

THE STATE OF NEW HAMPSHIRE
BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION
PREPARED TESTIMONY OF LEE LAJOIE AND BRIAN DICKIE
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE d/b/a EVERSOURCE ENERGY
2018 RELIABILITY ENHANCMENT PROGRAM RECONCILIATION
AND REQUEST FOR PROGRAM CONTINUATION

Docket No. DE 17-XXX

1 **Q. Please state your names, business addresses, positions, and responsibilities.**

2 A. My name is Lee Lajoie and I am employed by Eversource Energy Service Company as
3 the Manager of System Resiliency. In my role, my primary responsibility is the
4 management of the Reliability Enhancement Program for the distribution system in New
5 Hampshire that is operated by Public Service Company of New Hampshire d/b/a
6 Eversource Energy (“Eversource” or the “Company”). I also manage the Company’s
7 Distribution Automation program and am involved in developing and managing the
8 Company’s capital budget.

9 A. My name is Brian Dickie and I am employed by Eversource Energy Services Company
10 as the Director of System Operations. In my role, my primary responsibility is
11 management of New Hampshire Transmission and Distribution (T&D) Grid operations,
12 technology support for the systems required to operate the T&D systems, and the
13 troubleshooter linemen organization.

14 **Q. Have you previously testified before the New Hampshire Public Utilities**
15 **Commission (“Commission”)?**

16 A. Yes, we testified previously in the Reliability Enhancement Program Reconciliation and
17 Continuation Filing – 2017 (Docket No. DE 17-076).

1 **Q. Mr. Lajoie, please describe your educational background.**

2 A. I graduated from Northeastern University in Boston, MA in 1985 with a Bachelor of
3 Science in Electrical and Computer Engineering, Power Systems and from Southern NH
4 University in Manchester, NH in 2016 with a Master of Business Administration.

5 **Q. Mr. Lajoie, please describe your professional experience.**

6 A. Upon graduation from Northeastern University, I was hired by Public Service of New
7 Hampshire and have held various positions in Distribution Engineering, Field
8 Engineering, New Service, and Distribution Maintenance with increasing responsibility
9 through my current position as Manager of System Resiliency.

10 **Q. Mr. Dickie, please describe your educational background.**

11 A. I graduated from the University of New Hampshire with a Bachelor's of Science in
12 Engineering Technology and from Worcester Polytechnic Institute with a Masters in
13 Electrical and Computer Engineering. I am a licensed professional engineer in the state
14 of New Hampshire.

15 **Q. Mr. Dickie, please describe your professional experience.**

16 A. I have held various positions with Eversource over the last 28 years from Fossil / Hydro
17 Operations to engineering and engineering management. I am currently the Director of
18 System Operations responsible for transmission and distribution grid operations, outage
19 management operations, and the troubleshooter linemen department.

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

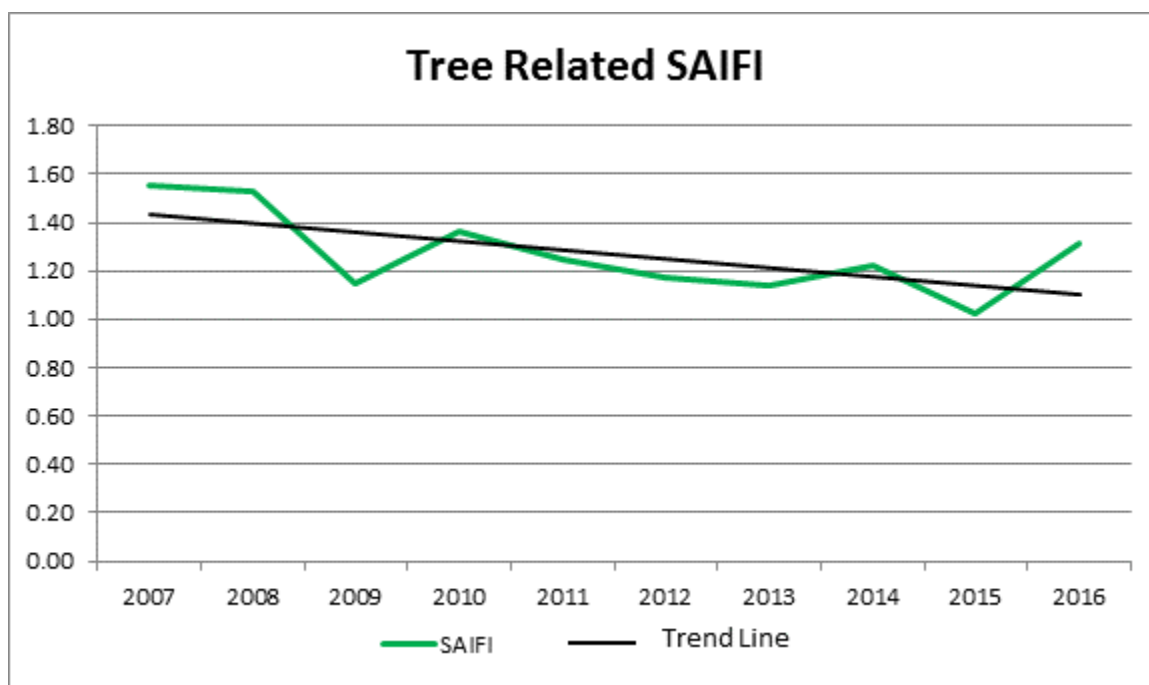
21 A. The purpose of our testimony is to describe the Company's proposed 2018 extension of
22 the Reliability Enhancement Program ("REP"). The proposed extension takes into
23 account the concerns raised by the Commission Staff, the Office of Consumer Advocate
24 ("OCA") and the Commission itself relative to the prior extension requested by
25 Eversource and ultimately approved in Order No. 26,034 (June 28, 2017). In formulating
26 this proposal, Eversource consulted with the Staff and OCA to ensure that their concerns
27 were addressed.

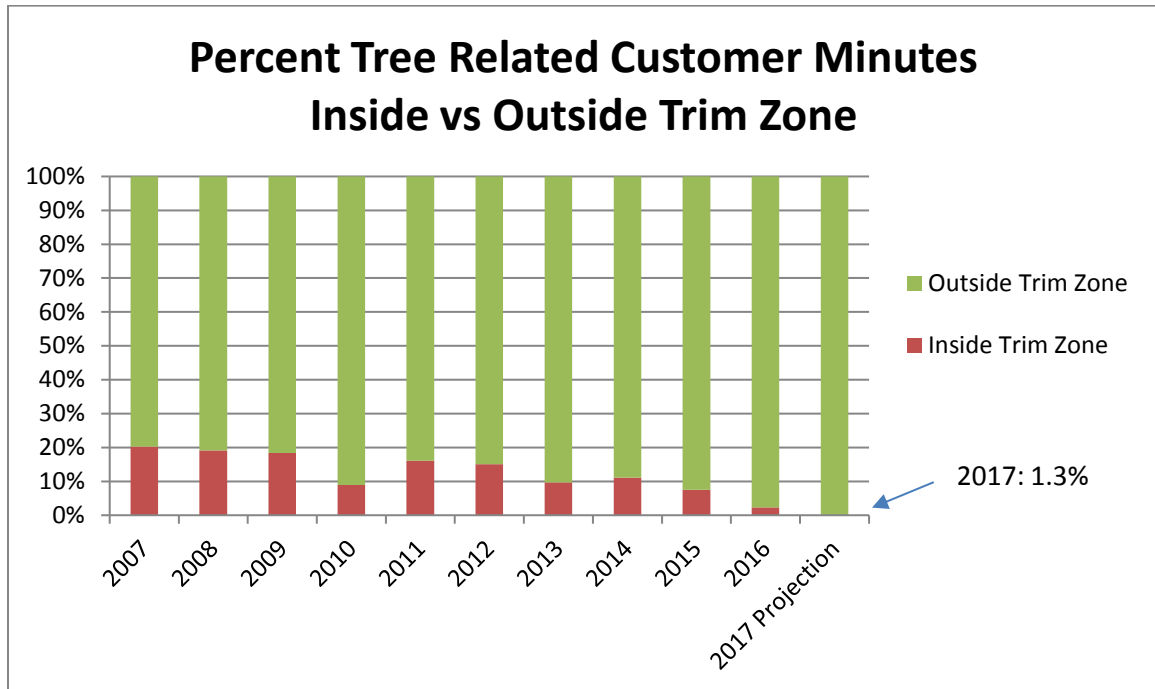
1 **Q. Please describe the Company's proposed REP activities for 2018.**

2 A. As noted in Order No. 26,034, there was significant interest in moving to a calendar-year
3 based program. Therefore, this proposal is for activities to occur in calendar year 2018.
4 The proposed 2018 REP is significantly scaled back from previous versions and consists
5 of activities grouped into two categories: Circuit Ties and Vegetation Management.

6 Two circuit tie projects are proposed under the REP in 2018, in the towns of Swanzey
7 and Hinsdale. Details on the circuit tie projects are shown in Attachment LGL-1 on
8 pages one through five.

9 Effective vegetation management activities will continue with plans to complete
10 approximately 100 miles of Enhanced Tree Trimming ("ETT"), and with funds having
11 been allocated for removal of hazardous trees. Although trees continue to be the largest
12 cause of outages, the frequency of tree related outages (tree related SAIFI) has steadily
13 declined since the inception of the REP, and the percentage of trees and limbs from inside
14 the trim zone has likewise steadily declined, as shown in the two charts below.



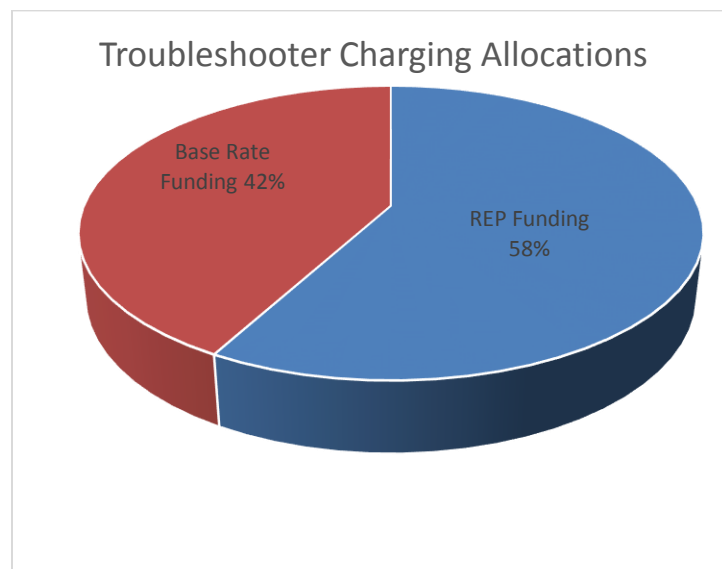


Similar to the prior REP, O&M activities include the O&M allocation from capital work related to REP as well as funding for 2018 for the Troubleshooter program.

Q. With respect to the Troubleshooter program, and in light of the Commission’s desire for more information on the costs and activities of that program, could you provide additional information on that program and its status following discussions with the Staff and OCA?

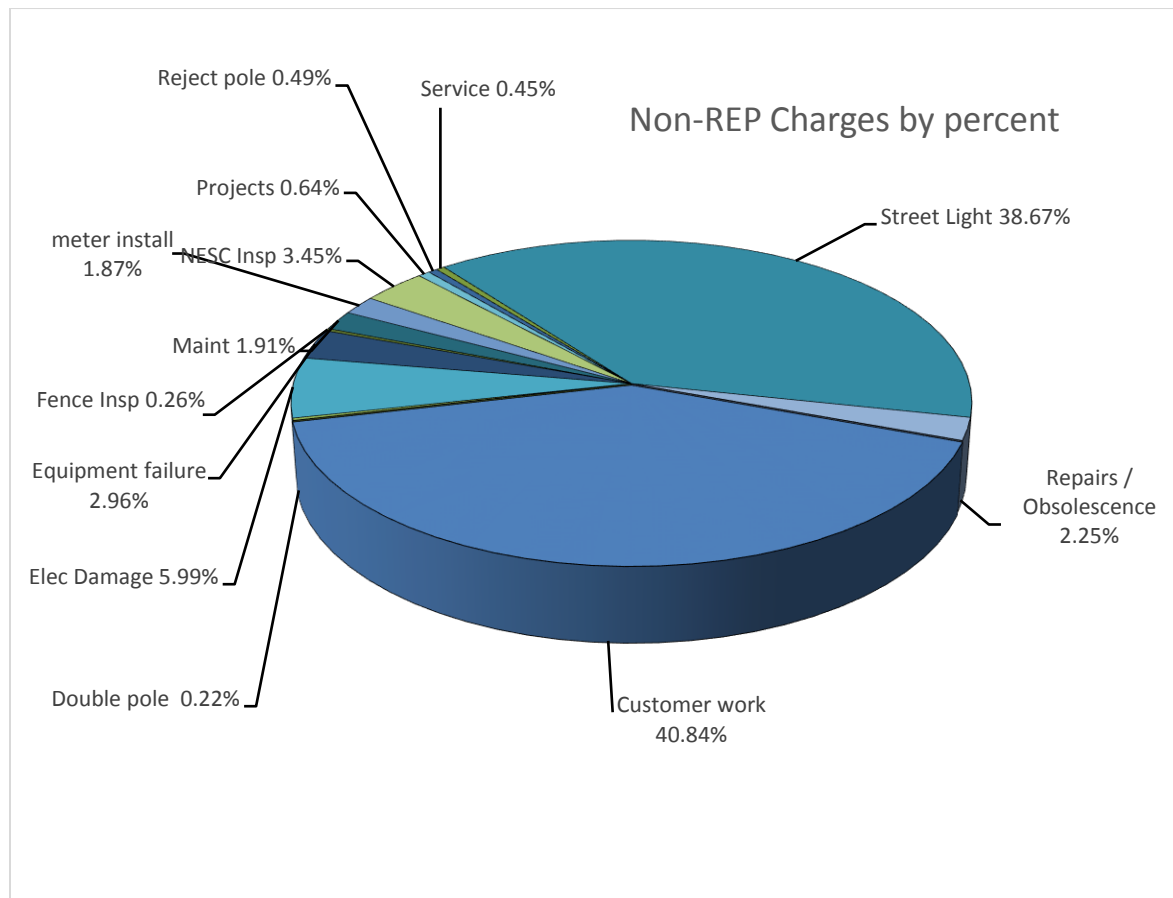
A. Yes. As testified to in the June 2015 REP filing, Eversource implemented a Troubleshooter program in New Hampshire in August, 2015. The Troubleshooter program consists of 18 Troubleshooter positions and two Supervisors. The Troubleshooters are broken up into three six person teams working twelve hour shifts providing coverage 24 hours a day, 365 days a year to the primary coverage area. The primary coverage area consists of the Bedford, Derry, Hooksett, and Nashua Area Work Centers (“AWCs”). This coverage area includes 235,704 customers across 1,052 square miles. When available, the Troubleshooters also provide coverage to a secondary coverage area consisting of the Epping, Keene, Newport, Portsmouth, Rochester and Tilton AWCs. This secondary coverage area includes 229,341 customers across 2,642 square miles.

1 The Troubleshooters perform both reliability related work and non-reliability related
2 work. The REP funding supports only the reliability work, and therefore the
3 Troubleshooters' cost charging is broken down into two streams. The first stream is from
4 the O&M portion of the REP and the second is from Eversource's base rates. The
5 breakdown for the two charging streams for the period between October 1, 2016 and
6 September 30, 2017 is 58% REP charging and 42% base rate charging as shown in the
7 below chart.

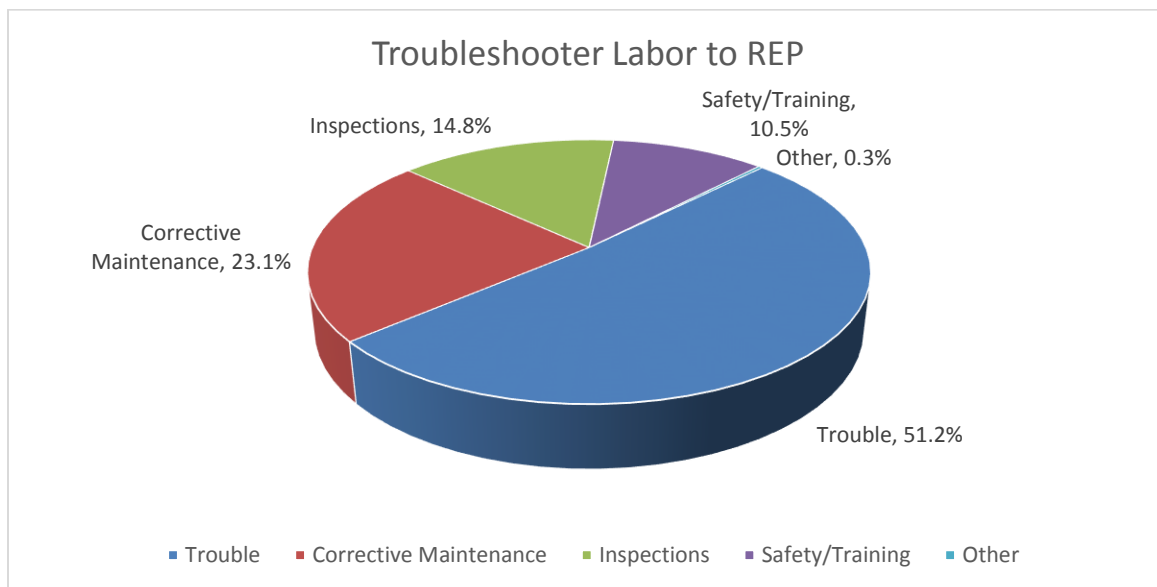


8 This breakdown recognizes that the Troubleshooters perform both reliability and non-
9 reliability related work. Troubleshooter charging for non-reliability related work
10 includes such things as: installation, repair, and removal of state, municipal, and private
11 street and area lighting, floating or reattaching services for customers, installation and
12 removal of temporary protective covers over lines and services, installation, removal,
13 replacement, or relocation of services, conversion of overhead and underground
14 temporary services to permanent, and third party "make ready" work among other tasks.
15 The costs of this non-reliability work are covered by the Company's base rates. The
16 following chart is a breakdown for the allocation of charges for **non-REP** work. The

testimony of Christopher Goulding addresses the costs of the Troubleshooters in the Company's rates.

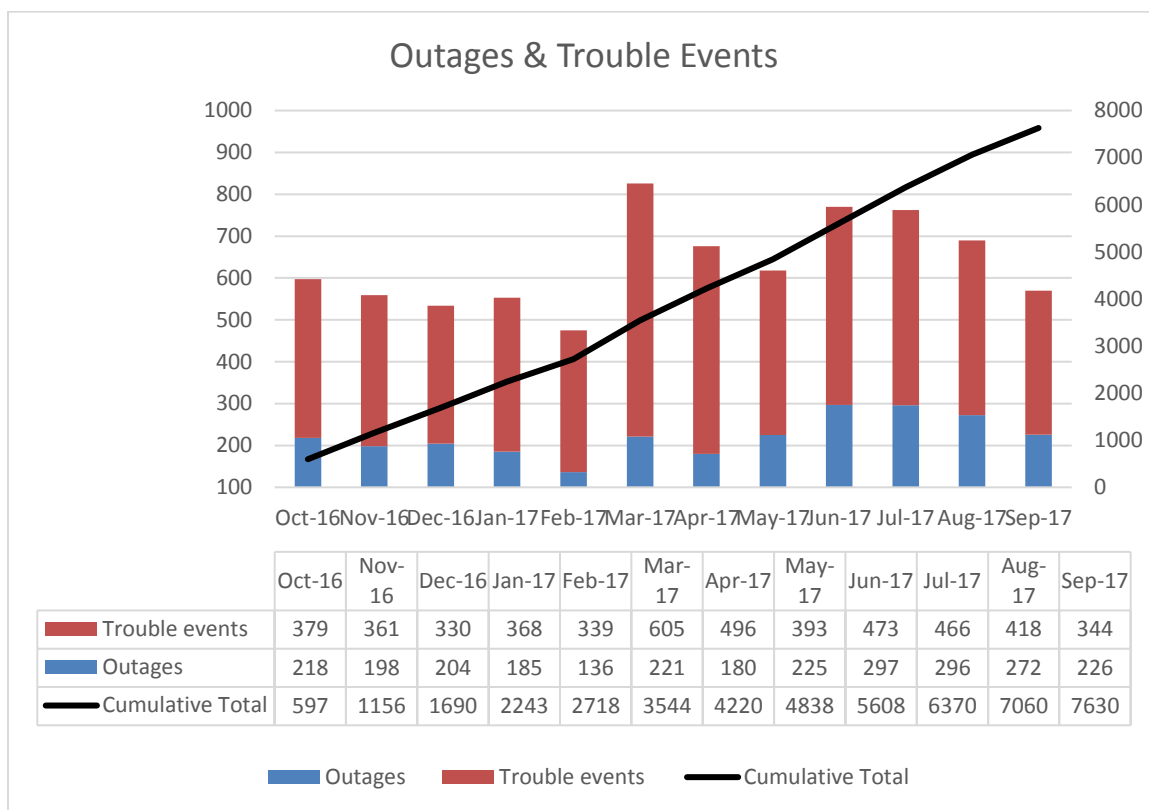


With respect to the work by the Troubleshooters that is reliability-related, the majority of the REP charging is for tasks relating to trouble and outage events, trouble and outage events that are not reimbursable (that is, trouble events that do not involve capital additions), along with any trouble and outage prevention work such as: removing limbs/trees from wires where there is no damage, proactive circuit patrols, substation security patrols, responding to emergencies, installation of animal protection and pole reflectors, and circuit device labeling. For the time period of October 2016 through September 2017 the Troubleshooters charged 12,493 hours to trouble, 5,632 hours to corrective maintenance, 3,614 hours to inspections, and 2,571 hours to safety and training. Below is a breakdown of these charges on a percent basis.

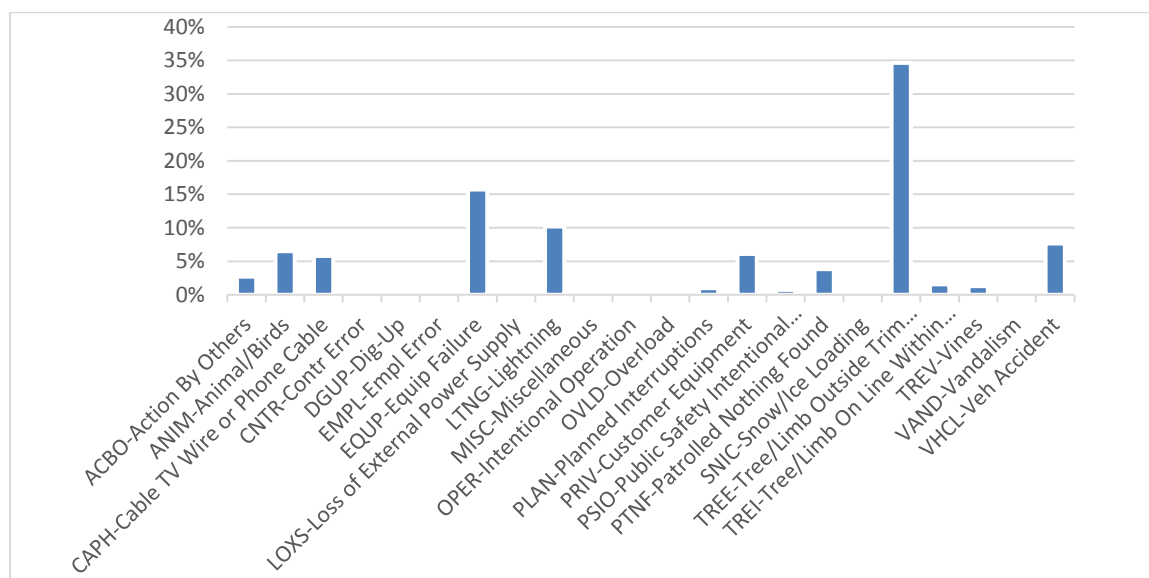


1 Following discussions with the Staff and OCA for this proposal, for 2018 the portion of
2 the Troubleshooter labor relating to safety and training will no longer be charged to the
3 REP, but will be covered in the Company's base rates.

4 Outage and trouble work for the Troubleshooter organization is generated via trouble
5 calls received in the Company's Customer Call Center or from the Supervisory
6 Controlled and Data Acquisition (SCADA) field devices to our Energy Management
7 System (EMS). The Company's System Operations Center (SOC) dispatches to the
8 closest available Troubleshooter, or, if the outage or trouble is outside the primary
9 Troubleshooter area, a determination is made on who can get to the trouble area faster, a
10 Troubleshooter or an AWC-based lineworker - either during regular hours or after
11 business hours. In the period between October 1, 2016 and September 30, 2017 the
12 Troubleshooters responded to 2,658 outage events and 4,972 trouble events. Below are
13 two charts detailing the outage and trouble events by month, and a breakdown of the
14 outage events that the Troubleshooters responded to for the time period listed.



1 Troubleshooter responded outage and troubles for October 2016 through September 2017



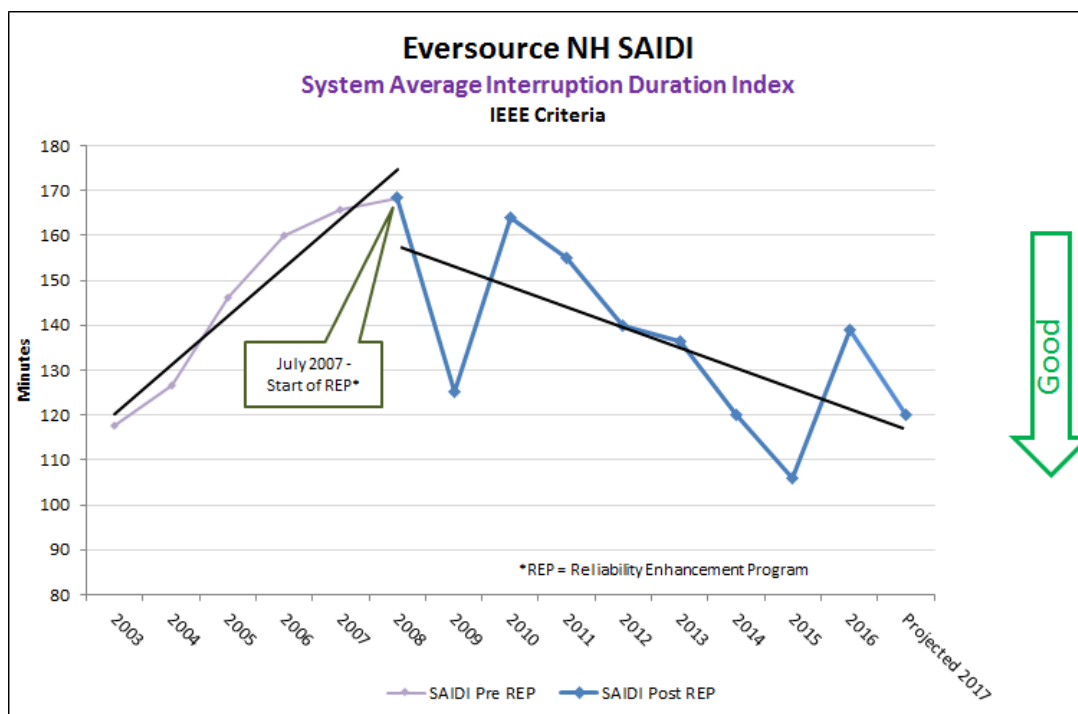
2 Troubleshooter outage causes by percentage October 2016 through September 2017

1 During the time period of October 1, 2016 to September 30, 2017, the Troubleshooters
2 responded to 48 events classified as vehicle accidents and outage events which have
3 impacted 151,328 customers. Based upon this experience, the Company projects similar
4 reliability work to be performed by Troubleshooters in 2018.

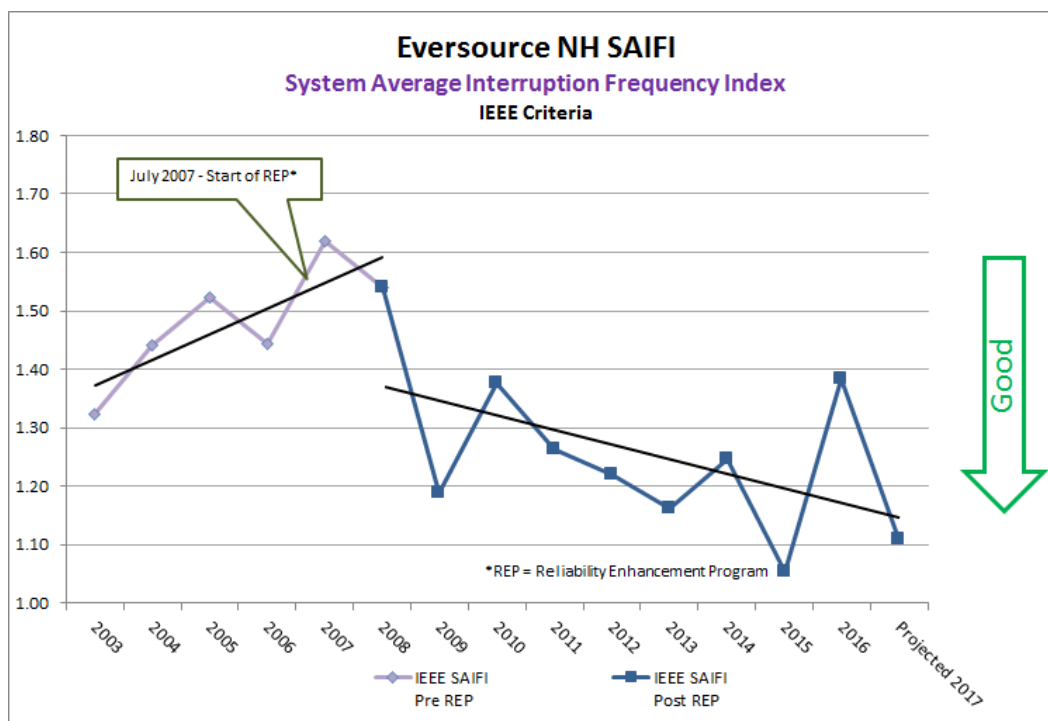
5 Lastly, in recognition that the Troubleshooter program has become a mature program and
6 the types of tasks and work are relatively well known and defined, the Company is
7 proposing to shift all costs of the Troubleshooters out of the REP by the end of 2018.
8 While the REP was instrumental in aiding the development and deployment of this
9 program – a program which has had meaningful and tangible reliability benefits for
10 customers – it is now developed enough to transition to being fully funded by the
11 Company's base rates. Therefore, as noted above, at the start of 2018 certain portions of
12 the REP charges from the Troubleshooters will be allocated out of the REP, and by the
13 end of 2018 all of the charges will be moved out of the REP.

14 **Q. Has the REP program to date achieved the goals of increased safety and reliability**
15 **of the Company's distribution system?**

16 A. Yes, the REP has led to a sustained improvement in the reliability of the Eversource
17 distribution system. The charts below illustrate the reliability performance before and
18 since the introduction of the REP program. As shown on the first chart, since the start of
19 the REP, there has been a steady decline in the average number of minutes the typical
20 customer is without power. Significant storm activity in 2016 led to an increase in SAIDI
21 that year, but the overall trend since the start of the REP program continues to show
22 improvement.



1 The next chart shows a similar reduction in the frequency of outages for the typical
2 customer.



1 Again, the REP has had, and is having, a sustained and measurable positive impact on
2 system reliability for Eversource's customers. Since the REP began, customers are
3 experiencing fewer outages, and the outages they do experience are shorter in duration.

4 **Q. Are reported reliability results "weather normalized" in any way?**

5 A. Major storms, as determined by Institute of Electrical and Electronics Engineers
6 ("IEEE") criteria and classified as Major Event Days, are excluded from reported
7 reliability statistics. The Company has internal metrics for classifying smaller storms, but
8 the results of these small storms are included in the reliability statistics included in this
9 testimony. Ultimately, the statistics can vary significantly depending on which metrics or
10 criteria are chosen for inclusion or exclusion in measuring reliability. In this case,
11 Eversource believes that relying upon the IEEE criteria for evaluating reliability provides
12 a relevant, objective basis for measuring performance over time.

13 **Q. Does the Company believe the REP should be continued?**

14 A. Yes. The Company strongly supports continuing the REP to ensure that customers will
15 continue to see improved reliability and so that the Company will have a strong and
16 resilient system capable of meeting customers' demands into the future. Therefore,
17 Eversource is proposing to continue the REP for 2018.

18 **Q. How does the Company plan to allocate REP capital funding in its proposed 2018
19 extension?**

20 A. The proposed REP extension is for \$9 million in capital funding. Proposed annual
21 funding for the categories in the REP is as follows:

Construct Circuit Ties	\$3.0 million	33.0%
Vegetation Management	\$6.0 million	67.0%

22 **Q. How did you determine that circuit ties and vegetation management should be
23 prioritized for inclusion in the REP in 2018?**

24 A. While the Company believes that there are certainly other types of projects that could be
25 implemented to positively impact reliability, the decision to prioritize circuit ties and

1 vegetation management was partly based upon our own analysis of projects that would
2 provide substantial benefits considering the level of investment, as well as on input from
3 the Staff and OCA. For the circuit tie projects, Eversource evaluated the historical
4 performance of the circuits and the number of customers who will benefit from proposed
5 projects. The funding proposed in this area will allow the Company to address two of the
6 most significant proposed projects, based on outages which have been experienced.
7 Additionally, since trees continue to be the major cause of outages on the Company's
8 system, it was critical to continue funding for that work. Therefore, the proposed funding
9 for vegetation management will continue at the same annual level as the existing
10 program.

11 **Q. Please describe the Company's proposed O&M related REP activated for 2018.**

12 A. Similar to the prior REP, O&M activities include the O&M allocation from capital work
13 related to REP. Additionally, the O&M portion of the REP in 2018 will support the
14 continuation of the Troubleshooter program, subject to the changes described earlier.

15 **Q. Could you summarize the Company's position on the REP in this filing?**

16 A. Implementing the REP has aided Eversource in achieving reliability gains for its
17 customers in New Hampshire, but there is still more to do. Therefore, Eversource is
18 proposing to continue the REP for the 2018 calendar year with the changes in scope and
19 cost described.

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

21 A. Yes, it does.