

STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DOCKET NO. DE 21-XXX

DIRECT TESTIMONY OF
EDWARD A. DAVIS

Proposed Outdoor Lighting Changes

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

March 31, 2021

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PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
d/b/a EVERSOURCE ENERGY

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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 as
4 the Director of Rates for Eversource’s electric and gas subsidiaries. In this position, I
5 provide support to Public Service Company of New Hampshire d/b/a Eversource Energy
6 (“Eversource” or the “Company”).¹ My business address is 107 Selden Street, Berlin,
7 Connecticut.

8 **Q. What are your principal responsibilities in this position?**

9 A. As the Director of Rates, I am responsible for activities related to rate design, cost of service
10 and rates administration for electric and gas subsidiaries of Eversource Energy, including
11 Eversource.

¹ At times in this testimony there are references to “PSNH”. Those references are to the same Public Service Company of New Hampshire d/b/a Eversource Energy.

1 **Q. Please describe your educational and professional background.**

2 A. I hold a Bachelor of Science degree in Electrical Engineering from University of Hartford
3 and a Master of Business Administration degree from the University of Connecticut. I
4 joined Northeast Utilities in 1979 and have held various positions in the areas of consumer
5 economics, engineering and operations, wholesale and retail marketing and rate design,
6 regulation, and administration.

7 **Q. Have you testified previously before the New Hampshire Public Utilities Commission**
8 **or other regulatory bodies?**

9 A. Yes. I have testified before the New Hampshire Public Utilities Commission
10 (“Commission”) on behalf of Eversource, and at the state utility commissions in
11 Connecticut and Massachusetts on behalf of other Eversource Energy companies on rate
12 related matters.

13 **II. SCOPE AND PURPOSE**

14 **Q. What is the purpose of your testimony?**

15 A. The purpose of my testimony is to present the Company’s proposed EOL-2 Tariff in
16 compliance with the October 9, 2020 Settlement Agreement (the “Settlement”) in Docket
17 No. DE 19-057.

18 **Q. Please outline the organization of your Testimony and Attachment EAD-1.**

19 A. My testimony is organized as follows:

1 Section I – Introduction - provides my background and experience

2 Section II – Scope and Purposes – outlines the scope of the testimony

3 Section III – Settlement Terms – provides the terms agreed to in the Settlement Agreement

4 Section IV – Proposed Rate EOL-2 – includes information and details on the proposed
5 Tariff

6 Attachment EAD-1 – Rate EOL-2 – provides Pages 86A to 86F which is the proposed Rate
7 EOL-2 Tariff

8 **III. SETTLEMENT TERMS**

9 **Q. Please provide the terms of the Settlement Agreement pertaining to Outdoor**
10 **Lighting.**

11 A. On December 15, 2020, in Order No. 26,433 in Docket No. DE 19-057 the Commission
12 approved the Settlement. Relevant to this filing, Section 14.8 of the Settlement specified
13 a number of changes that would be made to the Company’s outdoor lighting rates. That
14 provision of the Settlement states:

15 The Company shall make the following changes to its tariff relative to
16 outdoor lighting:

17 (a) The assumed hours of operation contained in PSNH’s Rate OL and Rate
18 EOL shall be adjusted to one-half hour after sunset to one-half hour before
19 sunrise consistent with those times for Concord, New Hampshire specified
20 in the 2020 edition of the Farmer’s Almanac and data available from the
21 U.S. National Oceanographic Atmospheric Administration (NOAA).
22 Midnight lighting hours shall be adjusted accordingly. The relevant

1 adjustments shall be made available once necessary programming and bill
2 changes have been implemented.

3 (b) PSNH's Rate EOL will also be amended to include language allowing
4 for advanced lighting controls. The relevant adjustments shall be made
5 available once necessary programming and bill changes have been
6 implemented.

7 (c) PSNH shall create a new rate which will align more closely with the
8 language of the Liberty Utilities LED-2 rate to allow additional flexibility
9 and options for municipalities to install advanced lights and lighting
10 controls, and to allow municipalities to own and maintain the streetlights in
11 their communities. PSNH shall work with interested parties on final tariff
12 language to implement this provision with a goal of having new tariff
13 language submitted to the Commission for approval during the first quarter
14 of 2021. A framework for this new rate offering is set out in Appendix 8.
15 At the time the new tariff language is submitted, the Company will also
16 specify the effective dates of the changes set out in Sections 14.8(a) and (b)
17 above.

18 As quoted above, Section 14.8 (c) of the Settlement required the Company to propose a
19 new rate to align more closely with the language of the Liberty Utilities LED-2 rate to
20 allow for additional flexibility and options for municipalities to install advanced lights and
21 lighting controls and to allow municipalities to own and maintain streetlights. This filing
22 contains that proposal.

23 **Q. Please describe how this filing is consistent with the terms of the Settlement.**

24 A. In this filing, the Company provides key information required by Section 14.8 of the
25 Settlement and proposes a new rate schedule, Rate EOL-2, which provides municipalities
26 with the option to own and maintain LED streetlights. The Company has provided the
27 proposed Rate EOL-2 to interested stakeholders, including the Commission Staff, the

1 Office of Consumer Advocate, and Clean Energy New Hampshire, and held meetings to
2 get input and recommendations from those parties. This instant filing reflects the result of
3 those meetings.

4 The Company is also providing the Commission with notice of the proposed effective dates
5 of the changes related to burn hours for all lighting options and advanced lighting controls
6 for Rate EOL. The Company will be submitting subsequent filings for review and approval
7 by the Commission in advance of such dates to update the Tariff pages for those changes.

8 The Company recognized and agreed in settlement to make these changes because it was
9 clear that municipalities have been interested in them and wanted to see them more widely
10 available. Based upon information that the Company has gathered from a few
11 municipalities in New Hampshire that have implemented some versions of advanced
12 lighting and/or advanced controls, as well as information on advanced lighting and controls
13 from other states, the Company saw this as an appropriate time to make the shift that
14 municipalities had been seeking. Accordingly, making this change following the
15 Settlement in the rate case makes sense for the Company and for customers.

16 **IV. RATE EOL-2**

17 **Q. Please describe the proposed Rate EOL-2.**

18 A. The Company has modeled Rate EOL-2 on its current Rate EOL, and on certain aspects of
19 Liberty Utilities' Rate LED-2. For purposes of form and substance, the proposed Rate
20 EOL-2 Tariff mirrors the language of Eversource's existing Rate EOL with the exception

1 that Rate EOL-2 includes language to allow municipal customers to own and maintain their
2 LED streetlights as well as use advanced lighting controls on their streetlights. Rate EOL-
3 2 also includes the updated hours of operation to align with the commitment in Section
4 14.8 (a) of the Settlement.

5 **Q. Please describe the additional language that was added to Rate EOL-2 to allow for**
6 **the required changes.**

7 A. As previous explained, the Company used the Rate EOL tariff as the basis for Rate EOL-
8 2 and updated language throughout EOL-2 to describe that this tariff is for municipal
9 customers who wish to own and maintain their advanced lighting. The Company also
10 added an “Advanced Lighting Control” section that allows for alternative options for
11 customers to install advanced controls. In addition, as described below, the per fixture cost
12 was updated to remove the charges for cost of Operation and Maintenance (“O&M”)
13 related to LEDs that will become the customer’s responsibility.

14 **Q. Please describe the advanced lighting control functionality proposed in Rate EOL-2.**

15 A. The Company has added language to Rate EOL-2 to allow customers to install their own
16 advanced lighting controls. If a municipality elects to install advanced lighting controls, it
17 will be required to provide notice to the Company of such installation and provide a
18 schedule indicating the expected average operating wattage of all lights subject to the
19 municipality’s control and operation. The municipality will be allowed to update the
20 expected average operating wattage once per year by notifying the Company.

1 The charge for the monthly kilowatt-hours will be calculated based on the average
2 operating wattage of the lights established at the beginning of the billing period multiplied
3 by the monthly hours of the outdoor lighting hours schedule provided by the municipality.
4 The wattage ratings will allow for the billing of kilowatt-hours according to the schedule
5 submitted by the municipality and will reflect any adjustments from the lighting control
6 system including, but not limited to, fixture trimming, dimming, brightening, variable
7 dimming, and multiple hourly schedules.

8 **Q. Please describe how the distribution rate in Rate EOL-2 was revised to reflect the fact**
9 **that the municipality will be responsible for maintaining its own streetlights under**
10 **this proposed Tariff structure.**

11 A. In Appendix 10, Page 22, to the Settlement, the Company provided the calculation of the
12 O&M expenses associated with LED lighting. As shown in that calculation, the O&M
13 portion of the delivery charge is equal to \$0.28 per fixture. The Company has used that
14 value to reduce the per fixture charge of Rate EOL-2 which results in a \$2.92 charge per
15 fixture.

16 **Q When does the Company propose EOL-2 will become effective?**

17 A. The Company is proposing that EOL-2 become effective for consumption on or after
18 January 1, 2022. Of note, this date is presently an estimate based on the billing system

1 changes necessary to be able to implement this new tariff. If the date shifts from the
2 expected January 1, 2022 implementation, the Company will inform the Commission.

3 **Q. The proposed EOL-2 is applicable to municipal outdoor lighting customers. Has the**
4 **Company considered making this rate available for private outdoor lighting**
5 **customers?**

6 A. Yes, the Company is currently working with internal groups to determine the necessary
7 adjustments to the billing system to be able to offer this rate for efficient private area
8 outdoor lighting (i.e., LED). The Company plans to file a request to add language to its
9 outdoor lighting tariffs later this year to address those customers.

10 **Q. Please provide the dates the Company expects to implement the changes to Rate OL**
11 **and EOL for updated burn hours and Rate EOL for advanced lighting controls.**

12 A. Since the time of the Settlement, the Company has worked with its Information Technology
13 and Billing groups to develop the required system changes to implement the changes to the
14 burn hours and allow advanced lighting controls. Based on the work with those groups,
15 the current estimates are that the billing system will be able to bill customers using updated
16 burn hours on or about August 1, 2021.

17 Regarding the changes required for advanced lighting controls, those changes are being
18 developed to effect billing on or about January 1, 2022, coincident with the proposed

1 effective date for service under Rate EOL-2. As with that rate, if these implementation
2 dates shift, the Company will inform the Commission.

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

4 **A. Yes, it does.**