



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

Docket No. DG 20-105

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities  
Distribution Service Rate Case

**DIRECT TESTIMONY**

**OF**

**STEVEN E. MULLEN**

July 31, 2020

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## ATTACHMENTS

<b>Attachment</b>	<b>Title</b>
SEM-1	Compliance Checklist
SEM-2	Pelham Risk Sharing Analysis
SEM-3	Depreciation Reserve Analysis
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SEM-7	Customer Feedback re: Decoupling

1 **I. INTRODUCTION AND BACKGROUND**

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

3 A. My name is Steven E. Mullen. My business address is 15 Buttrick Road, Londonderry,  
4 New Hampshire.

5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by Liberty Utilities Service Corp. (“Liberty”) as Director, Rates and  
7 Regulatory Affairs. I am responsible for rates and regulatory affairs for Liberty Utilities  
8 (EnergyNorth Natural Gas) Corp. (“EnergyNorth” or “the Company”) and Liberty  
9 Utilities (Granite State Electric) Corp. (“Granite State”) in New Hampshire, Liberty  
10 Utilities (Peach State Natural Gas) Corp. in Georgia, and Liberty Utilities (St. Lawrence  
11 Gas) Corp. in New York.

12 **Q. Please state your professional experience and educational background.**

13 A. In 2014, I was hired by Liberty as the Manager, Rates and Regulatory, and was promoted  
14 to Senior Manager in August 2017 and to my current position of Director in July 2018.  
15 In addition to managing the Rates and Regulatory Affairs department, I am responsible  
16 for the development of regulatory strategy, interacting with regulators and other parties  
17 on behalf of Liberty, reviewing and preparing testimony and other aspects of regulatory  
18 filings, and internal approval of rate changes for EnergyNorth and Granite State, among  
19 other duties.

20 From 1996 through 2014, I was employed by the New Hampshire Public Utilities  
21 Commission (“Commission”) in various roles. Through 2008, I held positions first as a

1 PUC Examiner, then as a Utility Analyst III and Utility Analyst IV. In those roles, I had  
2 a variety of responsibilities that included field audits of regulated utilities' books and  
3 records in the electric, telecommunications, water, sewer, and gas industries; rate of  
4 return analysis; review of a wide variety of utility filings; and presenting testimony  
5 before the Commission. In 2008, I was promoted to Assistant Director of the Electric  
6 Division. Working with the Electric Division Director, I was responsible for the day-to-  
7 day management of the Electric Division, including decisions on matters of policy. In  
8 addition, I evaluated and made recommendations concerning rate, financing, accounting,  
9 and other general industry filings. In my roles at the Commission, I represented  
10 Commission Staff in meetings with utility officials, outside attorneys, accountants, and  
11 consultants relative to the Commission's policies, procedures, Uniform System of  
12 Accounts, rate cases, financing, and other industry and regulatory matters.

13 From 1989 through 1996, I was employed as an accountant with Chester C. Raymond,  
14 Public Accountant, in Manchester, New Hampshire. My duties involved preparation of  
15 financial statements and tax returns, as well as participation in year-end engagements.

16 I graduated from Plymouth State College with a Bachelor of Science degree in  
17 Accounting in 1989. I attended the NARUC Annual Regulatory Studies Program at  
18 Michigan State University in 1997. In 1999, I attended the Eastern Utility Rate School  
19 sponsored by Florida State University. I am a Certified Public Accountant and have  
20 obtained numerous continuing education credits in accounting, auditing, tax, finance, and  
21 utility related courses.

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

2 A. I am testifying on behalf of EnergyNorth in support of its request for an increase to  
3 distribution revenues, including its request for approval of step adjustments to recover the  
4 revenue requirement associated with non-growth related capital additions placed in  
5 service after the test year. I also address certain issues related to the implementation of  
6 decoupling and other ratemaking impacts that depress earnings and have created financial  
7 pressures on the Company and contributed to its need to seek rate relief.

8 My testimony also describes the Company's request for approval of a property tax  
9 recovery mechanism, consistent with RSA 72:8-d and -e, to capture the impact of annual  
10 property tax increases that are beyond the Company's control.

11 In addition, I provide testimony to demonstrate the Company's compliance with the  
12 matters identified by the Commission in the February 28, 2020, secretarial letter in  
13 Docket No. DG 19-161, which was a rate case filing by EnergyNorth that was ultimately  
14 withdrawn. My testimony addresses each of these items, including and in addition to  
15 matters from Docket No. DG 17-048, EnergyNorth's prior rate case; Docket No. DG 15-  
16 362, the docket wherein EnergyNorth received approval to expand its franchise area to  
17 the towns of Pelham and Windham; and Docket No. DG 17-035, the proceeding wherein  
18 Liberty was granted approval of a special contract with the New Hampshire Department  
19 of Administrative Services ("NHDAS"). I will describe how the Company has complied  
20 with the requirements from the various orders and secretarial letter issued in these  
21 dockets.

1 I also briefly discuss several regulatory matters involving due dates for certain rate and  
2 other filings, the examination and review of which would serve all parties well in terms  
3 of process improvements and possible workload reduction and efficiency gains.

4 Lastly, I describe an upcoming customer service initiative of the Company to switch its  
5 account payment services provider, which will involve migration of current payment  
6 options through Liberty's Interactive Voice Response ("IVR") system and its website.

7 **II. REASONS FOR RATE CASE FILING**

8 **Q. What are the main factors that led to the Company's filing of this rate case?**

9 A. The major factors leading to this rate case filing are the lag on recovery for capital  
10 investments and increases in costs such as property taxes. These factors are described in  
11 more detail later in my testimony.

12 In addition to these factors, there are financial impacts related to the implementation of  
13 decoupling that have negatively impacted the Company. The decoupling impacts arose  
14 from an increase in use per customer since the 2016 test year in the prior rate case, as  
15 well as the February 2017 reclassification of 1,598 commercial and industrial customers  
16 to different rate classes based on a review of their usage. Because that reclassification  
17 happened after the test year, it was not reflected in the Docket No. DG 17-048 rate case  
18 billing determinants used to establish the revenue per customer ("RPC") amounts  
19 established as part of the decoupling mechanism. Each rate class has a different RPC  
20 amount each month. The customer reclassification changed the results that would have  
21 otherwise occurred in the class specific RPC amounts determined in the rate case. In

1 addition, as part of its decision in Docket No. DG 17-048, the Commission adopted a  
2 revenue adjustment originally proposed by Staff based on the year-end customer count of  
3 EnergyNorth, rather than the average number of customers during the test year and using  
4 average revenues by customer class. Consequently, following the implementation of  
5 decoupling, the year-end customer count adjustment significantly overstated the  
6 estimated number of new customers and thus overstated the amount of estimated annual  
7 revenue associated with those customers. The Company did not actually receive this  
8 revenue because those customers did not exist, so the Company experienced a  
9 detrimental financial impact due to the operation of the decoupling mechanism.

10 **Q. Would you please explain this impact in more detail?**

11 A. The revenue adjustment was performed in a simplified manner, but the results of that  
12 adjustment were found to vary significantly from the determination of revenues to be  
13 received from customers under the Company's decoupling structure that uses monthly  
14 RPC amounts that vary by class. Due to the significant variations in monthly RPC  
15 amounts, the simplified methodology in the year-end customer count adjustment  
16 overstated the amount of revenue to be received from new customers. This had the effect  
17 of decreasing the amount of necessary distribution revenue increase in the prior rate case,  
18 which, in turn, lowered the RPC amounts calculated in that case. The longer the situation  
19 exists, the more the Company's revenues will be lower than they should be. In Order No.  
20 26,122, the Commission recognized that a reset of the test year revenues would be  
21 necessary and directed that the next test year to be used in a rate case be no later than a  
22 twelve-month period ending December 31, 2020, so that such a reset could occur.

1 **Q. Was termination of the Cast Iron/Bare Steel Replacement Program also a factor**  
2 **that led to this rate case filing?**

3 A. Yes. With the termination of the accelerated recovery mechanism that was previously  
4 available as part of the Cast Iron/Bare Steel Replacement (“CIBS”) program, the  
5 Company needs to have an alternative method to obtain timely recovery of the costs  
6 involved with the replacement of leak-prone pipe on its distribution system. As described  
7 in the joint testimony of Company witnesses Brian Frost, Robert Mostone, and Heather  
8 Tebbetts, the Company is proposing an initial step adjustment for certain capital  
9 investments made during calendar year 2020, including the replacement of leak-prone  
10 pipe. This proposal is consistent with the recommendation made by Staff in Docket No.  
11 DG 19-054 with respect to termination of the CIBS program.<sup>1</sup> In that docket, the  
12 Commission agreed with Staff and stated:

13 We encourage Liberty to seek recovery of 2019 CIBS  
14 spending through its anticipated general rate filing rather  
15 than a CIBS FY 2020 filing. Recovery of 2019 CIBS  
16 spending through a general rate filing would be  
17 administratively efficient and recovery would commence at  
18 approximately the same time as provided for under the CIBS  
19 settlement agreement if a general rate case is filed by mid-  
20 year 2020.<sup>2</sup>

21 As described later in my testimony, the Company is also proposing step adjustments to  
22 recover capital expenditures through 2022.

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<sup>1</sup> [https://www.puc.nh.gov/Regulatory/Docketbk/2019/19-054/INITIAL%20FILING%20-%20PETITION/19-054\\_2019-02-14\\_STAFF\\_RECOMMENDATION.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2019/19-054/INITIAL%20FILING%20-%20PETITION/19-054_2019-02-14_STAFF_RECOMMENDATION.PDF)

<sup>2</sup> Order No. 26,266 at 7.

1 Given all of these factors described above, the Company found it necessary to file this  
2 rate case to avoid a prolonged period of continued detrimental financial impacts and to  
3 better position the Company to effectively and efficiently provide safe and reliable  
4 service to its customers going forward.

5 **III. REQUEST FOR STEP ADJUSTMENTS**

6 **Q. What is the largest source of downward pressure on a utility's earnings between**  
7 **rate cases?**

8 A. The largest negative impact on a utility's earnings between rate cases is the regulatory lag  
9 between the time capital investments are made and the time that recovery of the revenue  
10 requirement associated with those capital investments begins, particularly when those  
11 investments are considered non-revenue producing or non-growth related. The revenue  
12 requirement includes a return on and of (*i.e.*, depreciation expense) the investment as well  
13 as associated costs, such as property taxes.

14 **Q. Please demonstrate the impact of regulatory lag on a utility's earnings.**

15 A. This can best be demonstrated by way of example. Assume a utility places \$40,000,000  
16 of non-growth related capital investments into service in a given year with no mechanism  
17 for rate recovery related to those investments. As a rule of thumb, the revenue  
18 requirement for utility capital investments can be roughly estimated by multiplying the  
19 capital investments by 15 percent, which provides for such items as depreciation,  
20 property taxes, and the impact of deferred taxes. For that \$40,000,000 of non-growth  
21 related capital investments, the associated revenue requirement would be approximately

1       \$6,000,000. Therefore, all else being equal, those investments in a utility's plant and  
2       equipment would reduce earnings by \$6,000,000. That reduction to earnings occurs each  
3       year there is no method for rate recovery, such as in the years between test years. This is  
4       the primary reason that utilities investing in their system and replacing existing  
5       infrastructure need to file frequent rate cases.

6       Applying this concept to EnergyNorth, and as described in the joint testimony of Messrs.  
7       Frost and Mostone and Ms. Tebbetts, EnergyNorth made significant capital investments  
8       that were placed in service during 2018 and 2019 for which there has been no cost  
9       recovery. These investments are a primary reason for the filing of this request for an  
10      increase in distribution revenues.

11   **Q.    Please describe more specifically how the current regulatory structure for**  
12   **EnergyNorth impacts its earnings during the time interval between rate cases.**

13   **A.**    Since Liberty Utilities' acquisition of EnergyNorth in mid-2012, EnergyNorth has had to  
14   file distribution rate cases approximately every three years -- in 2014, 2017, and now in  
15   2020.<sup>3</sup> The 2014 and 2017 rate cases resulted in permanent rate increases based on  
16   historic test years, each accompanied by a step increase for plant placed in service during  
17   the year following the test year (*e.g.*, for Docket No. DG 17-048, the test year was 2016  
18   and the step increase covered plant investments in 2017). This timing creates a lag in  
19   recovery for plant investments outside the test years and not covered by step increases.  
20   In addition, EnergyNorth historically was allowed annual recovery of investments made

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<sup>3</sup> As noted, the Company also filed a rate case in 2019 that was subsequently withdrawn.

1 as part of its CIBS program. However, annual recovery through the CIBS program  
2 ceased as of March 31, 2020, which was the end of the most recent CIBS year, based on a  
3 decision by the Commission in Docket No. DG 19-054. As a result, investments placed  
4 in service after 2017 that were outside of the CIBS program have not been allowed for  
5 cost recovery, and this has negatively impacted the Company's earnings.

6 **Q. You mentioned property taxes as one of the cost items included in the revenue**  
7 **requirement associated with new plant investments. Have property taxes increased**  
8 **on previously existing plant investments?**

9 A. Yes. Property taxes are the primary funding source for municipal budgets, and for many  
10 municipalities utility property comprises a large portion of their tax base. Utility property  
11 taxes are also a significant funding source for the State of New Hampshire. As a result,  
12 even if no new capital investments are made, utilities often see their property tax bills  
13 increase.

14 **Q. Have EnergyNorth's property taxes increased since its last rate case?**

15 A. Yes. The Company's prior rate case in Docket No. DG 17-048 had a 2016 test year and  
16 the property tax expense in that rate case was \$9.3 million. For the test year in this case,  
17 the twelve months ended December 31, 2019, the total property tax expense was \$12.4  
18 million, which is an increase of \$3.1 million, or 33 percent.

1 **Q. Was EnergyNorth granted a step adjustment for plant investments placed in service**  
2 **after the last rate case that provided recovery for additional property taxes?**

3 A. Yes. As part of Docket No. DG 17-048, the Commission approved a step adjustment for  
4 plant placed in service during calendar year 2017, and the Company was also allowed  
5 annual adjustments related to CIBS plant placed in service through March 31, 2020.  
6 However, the total amount of property tax recovery provided in those rate adjustments  
7 totaled only approximately \$1.15 million, leaving an additional increase of approximately  
8 \$1.95 million for which there has not been any recovery to date. As compared to the  
9 amount of the Company's request in this proceeding for a temporary distribution revenue  
10 increase, property taxes alone account for a significant portion of the earnings shortfall.

11 **Q. Based on these facts, what is the Company requesting in its multi-year rate plan**  
12 **proposal?**

13 A. The Company is requesting approval of a multi-year rate plan that includes a provision  
14 for step adjustments related to plant investments through 2022, along with a separate  
15 mechanism addressing changes in property taxes. As explained above, plant investments  
16 placed in service in the years outside of test years, particularly non-growth related capital  
17 investments, have a significant impact on EnergyNorth's earnings, as do uncontrollable  
18 increases in property taxes. Absent an alternative means of cost recovery, these costs end  
19 up causing frequent distribution rate case filings, which is administratively inefficient and  
20 costly for customers. Specifically, rate cases place significant demands on Company  
21 resources, as well as those of the Commission, its Staff, the Office of the Consumer  
22 Advocate ("OCA"), and other affected parties. Each rate case requires substantial costs

1 to be incurred by the Company, Staff, and the OCA to prepare, review, and prosecute the  
2 case, and these costs are ultimately borne by EnergyNorth's customers. Thus, the step  
3 adjustment approach, coupled with the proposed property tax mechanism, is a reasonable  
4 method to allow for more timely recovery of assets placed in service after the test year  
5 without the need for a full rate case, and would enable the Company to potentially  
6 lengthen the time between rate cases and have a reasonable opportunity to earn a  
7 reasonable rate of return. A multi-year plan that includes a provision for step adjustments  
8 related to plant investments, along with addressing changes in property taxes, would be a  
9 step in the right direction. This would allow the Company to focus on operating the  
10 business while also reducing rate case expenses being incurred on a frequent basis.

11 **Q. Is the Company's multi-year rate plan proposal limited solely to providing for step**  
12 **increases?**

13 A. No. Although step increases would be a necessary component of a multi-year plan for at  
14 least 2020 through 2022 capital investments, the Company is open to exploring other  
15 alternatives such as performance based ratemaking mechanisms, a program similar to  
16 National Grid's Gas Infrastructure, Safety, and Reliability Plan that is in place in Rhode  
17 Island, or other possible methodologies. The Company looks forward to having  
18 discussions with the Staff and the OCA to explore alternative approaches.

1 **Q. Have there been any other developments related to property taxes that would**  
2 **support approval for a rate mechanism for property taxes?**

3 A. Yes. On June 21, 2019, the Governor signed HB 700, which established a methodology  
4 for valuing utility distribution assets for property tax purposes, codified as RSA 72:8-d  
5 and -e. Part of that law established a new methodology for assessing utility property, and  
6 a five-year phase-in period to fully transition to that new methodology. The first property  
7 tax year of the phase-in period is the tax year beginning April 1, 2020.

8 The law also requires the Commission to establish by order a rate recovery mechanism  
9 for the property taxes paid by a public utility. Thus, the Company's proposal for a  
10 property tax recovery mechanism is supported by the recent law.

11 **Q. To date, has the Commission initiated any actions to develop a rate recovery**  
12 **mechanism for property taxes?**

13 A. To the Company's knowledge, no, it has not.

14 **Q. Does the law require the rate recovery mechanism to be the same for all utilities?**

15 A. No. The law states as follows:

16 **72:8-e Recovery of Taxes by Electric, Gas and Water**  
17 **Utility Companies.** For the implementation period of the  
18 valuation of utility company assets under RSA 72:8-d, VI  
19 and terminating with the property tax year effective April 1,  
20 2024, the public utility commission shall by order establish  
21 a rate recovery mechanism for any public utility owning  
22 property that meets the definition of utility company assets  
23 under RSA 72:8-d, I. Such rate recovery mechanism shall  
24 either:

1 I. Adjust annually to recover all property taxes paid by each  
2 such utility on such utility company assets based upon the  
3 methodology set forth in of RSA 72:8-d; or  
4

5 II. Be established in an alternative manner acceptable to both  
6 the utility and the public utility commission.

7 **Q. Taking into account the last sentence quoted above, does the Company have a**  
8 **proposed mechanism to capture the changes in property taxes that it will experience**  
9 **pursuant to RSA 72:8-d?**

10 A. Yes. As the Company has assets in many communities, and understanding that the law is  
11 new and requires changes to valuation methodologies previously used by those  
12 municipalities, it is likely there will be challenges over the first couple of years of  
13 implementation that will have to be worked through as the communities and Liberty  
14 understand the full effects of the new law and make sure it is applied appropriately. As  
15 an initial data point, many municipalities did not change the property valuations on their  
16 June 2020 tax bills, even though those bills are for the first property tax year impacted by  
17 the law. Given the likelihood of inconsistent treatment and timing of the property tax  
18 adjustments among the municipalities, it is imperative that any recovery mechanism be  
19 simple to administer for all involved. With that in mind, the Company proposes a full  
20 property tax recovery mechanism that each year compares the most recent municipal and  
21 state property tax bills to the amount currently collected in distribution rates. Such a  
22 mechanism would be simple to implement, administer, and verify, and would be  
23 consistent with the letter and spirit of the cost recovery contemplated in the law.

1 **Q. Would the Company’s proposed property tax mechanism cover all property taxes**  
2 **paid by the Company and not just the property that is considered “utility company**  
3 **assets” pursuant to RSA 72:8-d?**

4 A. Yes.

5 **Q. Why is it reasonable to include certain assets beyond “utility company assets” in**  
6 **such a mechanism?**

7 A. To begin, recall that Liberty does not profit off property taxes; they are simply a pass-  
8 through cost. In addition, “utility company assets”<sup>4</sup> encompass the vast majority of the  
9 Company’s taxable property, so the inclusion of non-“utility company assets” is a  
10 relatively insignificant item, particularly since the valuation of those assets is not subject  
11 to the changes prescribed in RSA 72:8-d. It is possible, however, that the taxation of  
12 non-“utility company assets” may be increased as municipalities deal with changes to  
13 their operating budgets and revenues resulting from the property tax law. Thus, inclusion  
14 of the non-“utility company assets,” which are included in the Company’s rate base, in  
15 the property tax mechanism would be appropriate to capture any such unintended  
16 consequences as they occur.

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<sup>4</sup> “Utility company assets” as defined in RSA 72:8-d are: “For a gas company providing gas service to retail customers: distribution pipes, fittings, meters, pressure reducing stations, buildings, contributions in aid of construction (CIAC), construction works in progress (CWIP), and land rights including use of the public rights of way, easements on private land owned by third parties, and land owned in fee by the gas company.”

1 **Q. What are some examples of assets that are not encompassed in the definition of**  
2 **“utility company assets” for purposes of the valuation provisions of RSA 72:8-d**  
3 **and -e?**

4 A. Examples of such assets are transmission plant, production plant, and general plant such  
5 as office buildings.

6 **Q. Would a deferral account need to be established with respect to the property tax**  
7 **mechanism?**

8 A. Yes. A deferral account would be necessary to capture the increases and decreases that  
9 may occur as the property tax year progresses, and to capture the recoveries and timing  
10 differences between tax billing periods, the start of recovery, and timing of collections.

11 **Q. Does the Company have a proposed implementation date for the property tax**  
12 **mechanism?**

13 A. Ideally, the effective date would occur soon after the Company receives its second tax  
14 bills of the property tax year in 2020, taking into consideration any adjustments by  
15 municipalities dating back to the April 1, 2020, which was the effective date of this new  
16 law. Those bills are expected to be received during the fourth quarter of 2020. However,  
17 as this mechanism is being proposed as part of this rate case, the Company proposes that  
18 the adjustment for the first property tax year of April 1, 2020, through March 31, 2021,  
19 take effect coincident with the August 1, 2021, implementation date of permanent rates at  
20 the conclusion of this proceeding. The effective date for subsequent property tax years  
21 could then be moved earlier in those calendar years.

1 **IV. FOLLOW-UP ITEMS FROM PRIOR DOCKETS**

2 **Q. Does the Company's rate case filing address all of the directives of the Commission**  
3 **from prior dockets?**

4 A. Yes. In its February 28, 2020, secretarial letter in Docket No. DG 19-161, the  
5 Commission included a list of items it required the Company to address in this rate case  
6 filing. The letter summarized the following requirements from prior dockets:

- 7 1. Analysis comparing revenue requirement versus anticipated revenue from Pelham  
8 customers per Docket No. DG 15-362;
- 9 2. From Docket No. DG 17-048:
- 10 a. An analysis of the depreciation reserve imbalance;
- 11 b. Information necessary to permit the Commission to evaluate the impact of  
12 decoupling;
- 13 c. An updated analysis similar to Exhibit 46 in that docket regarding the  
14 Company's investment in the iNATGAS facility;
- 15 d. A reduction to the proposed revenue requirement by 50 percent of any  
16 revenue shortfall for the first phase of the Keene CNG/LNG conversion;
- 17 3. Adjustments to the revenue requirement for items such as the year-end customer  
18 count versus the average customer account, vacancies, and severance pay;
- 19 4. Updated indirect gas costs;<sup>5</sup>
- 20 5. An identification and explanation of all non-supply costs to be recovered through  
21 the Keene Cost of Gas; and

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<sup>5</sup> The Company notes that, contrary to testimony from Staff during the January 10, 2020, prehearing conference in Docket No. DG 19-161, each EnergyNorth rate case filed subsequent to Liberty ownership has included an updated analysis of indirect gas costs as part of Functional Cost of Service Studies that were filed in each case. However, due to the particular circumstances of each case and how they were resolved, the indirect gas costs remained static, notwithstanding the fact that the Company did provide updated analyses of the costs.

1           6. If applicable, supporting information for the use of a test year other than a  
2           calendar year test year (*note: this item is not applicable to the current filing*  
3           *because the test year for this filing is calendar year 2019*).

4           The Company's filing presents the information necessary to address each of these  
5           directives, along with related requirements from Docket No. DG 15-362, Docket No. DG  
6           17-035, and Docket No. DG 17-048. This section of my testimony describes how the  
7           Company has complied with the requirements from the various orders and secretarial  
8           letter issued in these dockets.

9           **Q. Have you included an attachment that identifies the various requirements from**  
10           **those dockets and where the Company is addressing them in the rate case filing?**

11          A. Yes. Attachment SEM-1 presents a list of the various requirements along with a  
12           reference to the Company's testimonies and attachments where the pertinent information  
13           is located.

14          **Q. Please describe the follow-up information provided in the Company's filing with**  
15           **respect to Docket No. DG 15-362, the Windham and Pelham franchise docket.**

16          A. As discussed in that docket, the Company is serving customers in Pelham via a newly  
17           constructed take station on the Concord Lateral that is owned by Tennessee Gas Pipeline.  
18           Customers in Pelham are served under Managed Expansion Area rates in order to help  
19           pay the cost of the take station. In Docket No. DG 15-362, the Commission approved a  
20           settlement agreement that, in part, included a "risk sharing" mechanism whereby, as  
21           applicable to this rate case filing, the Company is required to prepare a discounted cash  
22           flow ("DCF") analysis that compares the revenue requirement of the take station with the

1 anticipated annual revenue from new Pelham customers. If there is a shortage in the  
2 average anticipated annual revenue over a three-year period following the date of  
3 implementation of permanent rates, as compared to the average annual revenue  
4 requirement over the same three-year period, the Company is required to absorb one-half  
5 of that shortfall.

6 **Q. When was the Pelham take station placed into service?**

7 A. It was placed into service on January 29, 2018.

8 **Q. What is the proposed implementation date for permanent rates?**

9 A. The proposed implementation date for permanent rates in this case is August 1, 2021.

10 **Q. In accordance with the settlement agreement in Docket No. DG 15-362, what is**  
11 **considered as “anticipated revenue?”**

12 A. The settlement agreement in that docket defines “anticipated revenue” as follows: “For  
13 purposes of this risk sharing section, anticipated revenue will include committed revenue  
14 plus Estimated Annual Margin as defined in EnergyNorth’s main extension provision in  
15 its tariff.”

16 **Q. Has the required analysis been prepared?**

17 A. Yes. Attachment SEM-2 presents the required analysis. As shown in Attachment SEM-  
18 2, the calculated average annual shortfall is approximately \$129,165, with one-half of  
19 that amount being \$64,583.

1 **Q. Will this information be updated as the case proceeds?**

2 A. Yes. It is expected that during the course of this proceeding additional sales  
3 opportunities will materialize, thus reducing the estimated shortfall.

4 **Q. Have the results of the analysis been incorporated into the overall revenue  
5 requirement schedules?**

6 A. Yes. The adjustment is included on Schedule RR-EN-3-1 in the attachments to the  
7 permanent rates testimony of Company witnesses David Simek and Kenneth Sosnick.

8 **Q. Please describe the follow-up items you are addressing from Docket No. DG 17-048,  
9 EnergyNorth's last rate case, as identified in the secretarial letter.**

10 A. The items I discuss are as follows: (i) the status of the amortization of the depreciation  
11 reserve deficiency that was determined in that case; and (ii) various items with respect to  
12 the topic of decoupling, including information to enable the Commission to evaluate the  
13 impact of decoupling. In addition, although not noted in the secretarial letter, I also  
14 provide a description of how various software-related items were assigned to the 3-, 5-,  
15 and 10-year amortization buckets.<sup>6</sup>

16 **Q. With respect to the depreciation reserve, what was required as part of the  
17 Commission's Order No. 26,122 in Docket No. DG 17-048?**

18 A. A relatively large depreciation reserve deficiency of just over \$9.9 million was  
19 determined in that docket, and the order approved its amortization over a six-year period.

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<sup>6</sup> Order No. 26,156 (July 10, 2018), at 7.

1 As part of its order, the Commission adopted the Company's position to perform a re-  
2 examination of the reserve variance in EnergyNorth's next rate case, rather than  
3 performing a full depreciation study.

4 **Q. Has that analysis been performed?**

5 A. Yes. The Company engaged the services of Management Applications Consulting, Inc.  
6 ("MAC"), which is the same consulting firm that prepared the depreciation study in  
7 Docket No. DG 17-048, in order to leverage the consultant's knowledge of the  
8 proceeding as well as its existing database of Company plant information. A copy of  
9 MAC's technical report is provided as Attachment SEM-3.

10 **Q. What were the results of that analysis?**

11 A. As detailed in Attachment SEM-3, the results of the review were that the reserve  
12 deficiency had actually grown since the last rate case to \$16.4 million. The result was not  
13 what was expected as the amortization of the \$9.9 million deficiency, which began in  
14 May 2018, was expected to decrease. However, as described in the consultant's report,  
15 there are several factors that contributed to this result, including the regulatory lag  
16 between the period involved in the study (i.e., plant in service as of December 31, 2016)  
17 and the May 1, 2018, start of the amortization; the fact that during that interim period a  
18 reserve surplus from an earlier case was still being amortized which, coupled with the  
19 fact that a deficiency actually existed, increased the amount of the deficiency by  
20 approximately \$3.4 million; and the Company's long-standing cost of removal estimate

1 of 10 percent that is applied to certain capital projects that dates back to prior ownership  
2 of the Company.

3 **Q. Did the consultant have any recommendations as to how to address the reserve**  
4 **deficiency going forward?**

5 A. Yes. Although MAC recommended the Company continue to use the 10 percent proxy  
6 for the cost of removal, MAC further recommended that the Company analyze jobs of  
7 various sizes and types to ascertain whether the 10 percent proxy currently being used for  
8 cost of removal should be adjusted downward. In addition, MAC recommended that the  
9 new depreciation study including calendar year 2020 plant data be performed during  
10 2021 to determine if the life analyses support a longer service life for any accounts.

11 **Q. Is the Company requesting any adjustment to the depreciation reserve deficiency**  
12 **amortization that was approved by the Commission in Docket No. DG 17-048?**

13 A. No. The Company has determined that the best course of action is to follow the  
14 recommendations of its consultant and perform additional analysis to determine if any  
15 internal policies need to be changed. Thus, the Company is not proposing any adjustment  
16 to the approved six-year amortization of the reserve deficiency.

17 **Q. Next, what are the decoupling items from Docket No. DG 17-048 that you are**  
18 **addressing?**

19 A. In Order No. 26,122, the Commission required EnergyNorth to file the following  
20 information in its next rate case as part of its approval of a decoupling mechanism:

- 1           1) the amount of revenue collected or passed back through this mechanism, by year;
- 2           2) an account of any measurable impacts decoupling had on Liberty’s utility
- 3                 sponsored energy efficiency programs;
- 4           3) a detailed list of all efforts the Company made to promote its own energy
- 5                 efficiency programs, and to promote other energy efficiency measures such as
- 6                 lobbying for stricter building/energy codes;
- 7           4) an account of efforts taken to educate builders about energy efficiency;
- 8           5) a detailed list of meetings with state and local officials and associations to
- 9                 promote energy efficiency;
- 10          6) customer feedback resulting from decoupling as implemented through the rate
- 11                 design; and
- 12          7) any changes in the Company's credit rating.

13           In addition to those items, the Commission required the Company to demonstrate that  
14           decoupling has allowed the Company to “remain an effective champion of energy  
15           efficiency” and has unlocked its “ability to enthusiastically support energy efficiency  
16           policy goals.”<sup>7</sup>

17   **Q.    Please discuss each of the above items.**

18    A.    With respect to item (1), revenue collected or passed back to customers pursuant to the  
19           decoupling mechanism can happen in one of two ways. First, through the operation of  
20           the Normal Weather Adjustment (“NWA”) that appears on each customer’s monthly bill  
21           during the November through April winter period, a refund or charge is determined based  
22           on the difference between actual degree days over the billing period versus the “normal”  
23           heating degree days over the same historic period. Since the implementation of

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<sup>7</sup> Order No. 26,122 (Apr. 27, 2018), at 46.

1 decoupling on November 1, 2018, the total revenue passed back to customers for the  
 2 NWA through the end of May 2020<sup>8</sup> was \$2,413,206, with the totals by year shown in  
 3 Table 1 below.

4 The second method by which revenue can be either collected or passed back to customers  
 5 is through the Revenue Decoupling Adjustment Factor (“RDAF”). The RDAF was  
 6 addressed in Docket No. DG 19-145, in which the Company’s Cost of Gas and its Local  
 7 Delivery Adjustment Charge (“LDAC”) were reviewed. The RDAF is one component of  
 8 the LDAC. The RDAF provides an annual reconciliation of allowed revenues versus  
 9 actual revenues, and beginning November 1, 2019, customers began receiving a credit of  
 10 approximately \$7 million, which is being returned over a twelve-month period. The  
 11 yearly amounts of revenue collected or passed back through the NWA and the RDAF are  
 12 shown below in Table 1:

<b>Table 1</b>			
Period	NWA	RDAF	Total
11/2018 - 12/2018	\$ (995,662)		\$ (995,662)
01/2019 - 12/2019	\$ 50,691	\$ (986,682)	\$ (935,991)
01/2020 - 05/2020	\$ 3,358,177	\$ (4,008,376)	\$ (650,199)
	<u>\$ 2,413,206</u>	<u>\$ (4,995,058)</u>	<u>\$ (2,581,852)</u>

<sup>8</sup> The NWA is in effect during the November through April winter period. In the months beyond April there are still amounts reflecting April usage billed in May as well as very minor adjustments in other months related to cancel/rebill transactions that may be necessary for individual customer bills.

1 In summary, through May 31, 2020, customers as a whole have received a positive  
2 financial benefit since the inception of decoupling of approximately \$2.6 million.

3 Regarding item (2), please refer to Attachments SEM-4 and SEM-5 for information  
4 prepared by the Company and FTI Consulting (“FTI”), respectively, that provide  
5 assessments of the measurable impacts of decoupling on the Company’s energy  
6 efficiency programs as well as the Company’s ability to remain an “effective champion  
7 of energy efficiency.” FTI analyzed the Company’s data as well as data of peer  
8 companies locally and in New England to gauge the impact decoupling has had on the  
9 Company’s energy efficiency efforts. FTI reached several conclusions, as detailed in  
10 Attachment SEM-5, most notably that “it is clear that the increased revenue certainty that  
11 came with decoupling either incited it to more zealously expand its EE program, or  
12 eliminated disincentives to do so, and that savings from its EE programs increased as a  
13 result.”<sup>9</sup> The positive conclusions by FTI stand out even more when one considers  
14 factors that may have otherwise tempered energy efficiency efforts during the time  
15 following the implementation of decoupling. First, the relatively modest NWA  
16 adjustments provided in Table 1 above, especially when considered on an individual  
17 customer basis, would not be expected on their own to have much of an impact on  
18 customer behavior with respect to the energy efficiency programs. Second, it is  
19 important to keep in mind that decoupling only impacts the distribution portion of  
20 customers’ bills. Commodity prices have recently been lower than in the past, so when

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<sup>9</sup> Attachment SEM-5, page 25 of 25.

1 customers assess their overall bill, lower Cost of Gas prices also affect customer behavior  
2 and the demand for energy efficiency measures. Finally, as described above, customers  
3 are currently receiving the benefit of a sizable credit through the RDAF. All of these  
4 factors working together, along with the infancy of the decoupling mechanism, make  
5 FTI's conclusions regarding the positive effects of decoupling on Liberty's energy  
6 efficiency efforts even more impressive.

7 EnergyNorth's activities and efforts through June 1, 2020, with respect to items (3), (4),  
8 and (5) above are summarized and detailed in Attachment SEM-6. Page 1 summarizes  
9 the total number of 2018, 2019, and 2020 activities through June 1, 2020, along with  
10 providing the total number of activities associated with requirements (3), (4), and (5).

11 The remainder of Attachment SEM-6 is a detailed list of each activity including the date  
12 and details as to the type of activity, the audience, the market segment (e.g., residential,  
13 C&I), and other relevant information.

14 With respect to item (6), there has been very little customer feedback and few inquiries  
15 with respect to decoupling, with most of the inquiries occurring near the beginning of the  
16 implementation period. A list of the inquiries through June 1, 2020, is provided in  
17 Attachment SEM-7. The Company also refers the Commission to its report on the first  
18 90 days of decoupling that was submitted to Staff on February 28, 2019, and was

1 submitted to the Commission by Staff on March 4, 2019, as part of Docket No. DG 17-  
2 048.<sup>10</sup>

3 Lastly, with respect to item (7), through June 24, 2020, the Company has not experienced  
4 any changes to its credit rating as a result of the implementation of decoupling.

5 **Q. What did the Commission require in Docket No. DG 17-048 with respect software**  
6 **classifications and amortization periods?**

7 A. Because the creation of separate classifications of software with varying amortization  
8 periods in the DG 17-048 matter was new for EnergyNorth, the Commission required that  
9 in the next rate case Liberty clearly describe how each piece of software is assigned an  
10 average service life.<sup>11</sup>

11 **Q. Please describe how various items of software are assigned to the 3-, 5-, and 10-year**  
12 **amortization buckets.**

13 A. With each item of software, the subject matter experts who use the software and are  
14 familiar with its features are consulted as to the appropriate life to apply to the software.  
15 Those subject matter experts reside in various departments, such as Information  
16 Technology, Engineering, Dispatch and Control, or other areas, depending on the  
17 particular nature and use of the software. The amortization period for cloud-based  
18 hosting arrangements will be the term of the service contract. The amortization period

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<sup>10</sup> The Company's 90-day report on decoupling can be accessed at:  
[http://www.puc.nh.gov/Regulatory/Docketbk/2017/17-048/LETTERS-MEMOS-TARIFFS/17-048\\_2019-03-04\\_STAFF\\_FILING\\_LIBERTY\\_DECOUPLING\\_RPT.PDF](http://www.puc.nh.gov/Regulatory/Docketbk/2017/17-048/LETTERS-MEMOS-TARIFFS/17-048_2019-03-04_STAFF_FILING_LIBERTY_DECOUPLING_RPT.PDF)

<sup>11</sup> Order No. 26,156 at 6 (July 10, 2018).

1 for other software solutions will depend on the specifics of the software and may vary  
2 between contracts. In some cases, details from a business case document will provide  
3 details supporting the useful life. Regardless of the particular circumstances, the  
4 Company's Plant Accounting department will not issue the job without having a clear  
5 direction on the appropriate useful life.

6 **Q. Are there other follow-up items from Docket No. DG 17-048 identified in the**  
7 **secretarial letter that are addressed elsewhere in the Company's filing?**

8 A. Yes. The following items are addressed elsewhere in the Company's rate case filing:

- 9 • An analysis of the Company's investment in the iNATGAS compressed natural  
10 gas facility is included in the joint testimony of Messrs. Clark and Stevens;
- 11 • Adjustments to the revenue requirement for a year-end customer count,  
12 employment vacancies, and severance pay are included in the joint testimony of  
13 Messrs. Simek and Sosnick;
- 14 • Information regarding production costs incurred by the Keene Division as well as  
15 any non-supply costs to be recovered through the Keene cost of gas are also  
16 included in the joint testimony of Messrs. Simek and Sosnick; and,
- 17 • Indirect gas costs are addressed in the testimony of Mr. Sosnick on the Functional  
18 Cost of Service Study.

1 **Q. In summary, has the Company addressed all of the directives in the February 28,**  
2 **2020, secretarial letter in Docket No. DG 19-161?**

3 A. Yes, with one addition. Item 2(d) of the secretarial letter related to the Keene CNG/LNG  
4 conversion. The conversion of the Keene system from propane/air to CNG and LNG has  
5 not reached a phase where the concept of a revenue shortfall would come into effect. The  
6 only conversion that has happened to date is to the limited number of customers located  
7 at the Monadnock Marketplace and, consistent with Order No. 26,294,<sup>12</sup> no customer  
8 commitment requirement was required as part of the Commission's approval of the  
9 conversion of that limited portion of the system.

10 **Q. Lastly, please describe the follow-up item from Docket No. DG 17-035 with respect**  
11 **to the special contract with the New Hampshire Department of Administrative**  
12 **Services.**

13 A. As stated above, Docket No. DG 17-035 involved a special contract with NHDAS related  
14 to its need for temporary boilers in order to ensure uninterrupted service for various State  
15 of New Hampshire buildings during the interim period between Concord Steam's  
16 cessation of service and NHDAS's completion of necessary retrofitting of natural gas  
17 equipment at those locations. A requirement of that special contract proceeding was that  
18 Liberty inform the Commission about the final costs associated with the contract. The  
19 Company has provided this information in the joint testimony of Company witnesses  
20 William Clark and Mark Stevens.

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<sup>12</sup> Docket No. DG 17-068, Order No. 26,294 (September 25, 2019) at 14.

1 Attachment SEM-1 provides a further summary of the Company's compliance with the  
2 Commission's directives.

3 **V. DUE DATES FOR RATE AND OTHER FILINGS**

4 **Q. Please provide your general comments regarding due dates of rate-related and other**  
5 **required filings.**

6 A. Over just the past five years, the regulatory reporting requirements of EnergyNorth and  
7 Keene have grown to where, on a combined basis, the weekly, monthly, quarterly, and  
8 annual required filings total slightly over 400 per year. That does not include other  
9 event-driven filings such as incident reports, interruptions of service, and similar filings  
10 that each year add to that total, depending on the occurrence of the relevant "events."  
11 Those reporting requirements have been established by rules, laws, Commission orders,  
12 settlement agreements, and other measures over the years, which have for the most part  
13 included due dates either in mid-month or on the last day or first day of a month. In  
14 addition to the increase in the total number of reporting requirements, an increase in the  
15 number of reports due simultaneously has also occurred. Moreover, directives from the  
16 Commission, whether by order or secretarial letter, to file supplemental information in  
17 dockets, special reports, or other documents also typically include mid-month or end of  
18 month due dates. Although the use of overlapping due dates is most likely coincidental,  
19 it creates a significant burden on the utility.

20 Particularly with respect to rate-related filings, the overlapping due dates also create  
21 burdens for the Commission, its Staff, and the OCA to review and analyze those filings

1 simultaneously, recognizing that Liberty is not the only utility submitting filings at any  
2 particular time. It is important to note that many of the same Liberty personnel who are  
3 involved with filings for EnergyNorth are also involved with filings for Granite State that  
4 fall on the same due dates or otherwise overlap.

5 **Q. Taking your above comments into account, what do you recommend?**

6 A. Recognizing the burden that overlapping filings can cause for those on both ends of the  
7 regulatory structure, and while recognizing that some of the overlapping dates stem from  
8 laws or Commission rules, the Company recommends that a discussion take place among  
9 Liberty, Commission Staff, and the OCA to review existing reporting requirements and  
10 deadlines and determine if certain requirements (including due dates) can be revised in  
11 terms of content or frequency, and whether some may be combined or eliminated.  
12 Through such a meeting the Company is hopeful of developing reporting requirements  
13 and timelines that work well for all involved and spread the workload to allow everyone  
14 to work more efficiently, which is in everyone's best interest.

15 **Q. Did you raise this same issue in Granite State's recently concluded rate case, Docket**  
16 **No. DG 19-064?**

17 A. Yes. In that case a provision was included in the Settlement Agreement by which the  
18 Company, Staff, and the OCA would meet by a certain date to review Granite State's  
19 reporting requirements. Liberty would seek a similar agreement in this proceeding with  
20 respect to EnergyNorth's reporting requirements.

1 **VI. CUSTOMER SERVICE INITIATIVE**

2 **Q. Please describe the planned initiative to switch the Company's payment services**  
3 **provider.**

4 A. Liberty plans to change its payment services provider from Fiserv to Kubra in January  
5 2021. As part of that change, payment options that are currently available through the  
6 Company's IVR system and website will be processed by Kubra rather than Fiserv.  
7 Associated with change of providers, the current credit card fee payment structure will be  
8 modified.

9 **Q. Please explain the options the Company is evaluating to change the credit card fee**  
10 **payment structure?**

11 A. In response to feedback from customer satisfaction surveys, the Company is exploring  
12 two different credit card fee structures. One option is to continue the current practice of  
13 requiring the customer pay a separate transaction fee for using a credit or debit card to  
14 make their bill payment. The other option is to offer the credit card payment option  
15 without a transaction fee, with the cost of the service borne by the Company and included  
16 as part of operating costs. Customers frequently express dissatisfaction with the current  
17 structure that requires a transaction fee for credit card usage, so exploring a fee free  
18 model is important to addressing customer concerns.

19 **Q. How would this work?**

20 A. Under the fee free model, EnergyNorth customers would be able to pay their bills by  
21 using a credit or debit card without incurring a separate transaction fee for using that

1 payment method. This approach is consistent with customer expectations, which are  
2 changing in response to the growing availability of digital technology and a proliferation  
3 of methods to purchase and sell goods and services in an e-commerce environment. The  
4 Company's customer satisfaction surveys show that customers expect to be able to use  
5 their credit cards without incurring a separate fee, in large part because they now  
6 routinely make purchases and pay bills using these methods. In today's economy,  
7 customers rarely pay a separate transaction fee to use a credit or debit card to make  
8 payments. Consequently, requiring a transaction fee for utility payments causes a high  
9 level of dissatisfaction for customers. A fee free payment option would be a significant  
10 step in increasing customer satisfaction.

11 **Q. Does the Company have a specific proposal at this time?**

12 A. No. The Company believes it would be appropriate to have discussions with Staff and  
13 the OCA to examine the pros and cons of the various alternative and keep the costs of  
14 either approach reasonable for customers. If the Company were to pursue a fee free  
15 model, it is likely that customer usage of the credit card payment option would increase  
16 substantially, and has the potential to become a relatively significant cost. For this  
17 reason, the Company will not implement the program without Commission approval.

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

19 A. Yes, it does.

**Liberty ENNG Rate Case – Compliance Items**

Docket	Compliance Requirement	Docket No. DG 20-105 Initial Filing Cross Reference
DG 19-161  2019 Rate Case	<p><u>Secretarial Letter (2/28/2020)</u>  <u>Item 1:</u> "In Order No. 25,987 (concerning expansion of gas service in to Pelham and Windham) the Commission approved a risk sharing mechanism requiring Liberty to absorb one half of a Pelham revenue shortfall in its first rate case after commencing service, based on a comparison of the anticipated average annual revenue requirement and an updated actual average annual revenue requirement."  <ul style="list-style-type: none"> <li>• "Liberty must include in its initial filing of its next rate case all the information required to be filed by Order No. 25,987, including but not limited to, a revenue requirement calculation that includes an adjustment, if applicable, as outlined in the Settlement Agreement approved in that Order, and detailed supporting schedules as required by that Settlement Agreement."</li> </ul> </p>	<ul style="list-style-type: none"> <li>• Mullen Testimony, Att. SEM-2</li> <li>• Rev. Req. Schedule EN-RR-3-1</li> </ul>
	<p><u>Secretarial Letter (2/28/2020)</u>  <u>Item 2:</u> Consistent with Order No. 26,122, Liberty must also include in its next initial rate case filing:  <ul style="list-style-type: none"> <li>• an analysis of Liberty's depreciation reserve imbalance (Order No. 26, 122 at 18).</li> </ul> </p>	<ul style="list-style-type: none"> <li>• Mullen Testimony, Att. SEM-3</li> </ul>
	<p><u>Secretarial Letter (2/28/2020)</u>  <u>Item 2:</u> Consistent with Order No. 26,122, Liberty must also include in its next initial rate case filing:  <ul style="list-style-type: none"> <li>• the information necessary to permit the Commission to evaluate the impact of decoupling (Order No. 26,122 at 46).</li> </ul> </p>	<ul style="list-style-type: none"> <li>• Mullen Testimony</li> <li>• Atts. SEM-4, SEM-5, SEM-6, SEM-7</li> </ul>
	<p><u>Secretarial Letter (2/28/2020)</u>  <u>Item 2:</u> Consistent with Order No. 26,122, Liberty must also include in its next initial rate case filing:  <ul style="list-style-type: none"> <li>• an analysis of Liberty's investment in its iNATGAS facility similar to Exhibit 46 in DG 17-048, in sufficient detail, to allow the Commission to evaluate the investment and its impacts on firm customers.</li> </ul> </p>	<ul style="list-style-type: none"> <li>• Clark/Stevens Testimony</li> </ul>
	<p><u>Secretarial Letter (2/28/2020)</u>  <u>Item 2:</u> "Consistent with Order No. 26,122, Liberty must also include in its next initial rate case filing:  <ul style="list-style-type: none"> <li>• a reduction to Liberty's proposed revenue requirement by 50 percent of any revenue shortfall for the first phase of the Keene CNG/LNG conversion.</li> </ul> </p>	<ul style="list-style-type: none"> <li>• Mullen Testimony (project has not progressed to that point)</li> </ul>

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Docket	Compliance Requirement	Docket No. DG 20-105 Initial Filing Cross Reference
	<p><u>Secretarial Letter (2/28/2020)</u> Item 3: Order No 26, 122 also established a number of adjustments to be included in Liberty's revenue requirement calculations. In its next rate case filing, Liberty's revenue requirement calculation must include adjustments for each item specifically adopted in Order 26,122 (or an explanation as to the change in circumstance that obviates the need for specific adjustments). Those adjustments include:</p> <ul style="list-style-type: none"> <li>• Year-End Customer Count vs. Average Customer Count (Order No. 26, 122 at 1 O);</li> <li>• A payroll calculation that reflects a representative level of vacancies (Order No, 26, 122 at 11 ); and</li> <li>• Severance Pay (Order No. 26, 122 at 13).</li> </ul>	<ul style="list-style-type: none"> <li>• Simek/Sosnick Testimony (Perm)</li> </ul>
	<p><u>Secretarial Letter (2/28/2020) at 2:</u></p> <ul style="list-style-type: none"> <li>• "Liberty's next rate petition should also include in its initial filing updated indirect gas costs with supporting testimony and schedules."</li> <li>• "In addition, the initial filing should identify and explain all non-supply costs to be recovered through the Keene cost of gas."</li> </ul>	<ul style="list-style-type: none"> <li>• Sosnick Testimony (Functional Cost of Service Study)</li> <li>• Simek/Sosnick Testimony (Perm)</li> </ul>
	<p><u>Secretarial Letter (2/28/2020) at 2:</u> "Finally, at the prehearing conference, Staff and the Office of the Consumer Advocate stated that a calendar year test year is preferable to a split-year test-year because it aligns with the Company's Annual Report to the PUC, Form F-16. The Commission found those statements persuasive and thus recommends Liberty use a calendar year in its next filed rate case. If it chooses not to do so, the Company must provide all supporting information in the format of a Form F-16 Annual Report."</p>	<ul style="list-style-type: none"> <li>• Not applicable: No split-year test year.</li> </ul>

Docket	Compliance Requirement	Initial Filing Cross Reference
DG 17-048  2017 Rate Case	<p><u>Order No. 26,122 (Apr. 27, 2018):</u></p> <ul style="list-style-type: none"> <li>• <u>Depreciation – Amortization of Reserve Deficiency:</u> “Thus, we approve a six-year amortization period of the existing test year-end balance and direct the Company to prepare and present in its next rate case, a review of the reserve imbalance, a thorough explanation of the cause of any imbalance, and a proposal for amortizing that reserve imbalance.” <u>Id.</u> at 18.</li> </ul>	<ul style="list-style-type: none"> <li>• Mullen Testimony</li> <li>• Att. SEM-3</li> </ul>
	<p><u>Order No. 26, 122 (Apr. 27, 2018):</u></p> <ul style="list-style-type: none"> <li>• Revenue Requirement Adjustments:               <ul style="list-style-type: none"> <li>○ Customer count. <u>Id.</u> at 10</li> <li>○ Employee vacancies. <u>Id.</u> at 11</li> <li>○ Severance pay. <u>Id.</u> at 13.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Simek/Sosnick Testimony (Perm)</li> </ul>
	<p><u>Order No. 26,122 (Apr. 27, 2018):</u></p> <ul style="list-style-type: none"> <li>• <u>Rate Base – iNATGAS:</u> “Nevertheless, the plant has been built and, for purposes of the base rates set in this case, we will allow recovery of the plant up to the level of costs presented in DG 14-091 (\$2,245,000) plus related O&amp;M expense. We will re-evaluate this investment in Liberty’s next rate case and may consider putting more of the investment in rate base at that time. The remedy fashioned here will put ratepayers in the position they were in when this project was approved.” <u>Id.</u> at 31-32.</li> </ul>	<ul style="list-style-type: none"> <li>• Clark/Stevens Testimony</li> </ul>
	<p><u>Order No. 26,122 (Apr. 27, 2018):</u></p> <ul style="list-style-type: none"> <li>• <u>Keene:</u> Commission permits the consolidation of Keene Division distribution rates with those of EnergyNorth subject to conditions, including:               <ul style="list-style-type: none"> <li>○ “Liberty must reduce its revenue requirement by 50 percent of any revenue shortfall in the first distribution rate case filed within five years following construction of each Phase and by 100 percent of any revenue shortfall in the second distribution rate case filed within the five years following the construction of each Phase.” <u>Id.</u> at 39.</li> <li>○ Revenue requirement to include both production and distribution costs. <u>Id.</u></li> <li>○ Direct cost of Keene system shall be recovered in rates to all distribution customers. <u>Id.</u></li> <li>○ Customer commitment requirements. <u>Id.</u></li> <li>○ Liberty to file updated DCF analyses at the in-service date of each phase and annually. <u>Id.</u> at 40.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Simek/Sosnick Testimony (Perm)</li> <li>• Sosnick Testimony (Functional Cost of Service Study) (Not all items are applicable at this time)</li> </ul>

Docket	Compliance Requirement	Initial Filing Cross Reference
	<p><u>Order No. 26.122 (Apr. 27, 2018):</u></p> <ul style="list-style-type: none"> <li><u>Decoupling</u>: "Further, to assist the Commission in evaluating Liberty's decoupling, we require the Company to report in its next rate case on the following: (1) the amount of revenue collected or passed back through this mechanism, by year; (2) an account of any measurable impacts decoupling had on Liberty's utility sponsored energy efficiency programs; (3) a detailed list of all efforts the Company made to promote its own energy efficiency programs, and to promote other energy efficiency measures such as lobbying for stricter building/energy codes; (4) an account of efforts taken to educate builders about energy efficiency; (5) a detailed list of meetings with state and local officials and associations to promote energy efficiency; (6) customer feedback resulting from decoupling as implemented through the rate design; and (7) any changes in the Company's credit rating.</li> </ul> <p>The above list is not intended to be exhaustive. In short, we require the Company to demonstrate that decoupling has allowed the Company to "remain an effective champion of energy efficiency" and has unlocked its "ability to enthusiastically support energy efficiency policy goals." <u>Id.</u> at 46.</p>	<ul style="list-style-type: none"> <li>Mullen Testimony</li> <li>Atts. SEM-4, SEM-5, SEM-6, SEM-7</li> </ul>
	<p><u>Order No. 26.122 (Apr. 27, 2018):</u></p> <ul style="list-style-type: none"> <li><u>Test Year</u>: Liberty shall file its next distribution rate case using a test year ending no later than December 31, 2020, and that rate case shall include a report on the effects of decoupling as detailed in the order. <u>Id.</u> at 56.</li> </ul>	<ul style="list-style-type: none"> <li>Mullen Testimony</li> </ul>
	<p><u>Order No. 26.156 (July 10, 2018):</u></p> <ul style="list-style-type: none"> <li>As suggested by Staff, we require that Liberty, in its next rate case, clearly explain how each piece of software is assigned an A[verage]S[ervice]L[ife]. <u>Id.</u> at 7</li> </ul>	<ul style="list-style-type: none"> <li>Mullen Testimony</li> </ul>

Docket	Compliance Requirement	Initial Filing Cross Reference
DG 17-068  Keene Declaratory Ruling re CNG/LNG	Order No. 26,274 (July 26, 2019) (order on affirming/clarifying declaratory ruling): <ul style="list-style-type: none"> <li>• “We note that Puc 503.04(a) requires gas utilities to ‘provide certain services to its customers when service conditions such as change in pressure or composition of gas affect or would affect efficiency of operation or adjustment of appliances.’ Puc 503.04(b) further requires that if any such change occurs, the ‘utility shall, without undue delay and without charge, inspect the appliances of its customers and, if necessary, readjust those appliances for the new conditions.’ Based on the Staff Assessment, it appears that these provisions will apply to the Keene system conversion, and we direct Liberty to address these rules when it seeks to recover Keene conversion costs from ratepayers.” <u>Id.</u> at 11.</li> <li>• “In addition, in accordance with the directives set forth in Order No. 26,122, Liberty must provide updated discounted cash flows (DCFs) based on detailed engineering plans and customer commitments that will produce at least 50% of the revenue requirement associated with the new facilities prior to the initiation of construction of each conversion phase.” <u>Id.</u> at 13.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable at this time.</li> </ul>
	Order No. 26,294 (Sept. 25, 2019) (order on rehearing): <ul style="list-style-type: none"> <li>• “We clarify that before initiation of construction for each phase of the Keene system conversion/expansion, Order No. 26,122 requires Liberty to file a detailed report of its business plan. The business plan shall include all conversion/expansion project costs, as well as detailed projected cost estimates for all conversion/expansion projects to be included in the revenue requirement analysis required as part of the risk-sharing mechanism. The business plan must be supported by updated DCF analyses based on detailed engineering plans and customer commitments that will produce at least 50 percent of the revenue requirement associated with the new facilities. As established in DG 17-048, such DCF analyses are the first step in gaining approval for each phase of the conversion/expansion and will be used to demonstrate that Liberty’s New Hampshire ratepayers are not burdened with unfair or unwarranted costs.” <u>Id.</u> at 14.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable at this time</li> </ul>

Docket	Compliance Requirement	Initial Filing Cross Reference
DG 17-035  NHDAS Special Contract	<u>Order No. 26,018 (May 15, 2017), at 4:</u> Liberty shall "notify the Commission if its costs related to this special contract exceed \$2,725,000, and if a contract amendment is necessary and denied, an explanation of the Company's plans in light of the denial, and the expected impact on boiler operations, cost, and cost recovery."	<ul style="list-style-type: none"> <li>Clark/Stevens Testimony</li> </ul>

Docket	Compliance Requirement	Initial Filing Cross Reference
DG 15-362  Franchise Approval in Pelham and Windham	<p><u>Order No. 25,987 (Feb. 8, 2017), at 4 (Settlement Agreement Condition #4):</u> "Liberty would recover the costs incurred to construct a take station off of the TGP Concord Lateral in Pelham through its distribution rates as part of a rate case. These costs would be amortized over 10 years, including a pre-tax return, based on the Commission-approved capital structure and cost of capital for Liberty."</p>	<ul style="list-style-type: none"> <li>• Mullen Testimony</li> <li>• Att. SEM-1</li> <li>• Rev. Req. Schedules EN-RR-3-1</li> </ul>
	<p><u>Order No. 25,987 (Feb. 8, 2017), at 4 (Settlement Agreement Condition #5):</u> "As a 'risk-sharing' provision Liberty would reduce its revenue deficiency in any rate case filed within five years of the in-service date of Phase 1 of the Pelham build-out as follows (as demonstrated in Appendix B of the Settlement Agreement): . . .</p> <p>a. In the first rate case any revenue deficiency between the anticipated average annual revenue from Pelham customers over the three years following implementation of permanent rates, and the average annual revenue requirement over the same period of the Pelham construction costs and amortization of the Pelham TGP take station, <b>would be reduced by one half</b>. If a second rate case is filed within the five year period, the amount of the reduction to the revenue deficiency <b>would be the full difference between</b> the anticipated Pelham revenue requirement and projected revenues. . . .</p> <p>b. For purposes of the risk-sharing provision, costs would include actual direct capital costs to date, the Pelham take station amortization expense, and projected direct capital costs for system reinforcement and customer growth to serve Pelham. . . .</p> <p>c. For purposes of the risk-sharing provision, anticipated revenue would include committed revenue plus Estimated Annual Margin as defined in Liberty's main extension provision in its tariff. . . .</p> <p>d. The risk-sharing provision would terminate if average annual revenue exceeds average annual revenue requirement.</p> <p>e. Liberty would file annual updated Pelham and Windham Discounted Cash Flow ("DCF") analyses in January of each year following the first full year of commencement of service until the projects achieve a positive annual return, but for no less than three years, and for no more than five years (as demonstrated in Appendix C of the Settlement Agreement). . . ."</p>	<ul style="list-style-type: none"> <li>• Mullen Testimony</li> </ul>

IL-233





# MANAGEMENT APPLICATIONS CONSULTING, INC.

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## MEMO

**DATE:** July 20, 2020  
**TO:** Steve Mullen, Liberty Utilities  
**FROM:** Paul Normand and Marcy Stefan  
**SUBJECT:** Review of Reserve Variance Deficiency for Liberty Depreciable Gas Plant

At Liberty's request, MAC has reviewed the growth in the Company's plant as it relates to depreciable plant with the goal of quantifying the change in reserve imbalances since the Company's last depreciation study. In evaluating the change in plant balances as ordered in the last rate case, this creates a very complicated process of identifying any change by specific plant account. Since the 2016 period of time, many plant balances have been reclassified to comply with the New Hampshire Public Utility Commission's Staff audit, and we have derived the following detail comparisons by category with which to quantify the growth in the reserve imbalance:

**TABLE 1**

**Historical Plant Balances and Net Salvage**

ACCOUNT / DESCRIPTION	PLANT BALANCE @12/31/2016	PLANT BALANCE @12/31/2019	DIFFERENCE (PLANT INCREASE)	% INCREASE IN PLANT	SCHEDULE A 2016		
					THEO. RSV WITH NET SALVAGE @12/31/2016	BOOK RSV @12/31/2016	RESERVE VARIANCE @12/31/2016
367.00 Mains (UNDER CURRENT 367 & 376)	\$234,672,697	316,221,089	81,548,392	34.75%	63,315,172	54,187,131	9,128,041
380.00 Services	\$146,720,226	187,120,798	40,400,572	27.54%	68,883,816	66,714,617	2,169,199
<b>TOTAL DEPREC GAS PLANT</b>	477,852,305	631,074,215	153,221,910	32.06%	165,193,965	155,247,187	9,946,778

*Note: Mains account was Account 367 @ 12/31/2016*

	SCHEDULE A 2019 PRELIMINARY		
	THEO. RSV WITH NET SALVAGE @12/31/2019	BOOK RSV @12/31/2019	RESERVE VARIANCE @12/31/2019
367.00 Mains	3,904,396	404,274	3,500,122
376.00 Mains	72,758,459	60,928,702	11,829,757
380.00 Services	84,274,853	83,285,975	988,878
<b>TOTAL DEPREC GAS PLANT</b>	\$205,106,324	188,750,655	\$16,355,669

*Note: Mains account split into 367 & 376 @ 12/31/2019*

*Note: See Attachments A (2016) and B (2019)*

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**TABLE 2**  
**Historical Cost of Removal**

DATE	\$ COST OF REMOVAL	ACCUMULATED \$ COST OF REMOVAL
@12/31/2012	573.53	573.53
@12/31/2013	1,502,866.45	1,503,439.98
@12/31/2014	1,604,008.61	3,107,448.59
@12/31/2015	1,504,536.59	4,611,985.18
@12/31/2016	1,736,434.75	6,348,419.93
@12/31/2017	2,527,346.53	8,866,047.53
@12/31/2018	2,843,715.44	11,709,762.97
@12/31/2019	3,738,897.19	15,448,660.16

**Note: The Cost of Removal relates to the following work types:**

1. Relay Main
2. Main Replacement
3. Relay service
4. Service Relocation
5. Service Replacement

Two key aspects of the Company's reserve variance growth are with respect to the replacement/retirement of large quantities of mains and services and the potential change in average service life (ASL) of depreciable assets. The first key element relating to ASL has to do with the potential increase to the life once new additions are factored into any life analyses. Based on experience and the Company's historical growth data, we would expect that a new study would derive longer service lives for both mains and services which would impact the resulting reserve variance. The second key element recognized annually is the cost of removal portion of the Company's plant replacement activities. It is this portion of costs that the Company has historically been estimating as a blanket 10% of investments in major plant accounts. In understanding this process, large growth in plant investments which has been occurring for many years, especially for key plant accounts related to mains and services, results in large amounts of unrecovered dollars being identified but not recovered in the short term.

Historically, we have observed that some utilities had periodically used a flat 10% estimate for cost of removal as a proxy to the more detailed and laborious efforts required to quantify these amounts which are primarily labor related. In the last ten years, the rapid increase in plant replacement/retirement requirements had, in many cases, resulted in a more detailed review of these costs (COR) which has resulted in being modified to reflect a much lower 3 to 5% range of costs to new plant investments. The cost areas typically considered are with respect to digging a trench, cutting and purging pipe, capping, resurfacing and flaggers/police. Again, the growth in

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these costs has been a direct result of a much higher frequency of retirement/replacement occurring for gas plant.

Based on our review of the available data (Tables 1 and 2), we offer the following recommendations to consider for the future plant activities of the Company's depreciable plant accounts:

1. Continue to record and document the Company's 10% COR by plant account.
2. In order to evaluate the current level of COR, a detailed effort coordinated between engineering (field) and accounting be undertaken for all major plant activity with respect to identifying/estimating activities relating solely to COR (plant and labor associated with activities). This should consider various types of projects where one can balance small and large projects to achieve an outcome to compare with the current 10% estimated level.
3. Once in place, consider maintaining this process going forwards to ensure that the new proposed levels are supportable.
4. The efforts surrounding the application of Items 1 – 3, above, should be undertaken as soon as possible such that the results will be available to influence the Company's next depreciation study.
5. Recommend that a new depreciation study be undertaken with the calendar year 2020 data included to ascertain if the life analyses support a longer average service life for any accounts. This should be prepared in early 2021 to provide you with immediate information as to the possible impact along with the technical support to possibly suspend the current allowed annual recovery of the shortfall.

LIBERTY UTILITIES (ENERGY/NORTH NATURAL GAS) CORPORATION  
SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/16  
WHOLE LIFE SCHEDULE WITH RESERVE VARIANCE

SCHEDULE A

FERC ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/16	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV.	ACCRUAL WITHOUT NET SALV.	NET SALV. %	SALV. FACTOR	ACCRUAL RATE W/ NET SALV.	ACCRUAL WITH NET SALV.	THEO. RSV. WITHOUT NET SALV.	THEO. RSV. WITH NET SALV.	BOOK RSV. @12/31/16	RESERVE VARIANCE	COR RATE %
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
303.00	CAPITALIZED SOFTWARE	14,745,889	S 4.0	6.2	16.13	2,378,512	0	1.00	16.13	2,378,512	5,708,940	5,708,940	4,975,703	733,237	0.00
<b>PRODUCTION PLANT</b>															
305.00	STRUCTURES AND IMPROVEMENTS	1,975,163	R 1.0	35.0	2.86	56,490	0	1.00	2.86	56,490	818,047	818,047	1,374,447	-556,400	0.00
311.00	LP GAS EQUIPMENT	258,481	R 1.0	35.0	2.86	7,393	0	1.00	2.86	7,393	59,141	59,141	63,766	-4,625	0.00
320.00	OTHER EQUIPMENT-LNG	2,556,209	R 1.0	35.0	2.86	73,108	0	1.00	2.86	73,108	357,489	357,489	364,891	-7,402	0.00
320.10	OTHER EQUIPMENT-PRODUCTION	8,777,306	R 1.0	35.0	2.86	251,031	0	1.00	2.86	251,031	4,967,873	4,967,873	7,765,237	-2,797,364	0.00
	<b>TOTAL DEPREC. PRODUCTION PLANT</b>	13,567,159		35.0	2.86	388,021			2.86	388,021	6,202,550	6,202,550	9,568,341	-3,365,791	
<b>STORAGE PLANT</b>															
361.00	STRUCTURES AND IMPROVEMENTS-LNG	57,345	R 1.0	35.0	2.86	1,640	0	1.00	2.86	1,640	13,371	13,371	9,179	4,192	0.00
363.50	OTHER EQUIPMENT-LNG	7,646	R 1.0	35.0	2.86	219	0	1.00	2.86	219	1,783	1,783	1,560	223	0.00
	<b>TOTAL DEPREC. STORAGE PLANT</b>	64,991		35.0	2.86	1,859			2.86	1,859	15,154	15,154	10,739	4,415	
<b>TRANSMISSION PLANT</b>															
366.20	STRUCTURES AND IMPROVEMENTS	269,809	R 1.0	35.0	2.86	7,717	0	1.00	2.86	7,717	119,856	119,856	177,630	-57,774	0.00
366.30	STRUCTURES AND IMPROVEMENTS-OTHER	353,851	R 1.0	35.0	2.86	10,120	0	1.00	2.86	10,120	192,816	192,816	278,219	-85,403	0.00
367.00	MAINS	234,672,697	R 3.0	60.0	1.67	3,919,034	-15	1.15	1.92	4,505,716	55,056,671	63,315,172	54,187,131	9,128,041	0.25
369.00	MEASURING AND REGULATING STATION EQUIP.	4,909,208	S 4.0	35.0	2.86	140,403	0	1.00	2.86	140,403	1,782,000	1,782,000	1,889,616	-107,616	0.00
	<b>TOTAL DEPREC. TRANSMISSION PLANT</b>	240,205,565		59.0	1.70	4,077,274			1.94	4,663,956	57,151,343	65,409,844	56,532,596	8,877,248	
<b>DISTRIBUTION PLANT</b>															
380.00	SERVICES	146,720,226	R 4.0	45.0	2.22	3,257,189	-60	1.60	3.55	5,208,568	43,052,385	68,883,816	66,714,617	2,169,199	1.33
381.00	METERS	14,628,345	R 3.0	32.0	3.13	457,867	0	1.00	3.13	457,867	6,058,054	6,058,054	7,838,363	-1,780,309	0.00
381.10	METERS-INSTRUMENT	188,398	R 3.0	32.0	3.13	5,897	0	1.00	3.13	5,897	46,943	46,943	31,378	15,565	0.00
381.20	METERS-ERTS	5,647,769	SO	15.0	6.67	376,706	0	1.00	6.67	376,706	4,689,816	4,689,816	2,073,245	2,616,571	0.00
382.00	METER INSTALLATIONS	14,360,005	R 3.0	32.0	3.13	449,468	0	1.00	3.13	449,468	3,013,872	3,013,872	2,510,354	503,518	0.00
387.00	OTHER EQUIPMENT	908,013	S 6.0	19.0	5.26	47,761	0	1.00	5.26	47,761	410,276	410,276	339,112	71,164	0.00
	<b>TOTAL DEPREC. DISTRIBUTION PLANT</b>	182,452,756		39.7	2.52	4,594,889			3.59	6,546,268	57,271,346	83,102,777	79,507,089	3,595,708	
<b>GENERAL PLANT</b>															
390.00	STRUCTURES AND IMPROVEMENTS	22,070,702	R 1.0	35.0	2.86	631,222	0	1.00	2.86	631,222	2,218,786	2,218,786	3,314,051	-1,095,265	0.00
391.00	OFFICE FURNITURE AND EQUIP.	285,566	S 4.0	18.0	5.56	15,877	5	0.95	5.28	15,078	44,136	41,929	26,275	15,854	0.00
391.10	OFFICE FURNITURE AND EQUIP-COMPUTERS	1,840,911	S 4.0	10.0	10.00	184,091	0	1.00	10.00	184,091	1,179,639	1,179,639	297,543	882,096	0.00
391.20	OFFICE FURNITURE AND EQUIP-LAPTOP COMP.	679,916	S 4.0	5.0	20.00	135,963	0	1.00	20.00	135,963	349,087	349,087	81,882	267,205	0.00
393.00	STORES EQUIPMENT	99,421	SO	30.0	3.33	3,311	0	1.00	3.33	3,311	19,569	19,569	28,007	-8,438	0.00
394.00	TOOLS, SHOP & GARAGE EQUIPMENT	825,963	S 6.0	19.0	5.26	43,446	0	1.00	5.26	43,446	270,641	270,641	347,637	-76,996	0.00
394.10	TOOLS, SHOP & GARAGE EQUIPMENT-CNG STATION	221,199	S 6.0	19.0	5.26	11,635	0	1.00	5.26	11,635	203,415	203,415	192,912	10,503	0.00
397.00	COMMUNICATION EQUIPMENT	443,965	SO	10.0	10.00	44,397	0	1.00	10.00	44,397	343,778	343,778	212,912	130,866	0.00
398.00	MISCELLANEOUS GENERAL EQUIPMENT	348,302	S 5.0	15.0	6.67	23,232	0	1.00	6.67	23,232	127,856	127,856	151,520	-23,664	0.00
	<b>TOTAL DEPREC. GENERAL PLANT</b>	26,815,945		24.5	4.08	1,093,194			4.07	1,092,394	4,756,907	4,754,700	4,652,739	101,961	
	<b>TOTAL DEPREC. GAS PLANT</b>	477,852,305		38.1	2.62	12,533,748			3.15	15,071,009	131,106,240	165,193,965	155,247,187	9,946,778	
<b>AMORTIZED PLANT</b>															
392	TRANSPORTATION EQUIPMENT	2,566,140		5.0	20.00	513,228	0	1.00	20.00	513,228			623,499		0.00
398	POWER OPERATED EQUIPMENT	491,943		5.0	20.00	98,389	0	1.00	20.00	98,389			430,651		0.00
	<b>TOTAL AMORTIZED PLANT</b>	3,058,083		5.0	20.00	611,617			20.00	611,617			1,054,150		
	<b>TOTAL DEPREC. &amp; AMORTIZED GAS PLANT</b>	480,910,388		36.6	2.73	13,145,364			3.26	15,682,626			156,301,337		
1211	OPI-STRUCTURES-RETAINED												133,284		
304/365	LAND & LAND RIGHTS	592,018													
389.00	GNL LAND & LAND RIGHTS	16,806													
1012	ARO	139,286													
	DIFF. IN ACCOUNT 367 & 380 BAL. VS PUC ANNUAL REPORT	8,352													
	<b>TOTAL GAS PLANT IN SERVICE</b>	481,666,850											156,434,621		

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORPORATION  
SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/2019  
WHOLE LIFE SCHEDULE WITH RESERVE VARIANCE

SCHEDULE A

FERC ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/2019	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV.	ACCRUAL WITHOUT NET SALV.	NET SALV. %	SALV FACTOR	ACCRUAL RATE W/ NET SALV.	ACCRUAL WITH NET SALV.	THEO. RSV. WITHOUT NET SALV.	THEO. RSV. WITH NET SALV.	BOOK RSV. @12/31/2019	RESERVE VARIANCE	CCR RATE %	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)			
<b>CAPITALIZED SOFTWARE</b>																
303.10	CAPITALIZED SOFTWARE- 3 YEARS	899,372	S	4.0	3.0	33.33	299,761	0	1.00	33.33	299,761	566,269	566,269	522,934	43,335	0.00
303.20	CAPITALIZED SOFTWARE- 5 YEARS	13,147,962	S	4.0	5.0	20.00	2,629,592	0	1.00	20.00	2,629,592	10,900,573	10,900,573	10,780,273	140,300	0.00
303.40	CAPITALIZED SOFTWARE- 10 YEARS	3,539,598	S	4.0	10.0	10.00	353,957	0	1.00	10.00	353,957	1,900,188	1,900,188	2,319,763	-119,575	0.00
	<b>TOTAL ACCOUNT 303</b>	17,586,930			5.4		3,283,310				3,283,310	13,367,030	13,367,030	13,601,970	-234,940	
<b>PRODUCTION PLANT</b>																
305.00	STRUCTURES AND IMPROVEMENTS	852,107	R	1.0	35.0	2.86	24,372	0	1.00	2.86	24,372	388,738	388,738	266,638	122,100	0.00
319.00	GAS MIXING EQUIPMENT	368,345	R	1.0	20.0	5.00	18,417	0	1.00	5.00	18,417	164,887	164,887	241,382	-76,505	0.00
320.00	OTHER EQUIPMENT-LNG	315,570	R	1.0	35.0	2.86	9,025	0	1.00	2.86	9,025	44,571	44,571	-57,148	101,719	0.00
320.10	OTHER EQUIPMENT	3,478,111	R	1.0	35.0	2.86	99,474	0	1.00	2.86	99,474	2,087,209	2,087,209	1,389,131	698,078	0.00
	<b>TOTAL DEPREC. PRODUCTION PLANT</b>	5,014,193			33.2		151,289				151,289	2,685,405	2,685,405	1,840,013	845,392	
<b>STORAGE PLANT</b>																
361.00	STRUCTURES AND IMPROVEMENTS-LNG	96,980	R	1.0	35.0	2.86	2,774	0	1.00	2.86	2,774	19,586	19,586	17,233	2,353	0.00
363.50	OTHER EQUIPMENT-LNG	2,644	R	1.0	35.0	2.86	210	0	1.00	2.86	210	2,224	2,224	2,244	-180	0.00
	<b>TOTAL DEPREC. STORAGE PLANT</b>	104,628			35.0		2,992				2,992	21,810	21,810	19,277	2,533	
<b>LNG GAS TERMINATING AND PROCESSING PLANT</b>																
364.20	STRUCTURES AND IMPROVEMENTS-LNG	609,078	R	1.0	35.0	2.86	17,420	0	1.00	2.86	17,420	192,797	192,797	438,133	-245,336	0.00
364.80	OTHER EQUIPMENT	3,859,019	R	1.0	35.0	2.86	111,426	0	1.00	2.86	111,426	1,531,470	1,531,470	2,400,155	-868,685	0.00
	<b>TOTAL DEPREC. LNG TERM. AND PROCESS. PLANT</b>	4,505,097			35.0		128,846				128,846	1,724,267	1,724,267	2,838,288	-1,114,021	
<b>TRANSMISSION PLANT</b>																
367.00	MAINS	11,740,462	R	3.0	60.0	1.67	196,066	-15	1.15	1.92	225,417	3,395,127	3,904,396	404,274	3,500,122	0.25
369.00	MEASURING AND REGULATING STATION EQUIP.	138,182	R	4.0	35.0	2.86	3,952	0	1.00	2.86	3,952	61,651	61,651	-44,884	106,545	0.00
	<b>TOTAL DEPREC. TRANSMISSION PLANT</b>	11,878,644			59.5		200,018				1,93	229,369	3,456,778	3,966,047	359,380	3,606,667
<b>DISTRIBUTION PLANT</b>																
375.00	STRUCTURES AND IMPROVEMENTS	1,689,296	R	1.0	35.0	2.86	48,314	0	1.00	2.86	48,314	147,159	147,159	211,302	-64,143	0.00
376.00	MAINS	316,221,089	R	3.0	60.0	1.67	5,280,892	-15	1.15	1.92	6,071,445	63,268,225	72,758,459	60,928,702	11,829,757	0.25
377.00	COMPRESSOR STATION EQUIPMENT	2,246,186	R	1.0	35.0	2.86	64,241	0	1.00	2.86	64,241	164,456	164,456	192,723	-28,267	0.00
378.00	MEAS. AND REG. STATION EQUIPMENT-GENERAL	7,435,290	S	2.0	35.0	2.86	212,649	0	1.00	2.86	212,649	3,479,948	3,479,948	4,324,404	-844,456	0.00
379.00	MEAS. AND REG. STATION EQUIPMENT-CITY GATE	5,294,746	S	3.0	35.0	2.86	151,430	0	1.00	2.86	151,430	1,214,751	1,214,751	1,320,344	-105,593	0.00
380.00	SERVICES	187,120,798	R	4.0	45.0	2.22	4,154,062	-60	1.60	3.55	6,642,788	52,671,783	84,274,653	83,265,975	988,678	1.33
381.00	METERS	14,097,967	R	3.0	32.0	3.13	441,266	0	1.00	3.13	441,266	4,815,475	4,815,475	4,530,427	285,048	0.00
381.10	METERS-INSTRUMENT	276,522	R	3.0	32.0	3.13	8,655	0	1.00	3.13	8,655	94,411	94,411	113,499	-19,088	0.00
381.20	METERS-ERTS	6,045,353	SQ	15.0	6.67	403,225	0	1.00	6.67	403,225	4,435,265	4,435,265	2,730,186	1,705,079	0.00	
382.00	METER INSTALLATIONS	18,597,177	R	3.0	32.0	3.13	582,092	0	1.00	3.13	582,092	4,539,321	4,539,321	4,116,883	422,438	0.00
385.00	INDUSTRIAL MEASURING & REGULATING EQUIPMENT	53,375	S	6.0	19.0	5.26	2,808	0	1.00	5.26	2,808	9,832	9,832	5,332	4,500	0.00
387.00	OTHER EQUIPMENT	2,682,115	S	6.0	19.0	5.26	141,079	0	1.00	5.26	141,079	1,081,159	1,081,159	1,078,797	2,362	0.00
	<b>TOTAL DEPREC. DISTRIBUTION PLANT</b>	561,759,914			48.9		11,490,733				2.63	14,769,992	135,921,785	177,015,089	162,838,574	14,176,515
<b>GENERAL PLANT</b>																
390.00	STRUCTURES AND IMPROVEMENTS	22,648,772	R	1.0	35.0	2.86	647,755	0	1.00	2.86	647,755	3,631,027	3,631,027	5,622,010	-1,990,983	0.00
391.00	OFFICE FURNITURE AND EQUIP.	636,368	S	4.0	18.0	5.56	35,382	5	0.95	5.28	33,600	160,564	152,536	119,886	32,650	0.00
391.10	OFFICE FURNITURE AND EQUIP.-COMPUTERS	867,103	S	4.0	10.0	10.00	86,710	0	1.00	10.00	86,710	451,043	451,043	-403,214	854,257	0.00
391.20	OFFICE FURNITURE AND EQUIP.-LAPTOP COMP.	899,621	S	4.0	5.0	20.00	179,924	0	1.00	20.00	179,924	637,036	637,036	440,849	196,187	0.00
393.00	STORES EQUIPMENT	138,142	SQ	30.0	3.33	4,600	0	1.00	3.33	4,600	30,157	30,157	35,198	-5,041	0.00	
394.00	TOOLS, SHOP & GARAGE EQUIPMENT	3,339,457	S	6.0	19.0	5.26	175,655	0	1.00	5.26	175,655	750,378	750,378	754,055	-3,677	0.00
397.00	COMMUNICATION EQUIPMENT	892,402	SQ	10.0	10.00	10.00	89,240	0	1.00	10.00	89,240	449,676	449,676	433,204	16,472	0.00
398.00	MISCELLANEOUS GENERAL EQUIPMENT	802,073	S	5.0	15.0	6.67	53,558	0	1.00	6.67	53,558	224,824	224,824	251,165	-26,341	0.00
	<b>TOTAL DEPREC. GENERAL PLANT</b>	30,224,838			23.8		1,272,826				4.21	1,271,044	6,334,705	6,326,677	7,253,153	-628,476
<b>TOTAL DEPREC. GAS PLANT</b>																
		631,074,215			38.2		16,530,012				3.14	19,838,841	163,511,780	188,750,655	16,555,670	7.97%
<b>AMORTIZED PLANT</b>																
392	TRANSPORTATION EQUIPMENT	8,367,661			5.0	20.00	1,673,532	0	1.00	20.00	1,673,532			3,619,840	0.00	
396	POWER OPERATED EQUIPMENT	1,378,752			5.0	20.00	275,750	0	1.00	20.00	275,750			683,509	0.00	
	<b>TOTAL AMORTIZED PLANT</b>	9,746,413			5.0	20.00	1,949,283				20.00	1,949,283		4,333,449		
<b>TOTAL DEPREC. &amp; AMORTIZED GAS PLANT</b>																
		640,820,628			34.7		18,479,295				3.40	21,788,124		193,084,104		
<b>1050 PLANT HELD FOR FUTURE USE</b>																
1210	OP-LAND-RETAINED	13,665														
1211	OP-STRUCTURES-RETAINED	133,284												133,284		
3020	FRANCHISES AND CONSENTS	250,950														
3040	LAND RIGHTS OWNED	97,594														
3641	LNG PROCSS LAND AND LAND RIGHTS	57,315														
3740	DISTR LAND & LAND RIGHTS	357,903														
3890	GNL LAND RIGHTS	121,489														
	<b>TOTAL GAS PLANT IN SERVICE</b>	642,705,043												193,217,388		

**Liberty Utilities, NH**  
**ENNG – Impacts of Decoupling on Energy Efficiency**  
**As of 6/1/2020**

**Summary**

Attached is a detailed inventory of specific marketing and promotion activities performed in 2018, 2019, and year-to-date in 2020 for the Company's natural gas energy efficiency programs. Activities are differentiated between advertisements, events, and training sessions performed, and further classified as relating to, (a) the promotion of stricter building energy codes in the state, (b) the education activities to builders, and/or (c) the engagement with state and local officials and associations to promote energy efficiency.

In summary, the Company more than doubled its volume of marketing and promotion activities between 2018 and 2019, performing 240 documented tactics in 2019 as compared to 99 in 2018. The Company increased its engagement with state and local officials and associations by 150%, and increased its education activities to builders by 88%. Specific tactics the Company deployed to promote stricter building energy codes in the state increased 64%, including where the Company expressed public support and lobbied for the full adoption of the 2015 IECC standards. In 2020, the Company is on pace to exceed its 2018 activity levels again and come close to matching if not exceeding certain 2019 activity levels, despite the market implementation challenges posed by COVID-19.

In terms of general promotion of the Company's energy efficiency programs, of noteworthy recognition is the Company's implementation of a broad-based, multi-channel mass-media campaign launched in April 2019. The campaign is a natural gas-focused energy efficiency advertising effort utilizing monthly Cable TV commercials and traditional and online radio spots, bus-wrappings, billboard advertisements, and social media marketing. This was a first-of-its kind energy efficiency marketing campaign from any of the NH utilities, which the Company is continuing to deploy on a monthly basis in 2020.

In terms of any measurable impacts decoupling has had on the results of the Company's sponsored energy efficiency programs, the Company increased its lifetime MMBtu savings achievements by 26% in 2019 compared to its 2018 savings achievements, while only increasing its program expenditure levels by 8% between 2019 and 2018.

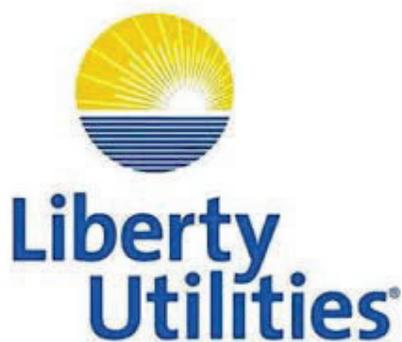
Lastly, the Company completed a survey of its residential customers in April 2020 to measure the level of energy efficiency program awareness. As part of the survey findings, the Company found that nearly three in four customers (73%) are aware that the Company offers energy efficiency programs to help customers reduce their energy costs, which is significantly higher than the awareness level recently measured as part of the Company's annual customer satisfaction survey completed in the fall of 2019, where energy efficiency program awareness was found to be 64%. The Company had last measured customer awareness of its energy efficiency programs in its 2016 annual customer satisfaction survey, where program awareness was measured to be 57%.



JULY 31, 2020

# EVALUATION OF THE EFFECTS OF REVENUE DECOUPLING ON ENERGY EFFICIENCY PROGRAM ACHIEVEMENT

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## 1. Introduction and Summary

The Power & Utilities practice at FTI Consulting Inc. (“FTI”) has been retained by Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty (“Liberty” or the “Company”) to evaluate linkages between rate decoupling and outcomes for utility-sponsored Energy Efficiency (“EE”) programs. Specifically, FTI was asked to analyze changes in the behaviors of gas utilities that are generally similar to Liberty in terms of size and geography attributable to the implementation of rate decoupling and, to the extent that such changes were identified, attempt to measure the effects.

The context for our inquiry is the rate case with which this report is filed. In Liberty’s most recent completed rate proceeding, the New Hampshire Public Utilities Commission (the “Commission”) authorized it to implement New Hampshire’s first revenue decoupling program, which includes a mechanism to adjust rates for differences between the revenue target contemplated in the Company’s most recent base-rate case and actual sales revenues. By accounting for this difference, the revenue decoupling mechanism is designed to eliminate revenue risks that arise from increasing EE penetration, in addition to changes in weather and other variables.<sup>1</sup> When the Commission approved the implementation of this mechanism through the rate settlement in the Company’s most recent base-rate proceeding, the Commission directed Liberty to report on the effectiveness of the mechanism in achieving the desired outcome, when the Company next requested a change in distribution rates.<sup>2</sup> This report supports fulfillment of that requirement and provides additional information to the Commission

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<sup>1</sup> Order No. 26, 122 at p. 1. Docket No. DG-19-161.

<sup>2</sup> Ibid., p. 46.



and intervenors regarding the effectiveness of the Company's decoupling program in advancing EE achievement.

Our evaluation included two main avenues of inquiry. *First*, we sought to determine whether the Company's behavior regarding its EE programs changed after November 1, 2018. One stated objective of decoupling the Company's rates was the elimination of disincentives to participate in EE programs. If that objective was achieved, we expected to find evidence of greater advocacy for those programs. To determine whether this was the case, we reviewed data regarding the Company's outreach and marketing efforts before and after decoupling took effect and also data showing savings from EE programs in those two periods.

*Second*, we sought to isolate evidence indicating a relationship between decoupling and EE achievement through a comparative analysis of similar utilities. Here, our thesis was that, if revenue decoupling is positively correlated to EE achievement, we would find evidence of that relationship for utility companies that operate in different jurisdictions, under different management, and which decoupled their rates at different times. To undertake this part of our analysis we reviewed EE data for a number of gas utilities, and one electric utility, throughout New England.

Through this investigation, we found that there is significant evidence that revenue decoupling and EE achievement are linked. Data for Liberty shows that its behavior changed once the Commission approved its request to decouple its rates from its revenues and that significant savings from its EE programs was a direct result. We also found similar outcomes for utilities all over New England, for whom gains in EE program savings coincided with the decoupling of rates.



In the final analysis, we conclude that the Commission’s approval of Liberty’s request to decouple its rates from its revenues in 2018 has provided measurable support for the Company’s subsequent gains in energy efficiency and that decoupling is likely to do so moving forward.

The remainder of this report is organized as follows. Section 2 provides a brief overview of utility decoupling, the Commission’s approval of revenue decoupling for Liberty, and the Company’s EE program. Section 3 describes the increases in the Company’s activity levels we observed after November 2018 and the increases in savings from EE programs that Liberty subsequently achieved. In Section 4, we describe the comparative analyses we conducted of other utilities in New England who have implemented decoupling in roughly the last ten years and our conclusion that there has been a demonstrable increase in spending on EE programs, EE savings, or both, for most of those utilities that coincides with the implementation of decoupling. Lastly, in Section 5, we summarize our findings.

## **2. Revenue Decoupling**

Revenue decoupling is a regulatory mechanism that first appeared in 1978 in the state of California to provide relief to natural gas utilities from reduced revenues due to natural gas supply constraints.<sup>3</sup> Since that time, many states have adopted decoupling measures for its electric and/or natural gas utilities through individual rate cases.

In recent years, decoupling has become more common as a growing number of state regulators and policymakers focus attention on reducing energy usage and greenhouse gas emissions. Traditional

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<sup>3</sup> Department of Energy (2010, July). *Natural Gas Revenue Decoupling Regulation: Impacts on Industry*. U.S. Department of Energy. Retrieved from: <https://www1.eere.energy.gov/manufacturing/states/pdfs/nat-gas-revenue-decoupling-final.pdf>



ratemaking may incent utilities to seek to increase profits by increasing sales. Simultaneously, utilities may have a financial disincentive to pursue investments and programs, like EE, that tend to reduce sales and revenues.<sup>4</sup> As a result, tensions can arise between policy objectives and utilities' financial outcomes. By “decoupling” revenues from sales, which is often accomplished through some adjustment mechanism that allows the utility to achieve a fixed amount of revenue, expressed on either an overall or on a per-customer basis, that tension can be resolved. With revenues decoupled from sales, utilities can support EE and related programs without putting its revenues at risk.

In April 2018, the Commission authorized Liberty to implement what is known as “full” decoupling in November 2018.<sup>5</sup> Specifically, Liberty is allowed to recover a fixed amount of revenue per customer, regardless of how its throughput changes for any reason.<sup>6</sup> Alternatives to full decoupling include partial decoupling, which allows a utility to recover some but not all of the difference between authorized and actual revenues, and limited decoupling, which provides for recoveries of “lost” revenues attributable to throughput reductions that arise from specific measures; for example, a limited decoupling mechanism may allow a utility to recover the difference between authorized and actual revenues that result from changes to weather but not that arise from changes to economic conditions.<sup>7</sup>

Liberty, along with the other gas and electric utilities in New Hampshire, collaborates to provide its customers EE solutions under the “NH Saves” brand, through which they provide customers with

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<sup>4</sup> Ibid.

<sup>5</sup> Regulatory Assistance Project (“RAP”) (2016, November). *Revenue Regulation and Decoupling: A Guide to Theory and Application*. Regulatory Assistance Project. Retrieved from: <https://www.raonline.org/wp-content/uploads/2016/11/rap-revenue-regulation-decoupling-guide-second-printing-2016-november.pdf>

<sup>6</sup> Order No. 26, 122 at p. 43-45. Docket No. DG 17-048.

<sup>7</sup> National Renewable Energy Laboratory (2009, December). *Decoupling Policies: Options to Encourage Energy Efficiency Policies for Utilities*. Retrieved from: <https://www.nrel.gov/docs/fy10osti/46606.pdf>



incentives, information, and support designed to save energy, reduce costs, and promote environmental objectives.<sup>8</sup> Additionally, each of the New Hampshire utilities are individually required to implement the Energy Efficiency Resource Standard (“EERS”), which was established by the Commission in 2016 and creates savings goals expressed as a function of each utility’s sales.<sup>9</sup> The EERS additionally requires the annual filing of updates to utility-specific EE plans (the “Statewide EE Plans”) through which increasingly stringent EE targets will be achieved. The 2020 Plan Update, filed in September 2019, is the most recent. Liberty’s EE offerings include separate programs for Residential and Commercial & Industrial (“C&I”) customers. Residential programs include performance audits, ENERGY STAR appliance rebates, programs targeted at low-income customers, and others.<sup>10</sup> Building and appliance programs are also offered to C&I customers. Additionally, Liberty engages in education and policy advocacy efforts, such as, for example, advocacy before regulatory agencies for more stringent building codes. Most of Liberty’s programs also include customer outreach elements, which is to say that it conducts marketing and purchases advertising to make customers aware of its EE programs and the options to create savings they have available.

### 3. Company Results

FTI reviewed public data regarding Liberty’s EE program and data that the Company compiled internally. Both indicate that after decoupling was authorized by the Commission, Liberty spent more on EE,

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<sup>8</sup> New Hampshire Statewide Energy Efficiency Plan, 2020 Update (the “2020 Plan Update”). Filed September 13, 2019 in DE 17-136 at p. 8.

<sup>9</sup> Order No. 25, 932. Docket No. DE 15-137.

<sup>10</sup> *Energy Efficiency Programs* (2020). Liberty. Retrieved from: <https://new-hampshire.libertyutilities.com/derry/residential/smart-energy-use/natural-gas/index.html>



conducted more outreach and achieved greater savings compared to the period prior to decoupling implementation.

### Enhanced Marketing Outreach

Liberty more than doubled the volume of its marketing and promotion activities in 2019, compared to 2018. On an ongoing basis, the Company places advertisements for its EE programs; conducts trainings for professionals in the construction and/or EE industries, including, for example, the Company’s participation in the Building Operator Certification program or “button-up” workshops whose purpose is to educate homeowners regarding EE opportunities; and participates in events, which include meetings with government agencies, participation in industry conferences, and running open houses and roundtable discussions.<sup>11</sup> Each activity is tracked individually. In 2018, there were 99 separate instances of outreach by the Company designed to promote its EE programs. In 2019, there were 240, an increase of 142%. Outreach instances are shown below by category:

**Table 1. Liberty EE Outreach by Category**

	Advertisement	Event	Training	Total
2018	45	25	29	99
2019	<u>72</u>	<u>62</u>	<u>106</u>	<u>240</u>
YoY Change	60%	148%	266%	142%

Liberty also tracks the primary objective of each outreach activity. Primary objectives include the Company’s promotion of enhanced building standards, which it seeks to achieve through advertisement and participation in industry events; engagement with state and local officials regarding EE and the

<sup>11</sup> Building Operator Certification (2016, January). *BOC Offered in New Hampshire!* Retrieved from: <https://www.theboc.info/boc-offered-in-new-hampshire/>



Company’s EE program, and others.<sup>12</sup> Table 2 shows the change in the frequency of outreach for each type of objective between 2018 and 2019. Note that the totals exceed those reported in Table 1 since some instances of outreach had multiple objectives.

**Table 2. Liberty EE Outreach by Objective**

	2018	2019	Increase
Promotion of enhanced building codes	11	18	64%
Education activities with builders	16	30	88%
Engagement with state and local officials	22	55	150%
Other activities	66	161	144%

One of the most impactful approaches to outreach regarding its EE programs that the Company has taken has been a broad-based, multi-channel mass-media campaign launched in April 2019. The campaign includes television and radio commercials, online content, “bus-wrappings”, billboard advertising, and social media marketing. The program, which is still ongoing, is the first of its kind in New Hampshire. Customer awareness is one of the key metrics that the Company uses to evaluate the effectiveness of its marketing efforts. Those data indicate that the measures described above have yielded benefits. In April 2020, the Company conducted a survey and determined that 73% of its customers were aware of its EE programs and their potential to help reduce energy costs. In mid-2019, awareness had been considerably lower, 64%, and in 2016, the most recent previous survey, awareness was only 57%.

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<sup>12</sup> Much of the Company’s 2019 efforts were devoted to advocating for full adoption of the 2015 International Energy Conservation Code (“2015 IECC”), which was adopted, with amendments, by the New Hampshire State Building Code Review Board in September 2019. See <https://www.puc.nh.gov/EnergyCodes/energypg.htm>



### Savings in Recent Years

Available data indicate that the Company’s EE savings following decoupling have been significant. Overall, the Company increased the savings achieved by the EE program, measured in lifetime MMBtu savings, by 26% in 2019 compared to its 2018 savings achievements, while only increasing its program costs by 8% over the same period. Savings were achieved in most of Liberty’s rate classes (and in all of its largest classes).

Using weather-normalized sales data that Liberty provided, FTI calculated normal use per bill for each rate class for the twelve-month period beginning each November (referred to below as a “decoupling year”). To account for long-run trends, normal use per bill for the annual periods of November 1<sup>st</sup> through the subsequent October 31<sup>st</sup> were calculated for each of the five decoupling years that end with October 2019. Results are summarized below.

**Table 3. Liberty Usage by Customer Group (average dth/bill)**

Normal Usage Per Bill by Class	Nov14- Oct15	Nov15- Oct16	Nov16- Oct17	Nov17- Oct18	Nov18- Oct19
R-1	212	216	218	213	196
R-3 & R-4	752	726	738	748	747
G-41, G-42 & G-43	45,209	44,417	46,009	43,002	40,831
G-51 & G-52	16,745	16,210	17,664	17,715	17,453

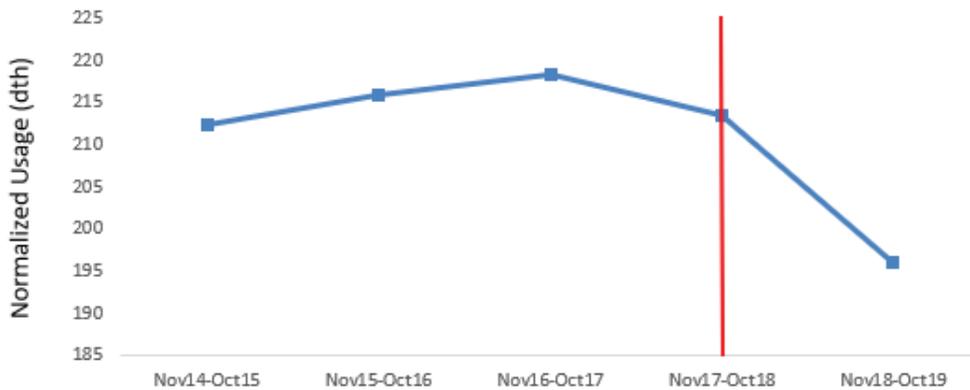
To compile these data, we grouped customers by rate class with other, similar classes and calculated average consumption per bill (dth) for each aggregation. In some instances, rate classes with a very small number of customers were excluded.<sup>13</sup> The results indicate a decreasing consumption across classes. Large reductions were observed for the C&I high-winter-use group (rate classes G-41, G-42 &

<sup>13</sup> This includes, for example, the G-53 and G-54 industrial customer rate classes.

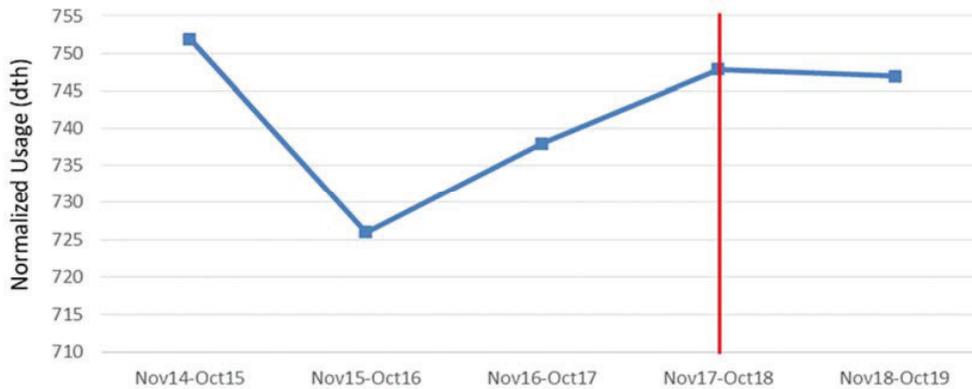


G-43) and residential non-heating group (R-1). The results for the residential heating group (R-3 & R-4) indicate smaller declines, expressed on a percentage basis, but represent a sizeable portion of the Company’s customers.<sup>14</sup> In each instance, the red line indicates the implementation of decoupling.

**Figure 1. Change in Annual Consumption, Residential Non-Heating Group**



**Figure 2. Change in Annual Consumption, Residential Heating Group**



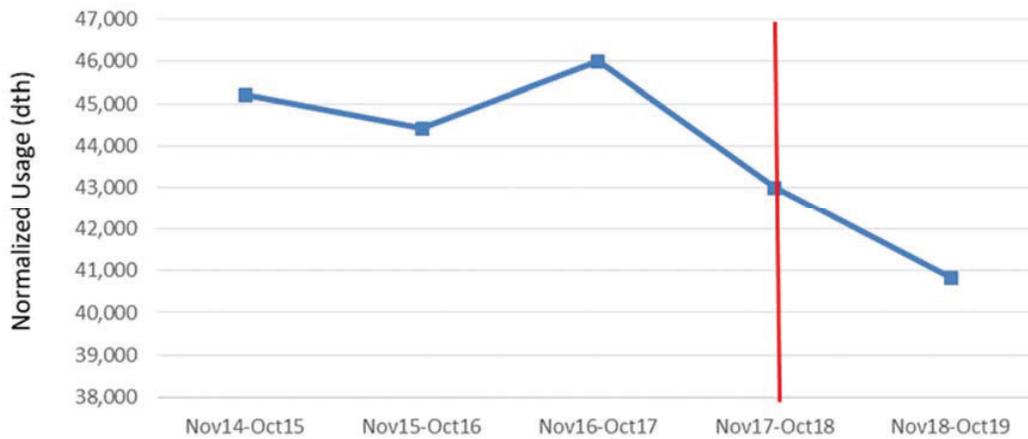
The low-winter-usage C&I group (G-51 & G-52) had a significant reduction in usage per bill as well. Although caution should be taken in inferring too much from such a limited sample size, the consistency

<sup>14</sup> As of October 2019, the R-3 rate class (75,307 customers) and the R-4 rate class (5,667 customers) combined for a total of 80,974 customers, or 83% of Liberty’s 97,348 total customers.

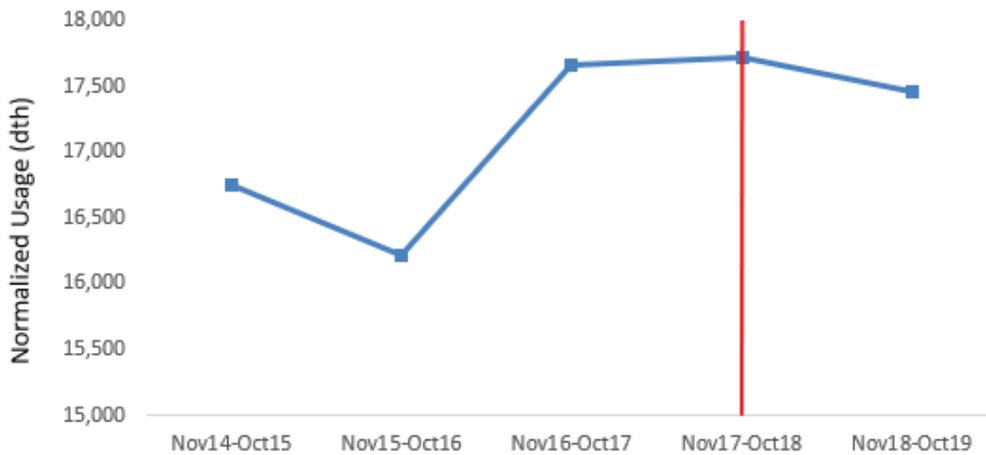


of these data suggest a change in customer behavior that may have coincided with the implementation of decoupling and the changes in Liberty’s outreach efforts described above which, as we describe below, is consistent with our other findings. Year over year changes for each aggregation are shown below.

**Figure 3. Change in Annual Consumption, C&I High-Winter-Use Group**



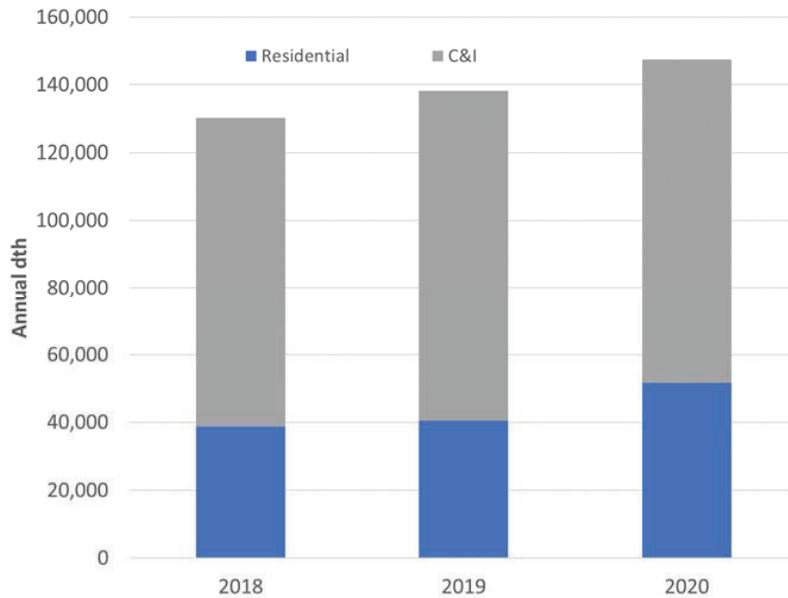
**Figure 4. Change in Annual Consumption, C&I Low-Winter-Use Group**





Moving forward, Liberty’s EE achievement is expected to remain strong, particularly in the residential segment. FTI has reviewed data from the last Statewide EE Plans filed with the Commission in DE 17-136. Those data indicate expectations of continued strong growth in savings. Below, Liberty’s EE targets for annual and lifetime savings approved each year by the Commission are reported for the three years ending in 2020.<sup>15,16</sup>

**Figure 5. Liberty Energy Efficiency Plan, Annual Savings by Customer Class, 2018-2020**



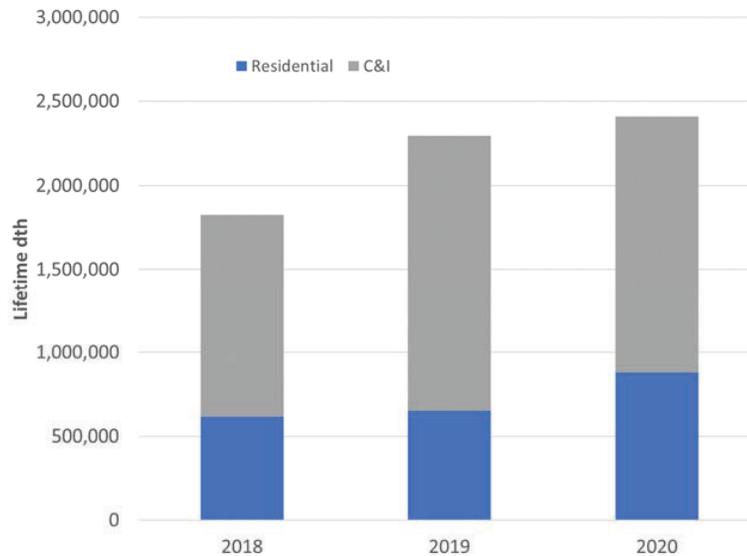
Notably, although C&I gains drove growth in savings from 2018 to 2019, benefits from the residential sector are expected to provide the basis for most of the expansion of the EE program in 2020. Planned residential savings for 2020, expressed on an annual and lifetime basis, are expected to increase by roughly 28% and 35%, respectively, compared to 2019.

<sup>15</sup> Order No. 26, 323. Docket No. DE 17-136.

<sup>16</sup> No attempt has been made to adjust or evaluate the reasonableness of the approved objectives for 2020 given the COVID-19 pandemic, ensuing economic recession, or any other factor.



**Figure 6. Liberty Energy Efficiency Plan, Lifetime Savings by Customer Class, 2018-2020**



One driver of those gains is expansion of the Company’s ENERGY STAR Homes program, a package of incentives it offers to customers seeking to achieve the ENERGY STAR qualification, which requires independent verification that the home is 15% more efficient than currently effective state requirements.<sup>17,18</sup> From 2019 to 2020, acceleration of the ENERGY STAR Homes program is expected to result in an increase in annual savings of roughly 10,000 dth, meaning that the measure accounts for much of the growth shown above.<sup>19</sup>

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<sup>17</sup> Liberty Utilities (2020). *Building a Home: ENERGY STAR Homes*. Retrieved from: <https://libertyutilities.com/residential/smart-energy-use/natural-gas/building-a-home.html>

<sup>18</sup> The combination of the Company’s participation in the ENERGY STAR program and its advocacy for increasingly stringent building codes has the potential for compounding benefits. For example, passage of the 2015 IECC means that greater savings will be required to achieve the ENERGY STAR qualification, all else equal.

<sup>19</sup> See Attachment I4 of the 2020 Energy Efficiency Plan.

#### 4. Comparative Analysis

In an effort to isolate the impacts of decoupling in these results, FTI compared the effect of decoupling on EE achievement on utilities in other jurisdictions. To do so, we compiled a group of utilities that were generally similar in certain ways to Liberty (and dissimilar in other significant ways) and reviewed data they reported to their regulators to determine how the introduction of decoupling affected their ability to generate energy savings through their EE programs. Our starting point was the universe of gas utilities in New England, of which there are twenty-four, according to the Northeast Gas Association.<sup>20</sup>

Of these, we eliminated the municipal utilities, including Holyoke Gas & Electric, Norwich Public Utilities, and others, as well as the companies that are either considerably larger than Liberty, such as National Grid Massachusetts, or much smaller, including Fitchburg Gas and Electric Light Co. and all of the Maine Local Distribution Companies (“LDCs”). Utilities that do not have revenue decoupling, such as Vermont Gas Services, were not considered, nor were companies such as Columbia Gas of Massachusetts (“CMA”) or Liberty’s Massachusetts affiliate, which decoupled its rates long enough ago that data regarding EE achievement was not sufficiently available to conduct the before and after comparisons we describe below.<sup>21</sup> Because Maine shares a number of important similarities with New Hampshire, and due to the lack of suitable LDCs from that state to include in our proxy group, we chose to include one electric company from Maine, Central Maine Power (“CMP”), in our analysis.

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<sup>20</sup> Northeast Gas Association. *Northeast Gas Providers – Links to Individual Company Safety Pages*. Retrieved from: [https://www.northeastgas.org/nat\\_gas\\_providers.php](https://www.northeastgas.org/nat_gas_providers.php)

<sup>21</sup> In all cases here and in the remainder of this section we adopted the convention to refer to each LDC by its current name regardless of what its name was when any event of note took place. For example, CMA was Bay State Gas at the time it first implemented decoupling.



The five utilities that comprise the proxy group are shown in Table 4. For each, the most recently available customer count is reported as well as the date on which its rates were decoupled and the docket in which the state regulator of relevance first approved decoupling.

**Table 4. Proxy Group Utilities**

	State	Type	Customers	Decoupling Implemented	Decoupling Docket
Connecticut Natural Gas (“CNG”)	CT	Gas	177,000	Jan-14	13-06-08
Southern Connecticut Gas (“SCG”)	CT	Gas	197,000	Jan-18	17-05-42
Berkshire Gas (“Berkshire”)	MA	Gas	40,000	Feb-19	18-40
National Grid Rhode Island (“NGrid RI”)	RI	Gas	272,000	Apr-11	4206
CMP	ME	Electric	600,000	Sep-14	2013-00168

As described in the remainder of this section, for each company we found a positive correlation between decoupling and EE achievement based on the observation that each achieved more savings from their EE programs after implementing decoupling than they did before. Moreover, we find that the change in regime is fairly evident in all cases. The clear difference in achievement pre- and post-decoupling, combined with the fact that the same change in trend was apparent regardless of where or when decoupling was implemented, creates compelling evidence of a causal relationship.

### Connecticut

Public Act No. 07-242 (2007) required the Public Utilities Regulatory Authority (“PURA”) of Connecticut to implement decoupling for each of the state’s gas and electric utilities in the next rate case following the measure’s passage. PURA first approved CNG’s decoupling program in 2014 while SCG’s mechanism was put into place in 2018. The CNG and SCG mechanisms are generally similar. Both are full decoupling mechanisms that reconcile rates on a dollars-per-customer basis and include weather normalization. Charges or refunds are allocated on a class-by-class basis and differentials between budgets and earned

revenues are reconciled through the decoupling mechanism only if the difference is greater than \$1 million. Minor differences exist regarding the treatment of customers added to the system between rate cases, but otherwise most of the same provisions are used for the two companies.

EE achievement in Connecticut is generally high. In addition to revenue decoupling, statutes also provide an opportunity for both gas and electric companies to earn incentive payments if EE targets are met or exceeded.<sup>22</sup>

CNG and SCG, along with the electric utilities in Connecticut, serve as administrators for the statewide EE plan, one responsibility of which is to develop three-year Conservation & Load Management Plans (“C&LM Plans”), which are approved by PURA and the Department of Energy and Environmental Protection (“DEEP”).<sup>23</sup> Once approved, plans are updated on an ongoing basis. The current C&LM Plan covers the period 2019-2021. The latest revision to that plan was filed with PURA and DEEP on March 1, 2020.<sup>24</sup> FTI relied on data from the 2019-21 C&LM Plan in order to evaluate decoupling impacts for CNG and SNG. Figure 7 shows annual savings realized by the CNG EE program beginning in 2012, two years before decoupling was implemented (and the earliest date for which data was readily available) through 2016. The red line in each figure delineates the time series to periods before and after decoupling.

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<sup>22</sup> C2ES (2019, March). *Decoupling Policies*. Center for Climate and Energy Solutions. Retrieved from: <https://www.c2es.org/document/decoupling-policies/>

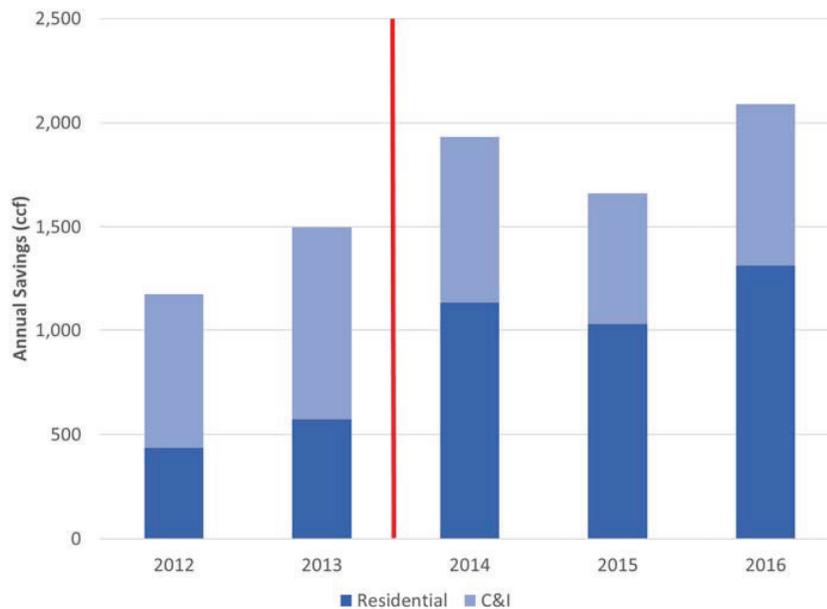
<sup>23</sup> Energize Connecticut (2020). *Current and Approved C&LM Plans*. Retrieved from: <https://www.energizect.com/connecticut-energy-efficiency-board/current-and-approved-clm-plans>

<sup>24</sup> Eversource Energy, United Illuminating, Connecticut Natural Gas Corporation, and Southern Connecticut Gas (2019, November). *2020 Plan Update to the 2019-2021 Conservation & Load Management*. Retrieved from: <https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2020-Plan-Update-Text-11-1-19.pdf?la=en>



Based on annual savings, EE achievement increased substantially once decoupling was introduced. Average energy savings from EE programs for the first two years of this dataset (the pre-decoupling period) was 1,340 Ccf,<sup>25</sup> expressed on an annual basis. In the three years afterwards, the average annual savings increases 41% to 1,895 Ccf.

**Figure 7. CNG Annual EE Savings, 2012-2016<sup>26</sup>**



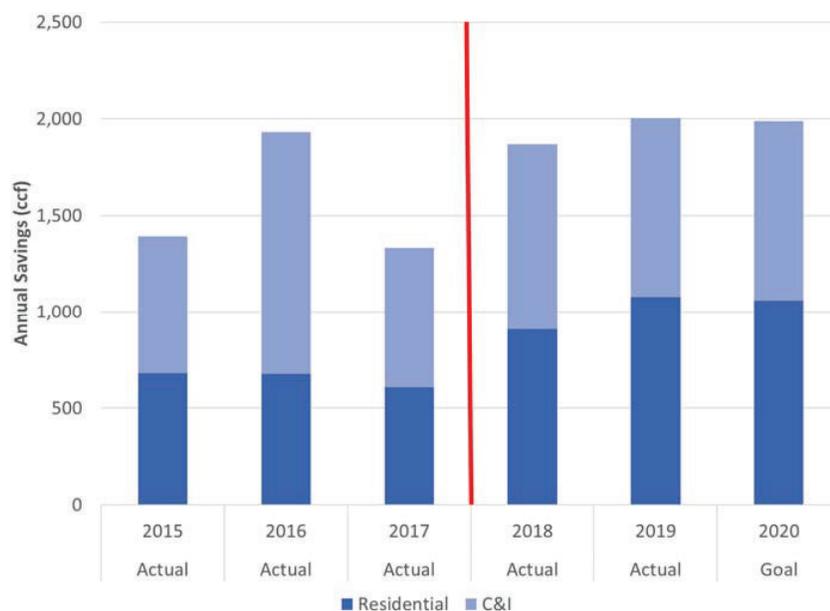
Conducting the same evaluation for SCG reveals the same pattern around the date when that utility’s decoupling mechanism was approved. As shown below, for the three-year period ending in 2017, SCG’s average annual EE savings was 1,551 Ccf. For the three years beginning in 2018, the year after which decoupling was implemented, annual savings increase 26% to 1,953 Ccf. Note that the 2020 goal was established in the latest C&LM Plan while data for other years report actual achievement.

<sup>25</sup> Ccf is the volumetric abbreviation for 100 cubic feet of natural gas and is the equivalent of 1.037 therms.

<sup>26</sup> 2019-21 C&LM Plan at p. 203.

That CNG and SCG show the same result achieved at different times is impactful. Changes to variables such as weather, economic conditions, or other factors could influence consumption levels, creating a potential “false positive” attribution of the change to the implementing of decoupling. The fact that these two companies experienced the same change in trend, in the same geography but at different times suggests a meaningful correlation rather than coincidence.

**Figure 8. SCG Annual EE Savings, 2015-2020<sup>27</sup>**



### Massachusetts

Berkshire’s mechanism, which was first approved by the Massachusetts Department of Public Utilities (“MADPU”), provides for full decoupling on a per-customer basis. Semi-annually, by season, Berkshire reconciles its revenues per customer to a benchmark revenue amount previously established by the

<sup>27</sup> 2019-21 C&LM Plan at p. 224.



MADPU and applies a Revenue Decoupling Adjustment Clause (“RDAC”) to either recover or refund any variances. The RDAC is calculated and applied for each rate class.<sup>28</sup>

LDCs in Massachusetts are required to file EE data regarding their EE plans and program achievement regularly. Typically, they file three-year plans and separately file reports of achievement, variances between actuals and plans, and other results. Since the MADPU authorized Berkshire to implement decoupling in early 2019, FTI analyzed actual annual savings for the period 2016-2018 compared to the savings projections included in the most recent EE plan approved by the MADPU.<sup>29</sup>

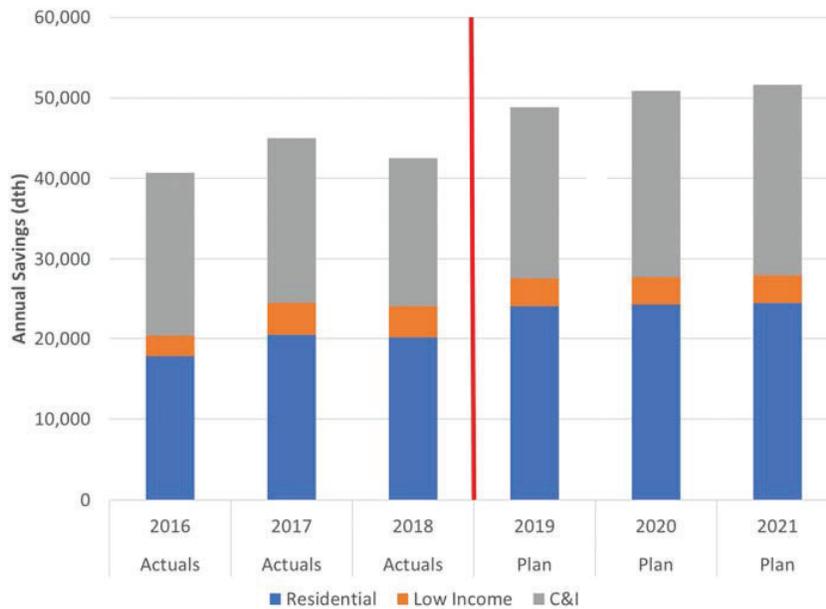
Berkshire’s EE savings show the same pattern as do those of the Connecticut utilities: a significant increase in the benefit from EE programs that coincides with the decoupling of rates and revenues. Annual savings for the three years prior to decoupling averaged 42,738 dth, as shown in Figure 10 below. The plan approved by the MADPU indicates expectation that savings will increase by about 18% to an average of 50,464 dth each year.

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<sup>28</sup> The Berkshire Gas Company (2020, March). Tariff M.D.P.U, No. 548: *Revenue Decoupling Adjustment Clause*.

<sup>29</sup> Actuals for 2016-2018 were reported in Berkshire’s August 1, 2016 filing in Docket No. DPU 16-121 and its current plan for 2019-2021 was filed with the DPU in Docket No. DPU 19-91 on August 1, 2019.

**Figure 9. Berkshire Annual EE Savings, 2016-2021**



The timing associated with these findings is important since Berkshire decoupled its rates at a different time than either of the Connecticut utilities. The fact that it experienced the same results as did those companies implies some causal correlation with the timing of the change in the rate structure.

### Rhode Island

Like Connecticut, Rhode Island decoupling was enacted by statute when, in 2010, the Rhode Island legislature passed House Bill 8082, requiring the Rhode Island Public Utilities Commission (“RIPUC”) to establish rates that included decoupling mechanisms in each utility’s next rate case.<sup>30</sup> NGrid RI’s mechanism was subsequently approved in Docket No. 4206 and implemented in April 2011.<sup>31</sup>

<sup>30</sup> Rhode Island State Legislature (2010, May). *Rhode Island House Bill 8082*. LegiScan. Retrieved from: <https://legiscan.com/RI/text/H8082/id/468020>

<sup>31</sup> RIPUC (2012, May). *Report and Order Re: Narragansett Electric Company d/b/a National Grid’s Proposed Revenue Decoupling Mechanism*. Retrieved from: [http://www.ripuc.ri.gov/eventsactions/docket/4206-NGrid-RDM-Ord20745\(5-25-12\).pdf](http://www.ripuc.ri.gov/eventsactions/docket/4206-NGrid-RDM-Ord20745(5-25-12).pdf)



NGrid RI's mechanism provides for full decoupling based on an annual reconciliation of revenues per customer for all classes except large and extra-large C&I customers.<sup>32</sup> Regularly, the utility files a benchmark estimate of per-customer revenues with the RIPUC. Thereafter (assuming that the estimate is approved), variances to the benchmark are calculated and either refunded or recovered through the Revenue Decoupling Mechanism ("RDM"). Changes to the RDM have subsequently been made on an annual basis for 12-month periods from April through the following March each year.

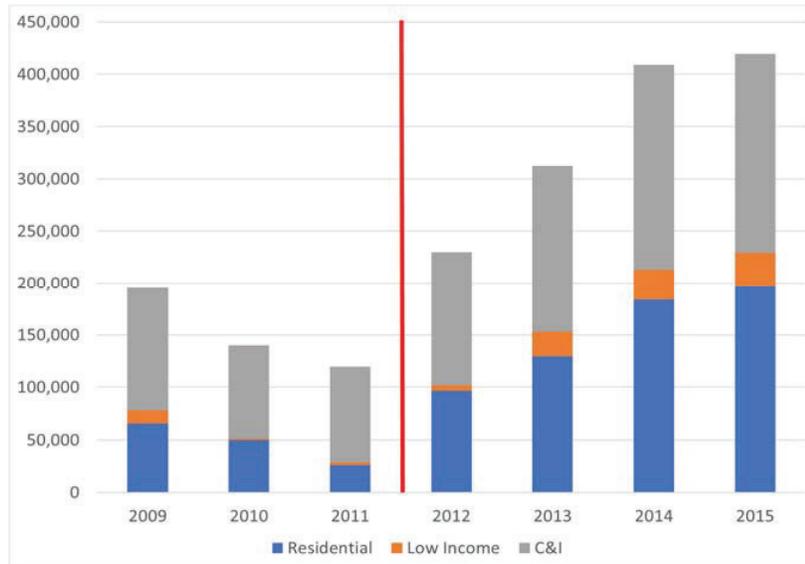
Annually, NGrid RI files with the RIPUC a report indicating its EE achievement for the previous year. FTI reviewed the reports for each year from 2009 to 2015.<sup>33</sup> Among other things, those reports indicate NGrid RI's annual savings from EE programs by customer type. Annual EE savings for the period 2009-2015 are shown in Figure 10.

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<sup>32</sup> When it proposed its decoupling mechanism, NGrid RI explained that it had excluded the large and extra-large C&I classes because there were a small number of such customers and, as a result, the migration of any one customer from the class to competitive service, which is an option for certain C&I consumers in Rhode Island, could create problematic price distortions and subsidization issues. See the RIPUC's May 25, 2012 Order in Docket No. 4206, at p. 5, for additional details.

<sup>33</sup> The reports were filed in dockets 4000 (2009), 4116 (2010), 4209 (2011), 4295 (2012), 4366 (2013), 4451 (2014), and 4527 (2015).

**Figure 10. NGrid RI Annual EE Savings, 2009-2015**



The data indicates that changes to EE achievement associated with decoupling is similar for NGrid RI as it is for other utilities, namely that it increases markedly at the same time that rates are decoupled from revenues. Total annual EE savings for the three years before decoupling was implemented was 151,637 MMBtu. For the three years following decoupling, the same measure increased by 109% to 317,091 MMBtu.

**Maine**

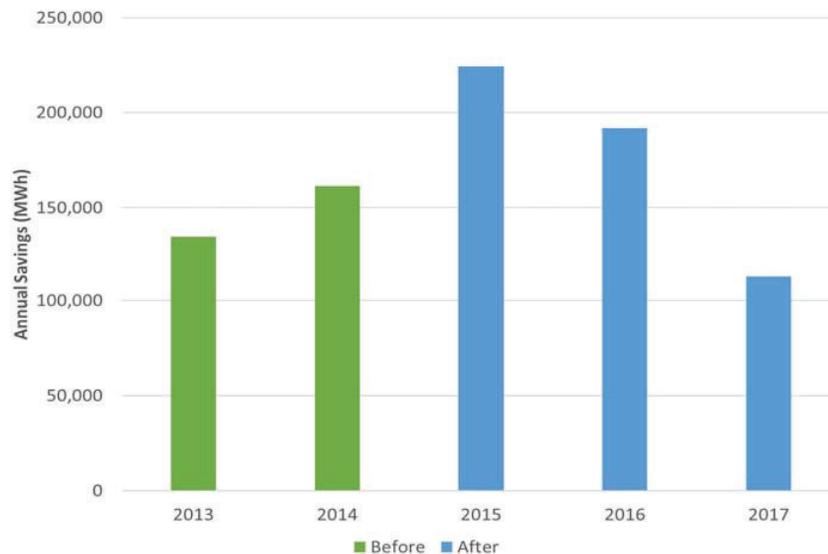
Decoupling was adopted in Maine in the late 1980s and early 1990s and subsequently abandoned for multiple reasons, one of the most important of which was a significant recession in the state which reduced energy consumption, causing recurring price increases.<sup>34</sup> Notwithstanding, the Maine Public Utilities Commission (“MEPUC”) is authorized under Title 35-A to implement a decoupling mechanism,

<sup>34</sup> RAP, p. 47.

which it did in 2014, granting CMP a decoupling mechanism in Docket No. 2013-00168 which became effective in September 2014.<sup>35</sup>

EE programs in Maine are administered by the Efficiency Maine Trust (“Efficiency Maine”), an independent administrator that is overseen by the MEPUC. Each year, Efficiency Maine publishes reports that explain EE achievement, among other things. Most results are reported on a statewide basis. Because CMP accounts for roughly 80% of the electric load in Maine, FTI chose to compare statewide EE savings before and after CMP’s decoupling mechanism took effect.<sup>36</sup> Those results are shown for the two years before decoupling became effective and the three years after, on an annual basis for each year, below in Figure 11. Efficiency Maine’s reporting of data does not differentiate results by class.

**Figure 11. Maine Annual EE Savings, 2013-2017**



<sup>35</sup> Maine Legislature (2019, December) *Title 35-A: Public Utilities*. Retrieved from: <http://legislature.maine.gov/statutes/35-A/title35-Ach0sec0.html>

<sup>36</sup> MEPUC (2020, February). *2019 Annual Report at p. 19*.

Despite the inherent challenges of measuring the impact of decoupling at a single utility using statewide reporting, the same clear pattern emerges from this data as in other sets, namely that the implementation of decoupling coincides with significant increases in EE achievement. In this case, annual savings increased roughly 19% from the two years before decoupling to the three years after, from an average of 148.1 GWh saved to 176.5 GWh.

## 5. Conclusions

Our analysis of EE savings achieved by Liberty and by other New England utilities who have decoupled their revenues from sales supports at least five conclusions:

- *First*, the decoupling of rates in November 2018 changed the way Liberty does business with regard to its EE programs. The change in its effort to reach out to engage stakeholders and improve market penetration are significant and measurable.
- *Second*, Liberty's savings from EE programs increased significantly once decoupling was implemented.
- *Third*, the strong performance of Liberty's EE programs was expected to continue into 2020 as of the start of this year. If 2020 achievement is lower than expected, that result is most likely attributable to impacts from the COVID pandemic.
- *Fourth*, our analysis of EE achievement by other utilities around New England that have implemented decoupling provides further evidence of a causal relationship. Despite the fact that the companies FTI reviewed have different management and regulators, operate in different weather conditions, and implemented decoupling in different years, in each instance we found that a measurable increase in savings from EE programs coincided with the decoupling of rates.



Based on these findings, we conclude that there is compelling evidence of a causal link between revenue decoupling and the advancement of EE programs. Simply put, EE savings are greater when utility revenues are decoupled from sales. In Liberty's case, it is clear that the increased revenue certainty that came with decoupling either incited it to more zealously expand its EE program, or eliminated disincentives to do so, and that savings from its EE programs increased as a result. It is also reasonable to conclude that the Commission's re-authorization of the Company's decoupling mechanism will promote increased savings in the future.

**Liberty Utilities, NH**

**EE Marketing Activities - ENNG: 2018, 2019 & YTD 2020**

**As of 6/1/2020**

**Overall Marketing/Promotion Activities**

Count of Year	Column Labels			
Row Labels	Advertisement	Event	Training	Grand Total
2018	45	25	29	99
2019	72	62	106	240
2020	21	38	4	63
<b>Grand Total</b>	<b>138</b>	<b>125</b>	<b>139</b>	<b>402</b>

**Promotion of Stricter Building Codes**

Count of Year	Column Labels			
Row Labels	No	Yes	Grand Total	% Increase
2018	88	11	99	
2019	222	18	240	64%
2020	51	12	63	
<b>Grand Total</b>	<b>361</b>	<b>41</b>	<b>402</b>	

**Education Activities to Builders**

Count of Year	Column Labels			
Row Labels	No	Yes	Grand Total	% Increase
2018	83	16	99	
2019	210	30	240	88%
2020	47	16	63	
<b>Grand Total</b>	<b>340</b>	<b>62</b>	<b>402</b>	

**Engagement with State/Local Officials & Associations**

Count of Year	Column Labels			
Row Labels	No	Yes	Grand Total	% Increase
2018	77	22	99	
2019	185	55	240	150%
2020	44	19	63	
<b>Grand Total</b>	<b>306</b>	<b>96</b>	<b>402</b>	

Liberty Utilities, NH EE Marketing Activities - ENNG: 2018, 2019 & YTD 2020 As of 6/1/2020											
Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
1/18/2018	2018	Advertisement	Email Newsletter	Building Automation Systems: 7 Common Mistakes	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
1/18/2018	2018	Advertisement	Email Newsletter	Saving Energy From the Comfort of Your Couch	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
2/1/2018	2018	Advertisement	Email	Energy Audit e-blast	Home Performance with ENERGY STAR benefits/opportunities e-blast to 53,885 subscribers	Residential gas customers	Whole house weatherization and efficiency improvements	Residential	No	No	No
2/1/2018	2018	Advertisement	Bill insert sent to 71,500 natural gas customers	Home Performance with ENERGY STAR & Visual Audit Bill Insert	HPwES/Visual Audit bill insert educating customers on program benefits and enrollment	LU residential natural gas customers	Air sealing, insulation, Instant Savings Measures, visual audit, and 2% & 0% financing options	Residential	No	No	No
2/9/2018	2018	Event	Concord	Business & Industry Association Small Business Day	Business to business energy discussions with NHSaves staff at Exhibitor table	Small business owners and managers, chambers of commerce, business associations	LU's electric and gas measures	C&I	No	No	No
2/14/2018	2018	Advertisement	Direct Mail	Energy Audit Mailer	Home Performance with ENERGY STAR benefits/opportunities mailer to 46,568 residential gas customers	Residential gas customers	Whole house weatherization and efficiency improvements, 2% financing	Residential	No	No	No
2/15/2018	2018	Advertisement	Email Newsletter	3 Options for Multiple Boiler Control	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
2/15/2018	2018	Advertisement	Email Newsletter	Quiz: How Energy Efficient Are You?	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
2/16/2018	2018	Training	Laconia	Building Operator Certification	Building Operator Training on all energy savings	Business Facility Managers and Staff	All EE measures	C&I	No	No	No
2/28/2018	2018	Event	Durham	<a href="#">NH Association of School Business Officials- Facilities Masters Conference</a>	School Facilities Managers' topics of interest	Northern New England school facilities managers	All EE measures	C&I	No	No	Yes
3/2/2018	2018	Training	Laconia	Building Operator Certification	Building Operator Training on all energy savings	Lakes Region Community College, facility managers	All EE measures	C&I	No	No	No
3/12/2018	2018	Event	Keene	<a href="#">NH Energy Week</a>	Business to business energy discussions with NHSaves staff at Exhibitor table	Keene government officials, community leaders, energy/business professionals	All EE measures	C&I	No	No	No
3/12/2018	2018	Event	Concord	<a href="#">NH Energy Week</a>	Business to business energy discussions at Exhibitor table	Non-profits, energy and business professionals	All EE measures	C&I	No	No	No
3/16/2018	2018	Training	Laconia	Building Operator Certification	Building Operator Training on all energy savings	Business Facility Managers and Staff	All EE measures	C&I	No	No	No
3/20/2018	2018	Advertisement	Email Newsletter	5 Ways to Make Your Meetings Short (and Save Energy)	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
3/20/2018	2018	Advertisement	Email Newsletter	5 Ways to Save While Spring Cleaning	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
4/3/2018	2018	Event	Plymouth	<a href="#">Grafton Regional Development Corp.</a>	small business EE workshop	Grafton small businesses	All EE measures	C&I	No	No	No
4/3/2018	2018	Training	Plymouth	<a href="#">Grafton Regional Development Corp.</a>	small business EE workshop	Grafton small businesses	All EE measures	C&I	No	No	No
4/4/2018	2018	Event	Concord	Mill Brooke School Tour	NEEP Healthy Schools presentation	School administrators	All EE measures	C&I	No	No	Yes
4/10/2018	2018	Advertisement	Email	Visual Audit e-blast	Highlights and benefits of Visual Audit program sent to 53,007 subscribers	Residential gas customers	Wi-Fi T-Stats, low flow devices, pipe wrap, LEDs	Residential	No	No	No
4/10/2018	2018	Event	Concord	<a href="#">REPA-NH (Residential Energy Professional Association)</a>	EE program presentation	Energy performance professionals	All EE measures	C&I	No	No	No
4/14/2018	2018	Event	Wilton	<a href="#">EE at Souhegan Sustainability Fair</a>	EE Table/Booth Setup	Home owners	Benefits of purchasing ENERGY STAR certified products and appliances and available rebates	Residential	No	No	No
4/19/2018	2018	Advertisement	Email Newsletter	Can HVAC Upgrades Improve Worker Performance?	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
4/19/2018	2018	Advertisement	Email Newsletter	Liberty is Offering FREE Energy Saving Products	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
4/19/2018	2018	Event	Concord	State Employee Manager Presentation	EE program presentation	State employees (managers)	All EE measures	C&I	No	No	Yes
4/25/2018	2018	Event	Pelham	Town of Pelham Open House	EE Table/Booth Setup	Town officials and residents	All EE measures	C&I	No	No	Yes
4/26/2018	2018	Event	Greenland	<a href="#">EE at Lowe's Spring Pro Event</a>	EE Table/Booth Setup	Home owners	Benefits of purchasing ENERGY STAR certified products and appliances and available rebates	Residential	No	No	No
5/2/2018	2018	Event	Concord	<a href="#">NHBSR Spring Conference</a>	Business to business energy discussions with NHSaves staff at Exhibitor table	Businesses supporting sustainable/socially responsible operations	All EE measures	C&I	No	No	No

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As of 6/1/2020											
Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
5/3/2018	2018	Training	Manchester	<a href="#">Energy Codes and Zero Energy Homes Training</a>	EE program presentation	Residential home builders, municipal officials, architects, people building homes	Reduced energy loads, high efficiency building shells, mechanical systems, domestic hot water, renewables	Residential	Yes	Yes	No
5/3/2018	2018	Training	Manchester	<a href="#">Energy Codes and Zero Energy Homes Training</a>	EE program presentation	Residential home builders, municipal officials, architects, people building homes	Reduced energy loads, high efficiency building shells, mechanical systems, domestic hot water, renewables	Residential	Yes	Yes	No
5/11/2018	2018	Event	Pembroke	NH State Employee Conference	EE Table/Booth Setup	State employees	All EE measures	C&I	No	No	Yes
5/12/2018	2018	Event	Nottingham	<a href="#">Nottingham Earth Day Festival</a>	EE Table/Booth Setup	Home owners	Benefits of purchasing ENERGY STAR certified products and appliances and available rebates, refrigerator and freezer recycling program	Residential	No	No	No
5/16/2018	2018	Event	Concord	<a href="#">NHDES Pollution Prevention Training</a>	EE Presentation for Businesses at NHDES	New Hampshire businesses in pollution prevention	All EE measures	C&I	No	No	Yes
5/17/2018	2018	Advertisement	Email Newsletter	Innovations Fuel Process Heating Efficiency	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
5/17/2018	2018	Advertisement	Email Newsletter	Infographic: Tips for Cool Summer Savings	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
5/17/2018	2018	Training	Atkinson	<a href="#">Energy Codes and Zero Energy Homes Training</a>	EE program presentation	Residential home builders, municipal officials, architects, people building homes	Reduced energy loads, high efficiency building shells, mechanical systems, domestic hot water, renewables	Residential	Yes	Yes	No
5/24/2018	2018	Training	Center Harbor	<a href="#">Button Up Workshop</a>	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NH Saves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	Yes
6/1/2018	2018	Event	Loudon	<a href="#">Green Your Fleet</a>	EV event with NHDES-4 utility tables	Businesses interested in electric cars and trucks	All EE measures	C&I	No	No	Yes
6/19/2018	2018	Advertisement	Email Newsletter	Improve Health & Comfort with Gas-Fired Dehumidification	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
6/19/2018	2018	Advertisement	Email Newsletter	5 Ways to Save While Doing Laundry	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
7/2/2018	2018	Advertisement	Online Key Word Search Ads	Pay Per Click Text Ads	Program Awareness and recognition: 7/2 through 8/20	Residents of NH	All EE measures	Residential	No	No	No
7/2/2018	2018	Advertisement	Social Media	Paid Facebook Ad (Boosted Posts)	Program Awareness and recognition: 7/2 through 8/20	Demo: Adults 25+, NH homeowners	All EE measures	Residential	No	No	No
7/2/2018	2018	Advertisement	Social Media	Programmatic Native	Targeting Tactics: Combination of targeting those searching for relevant content related to saving on energy, cutting costs, etc. as well as retargeting those who visit the website: 7/2 through 8/20	Demo: Homeowners 25+ Geo: New Hampshire	Energy efficiency tips	Residential	No	No	No
7/13/2018	2018	Advertisement	Direct Mail	Keene Energy Audit Mailer	Home Performance with ENERGY STAR informational letter sent to 710 residential customers	New Residential Keene customers	Whole house weatherization and efficiency improvements, 2% financing	Residential	No	No	No
7/18/2018	2018	Advertisement	Email	Gas Home Performance Summer Promotion e-blast	Home Performance with ENERGY STAR promo for 75% rebate or 0% financing sent to ~ 57,000 subscribers	Residential gas customers	Whole house weatherization and efficiency improvements	Residential	No	No	No
7/19/2018	2018	Advertisement	Email Newsletter	5 Ways to Save During Non-Business Hours	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
7/19/2018	2018	Advertisement	Email Newsletter	Remodeling? Build In Energy Efficiency	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
8/6/2018	2018	Event	Concord	NEC Roundtable with AIA	NH American Institute of Architects energy discussion	TNC/Warren Street Architects	All EE measures	C&I	No	No	No
8/16/2018	2018	Advertisement	Email Newsletter	Video: Improve Comfort & Reduce Costs with Circulating Fans	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No

Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
8/16/2018	2018	Advertisement	Email Newsletter	Smarter Living with Smart Thermostats	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
8/25/2018	2018	Training	Remote	Code Webinar - LES/NHSaves	Code Webinar - GDS/DES/NHSaves	Business owners and managers	All EE measures	C&I	Yes	Yes	No
8/27/2018	2018	Advertisement	Online Key Word Search Ads	Programmatic Native	EE Tips Promotion from 8/27 through 10/22	Demo: Homeowners 25+ Geo: New Hampshire	Targeting Tactics: Combination of targeting those searching for relevant content related to saving on energy, cutting costs, etc. as well as retargeting those who visit the website	Residential	No	No	No
9/12/2018	2018	Training	Meredith	<a href="#">Residential Code Workshop</a>	EE program presentation	Residential home builders, municipal officials, architects, people building homes	Reduced energy loads, high efficiency building shells, mechanical systems, domestic hot water, renewables	Residential	Yes	Yes	No
9/13/2018	2018	Event	Manchester	<a href="#">The Granite Group Heating Trade Show</a>	Heating Systems Supply House and Heating Contractors show	Plumbing, heating, cooling, water & propane supplies specialists	All EE measures	C&I	No	Yes	No
9/13/2018	2018	Training	Manchester	<a href="#">The Granite Group Heating Trade Show</a>	Heating Systems Supply House and Heating Contractors show	Plumbing, heating, cooling, water & propane supplies specialists	All EE measures	C&I	No	Yes	No
9/18/2018	2018	Training	Gorham	<a href="#">Residential Energy Code Training</a>	NHSaves Presentation	Residential home builders, municipal officials, architects, people building homes	Reduced energy loads, high efficiency building shells, mechanical systems, domestic hot water, renewables. Guest speaker Joe Harnois of Harber Construction.	Residential	Yes	Yes	No
9/18/2018	2018	Training	Gorham	<a href="#">Residential Energy Code Training</a>	EE program presentation	Residential home builders, municipal officials, architects, people building homes	Reduced energy loads, high efficiency building shells, mechanical systems, domestic hot water, renewables. Guest speaker Joe Harnois of Harber Construction.	Residential	Yes	Yes	Yes
9/20/2018	2018	Event	Portsmouth	<a href="#">North East Electric Distributors Tradeshow</a>	Electric Supply House and Electrical Contractors show	Electrical distributors, electricians	All EE measures	C&I	No	Yes	No
9/20/2018	2018	Training	Portsmouth	<a href="#">North East Electric Distributors Tradeshow</a>	Electric Supply House and Electrical Contractors show	Electrical distributors, electricians	All EE measures	C&I	No	Yes	No
9/25/2018	2018	Advertisement	Email Newsletter	Smart Thermostats: 5 Benefits for Your Business	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
9/25/2018	2018	Advertisement	Email Newsletter	Fall for Energy Savings	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
9/27/2018	2018	Event	Canaan	<a href="#">Mascoma Valley Energy and Sustainability Expo</a>	Monthly related event	Upper Valley town energy committees, building professionals, community members	Weatherization, high efficiency heating	C&I	No	Yes	Yes
9/29/2018	2018	Training	Canaan	<a href="#">Button Up Workshop</a>	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NHSaves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	Yes
10/1/2018	2018	Advertisement	Online Key Word Search Ads	Pay Per Click Text Ads	Promote content via ongoing Pay-Per-Click campaign	Residents of NH	All EE measures	Residential	No	No	No
10/1/2018	2018	Advertisement	Social Media	Paid Facebook & YouTube (Boosted Posts)	Program Awareness and recognition	Demo: Adults 25+, NH homeowners	All EE measures	Residential	No	No	No
10/1/2018	2018	Advertisement	Social Media	Facebook - Adults 25+ alternative homeowner behavior targeting	Video, Banners, Quiz	Demo: Adults 25+, alternative homeowner behavior targeting	All EE measures	Residential	No	No	No
10/1/2018	2018	Advertisement	Social Media	Instagram - Adults 25-40 Estimated Audience Size: 130,000	Video, Banners, Quiz	Demo: Adults 25-40 Estimated Audience Size: 130,000	All EE measures	Residential	No	No	No
10/1/2018	2018	Advertisement	Social Media	YouTube - Adults 18+ Estimated Views: 270,000 - 655,000	(06) / (1:15) Videos	Demo: Adults 18+ Estimated Views: 270,000 - 655,000	All EE measures	Residential	No	No	No

As of 6/1/2020											
Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
10/2/2018	2018	Training	Newmarket	<a href="#">Button Up Workshop</a>	NHSaves Presentation to Newmarket Energy and Environment Advisory Committee, The Newmarket Area Centennial Lions Club and Jonny Boston's International, Plymouth Area Renewable Energy Initiative	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	Yes
10/10/2018	2018	Training	Hampton	<a href="#">Residential Energy Code Training</a>	EE program presentation	Residential home builders, municipal officials, architects, people building homes	Reduced energy loads, high efficiency building shells, mechanical systems, domestic hot water, renewables. Guest speaker Jeffrey Cantara, Solar Design Specialist of Revision Energy.	Residential	Yes	Yes	No
10/10/2018	2018	Training	Hampton	<a href="#">Residential Energy Code Training</a>	EE program presentation	Residential home builders, municipal officials, architects, people building homes	Reduced energy loads, high efficiency building shells, mechanical systems, domestic hot water, renewables. Guest speaker Jeffrey Cantara, Solar Design Specialist of Revision Energy.	Residential	Yes	Yes	Yes
10/16/2018	2018	Training	West Lebanon	C&I Codes Training Workshop	EE program presentation	Builders, architects, contractors and sub-contractors	Building codes	C&I	Yes	Yes	Yes
10/18/2018	2018	Advertisement	Email Newsletter	Coming Up For Air: Improving Combustion Efficiency	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
10/18/2018	2018	Advertisement	Email Newsletter	Slide Show: Simple Steps to Winter Savings & Comfort	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
10/22/2018	2018	Advertisement	Radio	Radio Program Awareness	30 second spot on WHOM, NHPR, WXRK, WFNX, WXRK, WLKC	Residential customers	All EE measures	Residential	No	No	No
10/22/2018	2018	Training	Canterbury	<a href="#">Button Up Workshop</a>	EE Presentation to Canterbury Town Energy Committee, Plymouth Area Renewable Energy Initiative	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	Yes
10/24/2018	2018	Advertisement	Social Media	Visual Audit promotion via Facebook and Twitter channels	Highlights and benefits of Visual Audit program	Facebook and Twitter followers	Wi-Fi T-Stats, low flow devices, pipe wrap, LEDs	Residential	No	No	No
10/29/2018	2018	Advertisement	Internet Radio	Pandora	(:30) Audio	Demo: Adults 25+ and home owners, apartment/condo renters & owners Estimated Reach: 113,799	All EE measures	Residential	No	No	No
10/30/2018	2018	Training	Manchester	GDS C&I Codes	Building Energy Codes Workshop	Builders, architects, contractors and sub-contractors	Building codes	C&I	Yes	Yes	Yes
10/30/2018	2018	Training	Concord	<a href="#">NHSAA Conference</a>	Overview of EE programs: NH School administrators association of School Business Officials (NHSABO)	School superintendents	Lighting, HVAC and weatherization	C&I	No	No	Yes
11/1/2018	2018	Training	Holderness	<a href="#">Button Up Workshop</a>	EE Presentation to Holderness Energy Committee, Squam Lakes Association, Plymouth Area Renewable Energy Initiative	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	Yes
11/2/2018	2018	Event	Concord	<a href="#">Advanced Manufacturing Conference</a>	NHMEP Governor's Conference	Politicians, energy professionals, business professionals, manufacturing professionals	All EE measures	C&I	No	No	No
11/5/2018	2018	Event	Nashua	<a href="#">NHRIA Annual Dinner</a>	Upgrade Table and Full Page Ad	Restaurant and Lodging Association	All EE measures	C&I	No	No	No

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As of 6/1/2020											
Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
11/8/2018	2018	Training	Laconia	<a href="#">Button Up Workshop</a>	EE Presentation to Lakes Region Community College, Plymouth Area Renewable Energy Initiative	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	Yes
11/14/2018	2018	Event	Manchester	<a href="#">NHMA Annual Conference</a>	New Hampshire Municipal Association	Municipal officials	All EE measures	C&I	No	No	Yes
11/15/2018	2018	Advertisement	Email	Black Friday Promo for ecobee and Nest Wi-Fi T-Stats	E-blast for Ecobee and Nest manufacturer discounts with Utility rebate special to 64,559 subscribers	Residential gas customers	Wi-Fi T-Stats	Residential	No	No	No
11/15/2018	2018	Event	Manchester	<a href="#">NHMA Annual Conference</a>	New Hampshire Municipal Association	Municipal officials, other non-profits	All EE measures	C&I	No	No	Yes
11/16/2018	2018	Training	Manchester	<a href="#">Compressed Air Training</a>	LU EE and CES Event	Compressed air installers	All EE measures	C&I	No	No	No
11/16/2018	2018	Event	Concord	<a href="#">LES Conference</a>	EE Workshop and 1 pitch to the group	Politicians/lobbyists, non-profits, energy and business professionals	All EE measures	Residential	No	No	Yes
11/20/2018	2018	Advertisement	Email Newsletter	ABC's of Boiler Control	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
11/20/2018	2018	Advertisement	Email Newsletter	Revealed! 6 Hidden Sources of Home Energy Loss	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
11/26/2018	2018	Advertisement	Email	Black Friday Promo for ecobee and Nest Wi-Fi T-Stats	E-blast for Ecobee and Nest manufacturer discounts with Utility rebate special to 64,559 subscribers	Residential gas customers	Wi-Fi T-Stats	Residential	No	No	No
11/27/2018	2018	Training	Rindge/Fitzwilliam	Button Up Workshop	EE presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
11/28/2018	2018	Training	Lee	Button Up Workshop	EE presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
11/28/2018	2018	Training	Warren	Button Up Workshop	EE presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
11/28/2018	2018	Training	Bedford/Hillsborough	Button Up Workshop	EE presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
12/19/2018	2018	Advertisement	Email Newsletter	Boiler Maintenance: 5 Critical Practices for Optimizing Efficiency	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
12/19/2018	2018	Advertisement	Email Newsletter	Is EE on Your Holiday Gift List?	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No

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As of 6/1/2020											
Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
12/28/2018	2018	Advertisement	Direct Mail	Home Energy Assistance/Visual Audit Mailer	HEA Mailer detailing program benefits sent to 3,443 low income gas customers	LU natural gas customers coded under the low income rate	Air sealing, insulation, heating systems, appliances, Instant Savings Measures, visual audit	Residential	No	No	No
1/1/2019	2019	Advertisement	Bill Insert	House Feeling Drafty? (NH Saves residential offerings for 2019)	LU delivered to all Gas Customers	LU Gas & Electric Customers	All EE measures	Residential	No	No	No
1/8/2019	2019	Event	Concord	Business After Hours - Concord NH Chamber	Business to Business networking	Small business owners and General Contractors	All EE measures	C&I	No	Yes	No
1/13/2019	2019	Advertisement	Social media	Franklin School project case study	Facebook/Twitter	Local Commercial Online Traffic	All EE measures	C&I	No	No	No
1/17/2019	2019	Advertisement	Email Newsletter	What's the Difference? Direct vs. Indirect Gas-Fired Heaters	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
1/17/2019	2019	Advertisement	Email Newsletter	Infographic: Breaking Down Home Energy Use	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
1/17/2019	2019	Training	Webinar	Virtual NHSaves Button Up Workshop	Weatherization webinar with Q&A session to panel and staff	NH Residents	Weatherization	Residential	No	No	No
1/18/2019	2019	Advertisement	Social media	Online Marketplace Promotion - Smart Thermostat	Facebook/Twitter	LU Customers and Local Residential Online Traffic	Smart Thermostats	Residential	No	No	No
1/22/2019	2019	Event	City Hall, Concord	Concord 100% Renewable Energy Strategic Plan Stakeholder Committee Meeting	Discussions on all things energy related.	Non-profits, energy and business professionals	All EE measures	C&I	Yes	Yes	Yes
1/23/2019	2019	Advertisement	Social media	HPwES Program promotion	Facebook/Twitter	Local Residential Online Traffic	Weatherization	Residential	No	No	No
1/24/2019	2019	Advertisement	Social media	Smart Thermostat promotion	Facebook/Twitter	Local Residential Online Traffic	NHSaves Gas	Residential	No	No	No
1/30/2019	2019	Training	Nashua	Training w/Wn Contractor Turn Cycle Solutions	Surveyor/OTTER	Contractor	HPwES	Residential	No	No	No
1/30/2019	2019	Advertisement	Social media	Online Marketplace promotion of Smart Thermostats	Facebook/Twitter	Local Residential Online Traffic	All EE measures	Residential	No	No	No
1/31/2019	2019	Advertisement	Social media	HPwES Program promotion	Facebook/Twitter	Local Residential Online Traffic	HPwES	Residential	No	No	No
1/31/2019	2019	Training	Keene State College	1-Day Building Operator Class	Building Operator Training on all energy savings	Business Facility Managers and Staff	All EE measures	C&I	No	No	No
2/5/2019	2019	Event	State Legislative Office	State Legislative Office - Hearing on HB318	Summary presentation of company's EE programs and efforts ongoing to promote to customers	State Legislature	All EE measures	Both	No	No	Yes
2/7/2019	2019	Advertisement	Social media	Free Energy Savings Measures	Facebook/Twitter	Local Residential Online Traffic	HPwES	Residential	No	No	No
2/8/2019	2019	Event	Barley House	Concord Chamber of Commerce Local Government Affairs	Business to Business networking	Non-profits, energy and business professionals	All EE measures	C&I	Yes	Yes	Yes
2/13/2019	2019	Training	Roundabout Diner, Portsmouth	1-Day Building Operator Class	Building Operator Training on all energy savings	Business Facility Managers and Staff	All EE measures	C&I	No	No	No
2/13/2019	2019	Event	Concord	Business After Hours Networking & Promotion event	Business to Business networking	Small business owners and General Contractors	All EE measures	C&I	No	Yes	Yes
2/15/2019	2019	Advertisement	Social media	Smart Thermostat promotion	Facebook/Twitter	Local Residential Online Traffic	Smart Thermostats	Residential	No	No	No
2/15/2019	2019	Training	Concord	14th Annual Small Business Day - NHBIA	Learn about small business solutions	Small business managers	All EE measures	C&I	No	No	No
2/19/2019	2019	Advertisement	Social media	Energy Efficiency Online Tools	Facebook/Twitter	Local Residential Online Traffic	All EE measures	Residential	No	No	No
2/20/2019	2019	Advertisement	Nashua	State of the City Breakfast - Nashua Chamber of Commerce	Update on economic activity with networking following presentation	Business Leaders	All EE measures	C&I	No	Yes	Yes
2/21/2019	2019	Advertisement	Email Newsletter	Video: Maximize Boiler Control with an EMS	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
2/21/2019	2019	Advertisement	Email Newsletter	5 Ways to Start Saving Energy Today	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
2/21/2019	2019	Training	Concord	AIA-NH	Business to Business networking	Architects and General Contractors	All EE measures	C&I	No	No	No
2/22/2019	2019	Advertisement	Social Advertisement	Energy Efficiency Online Tools	Facebook/Twitter	Local Residential Online Traffic	All EE measures	Residential	No	No	No
2/27/2019	2019	Training	Durham	NH Association of School Business Officials-Facilities Masters Conference	School Facilities Managers' topics of interest	Northern New England school facilities managers	All EE measures	C&I	No	No	No
3/1/2019	2019	Advertisement	Bill Insert	Free Energy-Saving Equipment (Visual Audit)	LU delivered to all Gas Customers	LU Gas Customers	All EE measures	Residential	No	No	No
3/1/2019	2019	Training	Puritan Back Room	1-Day Building Operator Class	Building Operator Training on all energy savings	Business Facility Managers and Staff	All EE measures	C&I	No	No	No
3/8/2019	2019	Training	Doubletree by Hilton, Manchester	New Hampshire State Home Show	Education outreach to contractors and industry associations	NH Residents, Contractors, and Industry Associations	All EE measures	Both	No	No	Yes
3/12/2019	2019	Event	Concord	Business After Hours - Concord NH Chamber	Business to Business networking	Small business owners and General Contractors	All EE measures	C&I	No	No	Yes
3/14/2019	2019	Training	Common Man, Plymouth	1-Day Building Operator Class	Building Operator Training on all energy savings	Business Facility Managers and Staff	All EE measures	C&I	No	No	No
3/22/2019	2019	Advertisement	Email Newsletter	Save Energy With Efficient Water Heating	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
3/22/2019	2019	Advertisement	Email Newsletter	Home Appliances: The Biggest Energy Users	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
3/25/2019	2019	Training	Pease Tradeport in Portsmouth, NH	Energy Week Event: NH Energy Roundtable	How companies are addressing their energy needs, featuring leading experts & company representatives	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
3/26/2019	2019	Advertisement	Social media	General EE Post - NH SAVES Partnership	Facebook/Twitter	Local Residential Online Traffic	All EE measures	Residential	No	No	No

As of 6/1/2020											
Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
3/26/2019	2019	Training	OracleDyn in Manchester	Energy Week Event: Emerging Energy Needs Forum	Discussion on the emerging energy needs in NH's largest city & modern approaches to meeting those needs	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
3/27/2019	2019	Training	NH CIBOR - Bedford NH	NHCIBOR Statewide Meeting	Discussion about current commercial, industrial and municipal opportunities in the state	Commercial lenders, commercial brokers, and other interested parties	All EE measures	C&I	No	No	No
3/27/2019	2019	Training	City Hall	City of Concord	100% Renewable Energy Strategic Plan Stakeholder Committee Meeting	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
3/27/2019	2019	Training	Salt Hill Pub in Newport	Energy Week Event: NH Energy Roundtable	Discussion on the emerging energy needs in NH's largest city & modern approaches to meeting those needs	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
3/28/2019	2019	Training	Grappone Conference Center in Concord	Energy Week Event: NH Energy Breakfast	Discussion with a major offshore wind developer & panel of high-level representatives discussing how the regional grid, energy users, utilities, & generators	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
3/28/2019	2019	Training	Carriage House, Kimball Jenkins Estate in Concord	Energy Week Event: Awards Ceremony & Reception	NH Energy Awards for Business, Municipal, & Legislative Energy Champions	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
3/28/2019	2019	Training	Currier Museum of Art	AIA NH Design Awards	35th Annual Excellence in Design Awards	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
4/1/2019	2019	Advertisement	WGIR AM Radio	Weatherization Radio Advertisement - Winter & Summer Campaign	iHeart Media: recurring radio spot placement from April through December 2019	LU Customers and Local Commercial and Residential Online Traffic	All EE measures	Residential	No	No	No
4/2/2019	2019	Training	White Birch Brewing in Nashua	Energy Week Event: NH Energy Roundtable	Local energy stories from businesses & municipalities	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
4/11/2019	2019	Training	LAARS Manufacturing	ASHRAE CHP Event	Combined heat and power technology, tour of boiler manufacturing facility	Engineers, Manufacturers, distributors	All EE measures	C&I	No	No	No
4/11/2019	2019	Training	Nashua	Turn Cycle Solutions	Surveyor/OTTER	Residential Electric Customers	HPwES	Residential	No	No	No
4/11/2019	2019	Event	Holiday Inn Concord NH	State of the City - Concord Chamber of Commerce	Update on economic activity with networking prior and following presentation	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
4/15/2019	2019	Advertisement	Social media	Video about HPwES program	Facebook/Twitter	Local Residential Online Traffic	HPwES	Residential	No	No	No
4/17/2019	2019	Event	Concord City Wide Community Center	Concord Young Professionals Concord Chamber of Commerce	Business to business networking	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
4/19/2019	2019	Training	NH Healthcare Association	NHSFHM Monthly Meeting	Building commissioning for healthcare facilities	Healthcare facilities managers, contractors, general contractors	All EE measures	C&I	No	No	No
4/22/2019	2019	Advertisement	Email Newsletter	Boilers: Repair or Replace?	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
4/22/2019	2019	Advertisement	Social media	Earth Day - Thermostat Rebate	Facebook/Twitter	Local Residential Online Traffic	Smart Thermostats	Residential	No	No	No
4/22/2019	2019	Advertisement	E-blast	Smart Thermostats Make Saving Energy Easier	Questline	Local Residential Online Traffic	Smart Thermostats	Residential	No	No	No
4/22/2019	2019	Advertisement	Email Newsletter	Go Green This Earth Day	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
4/22/2019	2019	Event	Applebee's Nashua	Turn Cycle Solutions	EE program participation and identification of resources	Weatherization contractor	Weatherization	C&I	No	No	No
4/24/2019	2019	Training	FW Webb	Commercial Energy Codes Training	EE program participation and identification of resources	Business Facility Managers and Staff	All EE measures	C&I	Yes	No	No
4/24/2019	2019	Training	NH CIBOR - Bedford NH	NHCIBOR Statewide Meeting	Discussion about current commercial, industrial and municipal opportunities in the state	Commercial lenders, commercial brokers, and other interested parties	All EE measures	C&I	No	No	No
4/30/2019	2019	Training	Londonderry	P&M	Wx 101	Residential Electric Customers	HPwES/HEA	Residential	No	No	No
5/1/2019	2019	Advertisement	Bill Insert	Income Eligible EE Programs & New NH Saves Logo	LU delivered to all Gas Customers	LU Gas Customers	HEA	Residential	No	No	No
5/1/2019	2019	Advertisement	Cable Television	Weatherization Cable TV Advertisement - Winter & Summer Campaign	Comcast: recurring Cable TV spot placement from April through December 2019	LU Customers and Local Commercial and Residential Online Traffic	HPwES	Residential	No	No	No
5/1/2019	2019	Advertisement	Digital Billboard	Weatherization Digital Billboard Advertisement - Winter & Summer Campaign	Outfront Media: recurring digital billboard placement from May through December 2019	LU Customers and Local Commercial and Residential Online Traffic	HPwES	Residential	No	No	No
5/1/2019	2019	Advertisement	Community Billboard	Weatherization Community Billboard Advertisement - Winter & Summer Campaign	Outfront Media: recurring community billboard placement from May through December 2019	LU Customers and Local Commercial and Residential Community	HPwES	Residential	No	No	No
5/1/2019	2019	Advertisement	Streaming Radio - Pandora	Weatherization Streaming Radio Advertisement - Winter & Summer Campaign	iHeart Media: recurring online streaming radio advertisement from May through December 2019	LU Customers and Local Commercial and Residential Online Traffic	HPwES	Residential	No	No	No
5/1/2019	2019	Training	Marriott Courtyard Concord NH	NHBSR Spring Conference	EE program participation and identification of resources	Business Facility Managers and Staff	All EE measures	C&I	No	No	No
5/2/2019	2019	Event	Fitzemeyer & Tocci	Trade Ally Meeting with Fitzemeyer & Tocci	EE program participation and identification of resources	Full service mechanical engineering firm	All EE measures	C&I	No	No	No
5/3/2019	2019	Event	A.W.Rose Construction	Trade Ally Meeting with A.W. Rose Construction	EE program participation and identification of resources	General contractor trade ally	All EE measures	C&I	No	Yes	No
5/3/2019	2019	Event	Jay Lee, Berkshire Hathaway	Commercial Lender Trade Ally	EE program participation and identification of resources	Commercial Broker	All EE measures	C&I	No	No	No

As of 6/1/2020	Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
	5/6/2019	2019	Training	City Hall, Concord	Concord 100% Renewables Listening Session	Discussions on all things energy related.	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
	5/9/2019	2019	Training	Mill Brook Primary School	ASHRAE Monthly Meeting	EE program participation and identification of resources	Local engineer trades association	All EE measures	C&I	No	No	No
	5/10/2019	2019	Training	Newton	Invictus	EE Program overview	Spray Foam Insulation Contractor and Residential Gas Customers	HPwES	Residential	No	No	No
	5/10/2019	2019	Training	Pembroke Readiness Center	2019 State Energy Conference	EE program participation and identification of resources	State facilities staff and administrators	All EE measures	C&I	No	No	Yes
	5/14/2019	2019	Event	Manchester	EI NHsaves program participation and identification of resources	EE program participation and identification of resources	Contractor EEI Representatives	All EE measures	C&I	No	No	No
	5/14/2019	2019	Training	Havenwood Heritage Heights	Concord Chamber Business After Hours	EE program participation and identification of resources	Non-profits, energy and business professionals	All EE measures	C&I	No	No	Yes
	5/15/2019	2019	Advertisement	Social media	VA Energy Saving Measures and Visual Audit	Facebook/Twitter	Local Residential Online Traffic	Weatherization	Residential	No	No	No
	5/16/2019	2019	Training	Franklin	Franklin WWTP Award and Tour	EE program participation	State and municipal staff, and facilities personal	All EE measures	C&I	No	No	Yes
	5/17/2019	2019	Event	Lakes Region Chamber of Commerce	EE programs overview presentation	Infrastructure Seminar	State and municipal staff, and facilities personal	All EE measures	Residential	No	No	Yes
	5/20/2019	2019	Training	Concord	Turn Cycle Solutions	Blower door training	Contractor	HPwES	Residential	No	No	No
	5/21/2019	2019	Advertisement	Email Newsletter	Free Software Calculates Energy Savings of Steam System Insulation	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
	5/21/2019	2019	Advertisement	Email Newsletter	5 Ways to Get Your Home Ready for Summer	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
	5/22/2019	2019	Advertisement	Email	Promotion of visual audit offering	Monthly e-newsletter focus	Local Residential Online Traffic	Visual audit	Residential	No	No	No
	5/28/2019	2019	Advertisement	Email	Promotion of HPwES program	Monthly e-newsletter focus	Local Residential Online Traffic	HPwES	Residential	No	No	No
	5/30/2019	2019	Event	6 Eastpoint Dr., Hooksett	Eckhardt & Johnson	EE Program Participation	HVAC Contractor	All EE measures	C&I	No	No	No
	6/1/2019	2019	Advertisement	Bus Wrap	Weatherization Bus Wrap Advertisement - Winter & Summer Campaign	ATA Outdoor Media: recurring bus wrap advertisement from June through December 2019	LU Customers and Local Commercial and Residential Online Traffic	HPwES	Residential	No	No	No
	6/1/2019	2019	Training	Various Locations	Commercial Equipment Heating Equipment Dealer Visits in June	Commercial Equipment Heating Equipment Dealer Visits in June	Deluca Brothers, Kittredge Equipment, NH Restaurant Equipment, Perkins/Gordon Food Service, Pitco	Commercial Food Service Equipment (CFSE) rebate program	C&I	No	No	No
	6/5/2019	2019	Advertisement	Email	Fathers Day Thermostat Rebate	Special smart thermostat promotion	Local Residential Online Traffic	Smart Thermostats	Residential	No	No	No
	6/5/2019	2019	Training	Derry	Derry Solar Summit	Promotion of EE programs to attendees	Derry Netzero Task Force/municipal staff, and Derry/Londonderry businesses	All EE measures	Both	No	No	Yes
	6/6/2019	2019	Event	Concord Chamber of Commerce	EE programs overview presentation	Promotion of EE programs to attendees	State and municipal staff, and facilities personal	All EE measures	C&I	No	No	No
	6/6/2019	2019	Training	Concord Chamber of Commerce	Pinnacle Awards	Promotion of EE programs to attendees	State and municipal staff, and facilities personal	All EE measures	Both	No	No	Yes
	6/6/2019	2019	Training	Associated Builders & Contractors	ABC Innovation in Education	Municipal Project Focus	Architects, Municipal Staff and General Contractors	All EE measures	C&I	No	Yes	Yes
	6/12/2019	2019	Event	Manchester	Oliver Mechanical	Promotion of EE programs to attendees	HVAC Contractor	All EE measures	C&I	No	No	No
	6/13/2019	2019	Training	AIA-NH	AIA COTE Summit	Review of EE program eligibility to attendees	NH architects	All EE measures	C&I	No	Yes	No
	6/18/2019	2019	Advertisement	Facebook/Twitter	Fathers Day Thermostat Rebate	Facebook/Twitter	Local Residential Online Traffic	Smart Thermostats	Residential	No	No	No
	6/18/2019	2019	Advertisement	Email Newsletter	Thermostats: What's the Difference?	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
	6/18/2019	2019	Event	Londonderry	Walter F. Morris Company	Promotion of EE programs to attendees	Manufacturers Rep	All EE measures	C&I	No	No	No
	6/18/2019	2019	Training	Charlestown	Claremont Spray Foam	Mobile home weatherization	Residential Electric Customers	HEA	Residential	No	No	No
	6/19/2019	2019	Training	Newton	Invictus	Surveyor/OTTER	Residential Electric Customers	HPwES	Residential	No	No	No
	6/20/2019	2019	Training	Net Zero Task Force	Derry Muni Meeting	Review of EE program eligibility to attendees	Municipal Staff	All EE measures	Both	No	No	Yes
	6/21/2019	2019	Training	Municipal Energy Staff	Sierra Club Municipal Conference	Review of EE program eligibility to attendees	Muni Staff	All EE measures	Both	No	No	Yes
	6/26/2019	2019	Advertisement	Facebook/Twitter	HPwES Video - A/C Unit	Facebook/Twitter	Local Residential Online Traffic	HPwES	Residential	No	No	No
	6/26/2019	2019	Event	Business and Economic	NH BEA Meeting	Promotion of EE programs to attendees	State Staff	All EE measures	C&I	No	No	No
	6/26/2019	2019	Training	Business and Economic	NH BEA Meeting	Promotion of EE programs to attendees	State Staff	All EE measures	Both	No	No	Yes
	6/27/2019	2019	Advertisement	Email	Independence Day Thermostat Rebate Special	Special smart thermostat promotion	Local Residential Online Traffic	Smart Thermostats	Residential	No	No	No
	6/27/2019	2019	Event	6 Eastpoint Dr.,	Eckhardt & Johnson	Promotion of EE programs to attendees	HVAC Contractor	All EE measures	C&I	No	No	No
	6/28/2019	2019	Advertisement	Social media	Facebook/Twitter: HPwES Video - A/C Unit	Facebook/Twitter	Local Residential Online Traffic	HPwES	Residential	No	No	No
	6/28/2019	2019	Advertisement	Social media	Facebook/Twitter: 4th of July promo - Google	Facebook/Twitter	Local Residential Online Traffic	Smart Thermostats	Residential	No	No	No
	7/2/2019	2019	Advertisement	Social media	4th of July promo - Google Home mini and NEST	Facebook/Twitter	Local Residential Online Traffic	Smart Thermostats	Residential	No	No	No
	7/2/2019	2019	Event	CENH Home Office	Clean Energy NH Open House	Networking event	Contractors, manufacturer, distributor, city officials, Architects, engineers	All EE measures	C&I	No	No	Yes
	7/2/2019	2019	Training	CENH Home Office	Clean Energy NH Open House	Networking event	Contractors, manufacturer, distributor, city officials, Architects, engineers	All EE measures	C&I	No	Yes	Yes
	7/11/2019	2019	Advertisement	Social media	Special Rebates for Gas Customers	Facebook/Twitter	Local Residential Online Traffic	All EE measures	Residential	No	No	No
	7/11/2019	2019	Event	Walter F. Morris Company	Joint NHsaves - Walter Morris Flyer	Marketing Meeting	Marketing Staff	All EE measures	C&I	No	No	No

As of 6/1/2020	Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
	7/11/2019	2019	Event	Londonderry	Promotion of EE programs to attendees	Promotion of EE programs to attendees	Marketing Staff	All EE measures	C&I	No	No	No
	7/16/2019	2019	Advertisement	Email Newsletter	A Whole Building Approach to EE	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
	7/16/2019	2019	Advertisement	Email Newsletter	HVAC Systems: 4 Hidden Energy Costs	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	No	No
	7/16/2019	2019	Advertisement	Facebook/Twitter	HPwES Summer Promotion	Facebook/Twitter	Local Commercial and Residential Online Traffic	HPwES	Residential	No	No	No
	7/16/2019	2019	Advertisement	Email Newsletter	Video: 5 Ways to Save with Smart Home Technology	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
	7/18/2019	2019	Training	Johnson's (Northwood)	Lunch meeting w/ Yankee Thermal Imaging	Review of EE program eligibility to attendees	Jamie Polchies- estimator/auditor	All EE measures	C&I	No	No	No
	7/19/2019	2019	Event	RBG office	Promotion of EE programs to attendees	Promotion of EE programs to attendees	Don Perrin	All EE measures	C&I	No	No	Yes
	7/19/2019	2019	Training	RBG office	Meeting with State of NH	Review of EE program eligibility to attendees	Don Perrin	All EE measures	C&I	No	No	Yes
	7/23/2019	2019	Event	Londonderry	USGBC Summer Meet-up	Networking event with LEED professionals	Builders, architects, and designers	All EE measures	C&I	No	Yes	Yes
	7/23/2019	2019	Training	Concord	Rotary Presentation	Power point presentation for the Concord Rotary Club	Business owners and municipal leaders	Focus on commercial w/residential included	Both	No	No	Yes
	7/23/2019	2019	Training	Concord	Rotary Presentation	Power point presentation for the Concord Rotary Club	Business owners and municipal leaders	Focus on commercial	Both	No	No	Yes
	7/24/2019	2019	Event	Bedford NH	NH CIBOR Statewide Meeting	Promotion of EE programs to attendees	Commercial brokers, bankers,	All EE measures	C&I	No	No	No
	7/24/2019	2019	Event	New Canaan	Dave Gooding Company	Educating manufactures rep. on the NHSaves	Trade Ally Contact	All EE measures	C&I	No	No	No
	7/24/2019	2019	Training	Bedford NH	NH CIBOR Statewide Meeting	Promotion of EE programs to attendees	Commercial brokers, bankers,	All EE measures	C&I	No	No	No
	7/25/2019	2019	Event	F.W. Webb -	Vendor Counter Day	Tabling the F.W. Webb counter and speaking with	Potential Trade Allies	Heating Systems	C&I	No	No	No
	7/26/2019	2019	Event	Gilford	NHSHEM Summer Outing	Networking event with Hospital staff and general	Hospital Facilities Directors, and	All EE measures	C&I	No	No	No
	7/26/2019	2019	Event	Sunapee	CEAH Summer Outing	Networking event with Clean energy membership	Trade Ally Contacts and customers	All EE measures	C&I	No	No	Yes
	7/31/2019	2019	Training	Concord	LU Gas audit	Audit of Heritage Harley Davidson	LU Gas Customer	Gas Audit	C&I	No	No	No
	8/1/2019	2019	Event	Bedford	Fulcrum Trade Ally Meeting	Meeting With Fulcrum	General contractor trade ally	All EE measures	C&I	No	No	No
	8/2/2019	2019	Advertisement	Email	Promotion of visual audit offering	Promotion of visual audit offering	LU Customers and Local Residential Online Traffic	Visual audit	Residential	No	No	No
	8/2/2019	2019	Event	Manchester	Second Wind Water Systems	Meeting with Secondwind Water Systems	Specialty services trade ally	All EE measures	C&I	No	No	No
	8/3/2019	2019	Training	New Canaan	Dave Gooding Company	Educating manufactures rep. on the NHSaves	Trade Ally Contact	All EE measures	C&I	No	No	No
	8/5/2019	2019	Training	Windham	Meeting with The Dubai Group	Meeting to review 42 Nashua Road project	Engineer	All EE measures	C&I	No	No	No
	8/8/2019	2019	Advertisement	Social media	Explanation of the Energy Audit Process	Facebook/Twitter	Local Residential Online Traffic	HPwES	Residential	No	No	No
	8/8/2019	2019	Training	Derry	NHCIBOR Summer Mixer	Meeting with the commercial realtors and lenders group in central NH	see previous.	All EE measures	C&I	No	No	No
	8/8/2019	2019	Training	Manchester	HPwES Energy Audit	On-Boarding Discussion	Invictus	HPwES	Residential	No	No	No
	8/13/2019	2019	Training	Concord	REPA - Update on building Codes	Update on newly adopted 2015 building codes with amendments	Energy efficiency companies, and facilities managers	All EE measures	C&I	Yes	No	No
	8/14/2019	2019	Event	Concord	Key Account Building Walk-through	Meet with Jason Teaster, facilities director for NH Hospital.	Key Account	All EE measures	C&I	No	No	No
	8/14/2019	2019	Event	Concord	Meeting with Peter Mikolaczuk of Air Purchases/Engel HVAC	NHSaves Program	Territory Manager-HVAC	All EE measures	C&I	No	No	No
	8/14/2019	2019	Training	Concord	Breakfast Club meeting	Networking	Commercial lender, HVAC distributor, other members	All EE measures	C&I	No	No	No
	8/15/2019	2019	Event	Manchester	Meeting with Freudenberg-NOK	EE program presentation	Kevin Smith, Facilities Manager	All EE measures	C&I	No	No	No
	8/16/2019	2019	Training	Lebanon	New Hampshire Society for Healthcare Facilities Managers Seminar	Seminar focused on large energy projects with NH hospitals	Hospital facilities staff	All EE measures	C&I	No	No	No
	8/20/2019	2019	Training	Concord	NHSaves Presentation at North Branch	EE program presentation	Program managers, president	All EE measures	C&I	No	No	No
	8/21/2019	2019	Training	Concord	ABC Party in the Park	Associated Builders and Contractors summer event	Builders, trade contractors, property management companies	All EE measures	C&I	No	Yes	No
	8/22/2019	2019	Training	Manchester	Business After Hours- Manchester COC	TF Moran BAH	Manchester COC, TF Moran, Builders	All EE measures	C&I	No	Yes	Yes
	8/27/2019	2019	Training	Concord	Lunch meeting with Anne Copp- Commercial Realtor	EE program training	Anne Copp, Commercial realtor	All EE measures	C&I	No	No	No
	8/28/2019	2019	Training	Derry	Meeting with Derry Econ Dev	EE program training	Bev Donovan, Econ Dev Manager	All EE measures	Both	No	No	No
	8/28/2019	2019	Training	Concord	Breakfast Club meeting	EE program presentation	Commercial lender, HVAC distributor, other members	All EE measures	C&I	No	No	No
	8/29/2019	2019	Advertisement	Email Newsletter	Simple Steps to Lower Natural Gas Bills	Monthly e-newsletter distribution - 08/29/19	LU Customers and Local Commercial Online Traffic	All EE measures	C&I	No	No	No
	8/29/2019	2019	Advertisement	Email Newsletter	Smart Thermostats Make Saving Energy Easier	Monthly e-newsletter distribution - 04/12/19	LU Customers and Local Residential Online Traffic	All EE measures	Residential	No	No	No
	9/1/2019	2019	Advertisement	Bill insert	Promotion of low-coset Energy Savings Measures	LU delivered to all Gas Customers	LU Gas Customers	Visual audit	Residential	No	No	No
	9/1/2019	2019	Advertisement	Email	Promotion of low-coset Energy Savings Measures	LU delivered to all Gas Customers with email addresses	LU Gas Customers	Visual audit	Residential	No	No	No
	9/10/2019	2019	Event	Nashua	Meeting with Horizon and Invictus	HPwES/Energy Audit	Horizon and Affiliates	HPwES/HEA	Residential	No	No	No
	9/10/2019	2019	Training	Nashua	Invictus HPwES Energy Audit	EE Program training	Invictus	HPwES/HEA	Residential	No	No	No
	9/11/2019	2019	Training	Concord	Concord Professionals Breakfast Club meeting	Networking	Commercial lender, HVAC distributor, other members	All EE measures	C&I	No	No	No
	9/11/2019	2019	Training	Concord	Plan NH Business After Hours	Networking	Contractors, etc.	All EE measures	C&I	No	No	No
	9/11/2019	2019	Event	Concord	Concord Professionals Breakfast Club Meeting	Networking	Commercial lenders, HVAC distributors, and other members	All EE measures	C&I	No	No	Yes
	9/11/2019	2019	Event	Concord	Plan NH Business After Hours	Networking	Commercial lenders, HVAC distributors, and other members	All EE measures	C&I	No	No	Yes

As of 6/1/2020	Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
	9/12/2019	2019	Event	Manchester	Granite Group Trade Show	Conference and Networking	HVAC techs, contractors, etc.	All EE measures	C&I	Yes	No	No
	9/12/2019	2019	Event	Randolph, MA	GasNetworks Annual Conference	Conference and Networking	HVAC techs, contractors, etc.	All EE measures	C&I	Yes	No	Yes
	9/16/2019	2019	Event	Various Locations	2019 Energy Code Workshop Series	Eventbrite Registration - Commercial and Residential Code Series Discussions in September and October	Residential and Commercial Contractors	All EE measures	C&I	Yes	Yes	No
	9/16/2019	2019	Event	Manchester	New Contract Response	Total Climate Control	Horizon and Affiliates	HPwES	Residential	No	No	No
	9/17/2019	2019	Advertisement	Email Newsletter	Take Building Performance to the Next Level	Article: Take Building Performance to the Next Level	LU Customers and Local Commercial	All EE measures	C&I	No	Yes	No
	9/17/2019	2019	Advertisement	Email Newsletter	INFOGRAPHIC: Preparing for a Home Energy Audit	INFOGRAPHIC: Preparing for a Home Energy Audit	LU Customers and Local Residential	All EE measures	Residential	No	No	No
	9/17/2019	2019	Event	Concord	NH School Administrators Conference	Energy Summit	Directors of Buildings and Grounds	All EE measures	C&I	No	No	Yes
	9/18/2019	2019	Advertisement	Social media	Special Rebates for Gas Customers	Facebook/Twitter	LU Customers and Local Commercial and Residential Online Traffic	All EE measures	Residential	No	No	No
	9/18/2019	2019	Training	Concord	NH School Administrators Conference	Conference & Networking Day 2	Director of Buildings & Grounds	All EE measures	C&I	No	No	No
	9/23/2019	2019	Event	Concord	NH Energy Summit	Energy Summit	Energy Industry Professionals	All EE measures	C&I	No	No	Yes
	9/23/2019	2019	Training	FW Webb Company Distribution Center, 10 Webb Dr., Londonderry	2019 Energy Code Workshop Series	Exploring changes to energy code in NH	Residential Building Construction Industry	All EE measures	Residential	Yes	Yes	No
	9/24/2019	2019	Advertisement	Social media	Helping Schools and Towns Save through Rebates & Incentives	Facebook/Twitter	LU Customers and Local Commercial and Residential Online Traffic	All EE measures	C&I	No	No	No
	9/25/2019	2019	Training	Concord	Meeting with Matt Moore- CCSNH	EE Programs training	Dir of Capitol Improvement Projects	All EE measures	C&I	No	No	No
	9/25/2019	2019	Event	Derry	Chamber Business Before Hours	Presentation of EE programs	Chamber members and President of Chamber	All EE measures	C&I	No	No	Yes
	9/26/2019	2019	Event	Concord	Associated Builders and Contractors	Business after Hours - Young Professional Group - ABC	Contractors, HVAC techs, engineers, etc.	All EE measures	C&I	No	Yes	No
	9/26/2019	2019	Training	Manchester	Tri-City Expo	Expo- walked around to vendors	Contractors, property management companies, etc.	All EE measures	C&I	No	No	No
	9/26/2019	2019	Training	Concord	ABC YPG BAH	Business After Hours- Young Professional Group- ABC	Contractors, HVAC techs, engineers, etc.	All EE measures	C&I	No	No	No
	9/27/2019	2019	Training	Hooksett	NHSaves Lunch & Learn	PROCON Lunch & Learn	Project managers, estimators, etc.	All EE measures	C&I	No	No	No
	9/30/2019	2019	Event	Manchester	Jones Boy New Contract Response	New Contract	Horizon and Affiliates	HPwES/HEA	Residential	No	No	No
	10/1/2019	2019	Advertisement	Bill Insert	How EE can help your energy bill	LU delivered to all Gas Customers	LU Gas Customers	All EE measures	Residential	No	No	No
	10/1/2019	2019	Training	Concord	State of NH Employees Training	Energy Efficiency	Project managers, estimators, etc.	All EE measures	C&I	No	No	No
	10/1/2019	2019	Training	The Exeter Inn, 90 Front St., Exeter	2019 Energy Code Workshop Series	Exploring changes to energy code in NH	Residential Building Construction Industry	All EE measures	Residential	Yes	Yes	No
	10/1/2019	2019	Training	Concord	NHSaves Lunch & Learn	HL Turner	Project managers, estimators, etc.	All EE measures	C&I	No	No	No
	10/2/2019	2019	Training	Concord	NHSaves Button Up	UU Fellowship Hall	Homeowners, general public	All EE measures	Residential	No	No	No
	10/5/2019	2019	Event	669 Union St., Manchester	2019 Energy Code Workshop Series	Exploring changes to energy code in NH	Commercial Construction Industry	All EE measures	C&I	Yes	Yes	No
	10/8/2019	2019	Training	FW Webb Company Distribution Center, 10 Webb Dr., Londonderry	2019 Energy Code Workshop Series	Exploring changes to energy code in NH	Commercial Construction Industry	All EE measures	C&I	Yes	Yes	No
	10/9/2019	2019	Event	Goffstown	Key Account Meeting	Key Account Meeting with Mike Lencki, Hillsborough County Nursing Home	Purchasing Manager	All EE measures	C&I	No	No	No
	10/9/2019	2019	Training	Concord	Breakfast Club meeting	Networking	Commercial lender, HVAC distributor, other members	All EE measures	C&I	No	No	No
	10/10/2019	2019	Advertisement	Social media	What does weakening EPA regulations mean?	Facebook/Twitter	LU Customers and Local Commercial and Residential Online Traffic	All EE measures	Both	Yes	No	No
	10/10/2019	2019	Event	Dracut	Key Account Meeting	Key Account Meeting with Bob Norkiewicz, Brox Industries	Plant Manager	All EE measures	C&I	No	No	No
	10/10/2019	2019	Training	Church Landing at Mill Falls/Laker Room, 312 Daniel Webster Hwy, Meredith	2019 Energy Code Workshop Series	Exploring changes to energy code in NH	Residential Building Construction Industry	All EE measures	Residential	Yes	Yes	No
	10/10/2019	2019	Training	Concord	Concord Chamber: Building Forum	Discussion about developments in the capital city area	COC members, city officials, architects	All EE measures	C&I	No	Yes	Yes
	10/11/2019	2019	Training	Lebanon	Meeting with Atlantic Electrical Distributors	NH Saves Program	Distribution Representatives	All EE measures	C&I	No	No	No
	10/15/2019	2019	Advertisement	Email Newsletter	INFOGRAPHIC: Getting Your Facility Ready for Winter	Monthly E-Newsletter	Gas Key Accounts	All EE measures	C&I	No	No	No
	10/15/2019	2019	Advertisement	Email Newsletter	Photo Essay: Energy Saving Tips for Fall	Monthly E-Newsletter	LU Customers and Local Commercial and Residential Online Traffic	All EE measures	Residential	No	No	No
	10/15/2019	2019	Training	Woodstock Inn Brewery, 135 Main Street, North Woodstock, NH	2019 Energy Code Workshop Series	Exploring changes to energy code in NH	Commercial Construction Industry	All EE measures	C&I	Yes	Yes	No
	10/15/2019	2019	Training	Concord	CYPN- Concord Young Professionals	CYPN Networking Night	Young Professionals in various industries, met Steve Duprey, local developer	All EE measures	C&I	No	No	No
	10/16/2019	2019	Training	Nashua	Turn Cycle Solutions	Surveyor/OTTER	Contractor and New Staff	All EE measures	Residential	No	No	No
	10/17/2019	2019	Training	Hartford, VT	Landlords Energy Efficiency Conference	Meeting of commercial and residential landlords	commercial and residential landlords	All EE measures	Both	No	No	No

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10/18/2019	2019	Training	Nashua	NH Society of Healthcare Facility Managers (NHSFM)	Gave overview of technically assistance funding to NH hospital facility managers.	Hospital facility managers	All EE measures	C&I	No	No	No
10/23/2019	2019	Training	Portsmouth	NHSaves Lunch & Learn	TMS Architects - AIA lunch and learn series	Architects	All EE measures	C&I	No	Yes	No
10/24/2019	2019	Event	95 Canal Street, Nashua, NH	BAE Systems Energy Expo	Table at Expo to present NHSaves	BAE Employees	All EE measures	Residential	No	No	No
10/25/2019	2019	Training	Lebanon	Tracy St Multi-Family Ribbon Cutting	Official opening of first net zero affordable housing development in NH	Developer, Contractor, funders, Government Reps	All EE measures	C&I	No	No	Yes
10/31/2019	2019	Training	Concord	Advanced Manufacturing Conference	NHMEP Governor's Conference	Politicians, energy professionals, business professionals, manufacturing professionals	All EE measures	C&I	No	No	Yes
11/1/2019	2019	Advertisement	Bill Insert	Home Feeling Drafty? We Can Help!	LU delivered to all Gas Customers	LU Gas Customers	All EE measures	Residential	No	No	No
11/5/2019	2019	Training	Weatherize Guyz, Derry, NH	Contractor meeting with Horizon	Surveyor/OTTER	Contractor and LU Vendor	HPwES	Residential	No	No	No
11/5/2019	2019	Event	Manchester	CCSNH Meeting at MCC	Review MCC project	Colby Co. Engineering and Matt Moore	All EE measures	C&I	Yes	No	Yes
11/5/2019	2019	Event	Concord	Department of Admin Services Meeting	Status update on projects and future planned projects	Don Perrin	All EE measures	C&I	No	No	Yes
11/8/2019	2019	Training	Invictus Spray, Newton, NH	Contractor meeting with Horizon	Support for HPwES Program Development	Contractor and LU Vendor	HPwES	Residential	No	No	No
11/12/2019	2019	Training	Concord	REPA Meeting- Sense	Training on Sense home monitoring device	Energy efficiency companies, and facilities managers	All EE measures	C&I	No	No	No
11/13/2019	2019	Training	Airport Holiday Inn, Manchester	Efficient Heating and Cooling for Commercial Building Managers	Learn how to control energy costs and maximize EE Incentives	Lakes Region Community College Training for Facility Managers, COOs, building operators and sustainability officers	All EE measures	C&I	No	No	No
11/14/2019	2019	Event	Manchester	Municipal Association's 78th Annual Conference	Municipal Association's 78th Annual Conference	Municipal employees	All EE measures	C&I	No	no	Yes
11/15/2019	2019	Advertisement	Email Newsletter	Energy Smart Boiler Maintenance	Monthly E-Newsletter	LU Customers and C&I Gas Online Traffic	All EE measures	C&I	No	Yes	No
11/15/2019	2019	Advertisement	Email Newsletter	Busted! 3 Common Myths About Home Heating	Monthly E-Newsletter	LU Customers and Residential Gas Online Traffic	All EE measures	Residential	No	No	No
11/15/2019	2019	Training	Concord Grappone Conference Ctr	Clean Energy NH- Local Energy Solutions Conference	Grappone Conference Center	Energy professionals, contractors, business professionals, politicians	All EE measures	C&I	No	Yes	Yes
11/18/2019	2019	Training	Turn Cycle Solutions, Concord, NH	Field Training with Horizon	Energy Audit and work order review; identifying health and safety hazards, thermal imaging and worst case spillage testing.	Contractors and LU Vendor	All EE measures	Residential	No	Yes	No
11/18/2019	2019	Event	Concord	Concord School SAU #8 Meeting	SAU 8 project review	School Officials	All EE measures	C&I	Yes	no	Yes
11/19/2019	2019	Advertisement	LU Website	Black Friday - Thermostats	Social Media	Local Commercial Online Traffic	EE Gas Measures	Residential	No	No	No
11/19/2019	2019	Training	Common Man, Concord	Energy Efficiency for Restaurants and Hospitality	Learn how to control energy costs and maximize NHSaves Incentives	Lakes Region Community College Training for Facility Managers, COOs, building operators and sustainability officers	All EE measures	C&I	No	No	No
11/19/2019	2019	Event	Peterborough, NH	Button Up Workshop	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NHSaves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
11/20/2019	2019	Event	Orange, NH	Button Up Workshop	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NHSaves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
11/20/2019	2019	Training	Pembroke	State of NH EE Training	EE Training	State employees, facilities managers, building operators, NHSaves employees	All EE measures	C&I	No	Yes	No
11/20/2019	2019	Training	Concord	Energy Efficiency Training- Heating and Cooling-State of NH Employees	HVAC training	State employees, facilities managers, building operators, NHSaves employees	All EE measures	C&I	Yes	no	Yes
11/21/2019	2019	Training	Concord	Community Development Finance Authority (CDFA) Grant Meeting	Grant Applicants training	Grant Applicants	All EE measures	C&I	Yes	Yes	No
11/21/2019	2019	Training	Concord	ASHRAE @ Red Blazer	President of ASHRAE presentation on Integrated Building Design	Local engineer trades association	All EE measures	C&I	No	Yes	Yes

Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
11/27/2019	2019	Event	Concord	Breakfast Club meeting	Networking	Commercial lender, HVAC distributor, other members	All EE measures	C&I	Yes	No	No
11/27/2019	2019	Training	Concord	Non-Lighting Upstream C&I Subcommittee Meeting	4th Wednesday of every month	Joint Utilities	EE Gas Measures	C&I	No	No	No
11/27/2019	2019	Training	Bedford NH	NH CIBOR Statewide Meeting	NHSaves Program	Commercial brokers, bankers, engineers, affiliates	All EE measures	C&I	no	No	No
11/28/2019	2019	Advertisement	LU Website	Black Friday - Thermostats	Social Media	Local Commercial Online Traffic	EE Gas Measures	Residential	No	No	No
11/28/2019	2019	Advertisement	Liberty Utilities - Internal Marketing	Looking to Increase Comfort at Home?	Bill Insert	LU Gas & Electric Customers	EE Gas Measures	Residential	No	No	No
12/1/2019	2019	Event	Gilmanston, NH	Button Up Workshop	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NHSaves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
12/4/2019	2019	Event	Concord	USGBC - NH 10th Anniversary	10th anniversary celebration for NH chapter of the USGBC	Energy efficiency companies, and facilities managers	All EE measures	C&I	no	No	Yes
12/4/2019	2019	Training	Manchester	BIA Energy Symposium	BIA (statewide Chamber of Commerce) Energy symposium. Brought together energy professionals for a day long seminar.	Energy Performance professionals	All EE measures	C&I	No	No	Yes
12/5/2019	2019	Training	Concord	REPA Monthly Meeting	Peter Vost presented on roof venting, etc.	Energy efficiency companies, and facilities managers	All EE measures	C&I	No	Yes	No
12/10/2019	2019	Event	Manchester	CENH Member Holiday Dinner	Annual holiday dinner	Energy Performance professionals	All EE measures	C&I	no	No	No
12/11/2019	2019	Advertisement	Questline	Busted! 3 Common Myths About Home Heating	Eblast	Local Commercial Online Traffic	EE Gas Measures	Residential	no	No	No
12/15/2019	2019	Advertisement	Questline	Energy Smart Boiler Maintenance	Eblast	Local Commercial Online Traffic	EE Gas Measures	C&I	No	Yes	No
12/15/2019	2019	Event	Concord	Breakfast Club meeting	Networking	Commercial lender, HVAC distributor, other members	All EE measures	C&I	No	No	No
12/18/2019	2019	Training	Bedford NH	Franklin Energy Meeting	NH Saves Program	C&I Vendor Reps	All EE measures	C&I	No	No	No
12/19/2019	2019	Training	Manchester	Monthly HEA/HPwES Utility Meeting with Joint Utilities	Discuss Measures for 2020	Joint Utilities	All EE measures	C&I and Residential	No	No	No
12/20/2019	2019	Training	Manchester	Utility Monthly Products Meeting	Discuss Measures for 2020 - 4th Tuesday of Every Month	Joint Utilities	All EE measures	C&I and Residential	No	No	No
12/24/2019	2020	Advertisement	Questline	Wasting Energy is a Hard Habit to Break; 3 Reasons Why Your Furnace Turns on and Off Constantly; Video: You Can Prevent Freezing Pipes; Visual Audit Link	Eblast	Local Residential Online Traffic	EE Gas Measures	Residential	No	No	No
1/1/2020	2020	Advertisement	Questline	Considering a Smart Thermostat? Now's the Time!; Facilities Win with Natural Gas; Infographic: Gas Train Control; Reciprocating Gas Engines Power Hybrid Microgrids; Infographic: Menu for an Energy-Efficient Kitchen	Eblast	Local Commercial Online Traffic	EE Gas Measures	C&I	No	No	No
1/1/2020	2020	Advertisement	Liberty Utilities - Internal Marketing	NHSAVES: Your Source for Energy Efficiency	Bill Insert	LU Gas Customer	EE Gas Measures	Residential	No	No	No
1/8/2020	2020	Event	F.W. Webb- Concord	Breakfast Club Networking	Networking	Networking	EE Gas Measures	C&I and Residential	Yes	Yes	Yes
1/8/2020	2020	Event	F.W. Webb- Concord	Breakfast Club Networking	Networking	Commercial lender, HVAC distributor, other members	EE Gas measures	C&I and Residential	Yes	Yes	Yes
1/10/2020	2020	Training	Eversource	Energy Park	Preparation for Meetings with VEIC and EESE Board	Joint Utilities	All EE measures	C&I	No	No	No
1/14/2020	2020	Event	Concord	REPA Monthly Training	Air-source heat pumps	Air-source heat pumps	EE Gas Measures	C&I and Residential	No	No	No
1/14/2020	2020	Event	Concord	REPA Monthly Training	Air-source heat pumps	Contractors	EE Gas Measures	C&I and Residential	No	No	No
1/14/2020	2020	Training	Eversource	Small Business Working Session	NH Saves Program Design	Joint Utilities	All EE measures	C&I and Residential	No	No	No
1/15/2020	2020	Event	Bedford	NHCIBOR Meeting	Statewide Marketing Meeting	Statewide Marketing Meeting	EE Gas Measures	C&I and Residential	No	No	No
1/15/2020	2020	Event	Bedford	NHCIBOR Meeting	Statewide Marketing Meeting	Joint Utilities	EE Gas Measures	C&I and Residential	No	No	No
1/15/2020	2020	Training	Eversource	2020 Energy Star Homes Kick Off Meeting	2019 Review and 2020 Goals	Joint Utilities	All EE measures	C&I and Residential	No	No	No
1/16/2020	2020	Training	Merrimack, NH	Wx Crew Training	Blower Door Guided Air Sealing	Contractors	All EE measures	Residential	No	Yes	No
1/17/2020	2020	Event	New London Hospital (NHSHF)	NH Society of Health Facility Managers	Above-Ceiling Program	Contractors and Facility Representatives	EE Gas Measures	C&I	Yes	Yes	No
1/17/2020	2020	Event	New London Hospital (NHSHF)	NH Society of Health Facility Managers	Above-Ceiling Program	Above-Ceiling Program	EE Gas Measures	C&I	Yes	Yes	No
1/17/2020	2020	Event	New London Hospital (NHSHF)	NH Society of Health Facility Managers	Above-Ceiling Program	Above-Ceiling Program	EE Gas Measures	C&I	Yes	Yes	No
1/21/2020	2020	Advertisement	Newsletter	Considering a Smart Thermostat	Questline	Questline	EE Gas Measures	Residential	No	No	No

As of 6/1/2020											
Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
1/24/2020	2020	Event	Concord	Breakfast with Joe Campbell (North Branch)	Review of NHSaves programs, 2020 program, etc.	Commercial lender, HVAC distributor, other members	EE Gas Measures	C&I	Yes	Yes	No
1/24/2020	2020	Event	Manchester	NH Foodbank Walk-Through and Presentation	Walk-through and presentation to Chefs and COO	Joint Utilities	EE Gas Measures	C&I	Yes	No	No
1/24/2020	2020	Event	Concord	Breakfast with Joe Campbell (North Branch)	Review of NHSaves programs, 2020 program, etc.	Review of NHSaves programs, 2020 program, etc.	EE Gas Measures	C&I	Yes	Yes	No
1/24/2020	2020	Event	Manchester	NH Foodbank Walk-Through and Presentation	Walk-through and presentation to Chefs and COO	Walk-through and presentation to Chefs and COO	EE Gas Measures	C&I	Yes	No	No
1/24/2020	2020	Event	Bedford	Breakfast with Marie (AFE Chair)	Networking, review of AFE trade group	AFE Trade Group	EE Gas Measures	C&I	No	No	Yes
1/24/2020	2020	Event	Bedford	Breakfast with Marie (AFE Chair)	Networking, review of AFE trade group	Networking, review of AFE trade group	EE Gas Measures	C&I	No	No	Yes
1/25/2020	2020	Advertisement	Facebook/Twitter	Button Up Workshop - Wilmot	Social Media	Social Media	EE Gas & Electric Measures	Residential	No	No	No
1/25/2020	2020	Event	Wilmot, NH	Button Up Workshop	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NHSaves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
1/29/2020	2020	Event	Derry	Association for Facilities Engineering Business After Hours	Monthly Meeting	Joint Utilities and Contractors	EE Gas Measures	C&I	No	No	Yes
1/29/2020	2020	Event	Derry	Association for Facilities Engineering Business After Hours	Monthly Networking	Small business owners and General Contractors	All EE measures	C&I	No	No	Yes
1/29/2020	2020	Event	Derry	Association for Facilities Engineering	Monthly Meeting	Monthly Meeting	EE Gas Measures	C&I and Residential	No	No	Yes
1/29/2020	2020	Event	Derry	Business After Hours	Monthly Networking	Monthly Networking	EE Gas Measures	C&I and Residential	No	No	Yes
2/1/2020	2020	Advertisement	Questline	5 Ways to Lower Your Heating Costs; 4 Reasons Why Your Filter Isn't Filtering Air; Power Play: Energy Crossword Puzzle; Visual Audit Link	Eblast	Local Commercial Online Traffic	EE Gas Measures	Residential	No	No	No
2/1/2020	2020	Advertisement	Questline	The Rising Stars of Natural Gas; Switching to Natural Gas Vehicles: Advice from the Experts; Process Heating: Identifying and Reducing Energy Waste; Who Wants To Be An Energy Expert? Natural Gas; House Feeling Drafty? We Can Fix That	Eblast	Local Commercial Online Traffic	EE Gas Measures	C&I	No	Yes	No
2/1/2020	2020	Advertisement	Liberty Utilities - Internal Marketing	Home Performance with ENERGY STAR	Bill Insert	LU Gas Customers	EE Gas Measures	Residential	No	No	No
2/1/2020	2020	Advertisement	Bill Insert residential gas customers	Home Performance with ENERGY STAR	Promoting the HPwES program	Residential gas customers	air sealing, insulation, ISMs	Residential	No	No	No
2/1/2020	2020	Event	Newbury, NH	Button Up Workshop	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NHSaves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
2/4/2020	2020	Event	Concord	InTown Concord Town Hall Meeting	Town Hall Meeting- Façade Grant Program	Town Hall Meeting- Façade Grant Program	EE Gas Measures	C&I and Residential	No	No	Yes
2/5/2020	2020	Event	Laconia	Lakes Region Community Developers- Compass House Ribbon Cutting	Ribbon Cutting- Compass House	Ribbon Cutting- Compass House	EE Gas Measures	C&I and Residential	No	No	Yes
2/8/2020	2020	Event	Grantham, NH	Button Up Workshop	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NHSaves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
2/8/2020	2020	Event	Concord	REPA Monthly Training	Energy Efficiency Policy (EERS)	Energy Efficiency Policy (EERS)	EE Gas Measures	C&I and Residential	No	No	No
2/11/2020	2020	Event	Concord	NH Small Business Day	BIA Small Business Day	BIA Small Business Day	EE Gas Measures	C&I	No	No	Yes

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As of 6/1/2020											
Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
	2020	Event	New London, NH	Button Up Workshop	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NHSaves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
2/15/2020											
2/15/2020	2020	Event	Concord	Concord City Energy & Environment Advisory Committee meeting	Energy & Environment Advisory Committee Meeting	Energy & Environment Advisory Committee Meeting	EE Gas Measures	C&I	Yes	No	Yes
2/19/2020	2020	Event	North Andover, MA	AFE Monthly Meeting	Boston Med Flight Tour	Boston Med Flight Tour	EE Gas Measures	C&I	No	No	Yes
2/20/2020	2020	Event	Hooksett	BN Meeting	NE Tap House Grille	NE Tap House Grille	EE Gas Measures	C&I	No	No	Yes
2/21/2020	2020	Event	Newington	NHCIBOR- Seacoast Marketing Meeting	NHCIBOR Meeting	NHCIBOR Meeting	EE Gas Measures	C&I	No	No	Yes
2/21/2020	2020	Event	New London, NH	Button Up Workshop	EE program presentation	1 1/2 hour presentation about improving the energy efficiency of your home. It covers energy saving tips and NHSaves energy efficiency programs	Improve the energy efficiency of your home, basic building science principles, examples of whole house weatherization measures, energy audits and weatherization, rebates	Residential	No	No	No
2/22/2020											
2/24/2020	2020	Advertisement	Sidebar in Questline e-newsletter	Visual audit	Promoting the visual audit	Residential gas customers	Wi-Fi T-Stat, LEDs, water saving measures, piep wrap	Residential	No	No	No
2/26/2020	2020	Event	Milford	HBP New Hampshire Trade Show	Harvey Building Products, Trade Show	Harvey Building Products, Trade Show	EE Gas Measures	C&I	Yes	Yes	No
2/26/2020	2020	Event	Bedford	NHCIBOR	NHCIBOR Meeting	NHCIBOR Meeting	EE Gas Measures	C&I	No	No	Yes
2/26/2020	2020	Event	Salem	NNEFMC (Northern New England Facility Masters Conference)	Conference for school facility managers	Conference for school facility managers	EE Gas Measures	C&I	Yes	No	Yes
2/26/2020	2020	Advertisement	Questline	Energy Monitoring Systems Provide Real-Time Savings; Office Buildings: Energy and Cost Saving Strategies; Cybersecurity; Are Your Systems Up to Standard; 4 Women Who Changed the Tech Industry	Eblast	Local Commercial Online Traffic	EE Gas Measures	Residential	No	No	No
3/1/2020	2020	Advertisement	Questline	Energy Monitoring Systems Provide Real-Time Savings; 5 Key Safety Measures for CNG Vehicle Maintenance Facilities; The Benefits of Boiler Condensate Recovery; 4 Women Who Changed the Tech Industry	Eblast	Local Commercial Online Traffic	EE Gas Measures	C&I	No	Yes	No
3/1/2020	2020	Advertisement	Liberty Utilities - Internal Marketing	Free Energy Saving Equipment	Bill Insert	LU Gas Customers	EE Gas Measures	Residential	No	No	No
3/1/2020	2020	Event	Manchester	NH Business for Social Responsibility (NHBSR) Awards Night	Sustainability Awards Event	Sustainability Awards Event	EE Gas Measures	C&I	No	No	Yes
3/4/2020	2020	Event	Concord	NHSaves Business Partner Rollout	NHSaves event	NHSaves event	EE Gas & Electric Measures	C&I	Yes	Yes	No
3/5/2020	2020	Event	Concord	REPA Monthly Training	Installation of fenestration products & 475 High Performance Building Supply	Installation of fenestration products & 475 High Performance Building Supply	EE Gas Measures	C&I and Residential	No	Yes	No
3/10/2020	2020	Event	Concord	Breakfast Club Networking	Networking	Networking	EE Gas Measures	C&I and Residential	No	Yes	Yes
3/11/2020											
4/1/2020	2020	Advertisement	Questline	NH EE Covid-19 Contingency Plan; 6 Ways to Save this Spring; Money Savers Low Flow Showerhead; Keep This Planet Green for Me and You	Eblast	Local Commercial Online Traffic	EE Gas Measures	Residential	No	No	No
4/1/2020	2020	Advertisement	Questline	Covid-19 Information; Steam Systems: Keep the Pressure On and Save; CNG: Powering the Fleets of Tomorrow; 3 Options for Natural Gas Cooling; 811: Call Before You Dig	Eblast	Local Commercial Online Traffic	EE Gas Measures	C&I	No	Yes	No
4/1/2020	2020	Advertisement	Questline	We Are Here With You - Ecobee Earth Day - Rebate Incentive Program	Eblast	Local Commercial Online Traffic	EE Gas Measures	Residential	No	No	No
4/23/2020	2020	Advertisement	Questline	Covid-19 Information; Get Your House in Shape for Summer; Do You Need a Thermostat Adjustment?; Do's and Don'ts: Using the Dishwasher; Ready to Dig? Call 811	Eblast	Local Commercial Online Traffic	EE Gas Measures	Residential	No	No	No
5/1/2020											

As of 6/1/2020											
Launch Date	Year	Advertising, Event or Training?	Type/Location of Tactic	Title of Tactic	Details	Key Audiences/Participants	EE Measures Promoted	Market Segment	Promotion of Stricter Building Codes?	Education to Builders?	State/Local Officials & Associations?
5/1/2020	2020	Advertisement	Questline	Covid-19 information; Stay Cool with Natural Gas; Combined Heat and Power Without the Investment; Double-Effect Absorption Chillers: A Breakdown; Excess Air in Gas Burners: How Much is Too Much?	Eblast	Local Commercial Online Traffic	EE Gas Measures	C&I	No	Yes	No
5/1/2020	2020	Advertisement	Liberty Utilities - Internal Marketing	Weatherization on a Budget	Bill Insert	LU Gas Customers	EE Gas Measures	Residential	No	No	No
6/1/2020	2020	Advertisement	Questline	Summer Living: Staying Cool Upstairs is a Breeze; Do Dishwashers Use More Energy Than Hand Washing? Weather Wisdom: Temperature and Sleep; Fact or Fable? Summer Solstice	Eblast	Local Commercial Online Traffic	EE Gas Measures	Residential	No	No	No
6/1/2020	2020	Advertisement	Questline	Microgrids Power Up with Natural Gas; Cooling Problems? Natural Gas Can Solve Them; Capture Savings with Drain Water Heat Recovery; Safety First: Using Natural Gas in the Workplace	Eblast	Local Commercial Online Traffic	EE Gas Measures	C&I	No	Yes	No

WNA Tracking 2018-2019

Date	Call Type	Inquiry Details	Follow Up	Representative	Additional Comments	F.A.Q.'s Reference	Resolved
14-Feb	Inquiry	Why this program?	N/A	R.Scott	Asked if they would see the charge every month.	Are there any added benefits to decoupling?	Complete
18-Feb	Inquiry	Why this program?	N/A	T.Grant	Customer did understand why we were charging him	What is Revenue decoupling?	Complete
20-Feb	Inquiry	Hard to Understand	N/A	J.Colon	Didn't understand why we were crediting him	What is Revenue decoupling?	Complete
2-Mar	Inquiry	Why this program?	N/A	A.Reilly	Went over charges	How will this affect my bill?	Complete
3-Mar	Complaint	Escalation in Disagreement	N/A	A.Yusuf	Upset about how much the WNA "cost" for her	What is the main purpose of decoupling?	Complete
5-Mar	Inquiry	When will it start?	N/A	R.Scott	Never noticed it on the bill, questions about program.	What is Revenue decoupling?	Complete
6-Apr	Inquiry	What is this program?	N/A	R.Scott	Wanted to know if the program was optional or not	How does decoupling work?	Complete
22-Apr	Inquiry	What is this program?	N/A	K.Burroughs	Customer wanted to know what the charges were for?	What is the main purpose of decoupling?	Complete

WNA Tracking 2018-2019

Date	Call Type	Inquiry Details	Follow Up	Representative	Additional Comments	F.A.Q.'s Reference	Resolved
13-Nov	Inquiry	Hard to Understand	N/A	M.Grant	Thinks we should just increase the customer charge year round and that might make more sense to the customers	What is the main purpose of decoupling?	Complete
13-Nov	Inquiry	What is this program?	N/A	J.Roberts	Wanted to know more about the program, understands and found interesting	What is Revenue decoupling?	Complete
21-Nov	Inquiry	Why this program?	N/A	J.Brouillet	Why this program? Why not increase the customer charge year round? No follow up need- preferred the customer charge increase	Are there any added benefits to decoupling?	Complete
30-Nov	Inquiry	What is this program?	N/A	J.Brouillet	Questions on how the program works	How does decoupling work?	Complete
5-Dec	Inquiry	What is this program?	N/A	K.Burroughs	When reviewing usage for November, during high bill complaint, questioned the credit on account	How will this affect my bill?	Complete
6-Dec	Inquiry	Why this program?	N/A	N.Soucy	Concerned that the credits/debits are based on usage and not a flat rate for budgeting purposes	Is my bill still based on how much gas I use?	Complete
6-Dec	Inquiry	What is this program?	N/A	A.Cook-Dodge	Customer wanted more information on what the program was about	What is Revenue decoupling?	Complete
6-Dec	Complaint	When will it start?	Supervisor Call Back	A.Cook-Dodge	Wanted to know why it was on one bill and not another. See breakdown on tab A10 by Joanne Iovino		Complete
7-Dec	Inquiry	What is this program?	N/A	D.Duchaine	Wanted to know when this started and if other companies are participating too	Is decoupling a new concept?	Complete
11-Dec	Inquiry	What is this program?	N/A	D.Pisco	Why do I have this charge on the bill? Will I always get it?	How will this affect my bill?	Complete
12-Dec	Inquiry	What is this program?	N/A	A.Cook-Dodge	Curious as to why he had a credit on his account	What is Revenue decoupling?	Complete
12-Dec	Inquiry	Why this program?	N/A	A.Cook-Dodge	How long will the program last?	How will this affect my bill?	Complete
10-Dec	Inquiry	What is this program?	N/A	A.Maggio	Wanted to know more about the program, happy with credit	What is Revenue decoupling?	Complete
18-Dec	Inquiry	What is this program?	N/A	K.Ripaldi	Asked why he had a credit on his bill	How will this affect my bill?	Complete
3-Jan	Inquiry	Hard to Understand	N/A	A.Maggio	Didn't see the charge on the bill, walked customer through the fact that it was the credit. Referred to website for additional details as well.	What is Revenue decoupling?	Complete
16-Jan	Inquiry	What is this program?	N/A	A.Maggio	Wanted to know why there was a credit on his bill that he has never seen before	How will this affect my bill?	Complete
16-Jan	Inquiry	What is this program?	N/A	A.Maggio	Wanted to know more about the program and why he had a credit on his account	What is Revenue decoupling?	Complete
12-Feb	Inquiry	Why this program?	N/A	A.Cook-Dodge	Wanted to know what the charges on the bill were	What is Revenue decoupling?	Complete
1-Mar	Inquiry	What is this program?	N/A	J.Roberts	Wanted to know why he got a credit on his bill	What is Revenue decoupling?	Complete