BEFORE THE

PUBLIC SERVICE COMMISSION

OF MARYLAND

IN THE MATTER OF THE APPLICATION OF DELMARVA POWER AND LIGHT FOR ADJUSTMENTS TO ITS RETAIL RATES FOR THE DISTRIBUTION OF ELECTRIC ENERGY	)	Case No. 9670

Surrebuttal Testimony of

Melissa Whited

On Behalf of

The Maryland Office of People's Counsel

January 14, 2022

Q. Please state your name, title, and employer.

A. My name is Melissa Whited. I am a Principal Associate at Synapse Energy Economics ("Synapse"), located at 485 Massachusetts Avenue, Cambridge, MA 02139.

Q. Have you previously filed testimony in this proceeding?

A. Yes. I filed direct testimony on December 2, 2021.

Q. What is the purpose of your surrebuttal testimony?

A. My surrebuttal testimony responds to several points made in the rebuttal testimony of Company Witness Michael Normand and Staff Witness David Hoppock regarding RT-ND, as well as Mr. Normand's responses to my proposals regarding R-TOU-P and a new electrification rate design.

Q. Please summarize Staff Witness Hoppock's recommendation regarding rate class RT-ND.

A. Witness Hoppock notes that his findings regarding RT-ND are broadly consistent with my findings in that the rate design provides no meaningful way for customers to save money by shifting load.[1] For this reason, Witness Hoppock recommends closing the class to new customers and requiring the Company to notify these customers that they would likely save money by moving to a different rate class. However, Witness Hoppock does not recommend that RT-ND be permanently closed, as he expresses his hope that the rate will be redesigned as part of, or as a result of, the PC-44 TOU pilot review process.[2]

[1] Hoppock rebuttal, at 2.
[2] Hoppock Rebuttal, at 2-3.

Q. Do you support Witness Hoppock's recommendations?

A. In part. I concur that RT-ND should be redesigned and then be made available to customers who seek an alternative to R-TOU-P. I also agree that the customers currently on RT-ND should be notified and informed that they would likely save money by shifting to a different rate schedule. However, I disagree that the rate schedule should only be addressed as part of the PC44 process. In its January 31, 2017 order amending the scope of PC44, the Commission stated:

> In this proceeding, we will consider the following possible actions:
>
> 1. Implementing one or more time-varying rate pilot programs for distribution rates;
> 2. Implementing one or more time-varying rate pilot programs for retail rates (unless the private marketplace proffers such a rate option); and
> 3. Implementing a pilot program with time-varying rates for customers with distributed solar.[3]

While the Commission could certainly expand the scope of the PC44 rate design workgroup to address additional rate designs beyond a pilot for time-varying rates, including additional options for time-varying rates, I am not aware that it has done so. Therefore, I maintain my position that it is appropriate to address RT-ND in this proceeding and reiterate my initial recommendations[4] that:

[3] Public Service Commission, PC44, In the Matter of Transforming Maryland's Electric Distribution Systems to Ensure that Electric Service is Customer-Centered, Affordable, Reliable, and Environmentally Sustainable in Maryland, January 31, 2017, at 7.

[4] Direct Testimony of Melissa Whited on behalf of the Office of People's Counsel, CN9670, December 2, 2021, at 15-16.

1. R-TOU-ND should be adjusted to be revenue neutral to the default residential rate schedule R.

2. The on-peak period should be reduced from 11 hours to between 4 and 6 hours.

3. The on-peak and off-peak prices should be clearly linked to the timing of costs on the system.

4. The tariff should be made available to all customers, not just customers who take service from a retail supplier.

In addition, the Commission recognized "the need to offer and test new rate design alternatives among all populations, through multiple mechanisms."[5] Thus, I do not believe that it was the intent of the Commission to limit all rate design proposals to the PC44 workgroup.

Q. What does Witness Normand propose regarding rate schedule RT-ND?

A. Witness Normand does not rebut the critiques of RT-ND offered by Staff Witness Hoppock or myself. However, instead of modifying schedule RT-ND, Witness Normand proposes that it be closed, and that new customers desiring to take service on a time-differentiated tariff do so on R-TOU-P.[6]

[5] Public Service Commission, RE: Public Conference 44 – Rate Design Workgroup, November 28, 2017, at 2.
[6] Delmarva Power & Light Witness Michael T. Normand Rebuttal, December 23, 2021, at 28.

Q. Do you support Witness Normand's recommendation to only offer customers a time-varying rate option through R-TOU-P?

A. No. Offering customers a choice of rate designs that are more efficient than flat rates is an important means of encouraging customers to take service on time-varying rates. Customers are heterogenous in their lifestyles and electricity consumption patterns, as well as their risk tolerances. Thus, a single time-of-use tariff may not appeal to all customers. For example, some customers may prefer a shorter on-peak window with a higher on-peak to off-peak price differential, while others may prefer a longer on-peak window with a lower on-peak to off-peak price differential.

Q. Do any other utilities offer customers a choice of time-varying rates?

A. Yes. Some of the utilities with the highest enrollment in time-varying rates offer multiple options. For example, Southern California Edison offers three time-varying rate plans: one with an on-peak period from 4-9 pm ("TOU-D-4-9PM"), one with a shorter on-peak period from 5-8 pm ("TOU-D-5-8PM"), and one for customers who have invested in beneficial electrification technologies, such as electric vehicles and heat pumps for space or water heating ("TOU-D-PRIME").[7] As another example, Arizona Public Service offers two time-varying rates and has achieved residential enrollment levels of approximately 55% of its residential customers in these tariffs.[8]

[7] Southern California Edison, Time-of-Use Residential Rate Plans, https://www.sce.com/residential/rates/Time-Of-Use-Residential-Rate-Plans

[8] Arizona Public Service, Docket No., E-0I345A-I9-0236, Schedule H-2, Filed October 31, 2019.

Q. Please summarize Witness Normand's objections to developing a new electrification tariff.

A. Witness Normand argues that "any other potential rate designs or new service classifications focused on beneficial electrification should be considered within a PC-44 rate design workgroup," and states that the Company "does not see sufficient evidence that customers desire such a rate or that the lower volumetric rate would provide enough incentive."[9]

Q. How do you respond to Witness Normand's argument that an electrification tariff should be addressed in a PC44 rate design workgroup?

A. While I would support the development of an electrification tariff in the PC44 rate design workgroup, as noted above, I do not believe that such a tariff is currently within the scope of the workgroup. While the Commission could direct the workgroup to study an electrification tariff, it has not yet done so.

Again, I do not believe it was the intention of the Commission to limit all innovative rate design proposals to the PC44 rate design workgroup. Instead, I contend that utilities should be proactive in proposing new tariffs that will support Maryland in reaching its energy policy goals by encouraging the adoption of beneficial electrification technologies, rather than waiting for the Commission to direct them to do so.

[9] Normand rebuttal, at 28.

Q. Do you believe that the Company should wait to develop an electrification tariff until it sees more evidence that customers desire such a tariff?

A. No. There is no question that customers would prefer to save money on their bills, nor is there a question that it is the explicit goal of the state to reduce statewide greenhouse gas emissions by 40% from 2006 levels by 2030. Thus, it is appropriate to propose a tariff that encourages customers to adopt beneficial electrification technologies such as heat pumps now.

Q. Would an electrification tariff provide an insufficient incentive for customers, as suggested by Witness Normand?

A. No. Heat pumps for space heating generally use much more electricity than electric vehicles. Electric vehicles typically use 4,000 kWh pear year or less, while a heat pump can use several times that much. For example, under the default assumptions of the "Heating Comparison Calculator" on the Company's website, an 1,800 square foot home with average insulation and the temperature set at 70 degrees would use more than 13,000 kWh per year.[10] Thus, a reduction in the volumetric rate of $0.0094/kWh would result in savings of $124 per year. However, this only accounts for a reduction in the volumetric rate due to increasing the fixed charge to $18. The volumetric rate could be reduced further if heat pump customers have a better load factor (and thus a lower average cost to serve), or if the cost of supply service for these customers were lower (as it apparently is for DPL's counterpart in Delaware.)

[10] https://www.delmarva.com/WaysToSave/ToolsAndResources/Pages/HeatingComparisonCalculator.aspx

Q. What do you conclude regarding the Company's critiques of your proposals?

A. I find that the Company's critiques lack merit, for the reasons described above. Further, I am troubled by the Company's unimaginative approach to rate design. The Company appears reluctant to explore new rate design options that would empower customers to better manage their electricity consumption and encourage customers to adopt technologies that would reduce greenhouse gas emissions. I recommend that the Commission adopt my rate design recommendations and direct the Company to explore more innovative rate design options going forward.

Q. Does this conclude your testimony?

A. Yes, it does.