | 07-0551-EL-AIR | 2008 |
| FirstEnergy  | 08-0936-EL-SSO | 2008 |
| FirstEnergy | 08-0935-EL-SSO | 2008 |
| Ormet Primary Aluminum Corporation  | 09-0119-EL-AEC | 2009 |
| Cleveland Electric Illuminating Company | 08-1238-EL-AEC | 2009 |
| Columbus Southern Power Company  | 09-0516-EL-AEC | 2009 |
| FirstEnergy | 10-0388-EL-SSO | 2010 |
| FirstEnergy | 10-0176-EL-ATA | 2011 |
| Columbus Southern Power Company | 11-0346-EL-SSO | 2011 |
| Ohio Power Company | 11-0348-EL-SSO | 2011 |
| Columbus Southern Power Company | 10-0343-EL-ATA | 2011 |
| Ohio Power Company | 10-0344-EL-ATA | 2011 |
| AEP Ohio | 10-2376-EL-UNC | 2011 |
| AEP Ohio | 10-2929-EL-UNC | 2011 |
| AEP Ohio | 11-4921-EL-RDR | 2011 |
| FirstEnergy | 12-1230-EL-SSO | 2012 |
| AEP OhioAquaDayton Power and Light Company | 14-1693-EL-RDR16-0907-WW-AIR16-0395-EL-SSO | 201520162017 |

 **Attachment RBF-2**

**Source Documents Regarding Straight Fixed Variable (SFV) Rate Design**

Smart Rate Design for a Smart Future, July, 2015: Lazar, J. and Gonzalez, W. (2015). Smart Rate Design for a Smart Future. Montpelier, VT: Regulatory Assistance Project.

Pricing Do’s and Don’ts: Designing Retail Rates As If Efficiency Counts, April, 2011: Lazar, J., Schwartz, L. and Allen, R. (2011). Pricing Do’s and Don’ts: Designing Retail Rates As If Efficiency Counts. Montpelier, VT: Regulatory Assistance Project.

Addressing the Throughput Incentive and Digging into Decoupling, Pennsylvania PUC En Banc Session in Docket M-2015-2518883, Harrisburg, PA, March 3, 2016: Presented by Sedano, R. (2016). Addressing the Throughput Incentive and Digging Deeper into Decoupling. Montpelier, VT: Regulatory Assistance Project.

Fixed Charges / Demand Charges, Advanced Energy Economy, October 14, 2015: Presented by Lazar, J. (2015). Fixed Charges / Demand Charges. Montpelier, VT: Regulatory Assistance Project.

Minimum Bills: An Alternative to High Customer Charges, Solar Electric Power Association, San Diego, April 29, 2015: Lazar, J. (2015). Minimum Bills: An Alternative to High Customer Charges. Montpelier, VT: Regulatory Assistance Project.

Foundations of Energy Regulation, House Natural Resources and Energy Committee, Montpelier, Vermont, January 20, 2015: Presented by Weston, R. (2015). Foundations of Energy Regulation. Montpelier, VT: Regulatory Assistance Project.

Foundations for Electric Utility Rate Design, Missouri Comprehensive Energy Plan, October 22, 2014: Presented by Sedano, R. (2014). Foundations for Electric Utility Rate Design. Montpelier, VT: Regulatory Assistance Project.

Revenue Regulation and Decoupling: A Guide to Theory and Application, June, 2011: Lazar, J., Weston, R. and Shirley, W. (June, 2011). Revenue Regulation and Decoupling: A Guide to Theory and Application. Montpelier, VT: Regulatory Assistance Project.

Electric Utility Residential Customer Charges and Minimum Bills: Alternative Approaches for Recovering Basic Distribution Costs: Lazar, J. (2015). Electric Utility Residential Customer Charges and Minimum Bills: Alternative Approaches for Recovering Basic Distribution Costs. Montpelier, VT: Regulatory Assistance Project.

Use Great Caution in Design of Residential Demand Charges, 2016: Lazar, J. (2016). Use Great Caution in Design of Residential Demand Charges. Montpelier, VT: Regulatory Assistance Project.

Smart Rate Design for a Smart Future, Appendix D: The Specter of Straight Fixed/Variable Rate Designs and the Exercise of Monopoly Power, July, 2015: Lazar, J. (2015). Smart Rate Design for a Smart Future, Appendix D: The Specter or Straight Fixed/Variable Rate Designs and the Exercise of Monopoly Power. Montpelier, VT: Regulatory Assistance Project.

Charging for Distribution Utility Services: Issues in Rate Design, December, 2000: Weston, R. (2000). Charging for Distribution Utility Services: Issues in Rate Design. Montpelier, VT: Regulatory Assistance Project.

Economic concerns about high fixed charge pricing for electric service. Steve Kihm, October 2014 at http://americaspowerplan.co/wp-content/uploads/2014/10/Economic-analysis-of-high-fixed-charges.pdf

Straight Fixed Variable: American Electric Power Company, Issues in Electricity: Straight Fixed Variable, 2014 at http;//www.aep.com/about/IssuesAndPositions/Financial/Regulatory/AlternativeRegulation

Case No. 14-1297-EL-SSO: Supplemental Testimony of Scott J. Rubin On Behalf of The Office of the Ohio Consumers’ Counsel, December 30, 2015.

Moving Toward Demand-Based Residential Rates, Scott J. Rubin, NASUCA Annual Meeting, Austin, TX, November 10, 2015. [NASUCA = National Association of State Utility Consumer Advocates]

Moving Toward Demand-Based Residential Rates, Scott J. Rubin, The Electricity Journal, Volume 28, November, 2015, pages 63 – 71, 2015 Elsevier Inc.

State of Indiana Cause Nos. 44576 & 4602 re: Indianapolis Power & Light Company: Verified Direct Testimony of Glenn A Watkins – Public Exhibit No. 14 On Behalf of the Indiana Office of Utility Consumer Counselor, July 27, 2015.

Caught in a Fix: The problem with Fixed Charges for Electricity, Prepared for Consumers Union, February 9, 2016 by Synapse Energy Economics, Inc.: Whited, Melissa; Woolf, Tim; Daniel, Joseph (February 9, 2016). Caught in a Fix: The problem with Fixed Charges for Electricity, Prepared for Consumers Union, February 9, 2016 by Synapse Energy Economics, Inc., Cambridge, MA.

Fixed Charges and Utility Customers, Prepared for Consumers Union by Synapse Energy Economics, 2016. www.consumersunion.org; www.synapse-energy.com/fixed\_charges\_factsheet.

Residential Winners and Losers Behind the Energy versus Customer Charge Debate, Larry Blank and Doug Gegax, The Electricity Journal, Volume 27, Issue 4, May, 2014, pages 31-39, 2014 Elsevier Inc.

Evaluating Alternative Rate Mechanisms: A Conceptual Approach for State Utility Commissions, Ken Costello, The Electricity Journal, Volume 27, Issue 4, May, 2014, pages 16-30, Elsevier Inc.

What’s So Great About Fixed Charges, Severin Borenstein, November 5, 2014, http://www.thenergycollective.com.

Rooftop solar: Net metering is a net benefit, Marc Muro and Devashree Saha, Brookings, May 23,2016.

Rate Design for a Distributed Grid, Solar Energy Industries Association.

Curating the Future of Rate Design for Residential Customers, Ahmad Faruqui and Wade Davis, with Josephine Duh and Cody Warner, Electricity Policy, July, 2016.

Unjust, Unreasonable, and Unduly Discriminatory: Electric Utility Rates and the Campaign Against Rooftop Solar, Art Peskoe, Harvard Environmental Policy Initiative, February 1, 2016.

Pathway to a 21st Century Electric Utility, Peter H. Kind, Ceres, Inc., November, 2015.

1.0 Primer on Rate Design for Residential Distributed Generation, Edison Electric Institute, February, 2016.

Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates, Public Service Commission of Wisconsin, Docket 6690-UR-123, Post Hearing Brief of 10/01/14 and Reply Brief of 10/08/2014 of Renew Wisconsin.

Joint Application of Wisconsin Electric Power Company and Wisconsin Gas LLC, both dba We Energies, for Authority to Adjust Electric, Natural gas, and Steam Rates, Docket No. 05-UR-107, Initial Brief of the Citizens Utility Board, 10/07/14, 2014.

Charge Without a Cause? Assessing Electric Utility Demand Charges on Small Consumers; Paul Chernick, John Colgan, Rick Gilliam, Douglas Jester, and Mark Le Bel; Electric Policy, Electric Daily; August, 2016.

Bill Effects of Demand-Based Rates on Commonwealth Edison Residential Customers; Jeff Zethmayr: Energy Policy, Energy Daily: July, 2016.

1. *In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to §4928.143, Ohio Rev. Code, in the Form of an Electric Security Plan*, Case No. 16-1852-EL-SSO, Direct Testimony of Andrea E. Moore filed November 23, 2016, page 13. [↑](#footnote-ref-2)
2. *In the matter of Aligning Electric Distribution Utility Rate Structure With Ohio’s Public policies to Promote Competition, Energy Efficiency, and Distributed Generation*, Case No. 10-3126-EL-UNC, Finding and Order of August 21, 2013, page 20. [↑](#footnote-ref-3)
3. *In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Provide a Standard Service Offer Pursuant to R.C. §4928.143 in the Form of an Electric Security Plan*, Case No. 14-1297-EL-SSO, Opinion and Order dated March 31, 2016, page 93. [↑](#footnote-ref-4)
4. Case No. 14-1297-EL-SSO, Opinion and Order, March 21, 2016, page 94. [↑](#footnote-ref-5)
5. Case No. 10-3126-EL-UNC, Second Entry on Rehearing, December 4, 2013, page 5. [↑](#footnote-ref-6)
6. Charging for Distribution Utility Services: Issues in Rate Design, page 39, December, 2000, Frederick Weston, The Regulatory Assistance Project, Montpelier, VT. [↑](#footnote-ref-7)
7. Case No. 10-3126-EL-UNC, Finding and Order, August 21, 2013, pages 19 – 20. [↑](#footnote-ref-8)
8. Case No. 14-1297-EL-SSO, Opinion and Order, March 31, 2016, page 93 and 120. [↑](#footnote-ref-9)
9. Petition of Indianapolis Power & Light Company to Increase Rates and Charges for Electric Utility Service, Cause Nos. 44576 and 44602, Direct Testimony Glenn A. Watkins on behalf of the Indiana Office of Utility Consumer Counselor, July 27, 2015, page 60. [↑](#footnote-ref-10)
10. Watkins, pages 58 and 59. [↑](#footnote-ref-11)
11. Watkins, page 59 and FERC Docket Nos. RM91-11-001 and RM87-34-065, Order No. 636, April 19, 1992, page 7. [↑](#footnote-ref-12)
12. Watkins, page 59. [↑](#footnote-ref-13)
13. Watkins, page 60. [↑](#footnote-ref-14)
14. Caught in a Fix: The Problem with Fixed Charges for Electricity, pages 16 and 17, February 9, 2016, Melissa Whited, Tim Woolf and Joseph Daniel, Prepared for Consumers Union by Synapse Energy Economics, Cambridge Massachusetts. [↑](#footnote-ref-15)
15. Smart Rate Design For A Smart Future, page 36, July, 2015, Jim Lazar and Wilson Gonzalez, The Regulatory Assistance Project, Montpelier, VT. [↑](#footnote-ref-16)
16. Lazar and Gonzalez, page 48. [↑](#footnote-ref-17)
17. Lazar and Gonzalez, page 48. [↑](#footnote-ref-18)
18. Watkins, page 58. [↑](#footnote-ref-19)
19. Weston, page 7. [↑](#footnote-ref-20)
20. Whited et al, page 23. [↑](#footnote-ref-21)
21. Weston, page 32. [↑](#footnote-ref-22)
22. Weston, page 38. [↑](#footnote-ref-23)
23. Watkins, page 58. [↑](#footnote-ref-24)
24. Weston, page 38. [↑](#footnote-ref-25)
25. Economic Concerns About High Fixed Charge Pricing for Electric Service, page 1, October, 2014, Steve Kihm at http://americas powerplan.co [↑](#footnote-ref-26)
26. Principles of Public Utility Rates, page 356, James Bonbright, 1961, Columbia University Press, New York. [↑](#footnote-ref-27)
27. Whited et al, page 23. [↑](#footnote-ref-28)
28. Kihm, page 1. [↑](#footnote-ref-29)
29. Case No. 10-3126-EL-UNC, page 5. [↑](#footnote-ref-30)
30. Weston, page 51. [↑](#footnote-ref-31)
31. Weston, page 42. [↑](#footnote-ref-32)
32. Weston, page 40. [↑](#footnote-ref-33)
33. Evaluating Alternative Rate Mechanisms: A Conceptual Approach for State Utility Commissions, The Electricity Journal, Volume 27, Issue 4, May, 2014, page 21, Ken Costello. [↑](#footnote-ref-34)
34. Weston, page 9. [↑](#footnote-ref-35)
35. Watkins, page 60. [↑](#footnote-ref-36)
36. Whited et al, page 14. [↑](#footnote-ref-37)
37. Residential Winners and Losers behind the Energy versus Customer Charge Debate, The Electricity Journal, Volume 27, Issue 4, May, 2014, page 2, Larry Blank and Doug Gegax. [↑](#footnote-ref-38)
38. Whited et al, page 14. [↑](#footnote-ref-39)
39. Whited et al, page 17. [↑](#footnote-ref-40)
40. Weston, page 6. [↑](#footnote-ref-41)
41. Case No. 16-1852-EL-SSO, Moore testimony, page 13. [↑](#footnote-ref-42)
42. Utility’s response to OCC-INT-2-275(b)) (Attached). [↑](#footnote-ref-43)
43. Watkins, pages 39 – 41. [↑](#footnote-ref-44)
44. Blank and Gegax, page 5. [↑](#footnote-ref-45)
45. Whited et al, page 25. [↑](#footnote-ref-46)
46. Weston, page 40. [↑](#footnote-ref-47)