

Public Service Company of New Hampshire  
d/b/a Eversource Energy  
Docket No. DE 19-057  
Rebuttal Testimony of Edward A. Davis  
March 3, 2020

**STATE OF NEW HAMPSHIRE**  
**BEFORE THE**  
**NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION**

**DOCKET NO. DE 19-057**

**REQUEST FOR PERMANENT RATES**

**REBUTTAL TESTIMONY OF EDWARD A. DAVIS**

*Revenue Allocation*

**On behalf of the Public Service Company of New Hampshire**  
**d/b/a Eversource Energy**

**March 3, 2020**

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**PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**  
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1    **I.       INTRODUCTION**

2    **Q.       Please state your name, position and business address.**

3    A.       My name is Edward A. Davis. I am employed by Eversource Energy Service Company  
4           as the Director of Rates. In this position, I provide support to Public Service Company of  
5           New Hampshire (“PSNH” or the “Company”). My business address is 107 Selden Street,  
6           Berlin, Connecticut.

7    **Q.       Have you previously testified before the Commission, in this proceeding?**

8    A.       Yes. I have provided direct testimony on behalf of PSNH regarding Rates and Tariff  
9           Changes to the New Hampshire Public Utilities Commission (“Commission”).

10   **Q.       Did any other parties provide direct testimony regarding the issues addressed in your**  
11   **rebuttal testimony?**

12   A.       Yes. The Commission Staff’s consultant, Dr. Sanem Sergici, the Office of Consumer  
13   Advocate’s (“OCAs”) consultant, Ron Nelson, and AARP’s consultant, Scott Rubin filed

1 testimony regarding the Company's cost of service studies, class revenue allocation and  
2 rate design.

3 **Q. What is the purpose of your rebuttal testimony?**

4 A. The purpose of my testimony is to discuss the Company's proposed revenue allocation and  
5 rate design based on the Company's cost of service studies, and to address specific issues  
6 associated with these proposals raised by these parties.

7 **Q. Please summarize the issues addressed in this rebuttal testimony.**

8 A. The Company's rate design proposal is intended to strike a balance among numerous  
9 ratemaking goals and objectives and reflects consideration of impacts to customers from  
10 overall changes to rates at a class level, and from price or structural changes within each  
11 class. The Company relied on the results of the filed allocated cost of service ("ACOS")  
12 study and marginal cost of service ("MCOS") study to inform decisions leading to its  
13 proposed revenue allocation and rate design. The use of these studies has been met with  
14 both support and resistance, and with recommendations for alternate approaches. In its last  
15 rate case, the Company submitted only an ACOS. The importance, however, of having  
16 a MCOS marginal cost study to inform rate design was highlighted during the case, and in  
17 the final order the Commission required the Company to submit both allocated and  
18 marginal cost studies in its next rate case, which it has done in this proceeding. The  
19 methodologies applied in the studies filed by the Company in this case are representative  
20 of what has been employed in evaluating distribution costs in other rate cases conducted  
21 by the Commission. The results of these studies provide key insights into the costs

1       attributable to serving customers in each class and have helped inform the development of  
2       proposed class revenue requirements and rates. In this proceeding a number of issues and  
3       concerns have been raised, and certain alternate approaches have been recommended by  
4       witnesses for Staff, OCA and others. Rebuttal testimony submitted by the Company's  
5       Witness, Amparo Nieto, addresses many of the issues with the ACOS and MCOS raised  
6       by the parties. In this testimony I further address issues raised in testimony regarding  
7       application of study results and the Company's revenue allocation and rate design proposal.

## 8       **II. REVENUE ALLOCATION AND RATE DESIGN**

### 9       **Q. What are your concerns regarding application of the Company's cost studies?**

10      A. Of fundamental concern are the attempts particularly by OCA's consultant to undermine  
11      the validity and value of insights gained from the Company's studies, and to minimize, if  
12      not dismiss, the MCOS. It appears that both OCA and AARP witnesses are unfamiliar  
13      with or at least do not want to accept or rely on the MCOS and have emphasized changing  
14      methodologies and applying only the ACOS. These approaches attempt to override  
15      accepted practices and Commission requirements and would inappropriately serve to  
16      reduce overall revenue requirement and fixed cost responsibility for the residential class  
17      while shifting those responsibilities to other classes. Furthermore, the OCA's witness has  
18      made a number of unwarranted claims regarding these studies, which have been addressed  
19      in Ms. Nieto's rebuttal testimony.

1 In developing its rate proposal, the Company has first evaluated class cost responsibility  
2 and took a balanced approach in setting rates for each class consistent with key rate design  
3 principles and the various factors that needed to be considered for each class. While a  
4 MCOS has not been required to be filed by the Company in distribution rate cases  
5 conducted since restructuring, it had been a longstanding practice previously to submit both  
6 studies in a rate case. Both the ACOS and MCOS have been relied upon by the Company  
7 in developing revenue allocations and rate design in previous cases. In this case, both  
8 studies are required by the order of the Commission. The studies developed by the  
9 Company in this case are based on current (ACOS) and forward looking (MCOS) costs,  
10 and correctly employ methodologies appropriate for each type of study. The results of  
11 these studies provide important insights into the Company's costs of providing service to  
12 its customers and serve a critical role in guiding the Company's distribution revenue  
13 allocation and rate design decisions.

14 **Q. What concerns has Staff raised with the application of the ACOS and MCOS in**  
15 **developing proposed rates?**

16 A. Dr. Sergici has summarized a number of key rate principles and reviewed the Company's  
17 rate proposal noting where emphasis was more heavily placed by the Company (e.g.,  
18 gradualism) , and decisions to address other changes, particularly where structural changes  
19 might be made, were deferred (e.g., TOU pricing). While the Company does not  
20 necessarily disagree with the recommendations for additional changes, it has considered  
21 the requirements and potential impacts that could occur as a result of these changes, noting  
22 additional requirements that would need to be addressed including potential meter changes,

1 the need for billing determinants and other information to design rates and provide  
2 information to customers to facilitate informed decisions. Recognizing the priorities set in  
3 developing the company's rate proposal, a number of additional concerns should be  
4 addressed before developing additional changes to rates. The impacts and requirements for  
5 implementing new structures, data availability, and customer education and outreach are  
6 all important in evaluating the requirements and impacts that customers may see.

7 Regarding revenue allocation, the Company notes that its approach of using the equalized  
8 Rate of Return (ROR) as a basis for setting revenue allocation targets is not ad hoc. The  
9 ROR evaluation provided reflects use of the ACOS study results to identify the relative  
10 revenue contribution of each class toward its revenue requirements responsibility, and to  
11 inform the degree to which overall rates may be adjusted (with a goal of moving toward  
12 unity) while working within reasonable bounds to assure consideration of bill impacts and  
13 gradualism for each class is given and greater equity among rate classes is achieved. As  
14 observed by Dr. Sergici, these considerations, along with greater alignment of fixed and  
15 variable costs and more efficient pricing were given priority in developing the Company's  
16 proposal.

17 It is important to also note that in setting these priorities, the Company is working with  
18 legacy rate designs that vary significantly by class, along with emerging and somewhat  
19 undefined rate design needs. The structures that have fallen to distribution rates through  
20 the process of unbundling reflect production and transmission function characteristics and  
21 rate design that have been in effect for many years. As a result of the MCOS conducted

1 in this case, there are significant differences between legacy distribution rate design and  
2 what the MCOS informs. While the Company has been conservative in maintaining  
3 current structures while addressing the priorities discuss above, it recognizes the need to  
4 also address changes to rate design, including updating TOU and block structures, to  
5 achieve more efficient pricing. These structural changes may also need to address and  
6 align with the growing and emerging policy objectives, and the capabilities and  
7 requirements needed for their implementation, such as metering infrastructure, information  
8 requirements, customer education and program development.

9 **Q. Should proposed outdoor lighting rates be increased to offset increases to residential**  
10 **rates?**

11 A. The approach in allocation of cost responsibility and development of outdoor lighting rates  
12 reflects a set of circumstances and cost-of-service characteristics unique to this class.  
13 Service to outdoor lighting is unmetered, and involves a significant portion of fixed,  
14 directly assigned assets that have steady load on the distribution system. Since the last  
15 case, there have been many conversions both to new LED technologies and from one class  
16 (OL) to another (EOL). Costs for the outdoor lighting class are largely comprised of street  
17 lighting equipment and O&M. In the Company's proposal, rate design has been completely  
18 revamped, consistent with the unique characteristics of this class. Witness Rubin has  
19 suggested that rates ought to not "bounce around" for this class. However, relative to  
20 current rates, a significant reduction is warranted. The proposed new rate design for this  
21 class reflects changes in customer characteristics and rate design set at a revenue  
22 requirement based on a unity rate of return ("ROR") (further, the allocated study fully



1 reconciles the marginal costs of newly installed lights with the embedded costs of those  
2 lights.)

3 Adjustments to outdoor lighting rates performed over time on an average class basis when  
4 compared with the updated cost of service and rate levels reflected in the Company's  
5 proposal result in a significant decrease to rates from current to proposed levels. Proposed  
6 outdoor lighting rate changes reflect the significant changes and unique characteristics of  
7 this class. It is appropriate from a cost of service or fairness perspective to single out and  
8 "trade off" a portion of revenue allocations from the residential class to the outdoor lighting  
9 class as witness Rubin suggests. If it is found to be in the public interest to allocate less of  
10 an increase to the residential class than proposed (noting that the Company has proposed  
11 to move residential rates partially toward their full revenue requirements responsibility),  
12 then all else being equal, a weighting of such reduced allocation among all classes would  
13 be more equitable.

14 **Q. Is the proposed Residential Rate R customer charge reasonable and appropriate?**

15 A. One of the priorities in designing proposed rates beyond setting overall class targets is to  
16 determine the level of costs recovered through fixed vs. variable charges within each class.  
17 The cost studies provide important information for guiding this rate design decision. The  
18 ACOS provides key information about the level of fixed costs, while the MCOS provides  
19 key information about efficient pricing. The Company relied on the marginal cost study to  
20 establish fixed cost benchmarks for the customer charge, and in evaluating how far to move  
21 rates from current levels toward benchmark levels while paying particular attention to bill

1 impacts and degree of gradualism to be applied. In addition to the MCOS, the Company  
2 compared its proposed rates with the level of fixed charges from the allocated cost study.

3 Witnesses Nelson and Rubin have advocated moving away from reliance on either the  
4 ACOS or MCOS filed by the Company, recommending certain changes in the ACOS  
5 methodology (e.g., application of the so-called basic method) that serve to shift cost  
6 responsibility away from the residential class. An evaluation of these alternate methods  
7 and flaws in the claims made or approach employed is discussed in the rebuttal testimony  
8 of Witness Nieto.

9 As noted earlier, the Company is required to submit both the ACOS and MCOS in this  
10 proceeding. Both studies are important to Staff and the Commission. The role and  
11 importance to the Commission of the MCOS in designing rates was recently highlighted in  
12 the Electric Division recommendations to the Commission regarding the development of  
13 rate design standards for electric vehicles,<sup>1</sup> and is recognized as essential in developing  
14 efficient pricing and addressing a number of rate design principles, as discussed in the  
15 testimony of Staff's consultant, Sanem Sergici.

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<sup>1</sup> "Rates designed under the cost of service standard should, to the maximum extent practicable, reflect the cost of providing service to a particular customer class. The cost of service standard has been a foundational component of rate design in New Hampshire for decades.", referencing further Pub.Serv.Co. of New Hampshire, Order No 20,504 at 285 (June 8, 1992): "If we viewed rate design as a house, the important aspects of equity, continuity, simplicity, understandability and revenue stability are the attributes that make the house livable...The support – the foundation and the frame is the cost studies; particularly, it rests on the marginal cost of service study (MCOSS)". IR 20-004, Recommendations Regarding Investigation of Electric Vehicle Rate Design Standards, Electric Vehicle Time of Day Rates for Residential and Commercial Customers, January 10, 2020

1 **Q. What is the importance and relevance of relying on the Company's allocated and**  
2 **marginal cost studies in examining fixed cost responsibility vs. comparing rates**  
3 **charged by other utilities?**

4 A. The cost studies submitted by the Company provide the most relevant measure of cost  
5 responsibility for its customers. In his direct testimony, Witness Rubin references a  
6 Connecticut residential rate, where a minimum system study was conducted, and while the  
7 study showed significantly higher fixed costs, a state policy mandated a cap that narrowed  
8 the portion of fixed costs to be utilized in setting the customer charge. A MCOS was not  
9 conducted in that case. Mr. Rubin also cites the setting of Eversource's Massachusetts  
10 affiliate residential customer charge, but does not mention that the customer charge  
11 approved was the result of consolidating many rate classes from four separate service areas  
12 into one, with customer charges that increased by well over 50% in some cases, and that in  
13 any event, the final approved customer charge was less than that of the allocated cost study.  
14 Further, while a marginal cost study was performed, there is no customer component in  
15 that study. Unlike the forward-looking approach utilized in the Company's MCOS, a  
16 historic, statistical approach was applied in the MA MCOS. While witness Rubin cited  
17 low residential customer charges for CT and MA, he did not provide a comparison of more  
18 local utility residential rates in discovery. While the Company has requested to set a  
19 residential customer charge of \$13.89 in this case, it is important to note that this is  
20 significantly less than the levels indicted by both cost studies. Further, the residential  
21 customer charge approved by the Commission and currently in effect for New Hampshire's  
22 other regulated utilities are higher than this requested amount (Unitil: \$16.22; Liberty:  
23 \$14.67). Other examples include the New Hampshire Electric Coop, at \$29.32 per month,

1 and Green Mountain Power which charges a daily customer charge that equates to \$15.04  
2 per month. While these are interesting comparisons, the most relevant fact in this rate case  
3 is that the proposed customer charge of \$13.89 is less than, but aligned with, the cost studies  
4 conducted specifically for PSNH using current costs.

5 **Q. Please discuss the OCA's concerns regarding lost sales and the relevance of historic**  
6 **vs. test year revenue.**

7 A. Witness Rubin states the lost sales are a fiction, and the increase in revenue from the last  
8 rate case to the test year in this case supports [no mechanism should apply). Lost sales  
9 and therefore lost revenue are not a fiction. All else being equal, a reduction in sales due  
10 to actual energy efficiency measures installed translates into lost revenue. The record in  
11 [See pages 24-27 & 59-60 of Order # 25,932] is clear on this terminology, and on the basis  
12 for determining lost revenue and its recoverability through the Company's System Benefits  
13 Charge mechanism.

14 Witness Rubin compares revenue calculated at rates applied to sales established in the prior  
15 rate case with current case TY revenue, and claims that the increase in revenue during that  
16 time shows that the Company has not lost revenue. This comparison is irrelevant. The  
17 Company has developed proposed rates using TY billing determinants, and calculated  
18 revenue at current rates using those same billing determinants, and not those in effect 10  
19 years ago. Whatever changes in sales and revenue that have occurred between 2008 and  
20 2018, the relevant basis for setting revenue, and determining the extent of displaced or  
21 reduced sales due to EE (or DG) installations is the 2018 billing determinants applied in

1            setting rates in this case. Whether the LRAM or another form of decoupling applied,  
2            impacts and the determination of revenue adjustments would be made relative to 2018  
3            levels, and the effects of measures installed subsequently.

4    **Q.    Does this conclude your testimony?**

5    A.    Yes.