New Hampshire Department of Energy

RESULTS AND EFFECTIVENESS OF THE SYSTEM BENEFITS CHARGE

ANNUAL REPORT

October 1, 2022

Submitted to:

HOUSE SCIENCE, TECHNOLOGY, AND ENERGY COMMITTEE

SENATE ENERGY AND NATURAL RESOURCES COMMITTEE

THE NEW HAMPSHIRE DEPARTMENT OF EDUCATION

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SYSTEM BENEFITS CHARGE

The New Hampshire Department of Energy (Department or DOE)[1] hereby submits to the House Science, Technology, and Energy Committee; Senate Energy and Natural Resources Committee; and Department of Education the annual report on the results and the effectiveness of the system benefits charge (SBC).[2] The SBC is assessed on the bills of electric customers with proceeds from money collected through the SBC used to fund public benefits programs, including energy efficiency and low-income programs.

The initial charge and allocation of the SBC between energy efficiency and low-income programs was designated by the Legislature. In 1999, the Legislature set a cap of $0.0015, or 1.5 mills per kilowatt hour (kWh), on the low-income portion of the SBC.

In 2019, the Legislature amended RSA 374-F:3, VI, which required legislative approval of increases to the SBC, unless the increase is authorized by an order of the Commission to implement the Energy Efficiency Resource Standard (EERS), established by Commission Order No. 25,392, for the three-year periods 2018-2020 and 2021-2023, or the increase is authorized by the Fiscal Committee of the General Court for purposes other than implementation of the EERS.[3] In addition, the change made to the law in 2019 also required that no less than 20 percent of the SBC funds collected for energy efficiency be for low-income energy efficiency programs. Effective January 1, 2022, the Legislature passed HB549 (2022) amending RSA 374-F:3-VI, which requires the SBC to fund:

- Energy efficiency programs.
- Programs that promote and describe the consumer advantages of energy efficiency across all ratepayer classes.
- The electric utility industry's share of commission and department expenses pursuant to RSA 363-A.
- Support for research and development.
- Investments in commercialization strategies for new and beneficial technologies.
- Programs for low-income customers.

[1] Note that RSA 374-F:4, VIII(f) as amended by HB1270 requires NH Department of Environmental Services (DES) to submit this along with the New Hampshire Department of Energy, but as noted in the letter from DES, they defer to DOE. In addition, HB1270 changed the recipients of the report from the legislative oversight committee to monitor the transformation of electric services.

[2] This report is filed pursuant to RSA 374-F:4, VIII (f). The SBC is authorized by RSA 374-F:3, VI and RSA 374-F:4, VIII.

[3] *See* HB 4, Laws of 2019, Ch. 374.

In addition, RSA 374-F:3,VI-a (b) requires up to $400,000 of the SBC funds to be used "to promulgate the benefits of energy efficiency according to the guidelines developed as specified in RSA 125-O:5-a, I(c)." This report was prepared by the Department and reviews the performance of the SBC programs.

NHSaves – Energy Efficiency

The SBC funds NHSaves energy efficiency electric programs, which are operated by the state's regulated electric utilities: Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities; New Hampshire Electric Cooperative;[4] Public Service Company of New Hampshire d/b/a Eversource Energy; and Unitil Energy Systems (Unitil). Each utility also offers utility-specific programs tailored to its own customers' needs. The NHSaves programs, formerly known as the Core programs, are the implementation plans for the energy efficiency programs. The Core programs, which began in 2002, transitioned to the Energy Efficiency Resource Standard (EERS) plans in 2017. Now the funding levels for the energy efficiency programs again dictate the framework, instead of the EERS.

The utilities filed their initial three-year EERS plan on September 1, 2017 after having a one-year transition to EERS in 2017. The plan included savings goals and energy efficiency programs and budgets for calendar years 2018-2020.[5] The savings goals increased, and were updated, each year. Updated savings goals and related budgets for calendar year 2020 were approved by the Commission. The utilities submitted a proposed plan for 2021-2023 on September 1, 2020, with proposed savings goals, changes in programs, and related increases in funding and rates. On December 29, 2020, the Commission issued Order No. 26,440, which extended "the 2020 energy efficiency program structure and system benefit charge rate beyond December 31, 2020, and until the Commission is able to issue a comprehensive order." On September 1, 2021, the Commission issued Order No. 26,513 to reopen the record to receive responses to record requests to be issued by the Commission, to allow the Commissioner that was not part of the hearings held in December 2020 to ask questions. The Commission also indicated that a hearing would be held approximately two weeks after receiving responses to the record requests to examine the additional evidence, but not to relitigate the case. On September 21, 2021, the Commission suspended Order No. 26,513, while it considered motions for rehearing.

On November 12, 2021, the Commission denied the proposed 2021-2023 energy efficiency plan submitted by the New Hampshire electric and gas utilities, denied the settlement agreement requested by the utilities and some stakeholders, and ordered that the energy efficiency portion of the SBC rate continue as originally approved at $0.00528/kilowatt-hour (kWh) for 2021.[6] On February 24, 2022, with an effective

[4] Though not fully regulated, the New Hampshire Electric Cooperative's provision of SBC-funded programs is subject to Commission oversight.

[5] The 2018-2020 programs were approved by the Commission in Order No. 26,095, Docket No. 17-136.

[6] Order No. 26,553 in Docket No. DE 20-092 also approved the energy efficiency portion of the SBC rates for 2022 and 2023. The utilities and parties filed motions for rehearing and/or clarification on the Order, and some parties filed for relief in Superior Court. The motions for rehearing/clarification were granted in part.

date of January 1, 2022, HB 549 (2022) was approved which specified the SBC rates for the utilities for 2022 and beyond.

The Core energy efficiency programs, now the NHSaves programs, began in June 2002, and approximately $563.3million[7] has been invested in electric program energy efficiency measures, with expected energy savings of more than 19.02 billion kWh over the lifetime of the measures.[8] Based on information provided in the 2021 updated reports filed per Order No. 26,533, the estimated cost to save energy is 4.65 cents per lifetime of kWh saved for the plan year.

In 2021, the electric utilities supplemented the SBC-funded energy efficiency programs with an additional $6.6 million associated with revenue collected through the Independent System Operator in New England (ISO-NE) Forward Capacity Market (FCM).[9] ISO-NE pays the electric utilities from proceeds from the FCM based on capacity from the programs bid into the FCM, and those proceeds are reinvested into the energy efficiency programs.[10]

Funds from the energy efficiency portion of the SBC and the FCM are augmented by additional monies from the Regional Greenhouse Gas Initiative (RGGI) as required by statute.[11] For the 2021 program year, the combined funding from the SBC, FCM, and RGGI equaled $63.7 million for electric programs. [12]

One dollar of each RGGI allowance sold, net of administrative costs, is utilized by the electric utilities for energy efficiency programs, and the remaining proceeds are refunded to ratepayers. Utilities are required to allocate up to $2,000,000 of those RGGI funds per year for use by municipal and local governments for energy efficiency and to allocate at least 15 percent to the income-eligible Home Energy Assistance (HEA) program.[13] RGGI funds remaining after allocation to the municipal program and the income-eligible HEA program have been allocated to all-fuels, comprehensive energy efficiency programs administered by qualified parties selected through a competitive bid process originally managed by the Public Utilities Commission, now by the Department of Energy. The electric utilities were selected as administrators of those programs. A report regarding the all-fuels grant program is included in Appendix A.

The NHSaves programs are divided between programs for residential customers and programs for commercial and industrial (C&I) customers. Program budgets are allocated to residential and C&I

[7] This amount reflects $499.6 million reported in the prior SBC Report to the Legislature, plus an additional $63.7 million as reported by the utilities in the revised Q4 report filed on April 12, 2022.

[8] Savings reflects 17.65 billion kWh reported in the prior SBC Report to the Legislature, plus an additional 1.37 billion lifetime kWh savings as reported by the utilities in the revised 2021 Q4 report filed in Docket DE 17-136.

[9] Reference revised Q4 report filed in Docket DE 17-136.

[10] For additional information on Capacity Supply Obligations and the Forward Capacity Market, go to ISO-New England.

[11] *See* RSA 125-O:23.

[12] Reference revised Q4 report filed in Docket DE 17-136.

[13] Effective January 1, 2017 through the first three-year period of EERS, the Commission approved 17 percent of the overalL budget. (*See* Order No. 25,932). In addition, as noted above, HB 4, Laws of 2019, Ch. 374, requires that 20 percent of the SBC collected be allocated to income eligible programs.

customers roughly in proportion to their respective SBC payments. In 2017, the utilities began allocating approximately 17 percent of the overall program budgets to the Home Energy Assistance (HEA) program, for income-eligible customers. In 2018, the utilities began carrying over any budgeted but unspent funds in the income-eligible program from one program year to the next.[14] Per the legislative requirement, in 2020 and 2021, the utilities allocated 20 percent of the funds to be collected from the SBC within their authorized budgets for income-eligible programs. Both residential and commercial customers contribute proportionately to the HEA program, which provides weatherization and energy efficiency measures for income-eligible customers.[15] The HEA program is administered by the utilities in conjunction with the New Hampshire Community Action Agencies. The primary residential NHSaves programs are:

- ENERGY STAR® Homes, a fuel neutral program under which builders and homeowners are encouraged to construct more energy-efficient new homes that meet ENERGY STAR® standards.
- Home Performance with ENERGY STAR® (HPwES), which provides weatherization measures, including home energy audits, air sealing, insulation, and duct sealing, for homes with high energy usage.
- Home Energy Assistance (HEA), which provides weatherization and energy efficiency measures for income-eligible customers.
- ENERGY STAR® Products program, which promotes increased use and availability of energy efficient lighting products; provides incentives for customers to purchase efficient ENERGY STAR® rated appliances, including heat pump heating and cooling equipment; increases consumer awareness of energy efficient appliances; and provides incentives to gas utility customers to purchase ENERGY STAR® heating and hot water equipment and controls.
- Behavioral programs, such as Home Energy Reports, which allows customers to compare energy performance among homes and encourages conservation and greater efficiency.
- Educational programs, such as energy education for students, weatherization workshops for homeowners, and other educational materials and events.

The primary C&I NHSaves programs are:

- Small Business Energy Solutions, which provides small to medium sized electric and natural gas customers with incentives to install or upgrade to more energy efficient electrical, mechanical, and thermal systems or equipment such as lighting and hot water measures.
- Large Business Energy Solutions, which provides large gas and electric customers with incentives to install or upgrade to more energy efficient electrical, mechanical, and thermal systems or equipment.
- Municipal Program, which leverages the NH electric utilities' existing commercial and industrial

[14] Reference Docket DE 17-136, Settlement Agreement, December 13, 2018, p. 6.

[15] The HEA program is often in coordination with and as a supplement to the U.S. Department of Energy weatherization Assistance Program. The federal funding is received during the last quarter of the year and expended over the subsequent six- month period. Additional information on the amount and timing of these funds can be found on the Department of Energy's website.

programs; incorporates a fuel blind component; and encompasses a flexible approach for technical assistance.

- Education, pilot efforts to explore new program offerings for C&I customers, energy code training, and commercial energy auditing.
- Utility specific programs, such as Energy Rewards RFP that encourages customers to submit comprehensive projects as part of a competitive bid process.

The 2021 programs continued Active Demand Response (ADR) pilot offerings in which Eversource and Unitil provide incentives to residential and C&I customers to reduce electricity use at times of peak demand.

2021 NHSaves Program Year

The following table summarizes the 2021 program budgets and related goals that are supported by the energy efficiency funding, including SBC, FCM, and RGGI funds.

SUMMARY of NHSaves ELECTRIC UTILITY ENERGY EFFICIENCY PROGRAMS 2021				
NHSaves ELECTRIC UTILITY ENERGY EFFICIENCY PROGRAMS	**EXPENSES ($)**	**ANNUAL SAVINGS (kWh)**	**LIEFETIME SAVINGS (kWh)**	**CUSTOMERS**
RESIDENTIAL				
ENERGY STAR Homes	2,454,083	2,051,028	42,513,137	1,475
HPwES	9,786,338	2,538,122	48,049,383	2,066
Home Energy Assistance	12,579,839	2,554,046	27,486,360	1,370
ENERGY STAR Products	8,434,691	23,743,981	125,168,761	517,793
Other, including ADR and Education	493,611	3,611,286	3,611,286	31,813
Total Residential	**33,748,562**	**34,498,463**	**246,828,926**	**554,517**
C&I				
Small Business Energy Solutions	13,253,888	45,445,456	545,529,293	1,266
Large Business Energy Solutions	14,182,304	47,007,168	539,878,154	8,298
Municipal Program	1,879,378	3,727,970	49,001,529	206
Other, including ADR and Education	631,272	0	0	37
Total C&I	**29,946,842**	**96,180,594**	**1,134,408,976**	**9,807**
Total RESIDENTIAL AND C&I	**63,695,404**	**130,679,057**	**1,381,237,901**	**564,324**

2022 NHSaves Program Mid-Year Overview – January 1 through June 30, 2022, Highlights

The utilities began 2022 offering energy efficiency programs according to Order No. 26,553 in Docket DE 20,092. Following the approval of HB549 (2022), the utilities submitted the 2022-2023 plan on March 1, 2022,

which was approved by Order No. 26,621 on April 29, 2022 in Docket DE 20-092. The following table summarizes the expenses and savings associated with all electric efficiency programs (funded through SBC, FCM, and RGGI) for the six months beginning January 2022.

SUMMARY of NHSaves ELECTRIC UTILITY ENERGY EFFICIENCY PROGRAMS January 1, 2022 through June 30, 2022				
NHSaves ELECTRIC UTILITY ENERGY EFFICIENCY PROGRAMS	**EXPENSES ($)**	**ANNUAL SAVINGS (kWh)**	**LIFETIME SAVINGS (kWh)**	**CUSTOMERS**
RESIDENTIAL				
ENERGY STAR® Homes	1,080,509	821,505	17,652,481	872
HPwES	2,843,244	584,016	11,930,667	506
Home Energy Assistance	3,333,659	717,529	8,901,402	158
ENERGY STAR ® Products	978,387	899,784	9,995,075	10,438
Other, including Education	277,096	1,288,049	1,288,049	29,859
TOTAL RESIDENTIAL	**8,512,895**	**4,310,882**	**49,767,673**	**41,832**
C&I				
Small Business Energy Solutions	3,730,463	6,320,540	73,189,992	2,561
Large Business Energy Solutions	5,430,142	11,982,098	138,159,922	118
Municipal Program	562,086	1,336,707	15,787,551	30
Other, including Education	439,817	--	--	--
TOTAL C&I	**10,162,509**	**19,639,345**	**227,137,465**	**2,709**
TOTAL RESIDENTIAL AND C&I	**18,675,404**	**23,950,228**	**276,905,138**	**44,541**

Energy Efficiency Investment In Public Schools

RSA 374-F:4, VIII-a requires plans for program design and enhancements be submitted by the electric utilities and that the utilities estimate the participation levels needed to maximize the energy efficiency benefits to public schools, including measures to enhance the energy efficiency of public school construction or renovation projects that are designed to improve indoor air quality.

The table on the following page shows the results for 2021 along with January through August results to date for 2022 energy efficiency measures in New Hampshire public schools.

Energy Efficiency Measures in New Hampshire's Public Schools
Overview of 2021 and January 1 to August 31, 2022

Year	Measure Type	Number of Projects	Total Incentives	Project Cost	Annual kWh Savings	Annual MMBTU Savings
2021	Cooling	0	$0	$0	0	0
	CUSTOM	14	$45,739	$194,834	104,516	1,008
	CUSTOM-Lighting	0	$0	$0	0	0
	Energy Management System	0	$0	$0	0	0
	Heating	0	$0	$0	0	0
	HVAC	32	$294,555	$1,123,890	679,411	1,642
	Lighting	133	$1,111,848	$3,639,008	3,432,657	0
	Lighting Controls	1	$5,817	$10,804	32,319	0
	Motors	1	$3,000	$4,000	20,400	0
	Parking Lot lights	2	$91	$393	390	0
	Process	1	$250	$995	4,151	0
	Refrigeration	3	$3,659	$9,355	9,893	0
	VFD	1	$2,055	$2,740	6,165	0
	Water Heating	3	$4,779	$13,320	4,772	86
	Weatherization	0	$0	$0	0	0
2021 Total		**191**	**$1,471,793**	**$4,999,338**	**4,294,675**	**2,736**
Jan - Aug 2022	Cooling	0	$0	$0	0	0
	CUSTOM	4	$480,697	$1,124,443	1,180,000	0
	CUSTOM-Lighting	0	$0	$0	0	0
	Energy Management System	0	$0	$0	0	0
	Heating	0	$0	$0	0	0
	HVAC	1	$6,865	$10,664	19,424	0
	Lighting	24	$721,989	$2,375,892	1,708,687	0
	Lighting Controls	8	$4,696	$38,170	28,786	0
	Motors	0	$0	$0	0	0
	Parking Lot lights	0	$0	$0	0	0
	Process	0	$0	$0	0	0
	Refrigeration	0	$0	$0	0	0
	VFD	0	$0	$0	0	0
	Water Heating	0	$0	$0	0	0
	Weatherization	0	$0	$0	0	0
2022 Total (includes "In Process")		**37**	**$1,214,247**	**$3,549,169**	**2,936,897**	**0**
Grand Total		**228**	**$2,686,040**	**$8,548,507**	**7,231,572**	**2,736**

* Projects with zero values for savings and cost are committed projects not completed yet.

Recognition and Awards Attributable to NHSaves Energy Efficiency Programs

ENERGY STAR® Awards – 2022 Partner of the Year – Sustained Excellence: New Hampshire's ENERGY STAR® Homes Program

2022 was the tenth consecutive year that the utilities have been recognized by the U.S. Environmental Protection Agency (EPA) as an ENERGY STAR® Partner of the Year Award recipient. Recognition as Partner of the Year – Sustained Excellence entails demonstrating a strong commitment to energy efficiency through superior energy efficiency achievements and continued leadership in protecting the environment. The utilities have specifically been recognized for their collaboration and partnerships with Homebuilders, Home Energy Raters and trade associations to successfully implement the ENERGY STAR® Homes program across the state.

Prior Recognition and Awards

- ENERGY STAR® Awards – 2021 Partner of the Year – Sustained Excellence: New Hampshire's ENERGY STAR® Homes Program
- ENERGY STAR® Awards – 2020 Partner of the Year – Sustained Excellence: New Hampshire's ENERGY STAR® Homes Program
- ENERGY STAR® Awards – 2020 Partner of the Year – Sustained Excellence – New Home Builder: Chinburg Properties, Newmarket, NH
- ACEEE Exemplary Programs 2019 Recognition – NHSaves Home Performance with Energy Star
- ACEEE Exemplary Programs 2019 Recognition – NHSaves Home Energy Assistance Program
- ENERGY STAR® Awards – 2019 Partner of the Year – Sustained Excellence: New Hampshire's ENERGY STAR® Homes Program
- ENERGY STAR® Awards – 2019 Partner of the Year – New Home Builder: Chinburg Properties
- ENERGY STAR® Awards – 2018 Partner of the Year – Sustained Excellence: New Hampshire's ENERGY STAR® Homes Program
- ENERGY STAR® Awards – 2018 Partner of the Year – New Home Builder: Chinburg Properties
- ENERGY STAR® Awards – 2018 Partner of the Year - Home Energy Rater: GDS Associates, Inc.

Electric Assistance Program

As directed by RSA 374-F:3, V, the New Hampshire Public Utilities Commission adopted the Electric Assistance Program (EAP) to provide bill assistance to low-income customers as part of electric restructuring in 2002.

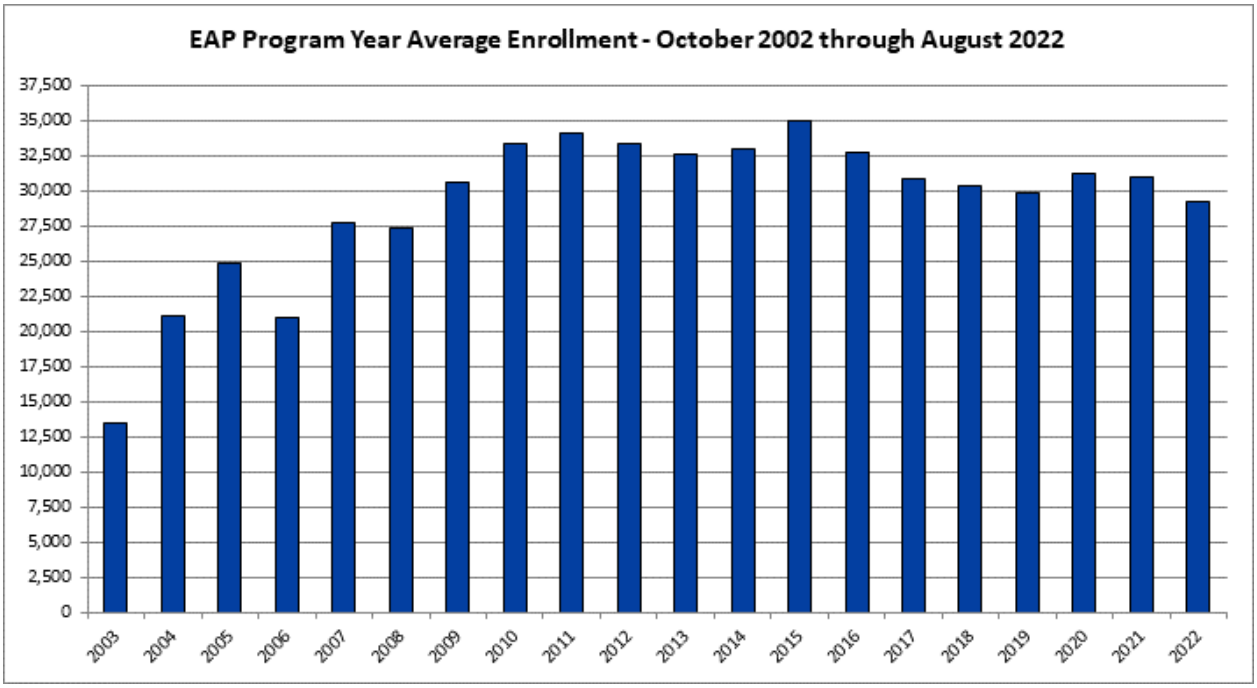
The EAP provides targeted benefits to low-income customers. The program has been developed to provide households with the lowest poverty level with the highest benefits. Eligibility for the program is determined using New Hampshire's state median income, a measure of income issued every year by the federal Department of Health and Human Services. This income threshold mirrors that of the federally funded Low-Income Home Energy Assistance Program, providing one-stop shopping for customers and an efficient, streamlined EAP application process.

RSA 374-F:4, VIII (c) authorizes funding of the EAP through the SBC, and customers of Eversource Energy, Liberty Utilities, New Hampshire Electric Cooperative and Unitil Energy Systems support the EAP through a per kWh charge on electric bills. Between $15 million and $16 million is collected each year through the low-income portion of the SBC to provide bill assistance to low-income households in New Hampshire. The EAP completes its twentieth year of operation on September 30, 2022. Currently, there are approximately 27,500 households receiving this benefit.

In May 2022, following a competitive bid solicitation, Eversource contracted with an independent consultant to undertake a review, analysis, and evaluation of the EAP program design on behalf of the EAP Advisory Board. The consultant provided a final report to the Advisory Board on September 26, 2022. In his report, Mr. Colton found that the EAP is a fundamentally sound program. While identifying some modifications that could be made, Mr. Colton noted that none of the modifications would change the fundamental design and operation of the program as the program function well. The consultant's report is provided here as Appendix B.

Enrollment

EAP enrollment levels have declined since the program's highest enrollment level in 2015. The average annual enrollment for each program year is shown in the chart below.



Monthly enrollment in the EAP varies, with the highest enrollments occurring over the winter months and lower enrollments in late spring and early summer. While enrollment typically begins to increase in October, the current high energy prices are expected in further increase EAP applications over the next few months.

Monthly Enrollment												
	Jan	**Feb**	**Mar**	**April**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**
2018	31,330	31,868	30,810	30,957	30,342	30,075	29,743	29,243	29,042	29,211	29,571	30,333
2019	30,738	30,118	30,227	30,329	29,954	29,646	29,481	28,953	28,954	29,104	29,568	30,222
2020	31,523	31,597	31,682	31,924	32,054	32,051	31,852	31,747	31,618	31,643	31,160	31,182
2021	31,712	32,024	32,025	32,023	30,943	30,690	29,539	29,414	29,143	29,324	28,994	29,334
2022	29,825	30,509	30,994	31,011	29,830	27,984	27,368	26,553	n/a	n/a	n/a	n/a

Program Benefits

The EAP provides targeted bill assistance through five discount tiers. Households with the lowest poverty level receive the highest discount. The distribution of households by tier has been relatively consistent from year to year. The number of households above 150% of the federal poverty guidelines, which are the households in the 8% discount tier, has grown since the income eligibility threshold was increased to 60% of NH state median income. As of September 19, 2022, 17 percent of enrolled households received a discount of 76 percent; 18 percent received a discount of 52 percent; 17 percent received a discount of 36 percent; 15 percent received a discount of 22 percent; and 33 percent of enrolled households received a discount of 8 percent. The following table displays the five discount tiers and the income range, by household size, for each tier.

EAP Income Eligibility Guidelines by Discount Tier

Household size	76%	52%	36%	22%	8%
1	≤$10,193	> $10,193 but ≤ $13,590	> $13,590 but ≤ $16,988	> $16,988 but ≤ $20,385	>$20,385 but ≤ $38,969
2	≤ $13,733	> $13,733 but ≤ $18,310	> $18,310 but ≤ $22,888	> $22,888 but ≤ $27,465	> $27,465 but ≤ $50,959
3	≤ $17,273	> $17,273 but ≤ $23,030	> $23,030 but ≤ $28,788	> $28,788 but ≤ $34,545	> $34,545 but ≤ $62,950
4	≤ $20,813	> $20,813 but ≤ $27,750	> $27,750 but ≤ $34,688	> $34,688 but ≤ $41,625	> $41,625 but ≤ $74,941
5	≤ $24,353	> $24,353 but ≤ $32,470	> $32,470 but ≤ $40,588	> $40,588 but ≤ $48,705	> $48,705 but ≤ $86,931
6	≤ $27,893	> $27,893 but ≤ $37,190	> $37,190 but ≤ $46,488	> $46,488 but ≤ $55,785	> $55,785 but ≤ $98,922
7	≤ $31,433	> $31,433 but ≤ $41,910	> $41,910 but ≤ $52,388	> $52,388 but ≤ $62,865	> $62,865 but ≤ $101,170
8	≤ $34,973	> $34,793 but ≤ $46,630	> $46,630 but ≤ $58,288	> $58,288 but ≤ $69,945	> $69,945 but ≤ $103,418

Program Funding

During the past 11 months, the low-income portion of the SBC collected approximately $14.7 million in funding for the EAP. Customers received approximately $12.8 million in bill assistance during the period October 1, 2021 through August 31, 2022. Approximately $1.6 million in administrative costs were incurred by the New Hampshire Community Action Agencies (CAA) and the electric utilities.

As program administrator, the CAA performs activities such as client outreach and intake, application processing, enrollment of participants, and periodic review of ongoing program eligibility. The CAA also conducts compliance monitoring to ensure adherence to program guidelines. Utility incremental costs

generally include expenses for the production and printing of educational materials, such as posters and brochures, customer service, legal services, and information technology support, and represent those expenses reasonably incurred as part of the utility's administration of the EAP that would not be incurred absent administration of the EAP.

EAP Financial Information October 1, 2021 through August 31, 2022					
Balance in EAP Fund on 10/1/21	**SBC Revenue for EAP**	**Interest**	**Benefits Paid**	**Administrative Costs**	**Balance in EAP Fund on 8/31/22**
$3,911,146	$14,680,598	$4,419	$12,825,867	$1,616,101	$3,767,861

With the creation of the Department on Energy on July 1, 2021, responsibility for the EAP became shared between the Commission and the Department. The Department oversees the financial transactions into and out of the EAP Fund while the Commission retains authority over the low-income portion of the system benefits charge and the programmatic aspects of the EAP. The Department continues to participate in the EAP Advisory Board. Neither the Department nor the Commission charge the EAP for oversight of the program.

Energy service prices for customers of Eversource Energy and Liberty Utilities doubled on August 1, to approximately 22.5 cents per kWh for energy supply. While not as significant of an increase, customers of New Hampshire Electric Cooperative also saw the price of energy supply go up on August 1, from 9.62 cents to 16.98 cents. Volatile global energy markets, an energy supply crunch brought about by increased usage as the economy recovers from the COVID pandemic, and growing inflation across the country are contributing to the high energy supply prices New Hampshire residents are now experiencing. As a result, the average EAP benefit is projected increase significantly over the next few months and perhaps beyond. The average EAP benefit for the month of August 2021 was $37.18. The average benefit in August 2022 was $52.76. The Department anticipates that the higher average benefit will exhaust the balance in the EAP fund over the next few months. Additional funding for EAP was made available by HB 2023, passed by the Legislature and signed by the Governor on September 15, 2022. This $7 million dollar infusion should allow EAP benefits to continue without interruption during the next twelve months.

Information regarding the number of program participants and benefits paid, broken out by town, for the current EAP program year is located in Appendix C. There has not been a waiting list for the EAP since May 2012.

Appendix A

Moderate Income RGGI Grant

2022 ANNUAL REPORT
Energy Efficiency Programs Funded Through
Energy Efficiency Fund RFP #18-005

Jointly submitted by New Hampshire's Electric Utilities:
- Liberty Utilities Corp. (Granite State Electric Corp.) d/b/a Liberty Utilities
- New Hampshire Electric Cooperative, Inc.
- Public Service Company of New Hampshire d/b/a Eversource Energy
- Unitil Energy Systems, Inc. d/b/a Unitil-NH Electric Operations

October 1, 2022

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Table of Contents

Section 1: Background

This annual report ("Report") is being submitted jointly by Liberty Utilities Corp. (Granite State Electric) d/b/a Liberty Utilities ("Liberty Electric"), New Hampshire Electric Cooperative, Inc. ("NHEC"), Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource"), and Unitil Energy Systems, Inc. d/b/a Unitil-NH Electric Operations ("Unitil Electric") (hereinafter referred to as the "NH Electric Utilities").

This Report covers energy efficiency efforts pertaining to Commission RFP #2018-005 through August 2022.

1.1 New Hampshire's Energy Efficiency Programs

For more than two decades, New Hampshire's electric and natural gas utilities have offered energy efficiency programs to residential and Commercial and Industrial ("C&I") customers across the state.[1] These programs promote economic development, reduce the need for additional capacity investments, provide energy savings, and protect the environment by reducing the amount of carbon dioxide ("CO_2") and sulfur and nitrogen oxide released into the atmosphere due to reduced energy generation and consumption. New Hampshire's energy efficiency programs are jointly marketed by the NH Utilities under a statewide umbrella marketing brand—NHSaves™.

1.2 Regional Greenhouse Gas Initiative and Grant

In June 2008, the General Court of New Hampshire enacted RSA 125-O:19-28 authorizing New Hampshire's participation in the Regional Greenhouse Gas Initiative ("RGGI").[2] Established in 2005, RGGI is the first mandatory cap-and-trade program in the United States to reduce CO_2 and other greenhouse gas ("GHG") emissions from the electric power sector. Currently, ten states participate in RGGI: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

RGGI requires fossil-fuel-fired electric power generators with capacity of 25 megawatts ("MW") or greater (called "regulated sources") to purchase allowances equal to their CO_2 emissions over a three-year control period. Regulated sources within the ten states may comply by purchasing allowances from quarterly auctions, off-set projects, and other energy generators within the region. The

[1] Hereinafter, the word "customer" will be understood to mean both utility customers and New Hampshire Electric Cooperative members.

[2] The General Court of New Hampshire is the bicameral state legislature of New Hampshire made up of two chambers, the House of Representatives (400 members) and the Senate (24 members).

administration of RGGI has resulted in a decrease of CO_2 emissions by 48.3 percent between the base period of 2006-2008 and the period of 2016-2018.[3]

The same legislation that authorized RGGI participation also created the State's Greenhouse Gas Emissions Reduction Fund ("GHGERF"), which is funded with the proceeds from the auction sale of New Hampshire's CO_2 budget allowances and is administered by the Commission. In June 2012, the General Court of New Hampshire enacted HB 1490, which included a provision to replace the GHGERF with the Energy Efficiency Fund. The same legislation directed that all proceeds above a cap of $1.00 per RGGI CO_2 allowance be rebated back to the customers of the NH Electric Utilities. The legislation directed the Commission, beginning in 2013, to allocate remaining RGGI revenues to the NHSaves Programs administered by the NH Electric Utilities.

Per legislative updates enacted since then, additional requirements have been established regarding the allocation of RGGI funds resulting from the first $1.00 per RGGI CO_2 allowance. The first requirement is that at least 15 percent of these remaining funds must be allocated to the NHSaves income-eligible energy efficiency program—Home Energy Assistance. An additional requirement is that up to $2 million must be allocated annually for municipal and local government energy efficiency projects conducted through the NHSaves C&I Programs. If there are any funds remaining after these allocations to the NH Electric Utilities, the remaining funds must be allocated by the Commission through a competitive bid process to all-fuels, comprehensive energy efficiency programs administered by qualified parties. The legislation directed that the Commission's Electric Division conduct the competitive bid process and require each entity receiving funds to submit an annual report to the Commission on the performance of the energy efficiency programs and projects.

In 2015, the four NH Electric Utilities—Eversource, Liberty Utilities, New Hampshire Electric Cooperative, and Unitil Energy Systems, Inc.—jointly submitted a response to the Commission's Request for Proposal #14-004. The NH Electric Utilities were awarded $1.2 million for the delivery of the Retail Energy Reduction Partners Program and the Large Business Energy Reduction Partners Program over the three-year period of 2016 to 2018. The NH Electric Utilities tracked the goals and achievements for the Retail Energy Reduction Partners Program and Large Business Energy Reduction Partners Program separately from the standard NHSaves Programs.

In 2018, Eversource submitted a response on behalf of the NH Electric Utilities to the Commission's Request for Proposal #18-005. On April 17, 2019 the Governor and Executive Council approved the authorization of $690,000 in grant funds to be awarded to Eversource to administer a statewide moderate-income program on behalf of the NH Electric Utilities, to deliver incremental lifetime kWh and lifetime MMBtu savings to a vulnerable subset of customers that otherwise would not be achieved during the 2019-2021 period. The NH Electric Utilities received the first portion of funding for the Grant

[3] RGGI. *2018 Electric Power Monitoring Report.* "The annual average CO2 emissions from RGGI electric generation sources from 2016 to 2018 decreased by 66.8 million short tons of CO2, or 48.3 percent, compared to the base period of 2006 to 2008."

from the Commission in spring of 2020.

Section 2: Description of Program

The **Home Performance with ENERGY STAR Program for Moderate Income Customers (HPwES-MI)** is designed to leverage the success of the existing statewide NHSaves Energy Efficiency Programs in order to make fuel neutral, whole house energy efficiency services more available to single family residential customers with moderate incomes. Currently, the Home Energy Assistance (HEA) program provides no-cost services to income qualified customers. The HPwES program provides weatherization services with at least a 75% co-pay to residential customers with high energy use not participating in the HEA program. The HPwES-MI program attempts to leverage beneficial aspects of both programs to effectively target the needs of moderate-income customers who may not otherwise be able to participate in whole house weatherization.

The NH Electric Utilities have been working with the Community Action Agencies to identify potential moderate-income customers and to provide the whole house weatherization. There is an existing group of customers that spend a considerable amount of time gathering documentation for low-income qualification but whose income is just over the qualification limit. These customers have already self-identified as interested in weatherization and shown motivation for moving forward. They do not qualify for the HEA program or the NH Weatherization Assistance Program (WAP) but would likely find the co-pay for HPwES prohibitive to making significant weatherization upgrades. The HPwES-MI offering makes weatherization services more accessible to these customers, reduces their fuel use and greenhouse gas emissions and their energy costs, and makes their homes safer and more comfortable.

The new offering, when combined with the existing services offered under the NHSaves Energy Efficiency Programs, allows the NH Electric Utilities to seamlessly and cost-effectively offer comprehensive, fuel neutral, whole house energy efficiency services to moderate income residential customers interested in pursuing energy efficiency projects regardless of the fuel-type utilized for home heating.

Section 3: Program Efforts to Date

3.1 Timeline and Barriers Encountered

Since the approval of the 12-month extension of this Grant at the end of 2021, the NH Electric Utilities have redoubled efforts related to the Moderate Income RGGI grant. While some of the barriers outlined in last year's report have been addressed, some notable barriers continue to persist for

customers. These barriers contribute to a slower than anticipated uptake of the program offering. Aside from timing issues, the persisting barriers identified to date are:

- Income Eligibility

Income eligibility is a constantly moving target, where a customer who is classified as moderate-income one year may not be classified as such at a different point in time. Additionally, customer seeking to participate in this program must apply for low-income energy assistance in order to have their income verified. If they are then determined to be moderate-income, they can be referred to this Grant program. COVID-19 has led to significant volatility in these income classifications and those who know or believe that would not qualify for low-income assistance do not apply with the CAAs in the first place, which has made it very difficult for CAAs to provide accurate leads to the Company to contact for this offering.

- Cost Share

While an 80% rebate and 20% customer copay on some measures within this offering is a significant incentive, that copay still poses a significant barrier to many moderate-income customers, especially in the face of decades high inflation and economic uncertainty. Even under the best economic circumstances, moderate-income customers expend a relatively high proportion of their income on necessities, such as housing, utilities, food, and medication. The NH Electric Utilities have repeatedly been met with little interest in or financial ability for taking on another expense, even if it is cost-effective and provides a return over time.

- Supply and Demand

Supply of some of the products and materials continue to be constrained as some manufacturers have been unable to replicate their output levels prior to COVID-19. Contractor capacity and demand for them has also continued to remain imbalanced, with a lack of sufficient skilled labor available to meet the demand for these products and services. This confluence of supply and demand issues has led to prices in the marketplace that are much higher and timeframes for delivery and installation of measures that are much longer than they were when the grant application was submitted. Due to these issues, the Grant is expecting to complete the projects already underway but is unable to take on any additional projects to complete by year end. Additionally, many projects within the NHSaves residential programs which are in the project pipeline are expected to be completed in 2023.

3.2 Completed Projects and Pipeline

The NH Electric Utilities have five completed projects and five others in-process that are expected to complete by the end of the year. Below is a table depicting the cumulative status of the program through August 2022.

Through 08/31/2022

Funds Collected	Funding Not Yet Received	Total Contract Funding	Funds Expended	Projected Commitments	Projected Ending Balance
$ 575,000	$ 115,000	$ 690,000	$ 29,304	$ 60,621	$ 600,076

Projects Completed	Projects Enrolled	Cumulative Projects Projected
5	5	10

3.3 Next Steps

While the program is reaching the appropriate customers and identifying some eligible projects, there are timing constraints given that the grant period is set to expire on December 31, 2022. Eversource expects to request an extension of the grant on behalf of the NH Electric Utilities to the Department of Energy. An extension would allow Eversource to continue outreach to potential customers, adapt strategies based on our customer and partner feedback to date, and fully utilize the RGGI Grant funds for their intended purpose to assist Moderate Income customers in weatherizing their homes during this time of high energy prices.

Appendix B

New Hampshire Electric Assistance Program (EAP): Review of Performance / Future Directions

Prepared on Behalf of:

EAP Advisory Board

New Hampshire Department of Energy

Prepared by:

Roger Colton
Fisher, Sheehan & Colton
Public Finance and General Economics

September 2022

Table of Contents

Introduction

The Electric Assistance Program (EAP) provides bill assistance to low-income electric customers through a discount on electric bills. The Public Utilities Commission (Commission) oversees the electric utilities' administration of the EAP with the support of the Advisory Board. Members of the Advisory Board include representatives of the Department of Energy, the Office of the Consumer Advocate, the four electric utilities (Eversource Energy, Liberty Utilities, NH Electric Cooperative, and Unitil Energy Systems), the Community Action Agencies, the New Hampshire Municipal Welfare Directors, and New Hampshire Legal Assistance. The diverse nature of the Advisory Board ensures that all interests are well represented when program changes are proposed.

Eligibility for the program is based on a customer's gross household income and household size in relation to the New Hampshire State Median Income as determined annually by the federal Administration for Children and Families, Office of Community Services. There are five discount tiers ranging from 8% to 76%, with the discounts applied to the first 750 kWh of eligible customers' monthly electric usage. Households with the lowest poverty levels receive the largest discount. Usage above 750 kWh is billed at a non-discounted rate, serving as an incentive for energy efficiency and conservation. The goal of the EAP is to provide bill discounts that reduce, on average, participant electric bills to between 4% and 5% of the average income for the discount tier.

The EAP was approved in November 2000, pursuant to RSA 374-F, which created the system benefits charge (SBC). Specifically, RSA 374-F:3, V (a) states, "…Programs and mechanisms that enable residential customers with low incomes to manage and afford essential electricity requirements should be included as a part of industry restructuring." In addition, RSA 369-B:1, XIII requires the Commission to "design low-income programs in a manner that targets assistance and has high operating efficiency, so as to maximize the benefits that go to the intended beneficiaries of the low-income program." The EAP was designed with these principles in mind, and all subsequent program changes have been similarly consistent. The EAP began providing bill assistance to participating customers in 2002.

The SBC is a per kilowatt-hour charge collected from all electric utility customers pursuant to RSA 374-F:3, VI. Once collected, the funds are held in an account by the State Treasurer's Office (EAP fund) until they are needed to cover EAP expenses. On a monthly basis, utilities use the revenue from the low-income portion of the SBC (LI-SBC) to credit the applicable EAP discount to participant bills and reimburse the Community Action Agencies and themselves for administrative costs incurred. RSA 374-F:4, VIII, (c) requires the Commission to suspend collection of some or all of the EAP SBC for a reasonable period, if the EAP fund accumulates an excess of $1,000,000 and that the excess is not likely to be substantially reduced over the next 12 months.

While there have been a number of programmatic changes over the years, the last comprehensive review of the EAP design by an independent consultant was in 2007.

Over the last two years, the Advisory Board has discussed ways to effectively utilize unencumbered EAP funds while maintaining the sustainability of the EAP. The Advisory Board is conscious of the balance in the EAP fund and the statutory requirements relative to that balance and believes it is appropriate for an independent consultant to again undertake a comprehensive review of the EAP to review, analyze and evaluate the existing program design and to develop recommendations for improving the effectiveness and efficiency of the EAP.

The Public Utilities Commission recently approved the Advisory Board's recommendation to retain an independent consultant to undertake the work described above. In addition, the Commission asked that the consultant: collect data on the demographics of the participants, as to age, employment status, family size, ages of children, and disabilities; explore improved low-income targeting, shifting benefit away from the top income category to better serve the lowest income group enrolled in the EAP; and to consider the option of returning excess funding to ratepayers. The Commission further requested the consultant conduct a comparative analysis of New Hampshire's EAP to other EAP programs in New England. A copy of the Commission's Oder approving the Advisory Board's recommendation is attached to this Report as Appendix A.

The data and discussion presented below is the analysis presented in response to the Advisory Board's recommendation and the Commission Order.

An Overview of New Hampshire Electric Burdens

New Hampshire's low-income population, without EAP, faces substantial energy burdens. These burdens are four to five times higher than the commonly accepted definition of an affordable percentage of income (6%). Table 1 shows the total home energy burdens by selected ranges of income to Federal Poverty Level. For households with income less than 100% of Poverty, home energy burdens range from 22% (Strafford County) to 36% (Carroll County). In four of New Hampshire's 10 counties, home energy burdens for households with income at or below 100% of Poverty exceeded 30%. For households with income between 100% of 150% of Poverty, home energy burdens ranged from 11% to 18%.

Table 1. Home Energy Burdens (Total Energy) by County (New Hampshire)
By Selected Ranges of Income to Poverty Level[1]

	Average Energy Burden		
County	At or Below 100 % FPL	100 – 150% Poverty	150 – 200% Poverty
Belknap County	32%	15%	12%
Carroll County	36%	18%	14%
Cheshire County	27%	13%	10%
Coos County	27%	17%	12%
Grafton County	28%	15%	12%
Hillsborough County	20%	11%	9%
Merrimack County	21%	12%	10%
Rockingham County	32%	15%	11%
Strafford County	22%	11%	10%
Sullivan County	31%	13%	11%

While county-specific data is not available, statewide data shows that the bulk of total home energy burdens in New Hampshire can be attributed to electric bills. The statewide data is presented in the Table below. The burdens presented by fuels in this Table are additive. The total energy burdens, in other words, are the sum of the burdens for electricity plus natural gas

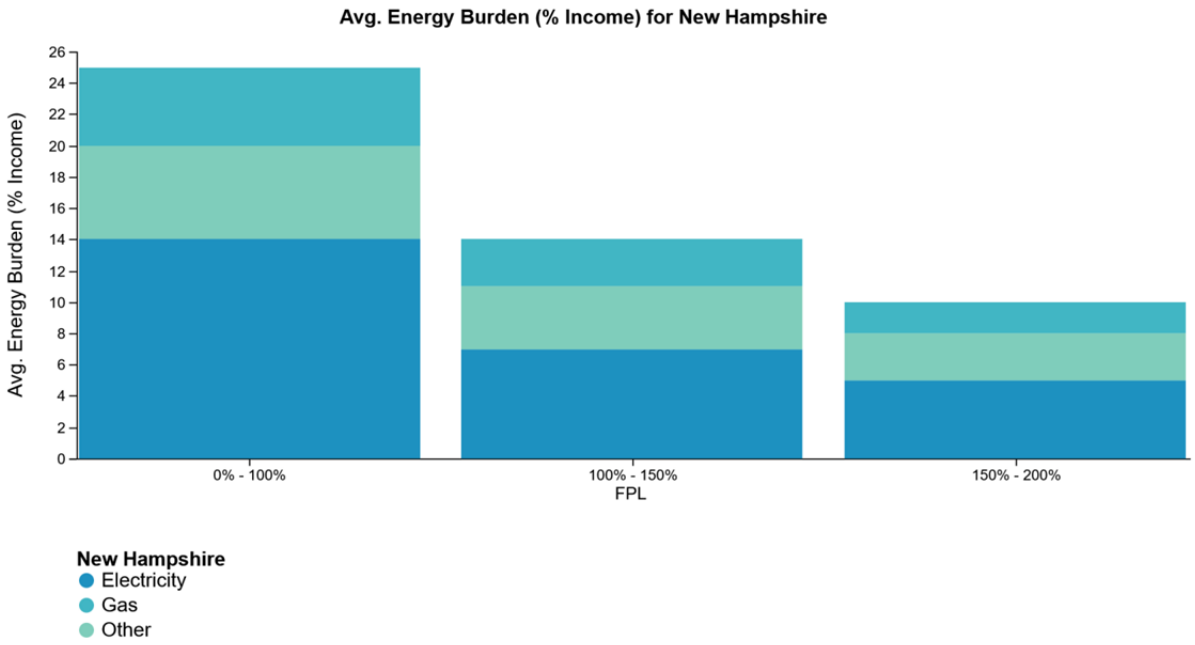
[1] Ma, Ookie, Krystal Laymon, Megan Day, Ricardo Oliveira, Jon Weers, and Aaron Vimont. 2019. Low-Income Energy Affordability Data (LEAD) Tool Methodology. Golden, CO: National Renewable Energy Laboratory. NREL/TP-6A20-74249, available at https://www.nrel.gov/docs/fy19osti/74249.pdf

plus "other." Nearly half of the total home energy burden for low-income households in New Hampshire can be attributed to electricity bills.

Table 2. Home Energy Burdens at Selected Ratios of Income to Federal Poverty Level and Fuel (New Hampshire)

		Average Energy Burden by Fuel			
State	Federal Poverty Level	Electricity	Gas	Other	Total
New Hampshire	0% - 100%	14%	5%	6%	25%
New Hampshire	100% - 150%	7%	3%	4%	13%
New Hampshire	150% - 200%	5%	2%	3%	10%

The average electricity burden for customers with income at or below 100% of Poverty is 14%. As incomes increase, burdens decrease. By the time incomes reach 150% to 200% of Poverty, electricity burdens (on average) have declined to 5% of income. The Figure below illustrates the contribution which electricity makes to total low-income home energy burdens in New Hampshire.



In contrast to these low-income burdens are the burdens faced by New Hampshire's residential customer base as a whole. For the state as a whole, at all income levels (i.e., total population), *total* energy burdens do not substantially exceed the burden which the State has defined as affordable exclusively for electricity. In the two counties with the highest total home energy burdens (Carroll County, Coos County), the burden is only 6% of income. In six other counties,

the total home energy burden is either 3% or 4% of income. As can be seen, total home energy burdens for New Hampshire's lowest income households (with income below 100% of Poverty) can be five to ten times higher than the average total home energy burden of the state's residential population as a whole.

Table 3. Average Total Energy Burden (% income) (Total Population) By County (New Hampshire)	
Belknap County	5%
Carroll County	6%
Cheshire County	4%
Coos County	6%
Grafton County	4%
Hillsborough County	3%
Merrimack County	4%
Rockingham County	3%
Strafford County	4%
Sullivan County	5%

This is the context that New Hampshire's EAP is offered. In the absence of EAP, electricity burdens for the lowest income households in the State are substantially higher than the burden targeted as affordable by the New Hampshire PUC. Without New Hampshire's EAP, low-income electricity burdens in New Hampshire would be untenable.

Part 1. An overview of the EAP recipient population.[2]

The discussion below examines the population of New Hampshire EAP participants from three different perspectives. The income of the EAP population is first examined. Given that the purpose of the EAP is to reduce electricity bills to an affordable burden –"burdens" are defined as annual electricity bills as a percentage of annual household income—it is important to determine whether those households with the lowest income, and thus the greatest potential to face unaffordable burdens, are actually participating in the program. The discussion in this Chapter next examines different aspects of a geographic distribution of EAP participants. On the one hand, EAP participation spread over New Hampshire's electric utilities is shown. In addition, EAP participation spread over New Hampshire's Community Action Agencies is presented. Finally, the discussion below examines the length of time which EAP participants have remained in EAP.

A Brief Methodological Introduction

Before turning to a discussion of the data, a brief introduction to the data being used is warranted. Two primary sets of data on EAP participants was obtained: one set from each utility; and a second set from New Hampshire's Community Action Agencies (CAAs). These two sets of data were merged by matching the electric account numbers contained in each data

[2] This Chapter simply describes the EAP participant population. A comparison of the EAP participant population to available Census data is presented in a separate Chapter below.

set. Data was obtained for the time period October 2020 through April 2022.[3] Using this time period allowed provided data from two complete winter heating seasons (October 2020 – April 2021; October 2021 – April 2022).

Because not every utility was able to provide the requested data, this analysis focuses on information provided by Eversource. The EAP Advisory Board agreed that, given how Eversource represents the overwhelming majority (70%+) of EAP participants, that company's data was appropriately deemed to be reflective of the State as a whole. When available, information provided by Unitil and by the New Hampshire Electric Cooperative was compared to Eversource data both to determine whether there might be differences between the utilities and to provide additional insights into the questions being examined.

After the utility and CAA data was merged, three populations were selected for an initial analysis. The three populations included: (1) that population comprised of all active participants as of April 2022 who had twelve complete months of data from May 2021 through April 2022; (2) that population comprised of active participants who had twelve complete months of data from October 2020 through September 2021 (i.e., one full year of data with a complete heating season); and (3) that population of active participants who had at least twelve complete months of participation at any point from October 2020 through April 2022. A comparison of these three populations found that the populations did not yield meaningfully different results. Accordingly, unless expressly noted otherwise, the first population described above (all active participants as of April 2022 with at least twelve complete months of data from May 2021 through April 2022) will be the study population used throughout this report.

Income of EAP participants.

New Hampshire's EAP divides its participant population into five "tiers." The five Tiers include:

- Tier 2: Households with income greater than 150% of Federal Poverty Level and less than or equal to 60% of State Median Income;

- Tier 3: Households with income greater than 125% of Federal Poverty Level and less than or equal to 150% of Poverty Level;

- Tier 4: Households with income greater than 100% of Federal Poverty Level and less than or equal to 125% of Poverty Level ;

[3] Utility data was provided in mid-May 2022. Since May thus did not have a complete month, the most recent data month was defined as April 2022.

- Tier 5: Households with income greater than 75% of Federal Poverty Level and less than or equal to 100% of Poverty; and

- Tier 6: Households with income less than or equal to 75% of Federal Poverty Level.

The EAP serves a substantial population in the lowest income ranges of New Hampshire's residential population. More than three-of-ten EAP participants have income in the lowest EAP Tiers (Tier 5 and Tier 6) (0 – 100% of Poverty Level). Two observations of particular note are evident in the Table below. First, the decrease in income from Tier 5 to Tier 6 is substantial. While the average annual income in Tier 5 is $14,213, the average income in Tier 6 is more than $5,000 lower ($8,899).

Just as noteworthy, however, is the fact that the average household size for Tier 6 is noticeably larger than for the other EAP tiers. While the overall EAP household size is 2.0 persons, the household size for Tier 3 through Tier 5 is less than 2.0, while the average household size for Tier 2 (the highest income Tier) is only slightly more than 2.0. The combined impacts of the *very* low income, and the noticeably larger household size would indicate that households in Tier 6 actually live in the lower ranges of 0 to 75% of Poverty. 100% of Poverty in 2022 for a two-person household is $18,310 while 100% of Poverty for a three-person household is $23,030.

Table 4. All EAP Participants (active as of June 2022) by EAP Tier and Average Income

EAP Tier	Count of Each Tier	Pct Each Tier of Total	Average of Annual Income	Average HH Size
2 (150% FPL – 60% SMI)	7,810	33%	$35,523	2.1
3 (125 – 150% FPL)	3,569	15%	$22,967	1.9
4 (101 – 125% FPL)	4,001	17%	$18,822	1.8
5 (76 – 100% FPL)	4,385	18%	$14,213	1.7
6 (0 – 75% FPL)	4,132	17%	$8,899	2.4
Total	23,897	100%	$22,338	2.0

Considering only the average income by EAP tier does not provide complete insight into just how low the incomes for the Tier 5 and Tier 6 EAP populations really are. Table 6 below presents a distribution, by Tier, of EAP participant incomes in absolute dollar terms. The percentages in each cell of the Table present the portion of EAP participants at each dollar income level compared to the total number of participants in each Tier. For example, the Table indicates that 27% of all participants in Tier 6 have income of less than $5,000. The numbers in each column are additive. This means, for example, that 65% (nearly two-of-three) Tier 6

households have annual income less than $10,000; 97% of the EAP participants in Tier 6 have annual income of less than $20,000.

Even Tier 5 EAP participants have incomes that are extremely low. Within the Tier 5 population, 75% of the EAP participants have annual incomes that fall between $5,000 and $15,000, while 87% have an annual income that is between $5,000 and $20,000.

Table 5. EAP Participants (active as of June 2022) by EAP Tier and Household Annual Income

Household Income	2	3	4	5	6	Total
$0-$5,000	0%	0%	0%	0%	27%	5%
$5,000-$10,000	0%	0%	0%	20%	38%	10%
$10,000-$15,000	0%	0%	39%	55%	24%	21%
$15,000-$20,000	4%	54%	33%	12%	8%	18%
$20,000-$25,000	19%	20%	13%	7%	2%	13%
$25,000-$30,000	20%	11%	7%	4%	1%	10%
$30,000-$5,000	16%	6%	4%	2%	0%	7%
$35,000-$40,000	13%	4%	2%	1%	0%	5%
$40,000-$5,000	8%	3%	1%	0%	0%	3%
$45,000-$50,000	7%	1%	0%	0%	0%	2%
$50,000-$5,000	4%	1%	0%	0%	0%	1%
$55,000-$60,000	4%	0%	0%	0%	0%	1%
$60,000-$65,000	2%	0%	0%	0%	0%	1%
$65,000-$70,000	1%	0%	0%	0%	0%	0%
$70,000-$75,000	1%	0%	0%	0%	0%	0%
>$75,000	1%	0%	0%	0%	0%	1%
Total	100%	100%	100%	100%	100%	100%

None of the EAP participating populations substantively differ from each other when distributed by New Hampshire's electric utilities. For Tier 6, the average annual income ranges from roughly $7,200 to roughly $10,200, with the statewide average being $8,899. Tier 6 participants who are Co-op customers have somewhat higher incomes ($10,209), while Tier 6 participants who are Liberty customers have somewhat lower incomes ($7,240). The range between utilities narrows as incomes increase, with the difference between the utility with the lowest and highest

being less for Tier 5 than for Tier 6, and the difference between the lowest and highest being even narrower for Tier 4.

Table 6. EAP Participants, Average Income, Average Household Size by EAP Tier

	2	3	4	5	6	Grand Total
Unitil						
Count of EAP participants	776	330	347	368	342	2,163
Average of Annual Income	$33,608	$22,143	$18,183	$12,973	$8,592	$21,918
Average of Household Size	1.9	1.7	1.7	1.5	2.2	1.8
NHEC						
Count of EAP participants	714	330	360	395	331	2130
Average of Annual Income	$34,649	$23,407	$18,909	$15,131	$10,209	$22,829
Average of Household Size	2.1	1.9	1.7	1.6	2.3	1.9
Liberty						
Count of EAP participants	403	167	198	192	177	1137
Average of Annual Income	$33,626	$21,418	$18,374	$15,177	$7,240	$21,954
Average of Household Size	1.9	1.6	1.8	1.6	2.1	1.8
Eversource						
Count of EAP participants	5917	2742	3096	3430	3282	18467
Average of Annual Income	$36,008	$23,108	$18,912	$14,186	$8,889	$22,354
Average of Household Size	2.1	1.9	1.8	1.7	2.4	2.0
Total Count of EAP participants	7810	3569	4001	4385	4132	23897
Total Average of Annual Income	$35,523	$22,967	$18,822	$14,213	$8,899	$22,338
Total Average of Household Size	2.1	1.9	1.8	1.7	2.4	2.0

Utility providers of EAP participants.

The extent to which each of New Hampshire's electric utilities "contributes" to the EAP participant population by EAP tier is relative constant between Tiers. Two perspectives support this conclusion. On the one hand, the Table below presents the proportion of the population in each Tier represented by customers of each utility. Eversource serves roughly three-fourths (77%) of the total number of EAP participants. No Tier substantively varies from that overall percentage, with the lowest income (Tier 6) being 80% and the highest income (Tier 2) being 76%.

Table 7. EAP Participants (active as of June 2022) by Utility Provider

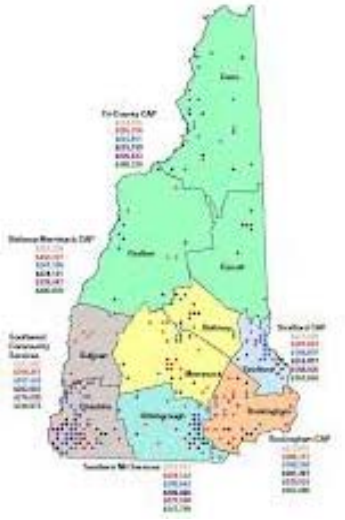
Electric Provider	2	3	4	5	6	Total
Unitil	5%	5%	5%	4%	4%	5%
NHEC	9%	9%	9%	9%	8%	9%
Liberty	5%	5%	5%	4%	4%	5%
Eversource	76%	77%	78%	78%	80%	77%
Total	100%	100%	100%	100%	100%	100%

On the other hand, Table 8 shows the proportion of each utility's EAP participant population comprised of households in each EAP Tier. As shown above, the largest percentage of EAP participants falls into Tier 2. This is not particularly surprising. Tier 2 ranges from 150% of Poverty level to 60% of State Median Income. In New Hampshire, 60% of State Median Income for a two-person household was $47,386 in 2021, while 60% of State Median Income for a three-person household was $58,536. The Federal Poverty Levels that are the equivalent to 60% of State Median Income are 259% (2-person household) and 254% (3-person household). The question here is not whether 60% of State Median Income is "too high." The observation is simply that Tier 2 is a very broad income range (from 150% to more than 250% of Poverty). Accordingly, it is not surprising that the percentage of EAP participants falling into this Tier is higher than the percentage falling into the remaining EAP Tiers.

Table 8. EAP Participants (active as of June 2022) by Utility Provider						
Electric Provider	2	3	4	5	6	Total
Unitil	36%	16%	16%	17%	17%	100%
NHEC	34%	15%	17%	19%	16%	100%
Eversource	32%	15%	17%	19%	18%	100%
Total	33%	15%	17%	18%	17%	100%

Within the remaining four Tier of income, however, roughly equal proportions of the total EAP population for each utility fall into each range of Poverty Level. While roughly one-in-three EAP participants have income placing them in Tier 2, each of the remaining Tiers has about half that percentage.

Community Action Agency service providers.



No Community Action Agency (CAA) shows a particularly sharp distinction in the extent to which the agency enrolls EAP participants into various income ranges. Overall, as shown in the equivalent utility data discussed immediately above, statewide, about one-in-three EAP participants fall in Tier 2, the Tier with the highest income (as well as the Tier with the broadest range of income). Each of the Tiers at lower income levels have roughly one-half of the percentage of total EAP participants in Tier 2. For example, while 35% of Unitil's EAP participants are in Tier 2, the percentages of Until EAP participants in Tier 3 through Tier 6 range from 16% to 18%. While 34% of NHEC EAP participants are in Tier 2, the percentage of NHEC EAP participants in Tier 3 through Tier 6 range from 15% to 19%.

The enrollment patterns for each CAA, however, closely mirrors the statewide data. Strafford County Community Action (SCCA) enrolls the lowest percentage of higher income EAP participants (26%), and a somewhat higher percentage of participants in the two lowest income ranges (41% combined). As shown in the Table, however, SCCA enrolls, by far, the fewest EAP participants of any of the State's CAAs. Only 9% of the total EAP participant population is enrolled through SCCA, while only 7% of the Tier 2 EAP participant population is enrolled through that agency. In contrast, Southern New Hampshire Services (SNHS), which enrolls two times more than the next highest CAA, has an enrollment by income range that is nearly exactly equal to the statewide average. Overall, the data shows that none of the CAAs has an enrollment

by income range that widely diverges from the statewide average. The Table below shows EAP participants by Community Action Agency in two different ways. The "top" half of the Table shows the percentage of each CAA's participants that fall into each EAP Tier. For example, 35% of BMCA's EAP participants, and 31% of TCCA's EAP participants, fall into Tier 2.

In contrast, the "bottom" half of the Table shows the percentage of each Tier's participants that were enrolled by each CAA. For example, 41% of all Tier 2 participants were enrolled by SNHS. 9% of all Tier 6 EAP participants were enrolled by SCCA.

Table 9. EAP Participants (active as of June 2022) by EAP Tier and Community Action Agency

Community Action Agency	2	3	4	5	6	Total
BMCA	35%	15%	16%	17%	17%	100%
SCCA	26%	14%	19%	23%	18%	100%
SNHS	34%	15%	16%	18%	17%	100%
SWCS	33%	14%	16%	17%	20%	100%
TCCA	31%	15%	18%	20%	16%	100%
Total	33%	15%	17%	18%	17%	100%
	2	3	4	5	6	Total
BMCA	20%	19%	18%	17%	18%	18%
SCCA	7%	8%	10%	11%	9%	9%
SNHS	41%	40%	38%	39%	39%	40%
SWCS	16%	15%	15%	14%	18%	16%
TCCA	17%	18%	19%	19%	16%	17%
Total	100%	100%	100%	100%	100%	100%

Five Essential Findings.

1. The EAP serves a substantial population in the lowest income ranges of New Hampshire's residential population. More than three-of-ten EAP participants have income in the lowest income EAP Tiers (Tier 5 and Tier 6).

2. 27% of all participants in Tier 6 have income of less than $5,000. 65% (nearly two-of-three) Tier 6 households have annual income less than $10,000.

3. The average household size for Tier 6 is noticeably larger than for the other EAP tiers. The combined impacts of the ***very*** low income, and the noticeably larger household size would indicate that households in Tier 6 actually live in the lower ranges of 0 to 75% of Poverty.

4. The extent to which each of New Hampshire's electric utilities "contributes" to the EAP participant population by EAP tier is relative constant between Tiers. Eversource serves roughly three-fourths (77%) of the total number of EAP participants. No Tier substantively varies from that overall percentage, with the lowest income (Tier 6) being 80% and the highest income (Tier 2) being 76%.

5. The largest percentage of EAP participants fall into Tier 2. This is not particularly surprising. Tier 2 ranges from 150% of Poverty level to 60% of State Median Income. In New Hampshire, 60% of State Median Income for a two-person household was $47,386 in 2021, while 60% of State Median Income for a three-person household was $58,536. The Federal Poverty Levels that are the equivalent to 60% of State Median Income are 259% (2-person household) and 254% (3-person household).

Part 2. COVID-19 considerations.

New Hampshire, as with other states around the nation, has been hard hit by the novel Coronavirus (COVID-19) health pandemic in recent years. In assessing the impacts of any public program on the ability of income-challenged utility customers to make utility bill payments, one must first acknowledge the ongoing impacts which COVID-19 might be having on ability-to-pay.

The U.S. Census Bureau has tracked the impacts of COVID-19 through its periodic "PULSE Survey." The Census Bureau began collecting information through the PULSE Survey in April 2020.[4] Data collection continues through today. The discussion here is limited to a relative narrow focus of the PULSE Surveys, the impact of COVID-19 on the ability of households to pay for their "usual household expenses." Statewide data for New Hampshire is discussed below.

The discussion below focuses on a limited number of the "weeks"[5] surveyed by the Census Bureau. The intent is to provide an insight into the how the ability-to-pay of New Hampshire

[4] The most recent PULSE Survey data tables were published on July 20, 2022, with data collected through July 11, 2022 (accessible at https://www.census.gov/programs-surveys/household-pulse-survey/data.html#phase3.5).

[5] Phase 1 of the Household Pulse Survey was collected and disseminated on a weekly basis. All later phases of the survey have used two-week collection and dissemination periods. Despite going to a two-week collection period, the

residents varied over the course of the pandemic (recognizing that the health emergency is not considered to be "over" even at this point in mid-2022). The weeks reviewed include:

- Week 13: August 19, 2020 through August 31, 2020.[6]
- Week 21: December 9, 2020 through December 21, 2020;
- Week 31: May 26, 2021 through June 7, 2021;
- Week 41: December 29, 2021 through January 10, 2022; and
- Week 47:[7] June 29, 2022 through July 11, 2022.

The weeks reviewed are intended to provide a distribution at reasonable intervals throughout the time from which the PULSE Surveys began to the present. After looking at the impacts of COVID-19 by income, the discussion will briefly turn to an examination of the impacts by the presence of older residents and the presence of children.

Overall, COVID-19 continues to have an ongoing adverse impact on the extent to which New Hampshire residents have a difficulty in paying for usual household expenses.[8] The degree of difficulty for each of the five weeks examined is presented in the Table below. For the population as a whole, New Hampshire residents are having more difficulty today in paying their usual household expenses than they have had since the advent of COVID-19. On the one hand, not only has the percentage of population finding it "not at all difficult" to pay their usual household expenses fallen to the lowest level since Week 13 of COVID-19, but the combined percentage of households finding it either "not at all difficult" or only "a little difficult" has fallen to the lowest level since that early week of COVID-19.

Household Pulse Survey continues to call these collection periods "weeks" to maintain continuity. Phases 3.3 and later maintain the two-week collection periods but shifted to a two-weeks on, two-weeks off collection approach.

[6] This is the first week the PULSE Survey began to ask questions about household difficulties in paying their "usual household expenses."

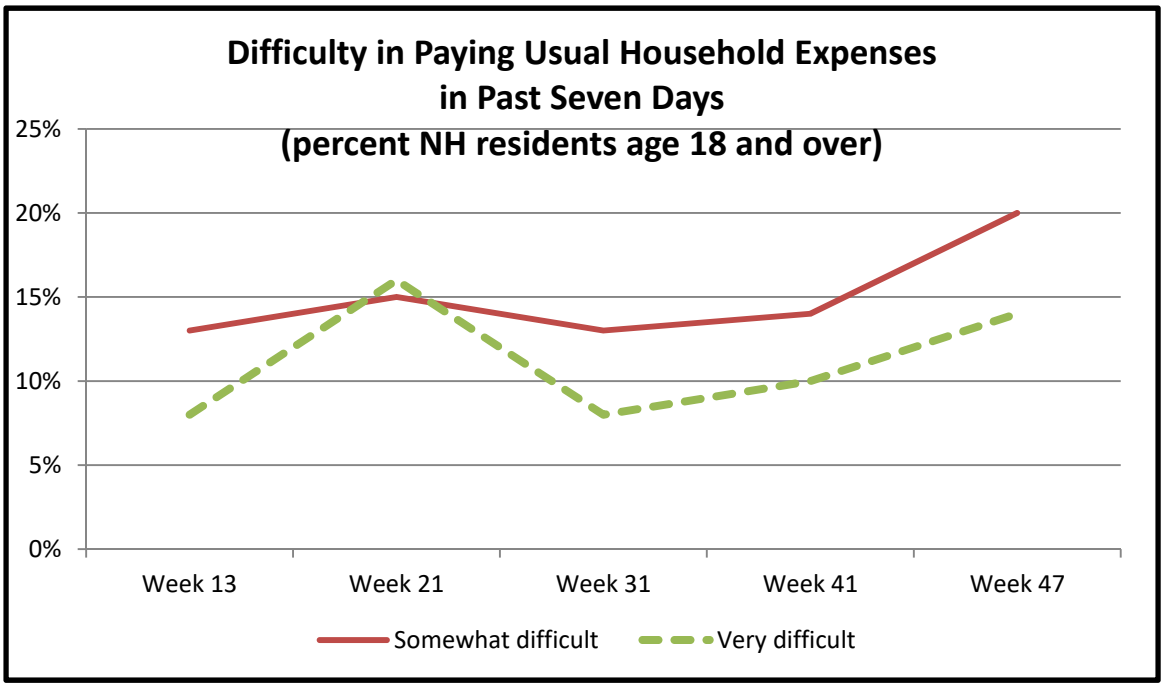
[7] This is the most recent PULSE Survey for which data has been publicly released as of the date this discussion was authored. While labelled "weeks," the numbering in fact reflects the number of the survey taken. "Week 47" is the 47th week in which a Survey was performed.

[8] The difficulty is limited to "difficulty paying for usual household expenses *in the last 7 days*." (emphasis added).

Table 10. Difficulty in Paying Usual Household Expenses in Last Seven Days (New Hampshire) (Selected Census PULSE Weeks)[9] (total population 18 years old and older)

	Total	Not at all difficult	A little difficult	Somewhat difficult	Very difficult
Week 13	1,073,014	54%	23%	13%	8%
Week 21	1,073,014	45%	20%	15%	16%
Week 31	1,080,887	53%	19%	13%	8%
Week 41	1,080,887	48%	20%	14%	10%
Week 47	1,110,006	36%	24%	20%	14%

In contrast to those having no difficulty or little difficulty, the percentage of New Hampshire residents having difficulty paying their usual household expenses declined, although it tipped upward for one period (Week 21). In 2022, however, those difficulties have been clearly trending upward, both for those are finding it "very difficult" to pay their usual household expenses and those who report finding it either "somewhat difficult" or "very difficult."



It should be noted, of course, that while these difficulties are documented through the Census Bureau's COVID-19 PULSE Survey, the difficulties that are being reported are not necessarily limited to those caused by, or associated with, COVID-19.

[9] Percentages may not add to 100% because those not reporting have been omitted.

Difficulties in Paying Usual Household Expenses by Income

The difficulty which New Hampshire's low-income population is facing in paying for usual household expenses is higher today than it has been since the advent of the COVID-19 pandemic. For purposes of examining New Hampshire's EAP, data on income status was limited to households with annual income of less than $50,000. With the exception of a brief uptick in difficulties in Week 21 of the Census PULSE Surveys, the highest percentage of the lowest income population now facing a "very difficult" time is documented in the most recent time period. Nearly four-of-ten persons with income less than $25,000 reports having had a "very difficult" time paying their usual household expenses "in the last seven days." Indeed, a full 70% of this lowest income population (i.e. annual income below $25,000) reports having either a "very difficult" or a "somewhat difficult" time paying their bills in mid-2022 (Week 47 of the Census PULSE Survey).

Not surprisingly, the highest income range considered (from $35,000 to $49,999) has the least difficult time in paying their usual household expenses. Even then, however, the problems faced by this population falling into the higher tier of the three income ranges considered are nonetheless considerable. Nearly one-in-five (18%) report facing a "very difficult" time in paying their usual household expenses, while nearly half (28% + 18% = 46%) report having either a "somewhat difficult" or a "very difficult" time in paying their bills.

Table 11. Difficulty in Paying for Usual Household Expenses in Last Seven Days (selected Census PULSE weeks) (percentage NH population 18 years and older) (by income)				
Week 13	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than $25,000	27%	34%	12%	27%
$25,000 - $34,999	33%	16%	45%	6%
$35,000 - $49,999	47%	18%	15%	20%
Week 21	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than $25,000	16%	15%	19%	49%
$25,000 - $34,999	20%	28%	31%	21%
$35,000 - $49,999	32%	22%	25%	22%
Week 31	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than $25,000	9%	28%	49%	15%
$25,000 - $34,999	39%	23%	24%	14%
$35,000 - $49,999	42%	19%	25%	13%
Week 41	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than $25,000	26%	25%	19%	29%
$25,000 - $34,999	27%	26%	22%	25%
$35,000 - $49,999	48%	29%	16%	7%
Week 47	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than $25,000	13%	17%	33%	37%
$25,000 - $34,999	12%	18%	32%	38%
$35,000 - $49,999	31%	22%	28%	18%

As discussed above, the difficulties faced by low-income and lower-income New Hampshire residents may, but are not necessarily, attributable to the ongoing impacts of COVID-19. The

Difficulties in Paying Usual Household Expenses by Persons Over Age 65

New Hampshire's aging population appears to be faring better in their ability to pay their usual household expenses. Substantially fewer persons aged 65 or older report finding it "very difficult" to pay their bills. While there is an uptick in the percentage of aged persons who reported finding it "somewhat difficult" to pay their bills in the middle of 2022, it is clear that in each time period considered, the percentage reporting difficulties is lower, and the percentage

reporting the lack of difficulties ("not at all difficult"; "a little difficult") is noticeably higher than the population as a whole as discussed above.

Table 12. Difficulty in Paying Usual Household Expenses in Last Seven Days (New Hampshire) (Selected Census PULSE Weeks)[10] (total population 65 years old and older)

	Total	Not at all difficult	A little difficult	Somewhat difficult	Very difficult
Week 13	256,833	65%	21%	8%	4%
Week 21	253,126	56%	24%	15%	4%
Week 31	264,245	65%	25%	6%	3%
Week 41	268,966	68%	13%	10%	5%
Week 47	268,130	46%	22%	24%	5%

The same pattern showing an uptick in difficulties can be seen for the aged population in mid-2022 (Week 47) for those reporting to find it "somewhat difficult" to pay their usual household expenses can be seen. That pattern, however, is *not* evident in those reporting it to be "very difficult." Overall, the pattern of difficulties for the population age 65 or higher is noticeably different from the patterns that appear for the population as a whole or for the lower income population.

Difficulties in Paying Usual Household Expenses by Presence of Children Age 18 and Younger

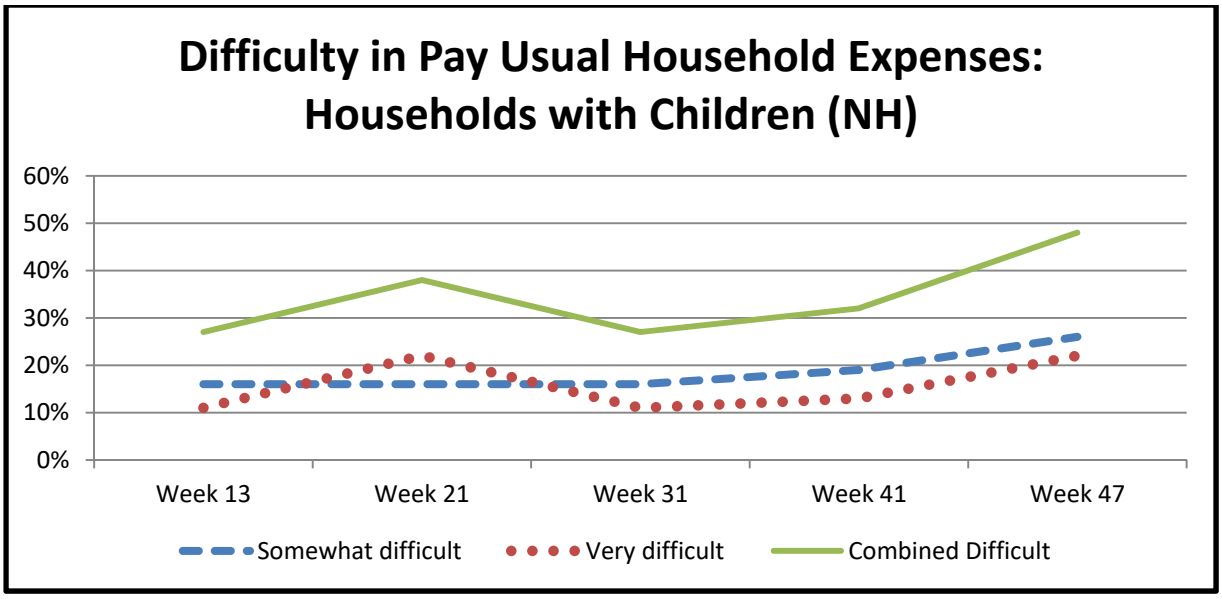
Nearly one-in-two (48%) New Hampshire residents with children had difficulty in paying their usual household expenses in the middle of 2022 (Week 47 of the Census PULSE Survey). That is the highest percentage since the PULSE Survey began to track payment difficulties in 2020. While the degree of difficulty increased for both New Hampshire residents with and without children, the extent of the difficulty for residents with children is noticeably higher. More than two times more residents with children (48%), than those without (23%), had either a "somewhat difficult" or "very difficult" time paying their usual household expenses in Week 47. Conversely, while the gap is not nearly as wide, far fewer residents without children reported having either no or few difficulties in paying their expenses (68% without children vs. 44% with children).

[10] Percentages may not add to 100% because those not reporting have been omitted.

Table 13. Difficulty in Paying Usual Household Expenses in Last Seven Days (New Hampshire) (Selected Census PULSE Weeks)[11] (total population 18 years old and older) (presence of children 18 years old and younger)					
With Children					
	Total	Not at all difficult	A little difficult	Somewhat difficult	Very difficult
Week 13	403,169	48%	23%	16%	11%
Week 21	365,044	39%	20%	16%	22%
Week 31	319,811	47%	18%	16%	11%
Week 41	345,023	31%	22%	19%	13%
Week 47	370,491	27%	17%	26%	22%
Without Children					
	Total	Not at all difficult	A little difficult	Somewhat difficult	Very difficult
Week 13	669,845	58%	22%	11%	6%
Week 21	707,970	48%	20%	15%	12%
Week 31	761,076	55%	20%	12%	7%
Week 41	735,864	55%	19%	12%	9%
Week 47	739,515	40%	28%	17%	6%

As with New Hampshire residents overall, and the subpopulations of residents disaggregated by the various demographics considered above, the difficulty in paying usual household expenses moves higher in Week 21 (December 2020) before dipping during 2021 and early 2022. The percentage with either a "somewhat difficult" or a "very difficult" time have noticeably increased over the course of 2022.

[11] Percentages may not add to 100% because those not reporting have been omitted.



Roughly equal percentages of the population report having a "somewhat difficult" time and having a "very difficult" time in paying their usual household expenses in the various weeks of the census PULSE Survey. There is not an increase in the percentage of residents having a "somewhat difficult" time because the percentage having a "very difficult" time is decreasing. Both percentages are now increasing, with those having a "very difficult" time increasing at a noticeably faster rate as reflected in the dotted line in the Chart above.

Five Essential Findings

1. COVID-19 continues to have an ongoing adverse impact on the extent to which New Hampshire residents have a difficulty in paying for usual household expenses. For the population as a whole, New Hampshire residents are having more difficulty today in paying their usual household expenses than they have had since the advent of COVID-19. The combined percentage of households finding it either "not at all difficult" or only "a little difficult" has fallen to the lowest level since those early weeks of COVID-19.

2. In contrast to those having no difficulty or little difficulty, the percentage of New Hampshire residents having difficulty paying their usual household expenses, while it tipped upward for one period (Week 21), then declined. In 2022, however, those difficulties have been clearly trending upward, both for those are finding it "very difficult" to pay their usual household expenses and those who report finding it either "somewhat difficult" or "very difficult."

3. The difficulty which New Hampshire's low-income population is facing in paying for usual household expenses is higher today than it has been since the advent of the COVID-19 pandemic. Nearly four-of-ten persons with income less than $25,000 reports having had a "very difficult" time paying their usual household expenses "in the last

seven days." A full 70% of this lowest income population (i.e. annual income below $25,000) reports having either a "very difficult" or a "somewhat difficult" time paying their bills in mid-2022.

4. New Hampshire's aging population appears to be faring better in their ability to pay their usual household expenses. Substantially fewer persons aged 65 or older report finding it "very difficult" to pay their bills. Overall, the pattern of difficulties for the population age 65 or higher is noticeably different from the patterns that appear for the population as a whole or for the lower income population.

5. Nearly one-in-two (48%) New Hampshire residents with children had difficulty in paying their usual household expenses in the middle of 2022 (Week 47 of the Census PULSE Survey). That is the highest percentage since the PULSE Survey began to track payment difficulties in 2020. More than two times more residents with children (48%), than those without (23%), had either a "somewhat difficult" or "very difficult" time paying their usual household expenses in Week 47.

Part 3. EAP participant payment patterns.

One critical aspect of New Hampshire's EAP is whether making bills more affordable to EAP participants allows those low-income customers to make their bill payments in a complete and regular manner. When a utility issues a bill to a customer, that Company seeks a number of related, yet separate, outcomes. The utility:

- Would like a ***complete*** payment in response to each bill. If the utility issues a bill for $100, it would like to have a payment of $100 from the customer;

- Would like to have a ***timely*** payment in response to each bill. If the utility issues a bill with a due date 20 days after the bill, it would like to receive a payment within that 20-day period.

- Would like to have a ***regular*** payment in response to its bills. A utility who issues 12 bills to a customer would like to receive 12 payments in return. Two customers who receive identical bills over 12 months are not equal if Customer A pays 100% of their bill in 12 regular payments and the other pays 100% of their bill but only in four payments.

Each of these attributes of EAP participant bill payment patterns is examined below. As discussed above, unless noted otherwise in the discussion, the data is drawn from Eversource EAP participants who were active as of April 2022 and who had at least twelve complete months of EAP participation ending in April 2022.

Numbers of Accounts in Arrears

The extent to which EAP participants make complete bill payments begins with an examination of the breadth of arrears with Eversource's EAP population. The "breadth" of arrears looks at how many EAP participants have arrears. The discussion then turns to an examination of the depth of arrears. The "depth" of arrears considers how far in arrears EAP participants are. The depth of arrears is measured both by the average arrears and by the distribution of arrears. Data on the breadth of EAP arrears is set forth in Table 14below.

Table 14. EAP Participant Arrears by Month (Oct. 2020 – April 2022)

Arrears	Less than $0	Equal to $0	Count more than $0
Oct-20	7%	59%	34%
Nov-20	5%	65%	30%
Dec-20	7%	58%	35%
Jan-21	7%	59%	34%
Feb-21	5%	61%	33%
Mar-21	8%	59%	32%
Apr-21	9%	61%	30%
May-21	9%	60%	31%
Jun-21	10%	59%	31%
Jul-21	9%	60%	31%
Aug-21	8%	60%	32%
Sep-21	7%	60%	33%
Oct-21	7%	59%	34%
Nov-21	7%	61%	32%
Dec-21	11%	56%	32%
Jan-22	12%	55%	32%
Feb-22	10%	58%	32%
Mar-22	11%	56%	33%
Apr-22	11%	60%	29%

New Hampshire's EAP participants routinely make complete payments on their electricity bills. Over the entire set of data, including two complete winter heating seasons (2020 – 2021, 2021 –

2022), only 30% of EAP participants had an unpaid arrearage balance on their monthly bill. The existence of unpaid arrearage balances in the EAP population does not have a noticeable seasonal variation. Over the 19-month study period (October 2020 – April 2022), the percentage of EAP accounts with a $0 balance or below remained relatively constant at roughly 65% – 70%.

The lack of seasonal variation is notable given the variation in seasonal electricity consumption amongst EAP participants. The seasonal variation in usage is discussed in detail below.

Distribution of Arrears

Merely knowing whether an EAP account has "some" arrears does not provide a complete picture of the extent to which EAP participants are making complete payments. In addition, it is important to examine the depth of arrears (i.e., how big of an unpaid balance an EAP account carries). Table 15 below presents data by month for the 19-month study period on the percentage of accounts with differing unpaid balances. The percentages in this Table are limited to those accounts with unpaid balances.

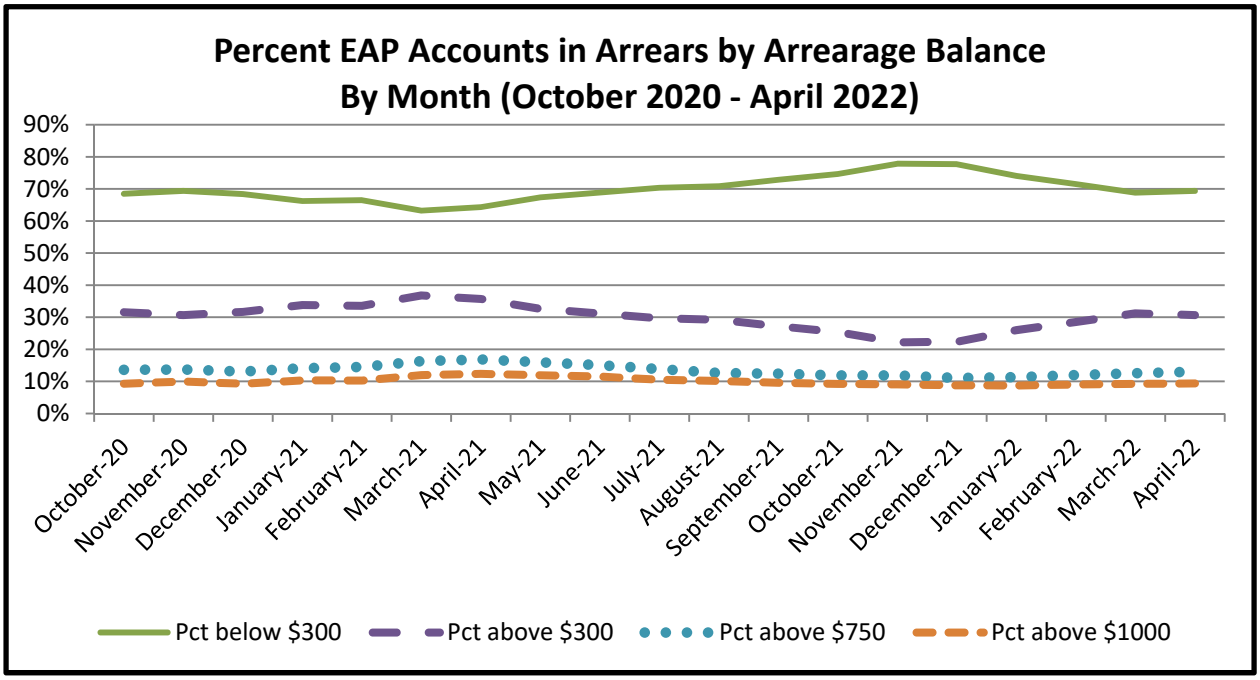
The data shows that EAP accounts with unpaid balances are not seriously in arrears. Consistently over the course of the study period, half of EAP accounts with an unpaid balance have balances that are less than $150. In one brief period (December 2020 – March 2021), it is possible to see how the level of unpaid balances fluctuates. During that period, while the percentage of accounts with arrears of less than $150 declines a slight amount, that decline is offset by a corresponding, and roughly equal, percentage of accounts with arrears of between $150 and $300 during the same time period.

Table 15. Distribution of EAP Accounts by Unpaid Balance of Accounts Arrears by Month (Oct 2020 – Apr 2022)

Arrears	$1 - $150	$151 - $300	$301 - $500	$ 501 - $750	$751 - $1000	$1001 - $2000	More than $2000	Total
Oct-20	50%	18%	11%	7%	4%	4%	5%	100%
Nov-20	52%	17%	11%	6%	4%	5%	5%	100%
Dec-20	50%	18%	12%	7%	4%	5%	4%	100%
Jan-21	47%	19%	12%	7%	4%	5%	5%	100%
Feb-21	47%	19%	12%	7%	4%	5%	5%	100%
Mar-21	46%	17%	12%	8%	4%	6%	6%	100%
Apr-21	48%	16%	11%	7%	5%	6%	6%	100%
May-21	51%	17%	10%	6%	4%	6%	6%	100%
Jun-21	55%	14%	10%	6%	4%	6%	6%	100%
Jul-21	53%	18%	10%	6%	3%	5%	6%	100%
Aug-21	52%	19%	10%	7%	2%	5%	5%	100%
Sep-21	55%	18%	9%	5%	3%	4%	5%	100%
Oct-21	55%	19%	8%	5%	3%	4%	5%	100%
Nov-21	63%	15%	6%	4%	3%	4%	5%	100%
Dec-21	61%	17%	7%	4%	2%	4%	5%	100%
Jan-22	55%	19%	10%	5%	3%	4%	5%	100%
Feb-22	52%	20%	11%	6%	3%	4%	5%	100%
Mar-22	49%	20%	12%	7%	3%	4%	5%	100%
Apr-22	51%	18%	11%	7%	4%	4%	5%	100%

One significant finding from the data in the Table above is simply that there is not a constant increase in the level of unpaid balances amongst those EAP accounts with an unpaid balance. The Chart below further combines balances into what might reasonably be considered to be "low" (less than $300), "moderate" ($301 - $1,000), and "high" (over $1,000) balances. The seasonal interaction between the "low" and "moderate" can be seen in this Chart. This Chart demonstrates that, of those EAP accounts having an unpaid balance, there has been a slight decrease in the percentage with balances less than $300 matched with a corresponding ever so slight decrease in the percentage of accounts with balances between $300 and $1,000. Note that the percentages in this Chart are not additive. Each higher level of arrears is a subset of all the

preceding lower levels of arrears (e.g., arrears exceeding $750 is a subset of arrears exceeding $300).



While the data above does not show a deterioration in either the breadth or the depth of EAP arrears over time, neither does it demonstrate a substantial improvement. Over the 19-month study period, there seems to be a not insubstantial percentage of EAP participants who persistently carry a relatively small, but noticeable, level of unpaid account balances.

Average Arrears of High Balances

There is cause for concern with a relatively small, but not insubstantial, group of EAP participants. This group includes the roughly 10% of EAP participants who consistently carry unpaid balances of more than $1,000. Half of those (5%) are accounts with unpaid balances exceeding $2,000. Table 16 below presents the average balances of those two sets of accounts, compared to the average balance of all accounts with an unpaid balance. The average of all accounts with a balance, in other words, incorporates the accounts with "high balances" as one of its subsets.

The data in the Table below documents a few things. First, the accounts with balances of more than $2,000 are, in fact, *substantially* "more than" $2,000. The average balances for these accounts are consistently between $5,500 and $6,000. These accounts represent serious payment difficulties. Second, the account balances between $1,000 and $2,000 have not deteriorated between October 2020 and April 2022. The account balances in this $1,000 range (between $1,000 and $2,000) vary in a relatively narrow range around $1,400. Third, in contrast, the accounts with balances of more than $2,000 have seen a deterioration in 2022. The average

balances within this group of EAP participants are now consistently approaching $6,000 on a monthly basis.

Table 16. Average EAP Account Balances of Accounts with "High" Arrears.

	Balance = $1001 - $2000	Balance more than $2000	All Balances > $0
Oct-20	$1,359	$5,506	$197
Nov-20	$1,332	$5,805	$174
Dec-20	$1,363	$5,814	$188
Jan-21	$1,348	$5,561	$206
Feb-21	$1,380	$5,624	$202
Mar-21	$1,385	$5,526	$215
Apr-21	$1,381	$5,319	$209
May-21	$1,397	$5,457	$207
Jun-21	$1,422	$5,549	$199
Jul-21	$1,419	$5,635	$196
Aug-21	$1,425	$5,825	$196
Sep-21	$1,412	$5,786	$193
Oct-21	$1,381	$5,718	$192
Nov-21	$1,411	$5,913	$174
Dec-21	$1,409	$5,842	$179
Jan-22	$1,443	$5,956	$186
Feb-22	$1,379	$5,887	$190
Mar-22	$1,401	$5,905	$204
Apr-22	$1,420	$6,093	$186

One final element of concern about these accounts with arrears exceeding $2,000 is the lack of impact of the availability of large grants to help retire utility arrears through the federal Emergency Rental Assistance Program (ERAP). The substantial increase in these "big" grants is discussed in greater detail below. Despite the receipt of these grants, however, both the breadth of high arrears and the depth of high arrears within New Hampshire's EAP population has remained relatively constant, if not somewhat worse, in recent months.

Average Arrearage Balances and Percentage of Income Burdens

EAP participants appear to have four distinct regimes of arrearage balances. Table 17 sets forth monthly data on the average unpaid arrearage balance disaggregated by seven ranges of bills as a percentage of income. The first range includes EAP participants with percentage of income burdens of 4% of income or less. These customers tend to have arrearage balances of well below $100 in each month of the study period.

Table 17. Average Unpaid Balance by Percentage of Income Burden by Month (Oct 2020 – Apr 2022)

	Bill as Percent of Income							
Month	0% - 4%	4% - 8%	8% - 12%	12% - 16%	16% – 20%	20% - 24%	>24%	Grand Total
Oct-20	$59	$163	$425	$723	$376	$1,307	$918	$177
Nov-20	$45	$142	$397	$687	$361	$1,265	$936	$158
Dec-20	$62	$162	$438	$714	$443	$1,349	$895	$180
Jan-21	$63	$166	$455	$755	$480	$1,406	$935	$185
Feb-21	$60	$162	$444	$791	$540	$1,420	$1,040	$184
Mar-21	$61	$169	$467	$789	$547	$1,476	$1,147	$191
Apr-21	$55	$163	$459	$774	$489	$1,454	$1,156	$184
May-21	$55	$159	$454	$777	$471	$1,431	$1,190	$182
Jun-21	$53	$150	$431	$774	$412	$1,493	$1,136	$174
Jul-21	$53	$149	$427	$777	$384	$1,376	$1,063	$171
Aug-21	$53	$150	$433	$796	$381	$1,397	$1,109	$174
Sep-21	$51	$151	$414	$810	$394	$1,399	$1,108	$172
Oct-21	$52	$150	$420	$774	$398	$1,416	$1,122	$172
Nov-21	$38	$133	$396	$751	$281	$1,383	$1,125	$154
Dec-21	$40	$129	$378	$745	$330	$1,384	$1,157	$152
Jan-22	$39	$133	$398	$761	$419	$1,437	$1,295	$158
Feb-22	$42	$140	$412	$824	$468	$1,493	$1,500	$168
Mar-22	$45	$149	$437	$857	$540	$1,552	$1,520	$177
Apr-22	$35	$126	$427	$726	$497	$1,579	$1,452	$158

In the Table above, the group of EAP participants with percentage of income burdens of between 4% and 8% of income have somewhat higher unpaid balances, with a third grouping encompassing those participants with burdens between 8% of income and 20% of income. When burdens exceed 20% of income, the resulting average unpaid balance substantially increases to reflect the higher burden.

As bill burdens increase, the contribution which those higher-burden households make to the total level of arrears increases as well. The Table below presents baseline data on the percentage of EAP accounts that fall into each range of bills as a percentage of income burden. Nearly 40% of all EAP participants have bill burdens of 4% of income or less. An additional 46% of accounts have burdens of between 4% and 8% of income.

The high percentage of EAP participants with lower energy burdens is to be expected. As higher and higher EAP discounts are provided to the customers as incomes decrease, the energy burdens experienced by EAP participants will decrease. EAP is designed to generate bill burdens within the range of 4% to 6% on average. Given this design, there should not be substantial numbers of EAP participants with higher energy burdens. And there are not.

Table 18. Percentage of EAP Accounts by Annual Bills as a Percentage of Income Burden

	Bills as a Percentage of Income Burden							
	0-0.04	0.04-0.08	0.08-0.12	0.12-0.16	0.16-0.20	0.20-0.24	>0.24	Grand Total
Percentage of Accounts	39%	46%	9%	3%	1%	1%	1%	100%

In contrast to this distribution of EAP accounts by bills as a percentage of burden, Table 19 below shows the distribution of the total dollars of unpaid balances for EAP accounts for each month of the 19-month study period. As can be seen, EAP accounts with lower burdens contribute a disproportionately small portion of total arrears from the EAP participant population. While nearly 40% of all EAP accounts have bill burdens of 4% of income or less, the range of the percentage of total unpaid account balances appearing on the accounts of those low-burden EAP participants ranges from only 9% to 13%. While the accounts falling into the 4% to 8% percentage of income burden range come closer to experiencing a proportionate share of unpaid balances, even the portion of arrears appearing on these accounts as a percentage of total arrears consistently falls below the percentage of participants experiencing a bill burden falling into this range.

Only when EAP bills exceed 8% of income does the percentage of unpaid balances falling into each percentage of income burden range exceed the percentage of EAP participants experiencing these burdens. For example, while 1% of all EAP participants have bill burdens respectively in each of the ranges of 16% to 20%, 20% to 24%, and more than 24% of income, these accounts contribute 2%, 6% and 3% of the total unpaid balances.

These numbers are additive between percentage of income burden ranges within any given single month. In October 2020, for example, 22% of the total unpaid EAP balances appear on EAP bills representing bill burdens of 12% of income or more, even though only 6% of all EAP participants have percentage of income burdens that high. Moreover, 44% of all unpaid balances appear on bills of EAP participants with a bill burden of 8% of income or more, even though only 15% of all EAP participants have percentage of income burdens that high.

In contrast, while 85% of EAP participants have percentage of income burdens of less than 8%, only 55% of the unpaid EAP account balances appear on the bills of those customers.

Table 19, Distribution by Month of the Percentage of Total Dollars of EAP Arrears by Accounts as a Percentage of Income Burden (Oct. 2020 – April 2022)

	Bills as a Percentage of Income Burden							Grand Total
Month	0-0.04	0.04-0.08	0.08-0.12	0.12-0.16	0.16-0.2	0.2-0.24	>0.24	
Oct-20	13%	42%	22%	11%	2%	6%	3%	100%
Nov-20	11%	41%	23%	12%	3%	6%	4%	100%
Dec-20	14%	42%	22%	11%	3%	6%	3%	100%
Jan-21	13%	41%	22%	11%	3%	6%	3%	100%
Feb-21	13%	41%	22%	11%	3%	6%	4%	100%
Mar-21	13%	41%	22%	11%	3%	6%	4%	100%
Apr-21	12%	41%	23%	11%	3%	6%	4%	100%
May-21	12%	40%	23%	11%	3%	6%	4%	100%
Jun-21	12%	40%	23%	12%	3%	7%	4%	100%
Jul-21	12%	40%	23%	12%	3%	6%	4%	100%
Aug-21	12%	40%	23%	12%	3%	6%	4%	100%
Sep-21	12%	41%	22%	13%	3%	6%	4%	100%
Oct-21	12%	40%	22%	12%	3%	7%	4%	100%
Nov-21	10%	40%	23%	13%	2%	7%	5%	100%
Dec-21	10%	39%	23%	13%	2%	7%	5%	100%
Jan-22	10%	39%	23%	13%	3%	7%	5%	100%
Feb-22	10%	38%	22%	13%	3%	7%	6%	100%
Mar-22	10%	39%	22%	13%	3%	7%	6%	100%
Apr-22	9%	37%	25%	12%	4%	8%	6%	100%

Payment Coverage Ratio

One common mechanism by which to view how "complete" low-income payments are is through a calculation of the Payment Coverage Ratio. The Payment Coverage Ratio is a relatively simple calculation, with the dollars of bills placed in the numerator and the dollars of bills for current service placed in the denominator. If the Ratio is greater than 1.0, customers are making payments that more than cover their bills for current service (likely making their current bill payment plus some additional amount toward an arrearage). If the Ratio is less than 1.0, the customer is making a payment that does not cover their entire bill for current service. A ratio of exactly 1.0 means that the payment is exactly equal to the bill for current service.

As bill burdens decline for EAP participants, the payment coverage ratio for accounts sharply increases. EAP participants with bill burdens of 8% of income or less have payment coverage ratios for the 12 months ending April 2022 of 100% or more. Even EAP participants with bill burdens of between 8% and 12% of income paid more than 90% of their total bill for current service during this 12 month period.

Table 20. Payment Coverage Ratios by Bills as a Percentage of Income
(12 months ending April 2022)

Percentage of Income Burden	Average of Pyt Coverage Ratio
4% or less	276%
4% to 8%	138%
8% to 12%	92%
12% to 16%	65%
16% to 20%	58%
20% to 24%	48%
More than 24%	71%
Grand Total	184%

Table 21 below presents a more detailed distribution of Payment Coverage Ratios by percentage of income burdens. As percentage of income burdens decline, EAP Payment Coverage Ratios dramatically increase. Nearly 70% of EAP participants with bill burdens of 4% of income or less paid 99% or more of their bills for current service during the 12 months ending April 2022. In contrast, only 21% of EAP participants with burdens lower than 4% of income paid 66% of their bill or less.

As burdens increase, the distribution reverses. When burdens are between 20% and 24% of income, only 14% of EAP participants paid 99% of their bill or more. Only 25% of EAP participants with bills which exceeded 24% of income paid 99% or more of their bills for current service.

Table 21. Distribution of Payment Coverage Ratios by Bills as a Percentage of Income (12 months ending April 2022)

Pyt Coverage Ratio	4% or less	0.04-0.08	0.08-0.12	0.12-0.16	0.16-0.2	0.2-0.24	>0.24	Grand Total
33% or less	11%	19%	28%	37%	43%	54%	40%	18%
33 – 66%	10%	19%	27%	29%	31%	27%	23%	17%
66 – 99%	10%	15%	17%	14%	11%	6%	9%	13%
99 – 132%	10%	12%	9%	9%	7%	8%	16%	10%
132 – 165%	4%	5%	4%	2%	1%	2%	2%	4%
More than 165%	55%	31%	15%	9%	8%	4%	9%	38%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%

Having noted this data, it is important to note the caution. When discussing Payment Coverage Ratios in this COVID-19 pandemic era, customers may well receive substantial federal grants to help them retire arrears. When such grants are received, they represent a much higher percentage of a small, sharply discounted bill than they represent of a larger bill. When construing the policy significance of data, the discussion should recognize that the existence of temporary federal emergency COVID-19 relief programs such as larger than normal LIHEAP payments and crisis relief payments through the Emergency Rental Assistance Program (ERAP) may skew the analysis in undetermined ways. It is, however, not conjecture to realize that a large emergency ERAP grant provided to a New Hampshire EAP participant with a $500 bill will more sharply increase that customer's Payment Coverage Ratio than the same emergency grant provided to an EAP participant with a $1,500 bill.

Even qualitatively taking the possibility of ERAP grants (as well as higher-than-typical LIHEAP grants) during the COVID-19 pandemic, the data above seems to support New Hampshire's decision to direct is EAP bill discounts toward the objective of achieving bills as an affordable percentage of income. Not only does the overall average bill Payment Coverage Ratio increase, but, in addition, more EAP participants with affordable burdens pay a higher percentage of their bills for current service.

"Big" Payments

Since New Hampshire's electric utilities do not track the source of customer bill payments, it is not possible to directly consider the impact of ERAP (and LIHEAP) payments on the presence

(or level) of arrears or on the level of Payment Coverage Ratios for EAP bill payments. However, as agreed to by the EAP Advisory Board when presented with the question, an inquiry into the number of "big" payments would provide some insights into whether utilities were seeing atypical payments made toward EAP participant bills. The presence of such "big" payments is the focus of the discussion below. Table 22 sets out data for both Eversource and for the New Hampshire Electric Cooperative (NHEC). Data on the number of "big" payments is set out by month for the 19 months October 2020 through April 2022, as well as aggregated on a calendar year basis. 2020 data is available for October through December. 2022 data is available for January through April. ERAP benefits first became available in January 2022. The dollars of LIHEAP assistance for Fiscal Year 2022 was the largest appropriation in the history of the program.[12]

In the Table below, the columns are ***not*** additive. Each reference to a next higher dollar level of payment is included in the number of payments in the preceding lower dollar level of payments. The number of payment "more than $500," for example, is a subset of the number of payments "more than $750," just as the number of payments "more than $1,000" is a subset of the number of payments "more than $750."

There is a noticeable increase in the number of big payments made on customer accounts beginning particularly in the Fall of 2021. In particular, the data below allows a comparison between two comparable time periods: (1) October – December 2020 to October – December 2021; and (2) January – April 2021 to January – April 2022. The Table shows that:

- Eversource nearly doubled (81% increase) the number of payments of more than $250 it received in October through December 2021 as compared to the same months in 2020. Eversource more than doubled the payments of more than $500 between those two time periods (115% increase in payments over $500; 140% increase in payments over $750; 183% increase in payments over $1,000).

- NHEC increased the number of payments over $250 in October through December 2021 by more than 500% relative to the number it received in October through December 2020. The numbers are still quite small; to that extent, the large percentage can perhaps be discounted. But, to conclude that the increase is "substantial" would not be inappropriate.

- Similarly, Eversource increased the number of payments it received over $750 by more than 50% in the four months January through April 2022 as compared to January through

[12] The impact of higher LIHEAP appropriations is diluted by the fact that there are few electric heating customers in New Hampshire who might receive LIHEAP.

April 2021. It increased the number of payments it received over $1,000 by nearly 70% in those four months in 2022 relative to the same months in 2021.

- NHEC more than doubled the number of payments or more than $250 (at all payment ranges) it received in the four months January through April 2022 as compared to January through April 2021. Indeed, NHEC has received nearly as many "big" payments in the first four months of 2022 than it did in *all* of 2021 (>$250: 293 in January – April 2022 vs. 302 in all of 2021; >$500: 76 in January – April 2022 vs. 79 in all of 2021; >$750: 26 in January – April 2022 vs. 32 in all of 2021; >$1,000: 15 in January – April 2022 v. 22 in all of 2021).

It should be remembered, however, that these high payments are likely driven by COVID-related federal assistance, which will *not* be available in a post-COVID environment.

Table 22. Number of "Big Payments" by Month and Size of Payment (Eversource & NHEC)

	Eversource					NHEC			
	More than $250	More than $500	More than $750	More than $1000		Over $250	Over $500	Over $750	Over $1000
2020 Total	1,561	270	121	59	2020	12	1	0	0
Oct	541	100	41	16	Oct	5	1	0	0
Nov	484	79	37	20	Nov	2	0	0	0
Dec	536	91	43	23	Dec	5	0	0	0
2021	12,132	2,697	1,250	690	2021	302	79	32	22
Jan	1,003	177	79	46	Jan	18	3	1	1
Feb	886	137	47	16	Feb	25	6	2	1
Mar	1,441	327	121	63	Mar	39	12	4	3
Apr	994	221	87	43	Apr	33	14	5	2
May	696	191	92	54	May	19	8	3	1
Jun	831	267	149	82	Jun	21	2	1	1
Jul	1,022	309	143	84	Jul	24	7	3	2
Aug	1,195	264	120	74	Aug	28	6	4	4
Sep	1,235	223	121	61	Sep	21	8	4	4
Oct	1,069	188	94	50	Oct	26	3	2	1
Nov	927	225	114	75	Nov	22	5	2	2
Dec	833	168	83	42	Dec	26	5	1	0
2022	5,100	1,231	505	280	2022	293	76	26	15
Jan	985	188	79	43	Jan	39	9	1	0
Feb	1,243	283	105	58	Feb	77	18	5	3
Mar	1,604	402	152	83	Mar	103	27	12	7
Apr	1,268	358	169	96	Apr	74	22	8	5

The disclaimers must be again noted in reviewing this data. It is not possible to definitively determine that the increase in "big" payments (i.e., payments exceeding $250 in a particular month) is attributable to the receipt of ERAP assistance or larger LIHEAP payments. Moreover, the data is not structured in a way to determine the overall impact of the larger-than-normal number of larger-than-normal payments on the EAP participant Payment Coverage Ratios. Nonetheless, the data on the increase receipt of these big payments is consistent with the availability of these temporary, emergency, federal COVID-19 relief assistance programs.

Nine Essential Findings

1. New Hampshire's EAP participants routinely make complete payments on their electricity bills. Over the entire set of data, including two complete winter heating seasons (2020 – 2021, 2021 – 2022), only 30% of EAP participants had an unpaid arrearage balance on their monthly bill.

2. The existence of unpaid arrearage balances in the EAP population does not have a noticeable seasonal variation. Over the 19-month study period (October 2020 – April 2022), the percentage of EAP accounts with a $0 balance remained relatively constant at roughly 60%, while the percentage of accounts with an unpaid balance remained relatively constant at roughly 30%.

3. EAP accounts with unpaid balances are not seriously in arrears. Consistently over the course of the study period, half of EAP accounts with an unpaid balance have balances that are less than $150.

4. While the data above does not show a deterioration in either the breadth or the depth of EAP arrears over time, neither does it demonstrate a substantial improvement. Over the 19-month study period, there seems to be a not insubstantial percentage of EAP participants who persistently carry a relatively small, but noticeable, level of unpaid account balances.

5. There is cause for concern with a relatively small, but not insubstantial, group of EAP participants. This group includes the roughly 10% of EAP participants who consistently carry unpaid balances of more than $1,000. Half of those (5%) are accounts with unpaid balances exceeding $2,000. The accounts with balances of more than $2,000 are, in fact, ***substantially*** "more than" $2,000. The average balances for these accounts are consistently between $5,500 and $6,000.

6. One final element of concern about these accounts with arrears exceeding $2,000 is the lack of impact of the availability of large grants to help retire utility arrears through the federal Emergency Rental Assistance Program (ERAP). Despite the receipt of these grants, however, both the breadth of high arrears and the depth of high arrears within

New Hampshire's EAP population has remained relatively constant, if not somewhat worse, in recent months.

7. EAP participants appear to have four distinct regimes of arrearage balances. The first range includes EAP participants with percentage of income burdens of 4% of income or less. These customers tend to have arrearage balances of well below $100 in each month of the study period. The group of EAP participants with percentage of income burdens of between 4% and 8% of income have somewhat higher unpaid balances, with a third grouping encompassing those participants with burdens between 8% of income and 20% of income. When burdens exceed 20% of income, the resulting average unpaid balance substantially increases to reflect the higher burden.

8. As bill burdens increase the contribution that those higher burden households make to the total level of arrears increases as well. While nearly 40% of all EAP accounts have bill burdens of 4% of income or less, the total unpaid account balances appearing on the accounts of those low-burden EAP participants ranges from only 9% to 13%. In contrast, EAP participants with higher burdens have a higher proportion of arrears. In October 2020, for example, 22% of the total unpaid EAP balances appear on EAP bills representing bills burdens of 12% of income or more, even though only 6% of all EAP participants have percentage of income burdens that high. Moreover, 44% of all unpaid balances appear on bills of EAP participants with a bill burden of 8% of income or more, even though only 15% of all EAP participants have percentage of income burdens that high.

9. There is a noticeable increase in the number of big payments made on customer accounts beginning particularly in the Fall of 2021. Eversource nearly doubled (81% increase) the number of payments of more than $250 it received in October through December 2021 as compared to the same months in 2020. NHEC increased the number of payments over $250 in October through December 2021 by more than 500% relative to the number it received in October through December 2020. These "big payments" are likely attributable to large benefit payments from LIHEAP or through the federal Emergency Rental Assistance Program (ERAP).

Part 4. EAP program elements.

In this Chapter, the review of New Hampshire's EAP will address whether the program can be improved in any reasonable way to improve the delivery of benefits to low-income New Hampshire electric customers at a reasonable cost. In noting this objective, however, it is important to realize that the world is somewhat different in the Fall of 2022 than it was in the Spring of 2022. In the Summer of 2022, each of New Hampshire's electric utilities provided notice that the supply-side rates charged to consumers would substantially increase. The increases provided by the New Hampshire Department of Energy are those set forth immediately below.

Table 23. Supply Rate Increases: New Hampshire (Summer 2022)

	Existing Rate	New Rate	Increase
Liberty	$0.11119	$0.22228	$0.11109
Eversource	$0.10669	$0.22566	$0.11897
NHEC	$0.0962	$0.1698	$0.07360

The impact that these rate increases will have on the operation of EAP will be discussed in a separate Chapter below. For purposes of this Chapter, the impact is to even further constrain what is already a tightly limited budget available to provide customer assistance. While the discussion below will not assume that *no* increase in EAP cost is appropriate given structural

and/or operational changes, the discussion will assume that any program cost increase should be minimized to the extent possible.

Moreover, one task that was identified in the original scope of work for this review involved making a determination of how, if at all, existing surpluses in the EAP budget should be treated. The question presented by the Advisory Board was whether the existing budget surplus should be "spent down" by delivering additional benefits or whether that surplus should be returned to New Hampshire's electric ratepayers who pay the System Benefit Charge that financially supports the EAP. The noticed increases in New Hampshire electric rates has rendered that task moot. Given the increases announced in electric rates, historic surpluses that have been experienced in the EAP budget are not expected to survive the 2022 – 2023 program year.

Four particular elements of the EAP structure and operation are examined below: (1) the ceiling that has been placed on usage that will be subject to the EAP discount; (2) the percentage of income discounts that are provided to each EAP Tier; (3) the income ranges which comprise each EAP Tier; and (4) the extent to which EAP fails to address pre-existing arrears as part of the efforts to achieve affordable bill burdens for New Hampshire's EAP program participants.

The discussion below leads to the conclusion that while there is a need to update the discounts provided through New Hampshire's EAP, there is not any need to make major structural changes in how the program is designed and operated.

Usage Limits on EAP Discounts

New Hampshire's decision to limit EAP discounts to the first 750 kWh of monthly consumption by program participants reveals no need for a modification at this point in time. Table 24 below presents data on the distribution of EAP participants by usage at and above the existing 750 kWh benefit ceiling. Two observations are evident from a review of this data.

First, the 750 kWh ceiling on usage allows the vast majority of EAP participants to participate each month while having their entire consumption subject to the EAP discount. In the shoulder months of the Spring and Fall, 80% or more of EAP bills are based on usage that is 750 kWh or less. In contrast during the 19-month study period, roughly 10% to 15% of EAP participants have consumption in excess of 800 kWh.

This is not to say that the usage of EAP participants does not exhibit some seasonal fluctuation. In the Table below, there is a noticeable decrease in the percentage of EAP participants with usage at or below the program ceiling and a corresponding increase in the percentage of EAP participants with consumption at or above 800 kWh primarily during cold weather months. During these months, the consumption which exceeds 750 kWh is billed at standard residential rates.

Table 24. Percentage of EAP Participants by Usage (kWh) by Month (October 2020 – April 2022) (shading provided for readability purposes)

Month	Below 650 kWh	650 – 700 kWh	700 – 750 kWh	750 – 800 kWh	800 or more kWh	Total
Oct-20	82%	3%	3%	2%	10%	100%
Nov-20	79%	3%	3%	2%	13%	100%
Dec-20	69%	3%	3%	3%	21%	100%
Jan-21	65%	4%	3%	3%	25%	100%
Feb-21	69%	3%	3%	3%	22%	100%
Mar-21	69%	4%	3%	3%	21%	100%
Apr-21	76%	3%	3%	2%	15%	100%
May-21	83%	3%	2%	2%	10%	100%
Jun-21	75%	4%	3%	2%	15%	100%
Jul-21	68%	4%	4%	3%	21%	100%
Aug-21	69%	4%	4%	3%	20%	100%
Sep-21	68%	4%	3%	3%	22%	100%
Oct-21	83%	3%	2%	2%	9%	100%
Nov-21	80%	3%	3%	2%	12%	100%
Dec-21	69%	4%	4%	3%	21%	100%
Jan-22	65%	4%	3%	3%	26%	100%
Feb-22	66%	3%	3%	3%	26%	100%
Mar-22	72%	3%	3%	2%	20%	100%
Apr-22	75%	3%	3%	2%	17%	100%

The continuing reasonableness of the 750 kWh ceiling on EAP discounts is further examined in Table 25 below. This Table sets forth the usage (in kWh) at four selected percentiles of EAP accounts by month over the 19-month study period. A "percentile" indicates the position of a particular usage amount within all usage amounts reported for EAP participants. The "50th percentile" means that 50 percent of usage amounts are below that amount and the other 50 percent are above it. The "70th percentile" indicates that 70 percent of all usage amounts are below this usage level, while the remaining 30% are above it. The four percentiles selected for consideration are the 50th percentile; 60th percentile; 70th percentile; and 80th percentile. Again,

the 80th percentile means that 80 percent of all EAP usage amounts in that month are less than the reported level, with the remaining 20 percent being above it.

As in the Table above, the months in which usage exceeds the 750 EAP ceiling are identified with dashed boxes. The Table shows that even at the 70th percentile of usage, usage falls below 750 kWh in each of the 19 study months. Usage only begins to exceed the 750 kWh ceiling when it reaches the 80th percentile of all actual usage amounts. Even then, the 750 kWh ceiling is exceeded in only 11 of the 19 study months.

Table 25. EAP Usage at Varying Percentiles by Month (October 2020 – April 2022)

	Month	50th percentile	60th percentile	70th percentile	80th percentile
2020	October	369	431	515	623
	November	385	455	540	668
	December	461	550	668	823
2021	January	492	590	715	907
	February	449	542	663	838
	March	452	542	657	827
	April	408	486	584	715
	May	351	416	499	597
	June	418	496	592	714
	July	479	565	672	817
	August	459	549	658	801
	September	473	559	675	828
	October	350	414	496	604
	November	370	441	530	647
	December	455	545	663	823
2022	January	492	591	725	920
	February	480	580	719	932
	March	426	512	625	808
	April	402	479	581	728

The seasonal fluctuation in usage identified in the Tables above is less problematic than one might first assume. New Hampshire's EAP is not designed to assess affordability on a ***monthly*** basis. Instead, the design of the program is to achieve, on average, an electric bill as an affordable percentage of income (defined to be between 4% and 5%) on an ***annual*** basis. The fact that usage might be seasonally higher, therefore, would only be of concern if the usage in the remaining months was ***at*** or ***near*** the usage cap. If that were the case, higher seasonal consumption during the winter heating or summer cooling months might be sufficient to push the overall annual bill beyond the target affordable burden. Two lines of inquiry lead to the conclusion that that does not occur.

The first (and simplest) inquiry examines the annual total usage. If the annual consumption exceeds 9,000 kWh (750/month x 12 months), the monthly consumption ceiling is being exceeded in a sufficient number of months to push the average monthly use above the 750 kWh ceiling. As set forth in Table 26, in fact, this does not occur. Three different 12-month periods were examined: (1) the 12 months ending April 2022 (i.e., the most recent 12-months); (2) Calendar Year 2021; and (3) the 12 months ending September 2021. In all three 12-month periods examined, the average annual usage for EAP participants (including months in which usage exceeded 750 kWh) fell substantially short of 9,000 kWh.[13] The Table shows that only at the 80th percentile, did annual consumption reach the limit of 9,000 kWh.

Table 26. Average 12-Month Total Consumption
(3 differing 12-month periods)

	Avg Annual Use (kWh)	50th Pctl	60th Pctl	70th Pctl	80th Pctl
Average annual use: May 2021 to April 2022	6,442	5,383	6,354	7,532	9,045
Average annual use: Calendar Year 2021	6,407	5,372	6,348	7,506	8,979
Average annual use: October 2020 - September 2021	6,439	5,419	6,382	7,540	9,068

The second inquiry examines monthly data in addition to looking at the annual data presented above. Rather than looking at all 19 months in the study period, Table 27 takes a closer look at usage during the months October 2021 through March 2022 (two of the shoulder months and three of the months with seasonally high usage).

In examining the usage of EAP participants, it is important to remember that consumption that is subject to the EAP discounts is not merely usage *at* 750 kWh, but usage at or below 750 kWh in each given month. It is easy to forget the "or below" part of the inquiry. Table 27 shows the importance of taking into account the low use months when considering the impacts of monthly consumption on annual bill burdens. The Table shows that in every month but one (January 2022), 40% or more of all EAP accounts had usage less than 400 kWh (and in January 2022, 38% had usage that low). In two months (October and November 2021), more than half of all EAP accounts had usage lower than 400 kWh.

The Table demonstrates that it would be inappropriate to isolate individual months apart from a 12-month period as a whole and to conclude that seasonal variations in usage during those isolated months present a threat to the achievement of affordable annual burdens because of a usage ceiling on benefits.

[13] Note that the "average" is different from the 50th percentile. The 50th percentile is the middle value, where half of all values are more than and the other half are less than. The "average" is the total consumption divided by the total number of accounts.

Table 27. Distribution of Usage by Month(October 2021 – March 2022)						
Use (kWh)	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022
0-100	3%	3%	2%	2%	2%	3%
100-200	16%	15%	12%	10%	11%	13%
200-300	21%	19%	14%	13%	13%	15%
300-400	17%	18%	15%	13%	14%	15%
400-500	13%	13%	13%	13%	12%	12%
500-600	9%	10%	9%	10%	9%	9%
600-700	7%	6%	8%	8%	7%	7%
700-800	4%	5%	6%	6%	5%	5%
800-900	3%	3%	5%	5%	5%	4%
900-1000	2%	2%	3%	4%	3%	4%
>1000	5%	6%	13%	17%	18%	13%
Grand Total	100%	100%	100%	100%	100%	100%

The extent to which the annual usage drives the affordability of the EAP participant's bill burden is finally supported by the data in Table 28 below. Rather than tying the bill burden to income (or EAP Tier), this Table examines EAP bill burdens disaggregated by annual consumption. The Table shows that so long as consumption remains below 7,500 kWh per year, the average EAP bill burden remains below 5% of income. Indeed, given that average bill burdens for usage between 5,000 kWh and 7,500 kWh are only 4.7% of income, usage could be somewhat higher than 7,500 kWh and nonetheless still remain at or below 5% of income

Table 28 also confirms what was found above. A full 70% (69.8%) of EAP participants have annual consumption below 7,500 kWh. Along with that, therefore, a full 70% of EAP participants have bills burdens that are at or below 4.7% of income, well within the target range of 4% to 5% established by New Hampshire in creating the EAP.

Table 28. Percentage of Income Burdens by Annual Usage Level		
Annual Usage (kWh)	Percentage of EAP Accounts	Average Bill Burden
0-2,499	11.6%	2.1%
2,500-4,999	33.4%	3.4%
5,000-7,499	24.8%	4.7%
7,500-9,999	14.3%	6.2%
10,000-12,499	6.3%	8.0%
>12,500	9.5%	12.6%
Grand Total	100.0%	5.1%

Based on the above discussion, it is reasonable to conclude that the 750 kWh ceiling on the provision of EAP discounts does not merit a modification at this time. The 750 kWh ceiling not only addresses usage on average for EAP participants, but it addresses usage for nearly eight-of-ten EAP participants each month.

While the impacts of higher bills on those customers with patterns of higher usage should not be ignored, it would appear that the better response to this high usage is the targeting of energy efficiency toward those EAP participants. Targeting efficiency investments to these higher use customers not only has the effect of reducing bills to more affordable levels, it has the impact of providing ongoing bill reductions year-in and year-out without the need to resort to ongoing bill assistance. By this reference thereto, it is recommended that the delivery of ratepayer-funded low-income electric efficiency investments in New Hampshire take the level of EAP excess usage (that consumption exceeding 750 kWh per month, 9,000 kWh per year) into account.

Percent Discount by Tier

The second operational aspect of EAP examined in this report involves whether the percentage discounts adopted for the five EAP Tiers remain reasonable. The discussion below leads to the conclusion that, even before taking into consideration the recent electric rate hikes discussed above, modest modifications should be made to the rate discount levels.

The reasonableness of the discount levels is measured by the extent to which those discounts result in bills representing an affordable electricity burden for EAP participants. The bill discounts currently offered by EAP are set forth in Table 29 below.

Table 29. EAP Bill Discounts by EAP Tier (as of August 2022) (up to 750 kWh per month)	
Tier 2 (above 150% Federal Poverty Level)	8%
Tier 3 (126% – 150% Federal Poverty Level)	22%
Tier 4 (100% to 125% Federal Poverty Level)	36%
Tier 5 (76% to 100% Federal Poverty Level)	52%
Tier 6 (75% of Federal Poverty Level or less)	76%

On average over the total EAP population, EAP's current discount structure does a reasonably good job of reducing bills to the target affordable percentage of income (from 4% to 5%). Where the EAP's current discounts begin to falter is in the upper and lower Tiers. The data is set forth in Table 30 below. At Tier 2 (with the highest income), the percentage of income burden (4.3%) is noticeably lower than the remaining EAP Tiers. In contrast, the Tier 6 burden (7.0%) is noticeably higher than the target affordability burden.

One of the specific inquiries by the New Hampshire PUC to be addressed by this study involved the "appropriateness and feasibility of expanding existing tiers or adding one or more additional tiers." It appears the basis for this inquiry is well-founded. The data appears to indicate that there needs to be a realignment of discounts between the various Tiers in order to ensure that the resulting burdens are equal to or approaching the target burdens in New Hampshire.

Table 30. Percentage of Income Burdens by EAP Tier at Current Discount

EAP Tier	Percent of Participants	Average of Bill Burden as Percent of Income
2	29%	4.3%
3	19%	4.9%
4	15%	5.1%
5	23%	5.3%
6	13%	7.0%
Grand Total	100%	5.1%

The task of realigning the discounts amongst the Tiers is made more difficult by the increase in New Hampshire's electric rates in 2022. The State does not have the luxury simply of expanding

the discount for Tier 6 with any increase in the total cost of the program being absorbed by the current EAP budget. The electric rates hikes, even with no change in discounts, are expected to more than exhaust any budget flexibility that had previously been expected to exist. To the extent possible, therefore, the realignment of discounts considered below is considered with the expectation that to the extent possible, the net increased costs will be minimized.[14]

Three alternative discount realignments were considered for the EAP Tiers. In each Realignment Option, the kWh subject to the discount is recommended to remain as it currently exists. This recommendation was discussed in greater detail above. Three Realignment Options are presented immediately below.[15] In each Realignment Option, the discount for Tier 4 was retained at the existing level (given that it had an average burden of 5.1% without modifications to the discount level). Discounts for Tier 5 and Tier 6 were increased (in an effort to reduce the resulting burden), while discounts for Tier 2 and Tier 3 were reduced (both to bring all Tiers into closer alignment with each other, and to offset the costs of increasing discounts in the lower income Tiers).

Table 31. Results of Three Realignment Options for Modifying EAP Burdens (and existing usage ceiling of 750 kWh)

EAP Tiers	Current Discount	Realignment Option #1		Realignment Option #2		Realignment Option #3	
		New Discount	Modified Burden	New Discount	Modified Burden	New Discount	Modified Burden
2	8%	5%	4.5%	3%	4.5%	5%	4.5%
3	22%	20%	5.0%	18%	5.2%	19%	5.1%
4	36%	36%	5.1%	36%	5.1%	36%	5.1%
5	52%	54%	5.1%	54%	5.1%	54%	5.1%
6	76%	85%	5.2%	85%	5.2%	86%	5.0%
Net cost		$77,322	4.9%	$8,427[16]	5.0%	$81,112	4.9%

[14] The Net Costs are based on the impacts with the Eversource data that has been reduced by the data matching explained earlier in this report. Rather than viewing the dollar figures as exact dollar amounts, they should be viewed judgmentally to assess whether the Net Cost is nearly $0, a moderate increase, or a substantial increase. The population considered involves 6,556 Eversource EAP participants.

[15] Given the number of Tiers, there are an immense number of potential discount modifications that could be packaged as different Realignment Options. Each possibility would combine different changes in different Tiers. This discussion presents three of the Options that were considered.

[16] Note how the sharply reduced discounts for Tier 2 and Tier 3 result in a sharply reduced net cost.

Table 31 presents the results for the three Realignment Options (retaining the existing 750 kWh usage ceiling).[17] In none of the options, did a reduction in the discount result in a substantial movement in the resulting electricity burden for Tier 2 EAP participants. In Option #3, therefore, the discount was increased back to 5% (a reduction from the current 8%). The rationale was to retain a discount at a sufficiently high level to continue to attract EAP participants. Providing a discount limited to 3% raised a concern that it would not be viewed as sufficient to attract Tier 2 customers. In contrast, the Tier 6 discount was increased, first from 76% to 85% (Option #1), and then again to 86% (Option #3), in an effort to bring average Tier 6 burdens more closely in line with the other Tiers. In Option #3, also, the Tier 3 discount was increased by a slight amount to align Tier 3 burdens with the Burdens in Tier 4 through Tier 6. While the cost of Realignment Option #3 is the highest, it is not substantially more than Realignment Option #1. Moreover, Option #3 most closely matches each Tier both to the target burden of 4% to 5% and to each other.

Having considered these three Realignment Options, the sensitivity of the three Options was tested against changes in the underlying maximum usage against which the discounts would be provided. Changes in the maximum usage were not considered in order to more closely align the EAP maximum to actual consumption. The reasonableness of the maximum in that respect was considered above. Rather, changes in the maximum ceiling were reviewed to assess: (1) whether such changes would make a noticeable difference in the resulting burdens; and (2) whether such changes would make a noticeable difference in the underlying costs of the discount modifications.

Table 32. Results of Three Realignment Options for Modifying EAP Burdens (and modified maximum usage ceiling of 700 kWh)

EAP Tiers	Current Discount	Realignment Option #1A		Realignment Option #2A		Realignment Option #3A	
		New Discount	Modified Burden	New Discount	Modified Burden	New Discount	Modified Burden
2	8%	5%	4.5%	3%	4.5%	5%	4.5%
3	22%	20%	5.0%	18%	5.1%	19%	5.1%
4	36%	36%	5.1%	36%	5.1%	36%	5.1%
5	52%	54%	5.1%	54%	5.1%	54%	5.1%
6	76%	85%	5.2%	85%	5.2%	86%	5.1%
Net cost		$73,021	4.9%	$5,667	5.0%	$76,404	4.9%

[17] The net cost was calculated based on data for the 12 months ending April 2022. For each Realignment Option, a Net Cost was also calculated for the 12 months ending September 2021. Given that these figures did not result in substantively different results, only the Net Costs for the most recent 12 month period (May 2021 – April 2022) are presented.

Table 32 immediately above considers the impact of retaining the same three Realignment Options, but reducing the maximum usage ceiling from 750 kWh to 700 kWh per month. The reason to consider this reduction is to determine whether such a reduction would yield substantial cost savings without placing the achievement of affordable burdens in jeopardy. As can be seen, a comparison to the status quo maximum EAP usage shows that reducing the maximum has virtually no impact on the resulting level of electricity burdens as a percentage of income. In addition, while there is a very slight decrease in the additional program costs, the cost reduction is not at all substantial. Cost considerations do not justify a reduction in the maximum EAP usage made subject to possible modifications in the EAP discounts.

Table 33. Results of Three Realignment Options for Modifying EAP Burdens (and modified maximum usage ceiling of 800 kWh)

EAP Tiers	Current Discount	Realignment Option #1B		Realignment Option #2B		Realignment Option #3B	
		New Discount	Modified Burden	New Discount	Modified Burden	New Discount	Modified Burden
2	8%	5%	4.5%	3%	4.5%	5%	4.5%
3	22%	20%	5.0%	18%	5.2%	19%	5.1%
4	36%	36%	5.1%	36%	5.1%	36%	5.1%
5	52%	54%	5.1%	54%	5.,1%	54%	5.1%
6	76%	85%	5.1%	85%	5.1%	86%	4.9%
Net cost[18]		$81,347	4.9%	$11,201	4.9%	$85,627	4.9%

In contrast, Table 33 considers the impact of increasing the maximum EAP usage ceiling (from 750 kWh to 800 kWh). The purpose of assessing an increase in the maximum usage ceiling was to examine whether making more kWh subject to the modified discounts could improve the percentage of income burdens without substantially increasing program costs. While increasing the maximum usage from 750 to 800 kWh would further reduce the Tier 6 burden (from 5.1% to 4.9%), the change in the maximum usage ceiling did not changes the burdens in the EAP Tiers (Tiers 3, 4 and 5) where the burden exceeded 5% with which to begin. For each Realignment Option, the cost increase of increasing the maximum usage ceiling was slight.

The proposed Realignment Option #3 is recommended for the New Hampshire EAP. While the resulting burden for the highest income EAP Tier (Tier 2) remains substantially lower than the resulting burden for the other four Tiers, reducing the discount further for Tier 2 presents the

[18] The Net Costs are based on the impacts with the Eversource data that has been reduced by the data matching explained earlier in this report. Rather than viewing the dollar figures as exact dollar amounts, they should be viewed judgmentally to assess whether the Net Cost is nearly $0, a moderate increase, or a substantial increase. The population considered involves 6,556 Eversource EAP participants.

concern that the program would be insufficiently substantial to attract program participants. Moreover, even though the resulting Tier 2 burden is lower than the burden for the other four Tiers, the Tier 2 burden remains in the mid-range of the target range first identified by the New Hampshire PUC as the objective of the program. The conclusion is that while the burdens for Tier 3 through Tier 6 are at the upper range of the target burden (4% to 5%), the burden for Tier 2 is not below the target range.

Having recommended Realignment Option #3 (with the existing maximum EAP usage ceiling retained), one final inquiry is to determine not only the resulting impact on the breadth of unaffordability (i.e., what proportion of EAP participants have burden over 5%), but to determine the depth of unaffordability as well (i.e., the dollar amount by which bills exceed an affordable burden). In making this assessment, "affordable" is defined to be the top of the target range previously identified by the New Hampshire PUC (5%). Table 34 presents the data. The data shows that:

- The percentage of Tier 2 customers with a burden exceeding 5% of income increases under Option #3. This is to be expected given that the recommended Tier 2 discount is a decrease from the status quo. Despite this, the average dollar amount of Tier 2 bills remains nearly $300 less than what the dollar amount would be if it was set equal to 5% of income. The percentage of Tier 2 customers with bills exceeding 5% remains at roughly 20%.

- The percentage of Tier 3 customers with a burden exceeding 5% of income increases under Option #3. Again, given that the Tier 3 discount was decreased under Option #3, this was to be expected. Despite the increase, EAP Tier 3 customers, on average still have bills that are nearly identical to a 5% burden. Roughly 30% of Tier 3 customers have bills that exceed 5%.

- No change occurs in Tier 4. This occurs because no change is proposed in the Tier 4 discount.

- The percentage of Tier 5 customers with burdens exceeding 5% somewhat declines (from 32% to 30%). Under Realignment Option #3, this Tier 5 percentage is now nearly identical to the percentages of Tier 3 and Tier 4. Perhaps more importantly Tier 5 customers, on average, move from missing the 5% target (on average) by roughly $20 to having (on average) bills that do not exceed the 5% target.

- Finally, not surprisingly, given the magnitude of the proposed increase in the Tier 6 discount, Tier 6 experiences the greatest improvement under the recommended modifications. The percentage of Tier 6 EAP participants experiencing a bill which exceeds the 5% target declines by almost one-third, from 36% to 24%. Indeed, the

percentage of Tier 6 customers with burdens exceeding 5% is the lowest of all the Tiers (with the exception of Tier 2). Moreover, on average, Tier 6 EAP participants move from having bills that exceed the 5% target by nearly $70 to having bills that are less than the 5% target by roughly $110.

Table 34. The Breadth and Depth of Unaffordability Under Realignment Option #3 Compared to the Status Quo

EAP Tier	Sum of Whether Over Affordable (status quo)	Sum of New Whether Over Affordable (Option #3)	Average of Current discount over Affordable (status quo)	Average of New Discount Over Affordable (Option #3)
2	19%	21%	($327.12)	($290.55)
3	29%	31%	($35.05)	($1.30)
4	30%	30%	$6.21	$6.21
5	32%	30%	$17.86	($4.36)
6	36%	24%	$67.01	($109.65)
Grand Total	28%	27%	($86.18)	($98.55)

Overall, there is little change in the percentage of EAP participants as a whole who fail to achieve a bill that is equal to or less than 5% of income. The change for the population as a whole is a decline in the percentage of participants exceeding the target burden from 28% to 27%. On average, over all the entire EAP population, participants move from having bills roughly $90 less than 5% of income to having bills roughly $100 less than 5% of income.

Based on the data and discussion in this section, Realignment Option #3 is recommended as a modification in the status quo discount levels by EAP Tier.

The Number / Range of Income Tiers

The consistent presence of burdens amongst Tier 2 EAP participants that are substantially lower than the burdens faced by remaining program participants provides reason to take a closer look at some of the underlying dynamics of the Tier 2 population. The maximum income eligibility for Tier 2 customers has been established at 60% of State Median Income (SMI). A comparison of 60% of SMI to the Federal Poverty Level for households with five or fewer persons is presented in Table 35 below.

As can be seen in this Table, 60% of State Median Income (by household size) is the equivalent of a maximum EAP eligibility set at between 260% (5-person household) and 287% (1-person household) of Poverty Level in 2022. For households with from one to five member, the Poverty Level equivalent to 60% of State Median Income ranges in a relatively narrow band from 260 to nearly 290% of Federal Poverty Level.

Table 35. 60% of State Median Income and Equivalent Federal Poverty Levels by Household Size (Households with 1 – 5 members) (2022)

Household Members	150% FPL (Tier 2 Minimum)	60% SMI (Tier 2 Maximum)	100% of FPL	60% SMI (FPL Equivalent)
1	$20,385	$38,969	$13,590	287%
2	$27,465	$50,959	$18,310	278%
3	$34,545	$62,950	$23,030	273%
4	$41,625	$74,941	$27,750	270%
5	$48,705	$86,931	$32,470	260%

As is evident from the Table above, the maximum income eligibility for a Tier 2 customer is nearly two times higher than the minimum income eligibility. The difference between the minimum Tier 2 eligibility (150% Federal Poverty Level) and the maximum Tier 2 eligibility (60% SMI) narrows as household sizes become larger.

The incomes presented in the shaded column above are the ***maximum*** incomes (by household size). In contrast, the Table below shows the ***average*** income by EAP Tier. To demonstrate that there is not a substantial variation in incomes by geographic location, the average income by Community Action Agency is presented below.

Table 36. Average Income by EAP Tier and CAA

	2	3	4	5	6	Grand Total
BMCA	$35,839	$23,095	$19,111	$15,120	$9,824	$23,344
SCCA	$34,994	$22,816	$18,632	$13,499	$9,040	$20,654
SNHS	$34,968	$22,668	$18,353	$13,694	$8,621	$22,068
SWCS	$37,460	$23,975	$20,597	$16,309	$8,929	$23,601
TCCA	$34,875	$22,722	$18,151	$13,289	$8,438	$21,589
Grand Total	$35,523	$22,967	$18,822	$14,213	$8,899	$22,338

The Table confirms what would otherwise be expected from looking at the data above. While the typical difference in income between one EAP Tier and the next lower Tier is roughly $4,000 to $5,000 across the State of New Hampshire, the difference in income between Tier 3 and Tier 2 is consistently greater than $12,000. The jump in maximum income eligibility from Tier 3 to Tier 2 is a much greater jump than the jump from any of the lower EAP Tiers. It is for this reason that the electricity burdens resulting from the EAP discounts, whether the discount is the status quo discount or the Realignment Option #3 discount (recommended above), are noticeably lower than the burdens resulting from the EAP discounts in the lower income Tiers.

Table 37. Increase in Average Income from One EAP Tier to the Next Higher Tier (by Community Action Agency)				
	2 from 3	3 from 4	4 from 5	5 from 6
BMCA	$12,744	$3,984	$3,991	$5,296
SCCA	$12,178	$4,184	$5,133	$4,459
SNHS	$12,300	$4,315	$4,659	$5,073
SWCS	$13,485	$3,378	$4,288	$7,380
TCCA	$12,153	$4,571	$4,862	$4,851
Grand Total	$12,556	$4,145	$4,609	$5,314

Table 38 below shows the distribution of incomes (as a percentage of Federal Poverty Level) within Tier 2 for each Community Action Agency in the State. Again, data is disaggregated by CAA not because the CAA will have any impact on participant incomes, but rather simply to review whether there are noticeable differences that might appear geographically throughout the State. No substantive differences appear to exist based on geographic area.

The Table below needs to be read in two different ways. First, the sum of the total percentages for each CAA will equal 100%. That number (e.g., 13% for BMCA; 9% for SCCA) is the percentage of total statewide Tier 2 customers enrolled by that particular CAA. Second, the sum of the data by Poverty Level within each CAA will equal 100%.[19] For example, within BMCA, of the total number of Tier 2 EAP participants it enrolled, 1% had income at 150% of Poverty; 41% had income at between 150% and 175% of Poverty; 26% had income between 175% and 200% of Poverty, and likewise). The percentages presented for the total CAA, in other words, are subsets of the total statewide number; the percentages presented by Poverty Level are subsets of the total CAA number.

The data shows that within Tier 2, there are substantial numbers of customers in the upper ranges of Federal Poverty Level within the Tier 2 EAP participant population. The Table shows that roughly one-of-three Tier 2 participants across the State have income above 200% of the Federal Poverty Level. By CAA, we see: (1) 33% of BMCA Tier 2 participants have income above 200% of Poverty; (2) 35% of SCCA Tier 2 participants have income above 200% of Poverty; (3) 35% of SNHA Tier 2 participants have income above 200% of Poverty; (4) 36% of SWCS Tier 2 participants have income above 200% of Poverty; and (5) 34% of TCCA Tier 2 participants have income above 200% of Poverty.

[19] There may be minor variations from 100% due to rounding.

Table 38. **Percentage of Tier 2 EAP Participants by Poverty Level By Community Action Agency**

BMCA % of state	**13%**	**SCCA % of state**	**9%**
1.25-1.5[20]	1%	1.25-1.5	1%
1.5-1.75	41%	1.5-1.75	37%
1.75-2	26%	1.75-2	27%
2-2.25	18%	2-2.25	20%
2.25-2.5	9%	2.25-2.5	10%
>2.5	6%	>2.5	5%
Intra CAA total	100%	Intra CAA total	100%
SNHS % of state	**48%**	**SWCS % of state**	**17%**
1.25-1.5	<1%	1.25-1.5	2%
1.5-1.75	37%	1.5-1.75	38%
1.75-2	27%	1.75-2	24%
2-2.25	17%	2-2.25	16%
2.25-2.5	11%	2.25-2.5	11%
>2.5	7%	>2.5	9%
Intra CAA total	100%	Intra CAA total	100%
TCCA % of state	**13%**		
1.25-1.5	<1%		
1.5-1.75	39%		
1.75-2	26%		
2-2.25	15%		
2.25-2.5	9%		
>2.5	10%		
Intra CAA total	100		
State Total of all CAAs		**100%**	

The conclusion cannot necessarily be drawn from the data above that maximum income eligibility is set "too high" by allowing Tier 2 participation up to 60% of State Median Income. The assessment of energy burdens in this report found that, notwithstanding the higher Tier 2

[20] Some Tier 2 customers have income as a percentage of Poverty Level exactly equal to 150%.

incomes, and the resulting lower tier 2 average burdens, the average Tier 2 burdens remained in the mid-range of the range of affordability previously defined by the New Hampshire PUC (from 4% to 5%).

Nonetheless, Tier 2 does present its problems. At first blush, it may seem reasonable to split Tier 2 into two separate Tiers (Tier 2A with income between 150% and 200% of Poverty and Tier 2B with income exceeding 200% of Poverty up to 60% of State Median Income). The problem with that option, however, is the same problem discussed above with respect to potential modifications to the Tier 2 discount. If Tier 2 were split into two separate Tiers, a lower discount would then be offered to the new Tier 2B (200% of Poverty to 60% of SMI). However, the discount for Tier 2 has already been reduced to the point where further reductions present a genuine concern that the discount would be insufficient to attract needy participants at this income level to enroll in the program.

The recommendation is that no modification of Tier 2 occur at this time. However, and it is a big however, should the EAP Advisory Board and/or the New Hampshire PUC decide at some future date that there is a need to reduce program costs in some aspect of the program, in order to have sufficient funds to provide adequate discounts to the lower income Tiers, rather than reducing the discounts to the lower EAP Tiers, it would be recommended that the decision to increase the maximum EAP income eligibility from 200% of Poverty to 60% of State Median Income be revisited.

An EAP Arrearage Forgiveness Component

Whether or not the New Hampshire EAP should implement an arrearage forgiveness component to the EAP is largely supported by other aspects of the inquiries pursued in this Report. Perhaps the major barrier to the adoption of an arrearage forgiveness component is the financial burden placed on EAP by the increases in electricity rates implemented in the Summer of 2022. At the same time, however, these electricity price hikes are such that they will likely increase the need for arrearage forgiveness.

This conclusion flows from findings in other parts of this Report. To begin, this Report documents that the Summer of 2022 electricity price increases will have substantial adverse impacts on the bill burdens that will be experienced by EAP participants. The findings of this Report are that, even given the recommended modifications in bill discounts, including bill discounts up to 86% for the lowest income EAP participants (Tier 6), bill burdens will substantially exceed the range previously found to be affordable by the New Hampshire PUC (4% - 5%). Given the Summer 2022 electricity price increases, and the proposed modifications to bill discounts, burdens would be: (1) 10.3% (Tier 6); (2) 8.2% (Tier 5); (3) 8.0% (Tier 4); (4) 7.7% (Tier 3); and (5) 6.9% (Tier 2). Overall average burdens, given the Summer 2022 electricity price increases, would reach 8.0%.

This should be expected to have a substantial impact on the arrearages incurred by EAP participants. This Report found the level of unpaid balances is associated with the bill burdens experienced by EAP participants. The discussion of arrearages above explained that as bill burdens increase the contribution which those higher burden households make to the total level of arrears increases as well. EAP accounts with lower burdens contribute a disproportionately small portion of total arrears from the EAP participant population. While nearly 40% of all EAP accounts have bill burdens of 4% of income or less, the range of the percentage of total unpaid account balances appearing on the accounts of those low-burden EAP participants ranges from only 9% to 13%. While the accounts falling into the 4% to 8% percentage of income burden range come closer to experiencing a proportionate share of unpaid balances, even the portion of arrears appearing on these accounts as a percentage of total arrears consistently falls below the percentage of participants experiencing a bill burden falling into this range.

Only when EAP bills exceed 8% of income does the percentage of unpaid balances falling into each percentage of income burden range exceed the percentage of EAP participants experiencing these burdens. For example, while 1% of all EAP participants have bill burdens respectively in each of the ranges of 16% to 20%, 20% to 24%, and more than 24% of income, these accounts contribute 2%, 6% and 3% of the total unpaid balances.

Not only do the dollars of arrears increase with increasing burdens, the percentage of accounts in arrears dramatically increases as well. In October 2020, for example, 22% of the total unpaid EAP balances appear on EAP bills representing 12% of income or more, even though only 6% of all EAP participants have percentage of income burdens that high. Moreover, 44% of all unpaid balances appear on EAP bills representing a burden of 8% of income or more, even though only 15% of all EAP participants have percentage of income burdens that high. In contrast, while 85% of EAP participants have percentage of income burdens of less than 8%, only 55% of the unpaid EAP account balances appear on the bills of those customers.

Finally, as explained above, this Report found that at current rates and current discounts, the level of arrears amongst EAP participants is not decreasing. This Report found that while the data does not show a deterioration in either the breadth or the depth of EAP arrears over time, neither does it demonstrate a substantial improvement. Over the 19-month study period, there seems to be a not insubstantial percentage of EAP participants who persistently carry a relatively small, but noticeable, level of unpaid account balances.

The problems presented by arrearages in the EAP participant population should not be overstated. The discussion of payment patterns above found that over the 19-month study period (October 2020 – April 2022), the percentage of EAP accounts with a $0 balance remained relatively constant at roughly 60%, while the percentage of accounts with an unpaid balance remained relatively constant at roughly 30%.

Moreover, those EAP accounts with unpaid balances are not seriously in arrears. Consistently over the course of the study period, half of EAP accounts with an unpaid balance have balances that are less than $150. Roughly one-third of all EAP accounts in arrears have balances that are less than $300. If percentages were calculated based on all EAP participants (rather than on all participants in arrears), those percentages would obviously be substantially smaller.

The bottom line is that there is a population of EAP participants who have a level of ongoing unpaid balances that will not likely be paid in the absence of an arrearage forgiveness program. The presence of such levels of arrearages place not only the unpaid balances in jeopardy, but also place the payment of bills for current service in jeopardy. As New Hampshire undertakes it deliberations on how to respond to the adverse bill impacts associated with the Summer 2022 electricity price hikes, it should also undertake those deliberations needed to make arrearage forgiveness a component of the EAP and seek the necessary funding to enable that.

Eleven Essential Findings

1. New Hampshire's decision to limit EAP discounts to the first 750 kWh of monthly consumption by program participants reveals no need for a modification at this point in time. The 750 kWh ceiling on usage allows the vast majority of EAP participants to participate each month while having their entire consumption subject to the EAP discount. During the 19-month study period, roughly 10% to 15% of EAP participants have consumption in excess of 800 kWh.

2. This is not to say that the usage of EAP participants does not exhibit some seasonal fluctuation. There is a noticeable decrease in the percentage of EAP participants with usage at or below the program ceiling and a corresponding increase in the percentage of EAP participants with consumption at or above 800 kWh primarily during the cold weather months. Even at the 70th percentile of usage, usage falls below 750 kWh in each of the 19 study months. Usage only begins to exceed the 750 kWh ceiling when it reaches the 80th percentile of all actual usage amounts.

3. Seasonal fluctuations in usage are less problematic than one might first assume. New Hampshire's EAP is not designed to assess affordability on a ***monthly*** basis. Instead, the design of the program is to achieve, on average, an electric bill as an affordable percentage of income (defined to be between 4% and 5%) on an ***annual*** basis. If the annual consumption exceeds 9,000 kWh (750/month x 12 months), the monthly consumption ceiling is being exceeded in a sufficient number of months to push the average monthly use above the 750 kWh ceiling. This does not occur.

4. It would be inappropriate to isolate individual months apart from a 12-month period as a whole and to conclude that seasonal variations in usage during those isolated months present a threat to the achievement of affordable annual burdens because of a usage

ceiling on benefits. The data shows that so long as consumption remains below 7,500 kWh per year, the average EAP bill burden remains below 5% of income. A full 70% (69.8%) of EAP participants have annual consumption below 7,500 kWh. Along with that, therefore, a full 70% of EAP participants have bills burdens that are at or below 4.7% of income, well within the target range of 4% to 5% established by New Hampshire in creating the EAP.

5. Even before taking into consideration the recent electric rate hikes, modest modifications should be made to the rate discount levels. The recommended burdens are as follows: Tier 2: 5%; Tier 3: 19%; Tier 4: 36%; Tier 5: 54%; and Tier 6: 86%.

6. The reasonableness of the discount levels is measured by the extent to which those discounts result in bills representing an affordable electricity burden for EAP participants. On average over the total EAP population, EAP's current discount structure does a reasonably good job of reducing bills to the target affordable percentage of income (from 4% to 5%). Where the EAP's current discounts begin to falter is in the upper and lower Tiers. At Tier 2 (with the highest income), however, the percentage of income burden (4.3%) is noticeably lower than the remaining EAP Tiers. In contrast, the Tier 6 burden (7.0%) discount is noticeably higher than the target affordability burden.

7. The proposed Realignment Option #3 is recommended for the New Hampshire EAP. While the resulting burden for the highest income EAP Tier (Tier 2) remains substantially lower than the resulting burden for the other four Tiers, reducing the discount further for Tier 2 presents the concern that the program would be insufficiently substantial to attract program participants. Moreover, even though the resulting Tier 2 burden is lower than the burden for the other four Tiers, the Tier 2 burden remains in the mid-range of the target range first identified by the New Hampshire PUC as the objective of the program. The conclusion is that while the burdens for Tier 3 through Tier 6 are at the upper range of the target burden (4% to 5%), the burden for Tier 2 is not below the target range.

8. The consistent presence of burdens amongst Tier 2 EAP participants that are substantially lower than the burdens faced by remaining program participants provides reason to take a closer look at some of the underlying dynamics of the Tier 2 population. The maximum income eligibility for Tier 2 customers has been established at 60% of State Median Income (SMI). 60% of State Median Income (by household size) is the equivalent of a maximum EAP eligibility set at between 260% (5-person household) and 287% (1-person household) of Poverty Level in 2022.

9. The maximum income eligibility for a Tier 2 customer is nearly two times higher than the minimum income eligibility. The difference between the minimum Tier 2 eligibility

(150% Federal Poverty Level) and the maximum Tier 2 eligibility (60% SMI) narrows as household sizes become larger.

10. The conclusion cannot necessarily be drawn from the data above that maximum income eligibility is set "too high" by allowing Tier 2 participation up to 60% of State Median Income. Nonetheless, Tier 2 does present its problems. It may, at first, seem reasonable to split Tier 2 into two separate Tiers (Tier 2A with income between 150% and 200% of Poverty and Tier 2B with income exceeding 200% of Poverty up to 60% of State Median Income). The problem with that option, however, is that if Tier 2 were split into two separate Tiers, a lower discount would then be offered to the new Tier 2B (200% of Poverty to 60% of SMI). However, the discount for Tier 2 has already been reduced to the point where further reductions present a genuine concern that the discount would be insufficient to attract needy participants at this income level to enroll in the program.

11. There is a population of EAP participants who have a level of ongoing unpaid balances that will not likely be paid in the absence of an arrearage forgiveness program. The presence of such levels of arrearages place not only the unpaid balances in jeopardy, but also place the payment of bills for current service in jeopardy. As New Hampshire undertakes it deliberations on how to respond to the adverse bill impacts associated with the Summer 2022 electricity price hikes, it should also undertake those deliberations needed to make arrearage forgiveness a component of the EAP.

Part 5. Lessons from New England low-income discounts.

The New Hampshire EAP compares quite favorably to other New England low-income discount programs in the essential elements of its design and operation. The New Hampshire program was compared to low-income discounts provided in Maine,[21] Vermont, Massachusetts, Rhode Island, and Connecticut.[22] Other states along the Eastern Seaboard are referenced as relevant to draw particular comparisons. Comparisons below are generally limited to electric programs.

Structure of the Discount

With the exception of Maine Public Service Company, which operates a straight percentage of income program,[23] New England's utilities generally provide across-the-board discounts to their income-eligible customers. In Massachusetts, for example, discounts are equal to 30% of the total bill. While Vermont does not yet have a statewide program, Green Mountain Power, Vermont's largest electric utility, offers a 25% monthly rate discount.

[21] Maine is in the middle of a proceeding considering the redesign of its low-income discount. Because any discussion of the existing Maine program may soon be out-of-date, it is set aside.

[22] Connecticut is the only New England state in which utilities do not offer low-income rate discounts. The review of Connecticut was thus limited to the state's Arrearage Management Program.

[23] A straight percentage of income program is a program wherein the utility caps a customer's payment at an affordable percentage of income. Each bill is individually determined based on the customer's actual income and household size.

Rhode Island is the one New England state where a utility offers a nod toward the type of "tiering" that is the hallmark of New Hampshire's EAP. In Rhode Island, Narragansett Electric Company provides a 25% discount on total bills for income-qualified customers. However, if customers participate in particular programs generally associated with *very* low incomes (Medicaid, Rhode Island Works Program, Public Assistance), the utility provides a 30% discount. In this fashion, the utility offers greater assistance to customers with the lowest income.

The Maryland Electric Universal Service Program (EUSP) is perhaps the program with the design that most closely reflects New Hampshire's EAP. In Maryland, EUSP provides a payment to program participants equal to a percentage discount off average electric bills (calculated on a per-utility basis). The percentage discount, which is tiered by Poverty Level – Maryland has five tiers-—is designed to reduce bills (on average) to an affordable percentage of income. The equation Maryland reports using to determine its EUSP benefit level is as follows:

Annual kWh usage x Average Cost per kWh x Utility Index[24] *x poverty level percentage = Benefit*

Maryland states that EUSP's purpose is "to make electric bills affordable for those families within specified income levels" within the constricts of its annual budget.

Maximum Benefits

No other New England state provides a discount based on a maximum usage in the way that New Hampshire does. Multiple Pennsylvania utilities, however, each of which operates its own "Customer Assistance Program" (CAP), includes various "CAP credit ceilings" as a "cost control" measure. The general approach to CAP credit ceilings in Pennsylvania is to set a dollar amount which the annual discount provided by the utility will not exceed. The CAP credit ceilings are tiered by income level in order to prevent programs from discriminating against the lowest income customers.[25]

Income Eligibility

[24] The Utility Index adjusts the benefit level to account for differences in utility rates amongst the state's various electric utilities.

[25] The lowest income customers are responsible for paying the lowest percentage of their income toward their home energy bills. When combined with their lower incomes with which to begin, this results in the lowest income customers receiving higher discounts in dollar terms. Without a tiering of the maximum CAP credit ceiling, therefore, the lowest income customers would exhaust their available credits more quickly. Accordingly, CAP credit ceilings are increased as incomes (as a percentage of Poverty Level) decrease.

There is considerable variability in in the maximum income eligibility for New England's low-income discounts. Massachusetts caps income eligibility at 200% of the Federal Poverty Level. Vermont's Green Mountain Power provides its discounts to those households with income at or below 150% of Poverty. Pennsylvania, too, defines "low-income" to include households with income at or below 150% of Poverty. Connecticut, which offers an Arrearage Management Program (but not a rate discount), has set its income eligibility at 60% of State Median Income.

Rhode Island's Narragansett Electric has taken a somewhat different approach. Rather than setting a dollar level of income eligibility, Narragansett Electric provides an electric discount if the customer receives any of the following: (1) Food Stamps (Supplemental Nutrition Assistance Program, SNAP); (2) Home Energy Assistance; or (3) Supplemental Security Income (SSI).[26] In Rhode Island, LIHEAP eligibility is set at 60% of State Median Income.

Maine is an outlier in that it limits its low-income discount population to customers who are actually enrolled in LIHEAP.

Program Intake

Nearly every New England low-income discount program relies on the Community Action Agencies serving the respective states to enroll customers (including intake and income verification). In Massachusetts, customers may also enroll directly through the utility.

Massachusetts, however, has an expanded approach to determining eligibility for its low-income discount. In Massachusetts, enrollment in the discount program(s) is automatic once a customer provides evidence of enrollment (such as a program ID or a program acceptance letter) in one of a dozen income-qualified programs: LIHEAP; Emergency Aid to Elders, Disabled, and Children (EAEDC); Food Stamps (SNAP); Head Start; MassHealth (Medicaid); National School Lunch Program; Public Housing; School Breakfast Program; Supplemental Security Income (SSI); Transitional Aid to Families with Dependent Children (TAFDC); various Veterans' benefits programs; or Women, Infants and Children (WIC).

While the Massachusetts enrollment is expansive, care must be taken to consider the trade-offs for this "automatic enrollment" process. Massachusetts can rely on this type of eligibility determination only because the program requires utilities to know only ***whether*** a customer is low-income. Given that every customer receives the ***same*** level of discount, knowing the actual

[26] As noted above, a somewhat higher benefit is provided if a customer participates in Medicaid, Rhode Island Works Program, or Public Assistance.

income of the customer (or the actual Poverty Level) is not necessary, since it is not used in any determination.

Vermont's largest gas utility has adopted an approach akin to that used in Massachusetts. The utility offers an across-the-board 20% discount to customers with income at or below 185% of Federal Poverty Level. Customers enroll through an application form processed through the State Department for Children and Families. On that application form, a customer checks-off whether they participate in a range of programs that would also income-qualify them for the natural gas discount. Once the Department confirms that participation, it notifies the utility, which then enrolls the customer in the discount program. While program enrollment is thus widely available, program benefits are a yes/no toggle. A customer is either eligible or is not eligible. No differentiation in benefits is provided based on income.

The Maine PUC is currently considering a modification of the Massachusetts/Vermont approach. In Maine, AARP has proposed that the State PUC deem households who have one or more members receiving Medicaid benefits to be eligible, by reason of that participation, for that state's low-income discounts.[27] While Medicaid participation would, unto itself, qualify someone for the program(s) of the state's utilities, enrollment would not be automatic. Instead, the state agency administering Medicaid would implement an annual mailing to each household with a Medicaid recipient. If a household returns an affirmative declaration of the design to receive the utility discount, the state would deem the household eligible, and notify the relevant utility. The utility would then enroll that customer in its respective discount program. The utilities who would participate in this Medicaid enrollment process do not differentiate the benefits which they provide based on income or Poverty Level.

Arrearage Management

Nearly every New England state has an arrearage management program (AMP) for income-qualified customers. Massachusetts provides arrearage forgiveness for customers who have an arrearage of at least $300 and 60-days in past due. If payments are made on-time, credits will be provided for a portion of your arrears up to a maximum of $12,000 per year. Rhode Island's program mirrors that offered in Massachusetts. Customers who are enrolled in the low-income discount program may be eligible for arrearage forgiveness for unpaid balances that are at least $300 and 60-days past-due. For each on-time payment, a portion of the unpaid balance is forgiven up to a maximum of $1,500 per year.

[27] This eligibility determination would not apply to Maine Pubic Service, the utility operating a percentage of income plan, for reasons discussed relative to Massachusetts and Vermont.

Connecticut, which does not operate a discount, does offer a "payment matching" program. Eligibility is set at 60% of State Median Income. Customers enroll either through a community action agency or directly through a utility. Customers who are enrolled in other means-tested programs are automatically eligible for the Connecticut program. The Eversource program provides two matching grants to participating customers. The first grant covers November 1 through May 1 of each program year. If by May 1, a customer has received a LIHEAP grant (and assigned it to Eversource), and made all required payments during that time period, the utility will provide a grant matching all payments made. The second grant covers May 1 through October 31. If by the end of that period, a customer has made all required payments, the utility will provide a second matching grant. In both cases, the grant is not to exceed reducing the outstanding balance to $0.

In Vermont, the Green Mountain Power arrearage program is more generous. In Vermont, a customer of Green Mountain power will have their pre-existing past-due balance reduced to $0 upon their enrollment in the utility's rate discount program.

Part 6. Demographic characteristics in New Hampshire.

The discussion below considers the extent to which New Hampshire's EAP reflects certain demographic characteristics of the State of New Hampshire. In particular, the inquiry examines the following factors: (1) income as a percent of Poverty Level (using EAP Tiers as a surrogate for Poverty Level); (2) the receipt of federal Supplemental Nutrition Assistance Program (SNAP) (Food Stamp) benefits; (3) the presence of aging persons (over age 75) in a household; and (4) the presence of very young children (under age 5/6) in a household.

For each demographic characteristic, after establishing a statewide baseline based on U.S. Census data, the inquiry seeks to examine aspects of the geographic distribution of EAP participants exhibiting each characteristic. The "geography" of EAP is examined first by looking at the distribution of EAP participants disaggregated by the electric utility which serves them; the geography is examined second by examining the Community Action Agency which serves them.

Poverty Level

New Hampshire's EAP somewhat underserves the lowest population in the State through its EAP Tier 6. According to the most recently published Census Data for the State of New Hampshire, 26% of the state's population living with income below 200% of Poverty Level in fact live with income less than 75% of Poverty.[28] In contrast, only 17% of EAP participants have income in Tier 6, the Tier serving the population with that same income level.[29]

If the bottom two EAP Tiers are combined, however, EAP aligns much more closely with the Census data. While 39% of New Hampshire's population living below 200% of Poverty have incomes below 100% of Poverty, 35% of the EAP population fall within Tier 5 and Tier 6 combined. The remaining EAP Tiers reasonably reflect the proportion of population in the corresponding Poverty Levels.[30]

Table 39. EAP Participants (active as of June 2022) by EAP Tier and Poverty Range (pct below 200%)

EAP Tier	Pct Each Tier of Total	Federal Poverty Level	Pct Each Range of Total <200% FPL[31]
2 (151% FPL – 60% SMI)	33%	150 - 199% FPL	34%
3 (126 – 150% FPL	15%	125 - 149% FPL	13%
4 (101 – 125% FPL	17%	100 - 124% FPL	14%
5 (76 – 100% FPL)	18%	75 - 99% FPL	13%
6 (<75% FPL)	17%	Below 75% FPL	26%
Total EAP	100%	Total below 200% FPL	100%

The distribution of EAP participants by Poverty Level does not substantially vary by utility company. Table 40, for example, demonstrates that 32% of all Eversource EAP participants, and

[28] Note the percentage refers to the proportion of population with income below 200% of Poverty, not the proportion of the *total* population.

[29] Census data does not take into account those households who do not have a direct customer relationship with an electric utility. Some households, for example, may have electric bills included in their rent.

[30] Remember, Tier 2 is not precisely comparable to the income range of 150% to 200% of Poverty. Tier 2 extends up to 60% of State Median Income, which is well above 200% of Poverty in New Hampshire

[31] American Community Survey, 1-year data (2019), Table B17002. Note that in order to achieve Census data using this income disaggregation, 2019 data was required. Other Census data used in this report involves reported 2020 data. 2020 data on the distribution of income by the multiple levels of Poverty relied upon in this Table has not been publicly released.

34% of all NHEC EAP participants, fall within EAP Tier 2. The Table shows that while 18% of all EAP participants statewide fall into Tier 5, the percentage of Tier 5 customers by utility varies in a very narrow range from 17% to 19%. The widest variation between utilities occurs with Tier 6, and even that variation is quite narrow. While 17% of all EAP participants fall within Tier 6, the percentage of Tier 6 customers by utility ranges from 18% to 15%.[32]

Table 40. Distribution of EAP Participants by EAP Tier by Utility

EAP Tier	Unitil	NHEC	Liberty	Eversource	Grand Total
2	37%	34%	35%	32%	33%
3	15%	15%	15%	15%	15%
4	16%	17%	17%	17%	17%
5	17%	19%	17%	18%	18%
6	16%	15%	16%	18%	17%
Grand Total	100%	100%	100%	100%	100%

Even when the geography of EAP participation is viewed by CAA service territory rather than by utility, the conclusions remain fundamentally the same. Each CAA enrolls EAP participants in reasonably consistent proportions.

Table 41. Distribution of EAP Participants by EAP Tier and by CAA

EAP Tier	BMCA	SCCA	SNHS	SWCS	TCCA	Grand Total
2	35%	27%	34%	33%	31%	33%
3	15%	14%	15%	14%	15%	15%
4	16%	19%	16%	16%	18%	17%
5	17%	23%	18%	17%	20%	18%
6	17%	18%	17%	20%	16%	17%
Grand Total	100%	100%	100%	100%	100%	100%

When viewed from one of the most fundamental demographic characteristic relevant to providing rate affordability assistance –the income of participants—New Hampshire's EAP

[32] Note how Table 40 differs from Table 7 discussed above. Table 7 shows that 79% of all Tier 6 customers in New Hampshire are Eversource customers. In contrast, Table 40 shows that 18% of all Eversource customers fall within Tier 6.

appears to be performing reasonably well. With the exception of Tier 6, the distribution of participants in the program as a whole reasonably reflects the distribution of population throughout the State as a whole. Moreover, the distribution of participants both by utility and by CAA reasonably reflects the distribution of participants in the program as a whole.

Public Assistance / Food Stamp Recipients

The New Hampshire EAP appears to be underserving the State's low-income population that is otherwise receiving public assistance through the state's cash assistance or Food Stamp (SNAP) programs. Census data shows that 40,069 New Hampshire households (just over 7% of *all* New Hampshire households) have received cash public assistance or Food Stamps within the immediately preceding year. In contrast, the State's EAP data shows that 4,648 (18.8% of all EAP recipients) report having received Food Stamps. In comparing those numbers, note that while the Census data extends to the receipt of Food Stamps *or cash public assistance*, the EAP data is restricted to the receipt of Food Stamps. Nonetheless, the data does seem to indicate a lack of EAP participation by participants in other similar public assistance programs.

With cash public assistance or Food Stamps/SNAP (ACS B19058) (5-Year 2020)		
	Households	Percent
New Hampshire	40,069	7.4%
EAP	4,648	18.8%

As with other data in this Chapter, the comparison of EAP to Census data is not exact. While the Census data on the receipt of Food Stamps and/or cash public assistance reports information for the population as a whole, the comparison to EAP data is restricted to the program participants (which, by definition, has a lower income than the population as a whole).

Table 42 shows the distribution of EAP participants by utility company and EAP Tier by whether or not the participants received Food Stamps. Several observations can be gleaned from this data. Overall, as indicated immediately above, nearly one-in-five EAP participants in New Hampshire (19%). Within that population, Unitil, the New Hampshire Electric Cooperative and Liberty appear to serve geographic areas with a lower percentage of Food Stamp recipients. At each EAP Tier, the percentage of EAP participants served by these utilities is lower than the percentage of EAP participants served by Eversource. Unitil and Eversource serve geographic areas with a high percentage of Tier 6 EAP participants who participate in the Food Stamp program. From 40% to 45% of the Tier 6 customers of these two utilities participate in Food Stamps, noticeably higher than the Tier 6 participation rate of the other New Hampshire utilities.

Table 42. EAP Participants by Whether or Not Received Food Stamps (SNAP)
(by Utility and by CAA)

EAP Tier and Utility	Yes
Tier 2	7%
Unitil	6%
NHEC	6%
Liberty	4%
Eversource	8%
Tier 3	15%
Unitil	14%
NHEC	13%
Liberty	8%
Eversource	15%
Tier 4	20%
Unitil	21%
NHEC	14%
Liberty	14%
Eversource	21%
Tier 5	19%
Unitil	14%
NHEC	19%
Liberty	13%
Eversource	19%
Tier 6	43%
Unitil	38%
NHEC	37%
Liberty	30%
Eversource	45%
Statewide total	19%

EAP Tier and CAA	Yes
Tier 2	7%
BMCA	7%
SCCA	11%
SNHS	7%
SWCS	7%
TCCA	5%
Tier 3	15%
BMCA	18%
SCCA	20%
SNHS	13%
SWCS	11%
TCCA	13%
Tier 4	20%
BMCA	24%
SCCA	23%
SNHS	21%
SWCS	15%
TCCA	19%
Tier 5	19%
BMCA	19%
SCCA	22%
SNHS	19%
SWCS	19%
TCCA	15%
Tier 6	43%
BMCA	45%
SCCA	49%
SNHS	46%
SWCS	38%
TCCA	37%
Grand Total	19%

As might be expected, the highest Food Stamp participation rate is found at the lowest EAP Tier. While 19% of the total EAP population reports receiving Food Stamps, 43% of Tier 6 participants receive Food Stamps. If anything, the percentage of Tier 2 customers receiving Food Stamps (7%) is somewhat surprising given that the maximum eligibility for Food Stamps is set generally at a level lower than EAP's maximum.[33]

An examination of the geographic distribution of EAP participants by whether they also report receiving Food Stamps is also seen by looking at the receipt of Food Stamps by EAP Tier for each Community Action Agency in the Table above. The CAA data confirms that the receipt of Food Stamp falls primarily in the lowest income range of EAP recipients. While more than 40% of Tier 6 EAP participants also receive Food Stamps, between 15% (Tier 3) and 20% (Tier 4 and Tier 5) participants do so. The distribution of Food Stamp recipients across the State is relatively uniform, with SCCA enrolling a somewhat higher percentage of Food Stamp recipients across all EAP Tiers and TCCA enrolling a somewhat lower percentage.

Age over 75

EAP enrolls a smaller proportion of older households than exist in the State population overall. While persons age 75 and older comprise 10.0% of New Hampshire's population with income less than 200% of Poverty Level, households with at least one person age 75 or older comprise only 7.2% of the EAP participant population. Note the difference in the populations being compared here. Census data is presented in terms of "people" (i.e., population). EAP data is presented in terms of households.

Table 43. Census Data: Population Over Age 75
(Income less than 200% of Poverty) (ACS Table B17024)

	Over Age 75
State of New Hampshire (population)	10.0%
EAP (households with at least one member)	7.2%

Table 44 presents a distribution of EAP participants with aging household members both by EAP Tier and by geography (utility, CAA). The Table demonstrates that as incomes decline, the presence of older household members declines as well. While 10% of Tier 3, and 14% of Tier 2, EAP participants have at least one household member over age 75, only 2% of Tier 5, and only 1% of Tier 6, EAP participants do.

[33] Unlike EAP, of course, Food Stamp income eligibility is not directly comparable to EAP income eligibility. The federal Food Stamp program has various "income disregards" dictated by federal law which are not incorporated in the state income eligibility for EAP. A Food Stamp recipient with income at "100% of Poverty," in other words, may not have the same income as an EAP participant with income at "100% of Poverty" even if all other things about the two households are identical.

Table 44. EAP Participants by Presence or Not of Household Member Age 75 or Older (by Utility and by CAA)

EAP Tier and Utility	Yes	EAP Tier and CAA	Yes
Tier 2	14%	Tier 2	14%
Unitil	14%	BMCA	16%
NHEC	18%	SCCA	10%
Liberty	15%	SNHS	11%
Eversource	13%	SWCS	14%
		TCCA	18%
Tier 3	**10%**	Tier 3	**10%**
Unitil	9%	BMCA	10%
NHEC	15%	SCCA	8%
Liberty	10%	SNHS	8%
Eversource	9%	SWCS	10%
		TCCA	14%
Tier 4	**5%**	Tier 4	**5%**
Unitil	4%	BMCA	5%
NHEC	6%	SCCA	5%
Liberty	6%	SNHS	4%
Eversource	5%	SWCS	5%
		TCCA	8%
Tier 5	**2%**	Tier 5	**2%**
Unitil	1%	BMCA	2%
NHEC	5%	SCCA	2%
Liberty	<1%	SNHS	2%
Eversource	2%	SWCS	2%
		TCCA	3%
Tier 6	**1%**	Tier 6	**1%**
Unitil	1%	BMCA	1%
NHEC	1%	SCCA	1%
Liberty	1%	SNHS	1%
Eversource	1%	SWCS	1%
		TCCA	1%
Statewide total	**7%**	Grand Total	**7%**

This is a somewhat sharper difference than exists in the Census data of aging population. While 14% of New Hampshire's persons over age 75 live with income less than 200% of Poverty, only 1% of New Hampshire's aging population lives with income less than 75% of Poverty. The pattern of fewer aging persons living at the lowest income levels remains the same for the State

as a whole, in other words, but the degree of difference between the population as a whole and the EAP participant population is greater.

No substantive difference appears geographically in the enrollment of households with aging members.

Age Under 5

EAP appears to be of particular assistance to households with very young children. While children under the age of 6 comprise 7.5% of New Hampshire's population with income less than 200% of Poverty, households with children under age 5 comprise nearly one-quarter of the EAP participant population. In beginning the review, it is again important to note the differences between the Census data and the EAP data. The Census data is reported in terms of total persons (i.e., population) while EAP data is reported in terms of households having at least one very young child. Moreover, the Census reports data for persons age 6 and below, while the EAP data reports data for households with children age 5 and below. To the extent that these differences exist, the comparisons between the Census data and the EAP data should be qualitatively adjusted.

Table 45. Population of Children Under Age 5 / 6
(income less than 200% of Poverty)

	Under Age 5 / 6
State of New Hampshire (population under age 6)	7.5%
EAP (households with children under age 5)	24.7%

The most striking pattern that emerges from an examination of the more detailed distribution of EAP participants with very young children is the extent to which households with young children appear in the lowest income Tier. While 24% of the total EAP households have children under the age of 5 years old, more than 40% of the children in Tier 6 do. In contrast, only roughly 20% of the EAP participants in Tiers 3, 4 and 5 have very young children.

Table 46. EAP Participants by Presence or Not of Household Member Age 5 / 6 or Younger (by Utility and by CAA)

EAP Tier and Utility	Yes	EAP Tier and CAA	Yes
Tier 2	24%	Tier 2	24%
Unitil	26%	BMCA	23%
NHEC	22%	SCCA	22%
Liberty	19%	SNHS	24%
Eversource	25%	SWCS	27%
		TCCA	24%
Tier 3	20%	Tier 3	20%
Unitil	19%	BMCA	20%
NHEC	18%	SCCA	21%
Liberty	16%	SNHS	20%
Eversource	21%	SWCS	24%
		TCCA	17%
Tier 4	19%	Tier 4	19%
Unitil	19%	BMCA	21%
NHEC	15%	SCCA	18%
Liberty	18%	SNHS	19%
Eversource	19%	SWCS	22%
		TCCA	15%
Tier 5	18%	Tier 5	18%
Unitil	13%	BMCA	16%
NHEC	16%	SCCA	18%
Liberty	14%	SNHS	18%
Eversource	19%	SWCS	25%
		TCCA	14%
Tier 6	42%	Tier 6	42%
Unitil	37%	BMCA	42%
NHEC	40%	SCCA	49%
Liberty	31%	SNHS	43%
Eversource	43%	SWCS	42%
		TCCA	35%
Statewide total	25%	Grand Total	25%

There appears to be no particular geographic pattern to the presence of very young children by income throughout New Hampshire. Unitil and Liberty appear to have somewhat lower percentages of very young children in Tier 6, while Eversource appears to have somewhat higher percentages of very young children in both the highest income (Tier 2) and lowest income (Tier 6) EAP Tiers. However, no particular pattern of distribution presents itself.

Overall, the data presented above leads to the conclusion that EAP is appropriately serving New Hampshire households with very young children. This conclusion applies not only to the State as a whole, but to the distribution of households with very young children as distributed throughout the State.

Tenure (including subsidized housing)

Almost exactly half of New Hampshire's EAP participants are homeowners and renters with major differences appearing across the State. Of the total number of renters, just under half live in subsidized rental units (28% non-subsidized; 22% subsidized rental units).

Rural areas of the state appear to have a higher proportion of low-income homeowners. More than seven-of-ten EAP participants served by New Hampshire Electric Cooperative are homeowners, contrasted to 50% for the State as a whole. In contrast, Unitil and Eversource have both a lower percentage of homeowners and a higher percentage of EAP participants living in subsidized housing units than other utilities.

Table 47. EAP Participants by Tenure By Utility

Utility	Own	Rent	Subsidized Rent	Grand Total
Unitil	48%	28%	22%	100%
NHEC	72%	19%	9%	100%
Liberty	59%	23%	18%	100%
Eversource	48%	29%	23%	100%
Grand Total	50%	28%	22%	100%

Not surprisingly, homeowner status sharply increases as EAP incomes increase. Nearly two-thirds of EAP Tier 2 participants are homeowners, with fewer than one-in-ten living in subsidized rental units. In contrast, for EAP Tier 6 participants, roughly one-third are homeowners, non-subsidized renters, and subsidized renters respectively. The percentage of homeowners increases at each level of increased income for EAP participants (with Tier 5 and Tier 6 being the same, at 35%).

Table 48. Homeowner Status by Owner/Renter Status

EAP Tier	Own	Rent	Subsidized Rent	Grand Total
2	65%	28%	7%	100%
3	57%	26%	16%	100%
4	47%	29%	24%	100%
5	35%	24%	40%	100%
6	35%	32%	33%	100%
Grand Total	50%	28%	22%	100%

The homeowner/renter status of EAP participants with household members over the age of 75 almost exactly reflected the status of the EAP population as a whole. While 50% of all EAP participants are homeowners, 48% of EAP participant households with aging members are homeowners. An even higher proportion of younger EAP participants, however, are homeowners. Households that do *not* have an older household member are homeowners 80% of the time.

In contrast, households with very young children are more likely to be renters than homeowners. Fewer than half (39%) of EAP participants with very young children are homeowners, compared to 54% of the households without very young children. Far more EAP participant households with very young children live in *non*-subsidized rental units (40%).

Table 49. Tenure by Selected Ages of Population

Presence of HH Member Over Age 75	Own	Rent	Subsidized Rent	Grand Total
No	80%	15%	5%	100%
Yes	48%	29%	23%	100%
Grand Total	50%	28%	22%	100%
Presence of Child Under Age 5	**Own**	**Rent**	**Subsidized Rent**	**Grand Total**
No	54%	24%	22%	100%
Yes	39%	40%	21%	100%
Grant Total	50%	28%	22%	100%

As with most of the Census data considered in this Report, the available Census data is not exactly comparable to the EAP data. It is cited here to allow readers to draw comparisons after qualitatively taking the differences into account. The Census data examined homeowner/renter

status by whether a family has income above or below the Federal Poverty Level. The Census data does not extend the data at different ranges of Poverty, and does not disaggregate data above Poverty. Moreover, the Census data is limited to families rather than examining households. By definition, a "family" has more than one person, with the persons related by blood or marriage. There cannot, under this Census definition of family, be a one-person "family."

Table 50. Families with Income Below Poverty and at or Above Poverty
By Tenure (New Hampshire) (2020)

	# Families	Percentage
Total below poverty	16,050	100%
HO below Poverty	6,321	39%
Renter below poverty	9,729	61%
Total at or above	335,395	100%
HO at or above	278,210	83%
Renter at or above	57,185	17%

With the distinctions identified above having been drawn, the Census reports that substantially more families living with income below the Poverty Level are renters rather than homeowners. In contrast, an overwhelming majority of families with incomes at or above Poverty in New Hampshire are homeowners. While 40% of the below-Poverty families are homeowners, nearly 85% of above-Poverty families are.

To provide more insight into the relationship between income and homeowner status, Table 51 provides statewide data on what percentage of occupied housing units in New Hampshire are occupied by owners and renters, by whether the occupants have income above or below the Poverty Level. The data shows that for all occupied housing units in the State as a whole:

- 48% of homeowners have annual income at or above $100,000. In contrast, only 5% of homeowners have income less than $20,000.
- 21% of renters have income less than $20,000. In contrast, 15% of renters have income at or above $100,000.

Clearly, income has a more substantial impact on limiting ownership status than it does on promoting renter status.

Table 51. Income of Homeowners and Renters
(occupied housing units) (New Hampshire) (2020)

	Estimate	Percent
Total:	539,116	
Owner occupied:	383,839	100%
Less than $5,000	4,594	1%
$5,000 to $9,999	2,792	1%
$10,000 to $14,999	5,736	1%
$15,000 to $19,999	8,038	2%
$20,000 to $24,999	9,047	2%
$25,000 to $34,999	21,319	6%
$35,000 to $49,999	31,686	8%
$50,000 to $74,999	62,085	16%
$75,000 to $99,999	56,991	15%
$100,000 to $149,999	87,211	23%
$150,000 or more	94,340	25%
Renter occupied:	155,277	100%
Less than $5,000	5,695	4%
$5,000 to $9,999	6,705	4%
$10,000 to $14,999	10,337	7%
$15,000 to $19,999	9,739	6%
$20,000 to $24,999	9,207	6%
$25,000 to $34,999	19,197	12%
$35,000 to $49,999	23,096	15%
$50,000 to $74,999	29,961	19%
$75,000 to $99,999	19,068	12%
$100,000 to $149,999	14,829	10%
$150,000 or more	7,443	5%

It would appear to be fair to conclude based on a review of the EAP and the Census data discussed above that EAP serves a disproportionate number of homeowners.[34]

Seven Essential Findings

1. Census data and EAP data does not exactly match with respect to the populations studied. With Poverty Level, for example, Census data is presented in terms of population (i.e., persons) while EAP data is presented in terms of households. With tenure, Census data is presented in terms of families rather than households. With very young children, Census data examines children under age 5, while EAP data is presented in terms of children under age 6. While policy conclusions can nonetheless still be reached, care must be taken to note the differences in data.

2. New Hampshire's EAP somewhat underserves the lowest population in the State through its EAP Tier 6. According to the most recently published Census Data for the State of New Hampshire, 26% of the state's population living with income below 200% of Poverty Level in fact live with income less than 75% of Poverty. In contrast, only 17% of EAP participants have income in Tier 6, the Tier serving the population with that same income level.

3. The New Hampshire EAP appears to be underserving the State's low-income population that is otherwise receiving public assistance through the state's cash assistance or Food Stamp (SNAP) programs. Census data shows that 40,069 New Hampshire households (just over 7% of ***all*** New Hampshire households) have received cash public assistance or Food Stamps within the immediately preceding year. In contrast, the State's EAP data shows that 4,648 (18.8% of all EAP recipients) report having received Food Stamps.

4. EAP enrolls a smaller proportion of older households than exist in the State population overall. While persons age 75 and older comprise 10.0% of New Hampshire's population with income less than 200% of Poverty Level, households with at least one person age 75 or older comprise only 7.2% of the EAP participant population.

5. EAP appears to be of particular assistance to households with very young children. While children under the age of 6 comprise 7.5% of New Hampshire's population with income less than 200% of Poverty, households with children under age 5 comprise nearly one-quarter of the EAP participant population. The most striking pattern that emerges from an examination of the more detailed distribution of EAP participants with very young children is the extent to which households with young children appear in the

[34] There is no opportunity to review in detail ***why*** this may be so. It may, however, be attributable, at least in part, to the fact that renters are less likely to be direct customers of an electric utility. If a renter pays for electricity as an undesignated part of rent, that renter would not be eligible for EAP.

lowest income Tier. While 25% of the total EAP households have children under the age of 5 years old, 40% of the children in Tier 6 do. In contrast, only roughly 20% of the EAP participants in Tiers 3, 4 and 5 have very young children.

6. Almost exactly half of New Hampshire's EAP participants are homeowners and renters with major differences appearing across the State. Of the total number of renters, just under half live in subsidized rental units (28% non-subsidized; 22% subsidized rental units). Rural areas of the state appear to have a higher proportion of low-income homeowners. More than seven-of-ten EAP participants served by New Hampshire Electric Cooperative are homeowners, contrasted to 50% for the State as a whole.

7. The homeowner/renter status of EAP participants with household members over the age of 75 almost exactly reflected the status of the EAP population as a whole. In contrast, households with very young children are more likely to be renters than homeowners. Fewer than half (39%) of EAP participants with very young children are homeowners, compared to 54% of the households without very young children.

Part 7. Impact of 2022 Electric Rate Increases.

As introduced in Table 23 above, New Hampshire's electric utilities implemented substantial increases in their supply rates in the Summer of 2022. The rate changes included:

- An increase for Liberty from $0.11119/kWh to $0.22228, the $0.11109 representing a 100% hike;
- An increase for Eversource from $0.10669 to $0.22566, the $0.11897 representing a 112% hike;
- An increase for NHEC from $0.0962 to $0.1698, the $0.07360 representing a 77% hike.

The Adverse Impacts on EAP

The adverse impact of these rate hikes on New Hampshire's EAP cannot be overstated. Determining the impact of New Hampshire's electric price increases involved a three-step process. First, all consumption less than 750 kWh was multiplied by the increase in rates reduced by the existing discount levels. Second, all consumption in excess of 750 kWh was multiplied by the full rate hike. Finally, those bill increases were summed with the existing discounted bills and divided by each participant's household income to determine the bill as a percentage of income at the new rates.

Table 52 below shows the impact on bill burdens given the 2022 rate hikes reduced by the existing discount levels. The lowest income EAP participants would experience a bill burden of more than 11% of income after taking the existing discounts into account. Tier 5 customers would receive bills equal to more than 8% of income, while Tier 3 and Tier 4 customers would receive bills representing burdens of 7.7% and 8.0% of income respectively. Even Tier 2 participants, given their higher incomes (as discussed above) would receive bills that, on average, would be well above the upper limit of the target affordability burden established by the New Hampshire PUC.

Table 52. Average Percent of Income Burden
at Existing and Recommended Discounts and Summer of 2022 Rates

EAP Tier	New Percentage of Income Burdens At Summer 2022 Rates	
	Existing Discount	Realignment Option #3 Discount
2	6.8%	6.9%
3	7.7%	7.7%
4	8.0%	8.0%
5	8.2%	8.2%
6	11.2%	10.3%
Grand Total	8.1%	8.0%

Table 52 further demonstrates that modifying the discounts to the extent recommended earlier in this report does not provide substantive relief from the increased electric prices. The average electric burden for the EAP population as a whole remains at 8%. Only Tier 6 customers (the lowest income) would experience a noticeable improvement in their percentage of income burden (decreasing from 11.2% at the existing discount to 10.3% at the recommended discount). Even then, the burden would be more than twice as high as the upper limit of the range of affordability previously adopted by the New Hampshire PUC.

In fact, it is not possible to achieve an affordable electric burden for New Hampshire's EAP customers with any reasonable level of discount. Table 53 below considers a set of discounts that appear to be clearly outside the range of reasonableness. The discounts presented in the Table begin with a 45% bill reduction for Tier 2 customers (an increasing from the existing 8%); a 65% discount for Tier 3 (an increase from the existing 22%), and discounts of 85%, 90% and 95% for Tiers 4, 5 and 6 respectively.

Even given these extraordinary bill reductions, New Hampshire's electric bill burdens for the EAP population as a whole, on average, would be 6.6%. Bill burdens for the four highest EAP

tiers would remain at or somewhat above 6%, while electric bill burdens for the lowest income population would remain above in excess of 9%. Even extraordinary discounts, in other words, could not achieve the affordability objective of New Hampshire's EAP given the electric price increases that were implemented in the Summer of 2022.

Table 53. New Percentage of Income Burdens at New Rates And Illustrative High Discounts

EAP Tier	Illustrative High Discount	New Percentage of Income Burdens At New Rates and Illustrative High Discount
2	45%	5.9%
3	65%	6.3%
4	85%	6.1%
5	90%	6.4%
6	95%	9.5%
Grand Total		6.6%

The electric rate increases implemented by New Hampshire's electric utilities represent a real threat to the continuing viability of the State's EAP. The price increases represent an imposition of bill levels on New Hampshire's low-income population that were not anticipated when the EAP was first designed, implemented and funded.

The total cost impact to the EAP can reasonably be expected to be even greater than simply the cost of increased rates to existing EAP participants. Given the substantial impact on bill affordability represented by the rate hikes, it would not be unreasonable to expect a noticeable increase in the number of low-income customers who seek relief through the program. This increase in participation also would occur while the state continues to re-emerge from the economic crisis created the COVID-19 health pandemic discussed earlier in this Report. A combination of increased prices and increased participation portends a financial impact that is not ascertainable to any degree of certitude at the present time.

Five Essential Findings

1. New Hampshire's electric utilities implemented substantial increases in their supply rates in the Summer of 2022.

2. The adverse impact of these rate hikes on New Hampshire's EAP cannot be overstated. The lowest income EAP participants would experience a bill burden of more than 11% of income after taking the existing discounts into account. Tier 5 customers would receive bills equal to more than 8% of income, while Tier 3 and Tier 4 customers would receive bills representing burdens of 7.7% and 8.0% of income respectively. Even Tier 2

participants, given their higher incomes (as discussed above) would receive bills that, on average, would be well above the upper limit of the target affordability burden established by the New Hampshire PUC.

3. Modifying the discounts to the extent recommended earlier in this report does not provide substantive relief from the increased electric prices. The average electric burden for the EAP population as a whole remains at 8%. Only Tier 6 customers (the lowest income) would experience a noticeable improvement in their percentage of income burden (decreasing from 11.2% at the existing discount to 10.3% at the recommended discount). Even then, the burden would be more than twice as high as the upper limit of the range of affordability previously adopted by the New Hampshire PUC.

4. In fact, it is not possible to achieve an affordable electric burden for New Hampshire's EAP customers with any reasonable level of discount.

5. The electric rate increases implemented by New Hampshire's electric utilities represent a real threat to the continuing viability of the State's EAP. The price increases represent an imposition of bill levels on New Hampshire's low-income population that were not anticipated when the EAP was first designed, implemented and funded.

Summary of Essential Findings

Based on the data and discussion presented throughout this Report, the following findings are made with respect to the New Hampshire Electric Assistance Program (EAP):

An Overview of the EAP Population

1. The EAP serves a substantial population in the lowest income ranges of New Hampshire's residential population. More than three-of-ten EAP participants have income in the lowest EAP Tiers (Tier 5 and Tier 6) (0 – 100% of Poverty Level).

2. 27% of all participants in Tier 6 have income of less than $5,000. 65% (nearly two-of-three) Tier 6 households have annual income less than $10,000.

3. The average household size for Tier 6 is noticeably larger than for the other EAP tiers. The combined impacts of the *very* low income, and the noticeably larger household size would indicate that households in Tier 6 actually live in the lower ranges of 0 to 75% of Poverty.

4. The extent to which each of New Hampshire's electric utilities "contributes" to the EAP participant population by EAP tier is relative constant between Tiers. Eversource serves roughly three-fourths (77%) of the total number of EAP participants. No Tier substantively varies from that overall percentage, with the lowest (Tier 6) being 76% and the highest (Tier 2) being 80%.

5. The largest percentage of EAP participants fall into Tier 2. This is not particularly surprising. Tier 2 ranges from 150% of Poverty level to 60% of State Median Income. In New Hampshire, 60% of State Median Income for a two-person household was $47,386 in 2021, while 60% of State Median Income for a three-person household was $58,536. The Federal Poverty Levels that are the equivalent to 60% of State Median Income are 259% (2-person household) and 254% (3-person household).

A consideration of the ongoing Impacts of COVID

1. COVID-19 continues to have an ongoing adverse impact on the extent to which New Hampshire residents have a difficulty in paying for usual household expenses. For the population as a whole, New Hampshire residents are having more difficulty today in paying their usual household expenses than they have had since the advent of COVID-19. The combined percentage of households finding it either "not at all difficult" or only "a little difficult" has fallen to the lowest level since those early weeks of COVID-19.

2. In contrast to those residents having no difficulty or little difficulty, the percentage of New Hampshire residents having difficulty paying their usual household expenses, while it tipped upward for one period (Week 21), then declined. In 2022, however, those difficulties have been clearly trending upward, both for those are finding it "very difficult" to pay their usual household expenses and those who report finding it either "somewhat difficult" or "very difficult."

3. The difficulty which New Hampshire's low-income population is facing in paying for usual household expenses is higher today than it has been since the advent of the COVID-19 pandemic. Nearly four-of-ten persons with income less than $25,000 reports having had a "very difficult" time paying their usual household expenses "in the last seven days." A full 70% of this lowest income population (i.e. annual income below $25,000) reports having either a "very difficult" or a "somewhat difficult" time paying their bills in mid-2022.

4. New Hampshire's aging population appears to be faring better in their ability to pay their usual household expenses. Substantially fewer persons aged 65 or older report finding it "very difficult" to pay their bills. Overall, the pattern of difficulties for the population age 65 or higher is noticeably different from the patterns that appear for the population as a whole or for the lower income population.

5. Nearly one-in-two (48%) New Hampshire residents with children had difficulty in paying their usual household expenses in the middle of 2022 (Week 47 of the Census PULSE

Survey). That is the highest percentage since the PULSE Survey began to track payment difficulties in 2020. More than two times more residents with children (48%), than those without (23%), had either a "somewhat difficult" or "very difficult" time paying their usual household expenses in Week 47.

EAP participant payment patterns

1. New Hampshire's EAP participants routinely make complete payments on their electricity bills. Over the entire set of data, including two complete winter heating seasons (2020 – 2021, 2021 – 2022), only 30% of EAP participants had an unpaid arrearage balance on their monthly bill.

2. The existence of unpaid arrearage balances in the EAP population does not have a noticeable seasonal variation. Over the 19-month study period (October 2020 – April 2022), the percentage of EAP accounts with a $0 balance remained relatively constant at roughly 60%, while the percentage of accounts with an unpaid balance remained relatively constant at roughly 30%.

3. EAP accounts with unpaid balances are not seriously in arrears. Consistently over the course of the study period, half of EAP accounts with an unpaid balance have balances that are less than $150.

4. While the data above does not show a deterioration in either the breadth or the depth of EAP arrears over time, neither does it demonstrate a substantial improvement. Over the 19-month study period, there seems to be a not insubstantial percentage of EAP participants who persistently carry a relatively small, but noticeable, level of unpaid account balances.

5. There is cause for concern with a relatively small, but not insubstantial, group of EAP participants. This group includes the roughly 10% of EAP participants who consistently carry unpaid balances of more than $1,000. Half of those (5%) are accounts with unpaid balances exceeding $2,000. The accounts with balances of more than $2,000 are, in fact, ***substantially*** "more than" $2,000. The average balances for these accounts are consistently between $5,500 and $6,000.

6. One final element of concern about these accounts with arrears exceeding $2,000 is the lack of impact of the availability of large grants to help retire utility arrears through the federal Emergency Rental Assistance Program (ERAP). Despite the receipt of these grants, however, both the breadth of high arrears and the depth of high arrears within

New Hampshire's EAP population has remained relatively constant, if not somewhat worse, in recent months.

7. EAP participants appear to have four distinct regimes of arrearage balances. The first range includes EAP participants with percentage of income burdens of 4% of income or less. These customers tend to have arrearage balances of well below $100 in each month of the study period. The group of EAP participants with percentage of income burdens of between 4% and 8% of income have somewhat higher unpaid balances, with a third grouping encompassing those participants with burdens between 8% of income and 20% of income. When burdens exceed 20% of income, the resulting average unpaid balance substantially increases to reflect the higher burden.

8. As bill burdens increase the contribution that that those higher burden households make to the total level of arrears increases as well. While nearly 40% of all EAP accounts have bill burdens of 4% of income or less, the total unpaid account balances appearing on the accounts of those low-burden EAP participants ranges from only 9% to 13%. In contrast, EAP participants with higher burdens have a higher proportion of arrears. In October 2020, for example, 22% of the total unpaid EAP balances appear on EAP bills representing bill burdens of 12% of income or more, even though only 6% of all EAP participants have percentage of income burdens that high. Moreover, 44% of all unpaid balances appear on bills of EAP participants with a bill burden of 8% of income or more, even though only 15% of all EAP participants have percentage of income burdens that high.

9. There is a noticeable increase in the number of big payments made on customer accounts beginning particularly in the Fall of 2021. Eversource nearly doubled (81% increase) the number of payments of more than $250 it received in October through December 2021 as compared to the same months in 2020. NHEC increased the number of payments over $250 in October through December 2021 by more than 500% relative to the number it received in October through December 2020. These high payments are likely driven by COVID-related federal assistance, which will *not* be available in a post-COVID environment.

EAP program elements

1. New Hampshire's decision to limit EAP discounts to the first 750 kWh of monthly consumption by program participants reveals no need for a modification at this point in time. The 750 kWh ceiling on usage allows the vast majority of EAP participants to participate each month while having their entire consumption subject to the EAP

discount. During the 19-month study period, roughly 10% to 15% of EAP participants have consumption in excess of 800 kWh.

2. This is not to say that the usage of EAP participants does not exhibit some seasonal fluctuation. There is a noticeable decrease in the percentage of EAP participants with usage at or below the program ceiling and a corresponding increase in the percentage of EAP participants with consumption at or above 800 kWh. Even at the 70th percentile of usage, usage falls below 750 kWh in each of the 19 study months. Usage only begins to exceed the 750 kWh ceiling when it reaches the 80th percentile of all actual usage amounts. These high payments are likely driven by COVID-related federal assistance, which will ***not*** be available in a post-COVID environment.

3. Seasonal fluctuations in usage are less problematic than one might first assume. New Hampshire's EAP is not designed to assess affordability on a ***monthly*** basis. Instead, the design of the program is to achieve, on average, an electric bill as an affordable percentage of income (defined to be between 4% and 5%) on an ***annual*** basis. If the annual consumption exceeds 9,000 kWh (750/month x 12 months), the monthly consumption ceiling is being exceeded in a sufficient number of months to push the average monthly use above the 750 kWh ceiling. This does not occur.

4. It would be inappropriate to isolate individual months apart from a 12-month period as a whole and to conclude that seasonal variations in usage during those isolated months present a threat to the achievement of affordable annual burdens because of a usage ceiling on benefits. The data shows that so long as consumption remains below 7,500 kWh per year, the average EAP bill burden remains below 5% of income. A full 70% (69.8%) of EAP participants have annual consumption below 7,500 kWh. Along with that, therefore, a full 70% of EAP participants have bills burdens that are at or below 4.7% of income, well within the target range of 4% to 5% established by New Hampshire in creating the EAP.

5. Even before taking into consideration the recent electric rate hikes, modest modifications should be made to the rate discount levels. The recommended burdens are as follows: Tier 2: 5%; Tier 3: 19%; Tier 4: 36%; Tier 5: 54%; and Tier 6: 86%.

6. The reasonableness of the discount levels is measured by the extent to which those discounts result in bills representing an affordable electricity burden for EAP participants. On average over the total EAP population, EAP's current discount structure does a reasonably good job of reducing bills to the target affordable percentage of income (from 4% to 5%). Where the EAP's current discounts begin to falter is in the upper and lower Tiers. At Tier 2 (with the highest income), however, the percentage of income burden

(4.3%) is noticeably lower than the remaining EAP Tiers. In contrast, the Tier 6 burden (7.0%) discount is noticeably higher than the target affordability burden.

7. The proposed Realignment Option #3 is recommended for the New Hampshire EAP. While the resulting burden for the highest income EAP Tier (Tier 2) remains substantially lower than the resulting burden for the other four Tiers, reducing the discount further for Tier 2 presents the concern that the program would be insufficiently substantial to attract program participants. Moreover, even though the resulting Tier 2 burden is lower than the burden for the other four Tiers, the Tier 2 burden remains in the mid-range of the target range first identified by the New Hampshire PUC as the objective of the program. The conclusion is that while the burdens for Tier 3 through Tier 6 are at the upper range of the target burden (4% to 5%), the burden for Tier 2 is not below the target range.

8. The consistent presence of burdens amongst Tier 2 EAP participants that are substantially lower than the burdens faced by remaining program participants provides reason to take a closer look at some of the underlying dynamics of the Tier 2 population. The maximum income eligibility for Tier 2 customers has been established at 60% of State Median Income (SMI). 60% of State Median Income (by household size) is the equivalent of a maximum EAP eligibility set at between 260% (5-person household) and 287% (1-person household) of Poverty Level in 2022.

9. The maximum income eligibility for a Tier 2 customer is nearly two times higher than the minimum income eligibility. The difference between the minimum Tier 2 eligibility (150% Federal Poverty Level) and the maximum Tier 2 eligibility (60% SMI) narrows as household sizes become larger.

10. The conclusion cannot necessarily be drawn from the data above that maximum income eligibility is set "too high" by allowing Tier 2 participation up to 60% of State Median Income. Nonetheless, Tier 2 does present its problems. It may, at first, seem reasonable to split Tier 2 into two separate Tiers (Tier 2A with income between 150% and 200% of Poverty and Tier 2B with income exceeding 200% of Poverty up to 60% of State Median Income). The problem with that option, however, is that if Tier 2 were split into two separate Tiers, a lower discount would then be offered to the new Tier 2B (200% of Poverty to 60% of SMI). However, the discount for Tier 2 has already been reduced to the point where further reductions present a genuine concern that the discount would be insufficient to attract needy participants at this income level to enroll in the program.

11. There is a population of EAP participants who have a level of ongoing unpaid balances that will not likely be paid in the absence of an arrearage forgiveness program. The

presence of such levels of arrearages place not only the unpaid balances in jeopardy, but also place the payment of bills for current service in jeopardy. As New Hampshire undertakes it deliberations on how to respond to the adverse bill impacts associated with the Summer 2022 electricity price hikes, it should also undertake those deliberations needed to make arrearage forgiveness a component of the EAP.

EAP participant demographics

1. Census data and EAP data does not exactly match with respect to the populations studied. With Poverty Level, for example, Census data is presented in terms of population (i.e., persons) while EAP data is presented in terms of households. With tenure, Census data is presented in terms of families rather than households. With very young children, Census data examines children under age 5, while EAP data is presented in terms of children under age 6. While policy conclusions can nonetheless still be reached, care must be taken to note the differences in data.

2. New Hampshire's EAP somewhat underserves the lowest population in the State through its EAP Tier 6. According to the most recently published Census Data for the State of New Hampshire, 26% of the state's population living with income below 200% of Poverty Level in fact live with income less than 75% of Poverty. In contrast, only 17% of EAP participants have income in Tier 6, the Tier serving the population with that same income level.

3. The New Hampshire EAP appears to be underserving the State's low-income population that is otherwise receiving public assistance through the state's cash assistance or Food Stamp (SNAP) programs. Census data shows that 40,069 New Hampshire households (just over 7% of ***all*** New Hampshire households) have received cash public assistance or Food Stamps within the immediately preceding year. In contrast, the State's EAP data shows that 4,648 (18.8% of all EAP recipients) report having received Food Stamps.

4. EAP enrolls a smaller proportion of older households than exist in the State population overall. While persons age 75 and older comprise 10.0% of New Hampshire's population with income less than 200% of Poverty Level, households with at least one person age 75 or older comprise only 7.2% of the EAP participant population.

5. EAP appears to be of particular assistance to households with very young children. While children under the age of 6 comprise 7.5% of New Hampshire's population with income less than 200% of Poverty, households with children under age 5 comprise nearly one-quarter of the EAP participant population. The most striking pattern that emerges from an examination of the more detailed distribution of EAP participants with very

young children is the extent to which households with young children appear in the lowest income Tier. While 25% of the total EAP households have children under the age of 5 years old, 40% of the children in Tier 6 do. In contrast, only roughly 20% of the EAP participants in Tiers 3, 4 and 5 have very young children.

6. Almost exactly half of New Hampshire's EAP participants are homeowners and renters with major differences appearing across the State. Of the total number of renters, just under half live in subsidized rental units (28% non-subsidized; 22% subsidized rental units). Rural areas of the state appear to have a higher proportion of low-income homeowners. More than seven-of-ten EAP participants served by New Hampshire Electric Cooperative are homeowners, contrasted to 50% for the State as a whole.

7. The homeowner/renter status of EAP participants with household members over the age of 75 almost exactly reflected the status of the EAP population as a whole. In contrast, households with very young children are more likely to be renters than homeowners. Fewer than half (39%) of EAP participants with very young children are homeowners, compared to 54% of the households without very young children.

Impact of 2022 electric rate increases

1. New Hampshire's electric utilities implemented substantial increases in their supply rates in the Summer of 2022.

2. The adverse impact of these rate hikes on New Hampshire's EAP cannot be overstated. The lowest income EAP participants would experience a bill burden of more than 11% of income after taking the existing discounts into account. Tier 5 customers would receive bills equal to more than 8% of income, while Tier 3 and Tier 4 customers would receive bills representing burdens of 7.7% and 8.0% of income respectively. Even Tier 2 participants, given their higher incomes (as discussed above) would receive bills that, on average, would be well above the upper limit of the target affordability burden established by the New Hampshire PUC.

3. Modifying the discounts to the extent recommended earlier in this report does not provide substantive relief from the increased electric prices. The average electric burden for the EAP population as a whole remains at 8%. Only Tier 6 customers (the lowest income) would experience a noticeable improvement in their percentage of income burden (decreasing from 11.2% at the existing discount to 10.3% at the recommended discount). Even then, the burden would be more than twice as high as the upper limit of the range of affordability previously adopted by the New Hampshire PUC.

4. In fact, it is not possible to achieve an affordable electric burden for New Hampshire's EAP customers with any reasonable level of discount.

5. The electric rate increases implemented by New Hampshire's electric utilities represent a real threat to the continuing viability of the State's EAP. The price increases represent an imposition of bill levels on New Hampshire's low-income population that were not anticipated when the EAP was first designed, implemented and funded.

Summary of Recommendations

Based on the data and discussion presented in this Report, the recommendations set forth below are made with respect to the New Hampshire Electricity Assistance Program (EAP). What is striking about the conclusions that flow from this review, however, is that the New Hampshire EAP is a fundamentally sound program. While there are recommendations advanced below to make some modifications to the EAP, none of these modifications address the fundamental design and operation of the program.

Recommendation #1:

The New Hampshire EAP should retain the 750 limit on the usage which the EAP discount(s) are applied against.

The maximum usage limit of 750 kWh reasonably covers the electricity that is consumed by EAP participants. Average monthly consumption is well below the 750 kWh limit. The EAP participants who consumer in excess of the 750 kWh limit are those consuming at the 80th percentile (80% consume less, while 20% consume more).

Moreover, even consumption exceeding 750 kWh in a given month does not necessarily indicate that New Hampshire's affordability targets (4% - 5%) are being exceeded. Whether or not the affordability targets are being exceeded is driven by ***annual*** consumption, not by consumption in individual months. Even within those EAP participants who may occasionally exceed the 750

kWh monthly limit do not routinely exceed the annual limit so as to push those participants over the affordability target.

Recommendation #2:

The New Hampshire EAP should identify participants with seasonal usage exceeding 1,000 kWh or with annual usage exceeding 9,000 kWh and refer those participants to the State's low-income energy efficiency program.

Notwithstanding the discussion in support of Recommendation #1, there is a reasonably limited population that has seasonal consumption which is noticeably higher than consumption in the remainder of the year. This consumption is primarily in cold weather months, but may be in hot weather months as well.

Whether or not this high consumption pushes an EAP participant's bill above New Hampshire's affordability target, this consumption means that customers are being billed for some portion of their usage that is subject to no EAP discount. Receiving a non-discounted bill will increase the electricity burden which the customer is being asked to pay, thus reducing the likelihood that the bill will be paid.

In addition, customers with usage exceeding 750 kWh are being paid the maximum discount possible (up to and including 750 kWh). A reduction in usage to a level below 750 kWh would thus reduce the overall total cost of the EAP program. Targeting too many participants, however, would be no targeting at all since it would provide no meaningful decision rule to include some EAP participants while excluding others from the intended targeting.

Defining "high consumption" is a task involving a policy judgment. However, defining high consumption as including monthly consumption in excess of 1,000 kWh or annual consumption in excess of 9,000 kWh, would appear to both: (1) identify those EAP participants in need of efficiency improvements; and (2) limit the population of targeted high use EAP participants to a level that would be achievable.

Recommendation #3:

The discounts offered through the New Hampshire EAP's five Tiers should be modified to provide greater assistance to the two lowest income Tiers (Tier 5, Tier 6) and lesser assistance to the two highest income Tiers (Tier 3, Tier 2). The recommended modified discounts are as follows:

EAP Tier	Proposed Discount
Tier 2	5%
Tier 3	19%
Tier 4	36%
Tier 5	54%
Tier 6	86%

The program design element that distinguishes New Hampshire from other low-income discount programs provided in New England states is that New Hampshire's discounts are tiered in order to achieve, on average, an affordable percentage of income burden once the discount is applied. Rather than providing an across-the-board discount, which provides the same percentage discount to every participant irrespective of the income or usage of the participant, the New Hampshire EAP is targeted based upon the affordability outcome.

A review of the percentage of income burdens that are experienced given the discounts that were previously adopted by the New Hampshire EAP reveals that, while the program as a whole results in burdens (on average) within the State's affordability targets, the burdens experienced by the respective Tiers have diverged from each other, with some Tiers exceeding the State's affordability target.

While modifications were required in the discounts, the modifications were constrained by two factors. First, overall, the modifications were sought to be as revenue neutral as possible. That meant that increases in the discounts for the lower-income Tiers would be offset (somewhat) by decreases in the discounts for the higher income Tiers. Second, discounts in the higher income Tiers needed to be sufficiently high to continue to attract EAP participants. Discounts could not be so low as to render them insufficient for income-eligible customers to want to enroll.

The existing and proposed discounts, and the corresponding percentage of income burdens, for each Tier are set forth below:

EAP Tier	Existing		Recommended	
	Discount	Burden	Discount	Burden
2	8%	4.3%	5%	4.5%
3	22%	4.9%	19%	5.1%
4	36%	5.1%	36%	5.1%
5	52%	5.3%	54%	5.1%
6	76%	7.0%	86%	5.0%
Program-wide	---	5.1%	---	4.9%

Recommendation #4:

The New Hampshire EAP should retain its five existing income Tiers.

The five existing income Tiers within the New Hampshire EAP work reasonably well in distributing EAP benefits. In particular, no changes are merited in Tier 3 through Tier 5. The one Tier that might present some concern is Tier 2, which is the Tier with the highest income. When New Hampshire modified its maximum income eligibility to increase that maximum from 200% of Poverty to 60% of State Median Income, the State also retained the discounts provided in that highest income Tier. Accordingly, Tier 2 has a very broad income range.

The definition of Tier 2, however, is constrained by the same policy concerns as constrain the definition of the appropriate discount. If Tier 2 is split in half, for example (Tier 2A: 150% to 200% of Poverty; Tier 2B: 200% of Poverty or more), the most appropriate discount for Tier 2A would be the 5% recommended immediately above (Recommendation #3). The corresponding discount for the new Tier 2B, therefore, would be lower than 5%. Defining a Tier with a discount that low raises the concern that the discount is insufficient to be perceived as a meaningful reduction on a participant's electricity bill.

A division of Tier 2 might be appropriate if the State decides its needs to reduce the overall cost of the EAP. Should that decision be made, it would be more appropriate to reduce the maximum income eligibility for Tier 2 to 200% of Poverty in lieu of reducing discounts for the lower income Tiers.

Reducing maximum income eligibility is *not* recommended based on this Report. As shown in the discussion of Recommendation #3, even with maximum incomes set at 60% of State Median Income, the resulting burden with a 5% discount is in the mid-range of the affordability target set

by the State. While the burden in Tier 2 is lower than the burdens in the other Tiers, it is *not* lower than the bottom of the range set by the affordability target. Moreover, it should be borne in mind that, at present, the income-eligibility for the LIHEAP program and the EAP program are the same. If the maximum income eligibility for EAP was reduced, New Hampshire's Community Action Agencies would be required to make separate determinations about income even though households would apply using a joint application.

Recommendation #5:

The New Hampshire EAP should seek added EAP funding to incorporate an Arrearage Management Program (AMP) into its program design.

While New Hampshire's EAP does not appear to have adequate funding to incorporate an Arrearage Management Program (AMP) into its program design at this time, the need for such a program cannot be questioned.

There is a not insubstantial percentage of EAP participants who persistently carry a relatively small, but noticeable, level of unpaid account balances. The percentage of accounts with an unpaid balance has remained relatively constant over the past two years at roughly 30%.

As bill burdens increase the contribution which those higher burden households make to the total level of arrears increases as well. EAP accounts with lower burdens contribute a disproportionately small portion of total arrears from the EAP participant population. While nearly 40% of all EAP accounts have bill burdens of 4% of income or less, for example, the range of the percentage of total unpaid account balances appearing on the accounts of those low-burden EAP participants ranges from only 9% to 13%. In contrast, while 1% of all EAP participants have bill burdens respectively in each of the ranges of 16% to 20%, 20% to 24%, and more than 24% of income, these accounts contribute 2%, 6% and 3% of the total unpaid balances.

Overall, those EAP accounts with unpaid balances are not seriously in arrears. Consistently over the course of the study period, half of EAP accounts with an unpaid balance have balances that are less than $150. Roughly one-third of all EAP accounts in arrears have balances that are less than $300.

At current rates and current discounts, the level of arrears amongst EAP participants is not decreasing. This Report found that while the data does not show a deterioration in either the breadth or the depth of EAP arrears over time, neither does it demonstrate a substantial improvement.

The bottom line is that there is a population of EAP participants who have a level of ongoing unpaid balances that will not likely be paid in the absence of an arrearage forgiveness program. The presence of such levels of arrearages place not only the unpaid balances in jeopardy, but also place the payment of bills for current service in jeopardy. The program cost of an AMP can be mitigated by establishing a minimum (and maximum) level of arrears that would be subject to the program. As New Hampshire undertakes it deliberations on how to respond to the adverse bill impacts associated with the Summer 2022 electricity price hikes, it should also undertake those deliberations needed to make arrearage forgiveness a component of the EAP.

Recommendation #6:

New Hampshire's EAP should seek the aid of the New Hampshire Department of Health and Human Services (DHHS) to enroll participants in the Supplemental Nutrition Assistance Program (SNAP) as well as the State's various Cash Assistance programs in EAP.

New Hampshire's lowest income families with children are amongst the State's residents who have been hardest hit by the COVID-19 health pandemic. Data developed by the U.S. Census Bureau through the Bureau's periodic PULSE Survey reveals that, as recently as mid-August 2022, families with children have a substantially greater difficulty in paying their "usual household expenses" than do families without children.

Moreover, a comparison of EAP participant data to Census data on the percentage of households with very young children in New Hampshire indicates that families with very young children are under-served by the New Hampshire EAP.

In New Hampshire, the gross income limit for SNAP, which is administered by the state Department of Health and Human Services (DHHS), is 185% of Poverty Level, which is less than the EAP income limit for EAP (60% of State Median Income). Accordingly, if a household receives SNAP, by definition, that household is ***also*** income-qualified for EAP. New Hampshire's EAP administrators should initiate discussions with the State DHHS to determine the feasibility of identifying Cash Assistance recipients who are electricity customers. To the extent that these recipients can be identified, they should be automatically enrolled in EAP in Tier 2. Once actual income is verified, the household could be moved to the appropriate EAP Tier.

The New Hampshire DHHS also operates the State's "Cash Assistance" programs. The amount of Cash Assistance that is provided in New Hampshire depends on the family's income,

resources and living situation. However, it is tied to 60% of the Federal Poverty Level.[35] A family of three, for example, with no income, may receive up to $1,086 per month.

New Hampshire's EAP administrators should initiate discussions with the State DHHS to determine the feasibility of identifying Cash Assistance recipients who are electricity customers. To the extent that these recipients can be identified, they should be automatically enrolled in EAP in Tier 6. The maximum grants provided by Cash Assistance would appear to qualify Cash Assistance recipients for the Tier 6 benefits.

This notion of information sharing is not new. Since 2019, DHHS has been working to address the "Cliff Effect" in New Hampshire. The Cliff Effect "is a term that describes the experience of individuals and/or families receiving public benefits where new or increased income results in a reduction or loss of public benefits, and the increased income does not fully compensate for, or exceed, the loss of public benefits. For the individual and/or family, the result is less public benefits and an increase in out-of-pocket expenses, thereby eliminating any financial gain from the new or increased income. As a result of the cliff effect, the individual and/or family is worse off financially."[36]

To help address the Cliff Effect, New Hampshire's DHHS has recently taken steps to share information about SNAP with the CAAs in order to facilitate LIHEAP enrollment. A recent (July 25, 2022) DHHS "progress report" on the agency's efforts to address the Cliff Effect stated: "Enrollment of SNAP participants in LIHEAP has been low; in partnership with the CAPs, the Department has created a data sharing agreement; so that when a household becomes eligible for SNAP, the CAP agency is notified (with participant consent) and then the CAP agency will contact the participant for enrollment."[37] This data sharing agreement is expected to be operational in October 2022.

[35] Note that this program differs from programs that may tie eligibility to 60% of State Median Income.

[36] NH DHHS (2019). "Helping Business Thrive and Families Prosper," available at https://www.dhhs.nh.gov/solving-benefits-cliff-effect (last accessed September 24 2022).

[37] DHHS (July 25, 2022). SFY 2022 Progress Report, available at https://www.dhhs.nh.gov/sites/g/files/ehbemt476/files/documents2/cliff-effect-progress-report-07252022.pdf (last accessed September 24, 2022).

Recommendation #7:

New Hampshire's EAP should seek expanded assistance in identifying and enrolling income-qualified customers into EAP. Assistance from the Department of Health and Human Services (DHHS) in identifying Medicaid recipient households, and with local Public Housing Authorities in identifying public housing residents, would be of priority importance.

According to New Hampshire's EAP Advisory Board, few EAP participants enroll in the program except through the State's administration of the federal Low-Income Home Energy Assistance Program (LIHEAP). Other discrete low-income populations, however, could be served as well. For example, the state Department of Health and Human Services (DHHS) administers Medicaid in New Hampshire. While Medicaid recipients would not have sufficiently low incomes to automatically enroll them in the appropriate EAP Tier to reflect their incomes, an annual contact by DHHS inviting Medicaid recipients to apply for EAP would unquestionably reach a substantial low-income population, whether or not that population enrolled in LIHEAP.

According to the most recent data from the Kaiser Family Foundation (KFF), a substantial proportion of New Hampshire's Medicaid recipients would be eligible for EAP. KFF reports[38] that the maximum income eligibility for Medicaid in New Hampshire (2019) was: (1) 201% of Poverty for pregnant women; (2) 138% of Poverty for parents; (3) 138% of Poverty for childless adults; (4) 74% of Poverty for seniors and people with disabilities; and (5) 323% of Poverty for children.[39] As can be seen, therefore, while DHHS assistance could be sought with respect to outreach, Medicaid recipients would still need to apply at a local Community Action Agency, be found eligible for EAP, and be assigned the appropriate EAP Tier.

[38] Henry J. Kaiser Family Foundation (October 2019). Medicaid in New Hampshire, available at http://files.kff.org/attachment/fact-sheet-medicaid-state-NH (last accessed September 24, 2022).

[39] A 2022 "Program Fact Sheet" published by the New Hampshire Bureau of Family Assistance reports similar, but not identical, income eligibility limits. For example, the BFA Program Fact Sheet reports maximum income for children to be no higher than 318% of Poverty. MFA reports maximum income for pregnant women to be no higher than 196% of Poverty. MFA reports maximum income for parents to be 133% of Poverty Level. https://www.dhhs.nh.gov/sites/g/files/ehbemt476/files/documents2/bfa-program-net-monthly-income-limits.pdf

Recommendation #8:

The New Hampshire EAP should seek legislative authorization to index EAP's funding stream to the price of electricity in the State, total program participations, or other cost-driving factors.

Price increases in electricity implemented in the Summer of 2022 pose a substantial threat to the continued affordability of electricity to EAP participants in New Hampshire. Inadequate funding exists in the EAP budget to respond to the electricity price increases. The data discussed in the narrative above shows the impact on bill burdens given the 2022 rate hikes reduced by the existing discount levels. The lowest income EAP participants would experience a bill burden of more than 11% of income after taking the existing discounts into account. Tier 5 customers would receive bills equal to more than 8% of income, while Tier 3 and Tier 4 customers would receive bills representing burdens of 7.7% and 8.0% of income respectively. Even Tier 2 participants, given their higher incomes (as discussed above) would receive bills that, on average, would be well above the upper limit of the target affordability burden established by the New Hampshire PUC. The ***average*** electric burden for the EAP population as a whole remains at 8%.

Average Percent of Income Burden
at Existing and Recommended Discounts and Summer of 2022 Rates

EAP Tier	Percentage of Income Burdens At Summer 2022 Rates	
	Existing Discount	Recommended Discount
2	6.8%	6.9%
3	7.7%	7.7%
4	8.0%	8.0%
5	8.2%	8.2%
6	11.2%	10.3%
Grand Total	8.1%	8.0%

It is not clear at this time how permanent the Summer 2022 electricity price increases will be. The price increases do not reflect increases in base electricity rates in New Hampshire. Rather, they are increases in supply costs to New Hampshire's electric utilities that are being passed-through to retail customers. Whether they are temporary increases associated with increased fuel costs attributable to war in Europe, temporary increases associated with supply side inflation, or

more permanent supply side increases attributable to some other factor, is simply not known at this time.

The 2022 increases in New Hampshire's electricity prices, however, reveal the vulnerability that New Hampshire's EAP bears to fluctuations in the underlying electricity rates. The current structure of EAP funding does not allow for program flexibility to respond to these changes in the underlying factors which drive total program cost. Whether program costs increase simply due to the higher bills associated with higher rates, or whether substantial increases in bills prompt more low-income customers to apply for rate relief through EAP, the program funding stream would remain relatively constant.

It would be ironic if New Hampshire's EAP became less effective because the need for the program has increased or because the program becomes more effective in reaching the New Hampshire residents it is intended to serve. An increased need could be evidenced, as is today, by increased electricity prices. An increased need could be evidenced by an increased participation attributable to the enhanced outreach and intake that is recommended above.

Legislative authorization should be sought which would provide the New Hampshire Public Utilities Commission with authority to modify the System Benefits Charge revenue stream which funds the EAP. Whether and when to exercise such authority would be within the province of the Commission with the advice and guidance of the EAP Advisory Board.

The Commission could consider the all-in electricity price on a semi-annual basis. It would not be practicable to consider individual utilities separately. The Commission should, therefore, use average consumption to determine all-in prices and weight those prices by the number of EAP participants by individual electric utility. The percentage increase in electric prices could then be used to determine the extent to which, if at all, a need exists to increase the System Benefit Charge.

Appendix

New Hampshire PUC

Pre-Hearing Order, Docket DE-21-133

Statewide Low-Income Electric Assistance Program

2021 – 2022 Electric Assistance Program Budgets

Order No. 26,576

February 3, 2022

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DE 21-133

STATEWIDE LOW-INCOME ELECTRIC ASSISTANCE PROGRAM

2021-2022 Electric Assistance Program Budgets

Prehearing Order

O R D E R N O. 26,576

February 3, 2022

After conducting a prehearing conference on January 27, 2022, the Commission issues the following prehearing order.

I. BACKGROUND AND PROCEDURAL HISTORY

On September 30, 2021, the Commission issued Order No. 26,530, in which it determined that it was necessary to develop a more complete record before it could approve the Electric Assistance Program (EAP) Advisory Board's recommendation to approve the 2021-2022 EAP budgets as then filed. The Commission approved the proposed EAP budgets on an interim basis for October and November 2021 but noted that its final order could provide for adjustments to the proposed EAP budgets.

The Commission issued a notice of adjudicative proceeding on November 30, 2021. The notice of adjudicative proceeding scheduled a hearing on March 9, 2022, which was rescheduled to March 10, 2022. Procedural Order dated January 18, 2022. The Commission subsequently granted the Office of the Consumer Advocate's (OCA) motion for a prehearing conference, which was scheduled on January 27, 2022.

Following the January 27 prehearing conference, the New Hampshire Department of Energy (Energy) filed a letter on behalf of all of the parties to the above-captioned docket, other than the OCA, recommending that the Commission do the following: clarify the process to be used for the remainder of the proceeding;

reschedule the March 10, 2022 hearing; permit the parties to file a procedural schedule after issuance of the prehearing order; and admit premarked exhibits 1-12, which were filed at the prehearing conference. The OCA filed a response on January 30, 2022, in which it objected to admission of exhibits 1-12 as full exhibits, but otherwise concurred with the other parties' recommendations.

II. PETITIONS FOR INTERVENTION

LISTEN Community Services (LISTEN) filed a petition to intervene on December 22, 2021 and participated during the January 27 prehearing. No objection to LISTEN's petition to intervene was filed. The Commission has granted LISTEN's request to intervene, finding that the standard for intervention in RSA 541-A:32 has been met. *See* N.H. Admin. R., Puc 203.17.

III. RULINGS

A. 2021-2022 EAP PROGRAM BUDGETS

As previously noted in Order No. 26,530, the Commission's final order in this proceeding may make adjustments to the EAP budgets, consistent with the Commission's duty to ensure that the EAP is operated as efficiently as possible to provide its intended beneficiaries with affordable electric service. *See* RSA 369-B:1, XIII; RSA 374-F:3, V(a); RSA 374-F:4, VIII(a) and (c). Given the passage of time, the focus of this docket has shifted, so that no changes will be made to the 2021-2022 program year EAP budgets, which the Commission approved during the January 27 prehearing conference. Any changes recommended by the Commission in its final order will concern future program year EAP budgets only, beginning with the 2022-2023 program year.

B. EXHIBITS 1-12

Exhibits 1-12, which were premarked at the prehearing conference, may be introduced during the final hearing, at which time the Commission will consider any objections before determining whether to admit them as evidence. *See* N.H. Admin. R., Puc 203.23(f).

IV. CLARIFICATION OF SCOPE OF PROCEEDING

The remainder of this proceeding will address the following issues: whether the current EAP meets the requirements of RSA 369-B:1, XIII, RSA 374-F:3, V(a), and RSA 374-F:4, VIII(a) and (c); whether the proposed EAP program is sufficiently targeted toward the lower income tiers; whether the enrollment in the EAP program can be increased; and whether the administrative costs for the EAP program can be reduced.

V. RECORD REQUESTS

To make this determination, the Commission would like the parties to file responses to the following record requests no later than February 28, 2022:

1. Please provide information on the relation between 60 percent of New Hampshire (NH) median income and 150 percent of the federal poverty level and the reasons for creating the EAP top tier at 60 percent of the NH median income level.

2. Please provide an update of the $3,785,789 balance in the EAP fund and an estimate (with all assumptions disclosed) of how likely the balance will be spent down during the current 2021-2022 12-month period.

3. Please provide a recommended adjustment to the EAP system benefits charge rate to bring the balance to $1,000,000 or less at the end of the 2022-2023 12-month program period.

4. Please provide an updated monthly enrollment chart on Bates page 13 of the report in Exhibit 12 with the most recent data available.

5. Please provide copies of any recent audits of the EAP programs done by Energy audit staff.

6. Please explain the relationship between the Fuel Assistance Program (FAP) and the EAP: how are costs shared between the FAP and EAP; how many participants are in the FAP and what amounts are proposed to be spent during

the 2021-2022 program year; has management consolidation between the two entities been considered; and has a competitive analysis been done on administrative costs?

7. When there is no EAP waiting list, a $3.9 million balance, and a $1 million statutory limit, how does the Advisory Board intend to reduce the existing balance?

8. Regarding the EAP: can you confirm that participants must re-enroll actively each year; what happens if a participant moves; and does a participant have to live in NH year-round?

9. On June 16, 2021, the EAP Advisory Board filed a recommendation with the Commission to issue an RFP for a consultant to undertake a review, analysis, and evaluation of the EAP program design. The Advisory Board noted that the results of the program review would aid in the development of recommendations for improving the effectiveness and efficiency of the EAP in fulfilling program goals and for prudently spending down a portion of the EAP fund in compliance with applicable law. As of the date of this report, no action has been taking on the Advisory Board's recommendation.

   Please describe in detail the concerns which led the Advisory Board to recommend the use of a consultant. Had a consultant been hired, what specific questions would the consultant have been expected to answer?

10. EAP enrollment levels were relatively consistent between 2010 and 2016. Enrollment between 2017 and 2020 declined slightly over prior years. While 2021 enrollment remains lower than pre-2017 enrollment levels, the Community Action Agencies (CAAs) have projected increases in enrollment over the next few months as the Emergency Rental Assistance Program funding attracts more eligible households to the CAAs for assistance.

    Did this happen? Please give current and projected EAP enrollment levels.

11. As of the end of August 2021, 17 percent of enrolled EAP households received a discount of 76 percent; 20 percent received a discount of 52 percent; 17 percent received a discount of 36 percent; 16 percent received a discount of 16 percent; and 30 percent of enrolled households received a discount of 8 percent.

    Does this align with targeted participation? Please show a breakdown of program benefit dollars by tier over the past program year 2020-2021 and through present program year 2021-2022.

12. Exhibit 12, Bates 32 shows that the average annual EAP benefit is $400 per household. Please give an average per tier household benefit.

VI. PROCESS AND PROCEDURAL SCHEDULE

The hearing scheduled on March 10, 2022 has been CANCELLED. Final hearings are scheduled on May 16 and May 17, 2022, from 9:00 a.m. to 4:30 pm, which will be conducted in accordance with the November 30, 2021 hearing guidelines using a hybrid format. The Commission has selected these hearing dates to allow a Commission order well before late July 2022, when budgets are due for EAP program year 2022-2023.

The parties asked that the Commission recommend a process for the balance of this proceeding. What follows is a process for the parties to consider in developing their procedural schedule:

(1) individual parties to submit initial proposals for recommended improvements to the current EAP in compliance with statutory requirements;

(2) discovery to be conducted, and discussions held, regarding individual party proposals; and

(3) parties to submit final proposals for recommended changes to the current EAP no later than May 9, 2022.

Prefiled testimony will not be required.

The parties are requested to confer and file a procedural schedule, with the Commission on or before February 28, 2022; otherwise, the Commission will issue a further procedural order.

By order of the Public Utilities Commission of New Hampshire this third day of February, 2022.

Daniel C. Goldner
Chairman

F. Anne Ross
Special Commissioner

Appendix C

EAP Municipal Report October 2021 through August 2022								
Distribution of household (HH) income data is not shown where 10 or fewer recipients in town								
	<75% FPG	**76 - 100% FPG**	**101 - 125% FPG**	**126 - 150% FPG**	**151% FPG - 60% SMI**	**Total HHs**	**Total Benefits**	**Avg Annual Benefit**
Acworth	6	2	5	3	11	27	$ 13,426.13	$501.91
Albany	8	6	7	2	7	31	$ 23,483.57	$769.95
Alexandria	8	9	7	6	12	42	$ 21,567.69	$510.48
Allenstown	20	24	24	29	66	162	$ 70,501.45	$434.52
Alstead	7	9	16	14	18	64	$ 27,457.87	$429.03
Alton	13	13	18	22	28	94	$ 43,282.67	$462.50
Amherst	7	5	7	8	30	57	$ 22,975.38	$406.05
Andover	8	2	7	7	20	44	$ 18,204.44	$415.31
Antrim	8	11	15	13	30	77	$ 30,483.85	$397.18
Atkinson	8	6	8	5	24	51	$ 10,008.51	$196.57
Auburn	1	2	5	6	17	31	$ 8,747.57	$280.67
Barnstead	10	10	12	16	37	85	$ 34,866.18	$412.62
Barrington	18	25	15	14	45	116	$ 60,533.46	$521.47
Bartlett	10	7	6	8	14	46	$ 21,458.66	$466.49
Bath	3	6	3	8	12	31	$ 13,645.50	$439.00
Bedford	10	17	18	19	51	114	$ 43,949.33	$384.68
Belmont	30	40	41	45	74	230	$ 98,561.09	$427.75
Bennington	4	10	9	8	18	49	$ 22,205.93	$457.07
Benton						9	$ 2,889.02	$330.17
Berlin	115	124	97	89	195	619	$ 290,146.55	$468.80
Bethlehem	8	9	7	11	19	53	$ 21,138.73	$396.35
Boscawen	22	12	17	15	33	98	$ 23,292.32	$237.68
Bow	6	7	4	5	16	37	$ 9,174.15	$247.39
Bradford	6	9	5	7	10	37	$ 16,861.65	$456.75
Brentwood	3	2	3	1	9	18	$ 7,676.86	$418.74
Bridgewater	2	3	2	3	6	17	$ 7,992.19	$479.53
Bristol	15	11	11	11	27	75	$ 36,735.00	$488.17
Brookfield	2	2	2	2	3	11	$ 6,593.35	$581.77
Brookline	3	3	4	8	16	34	$ 13,371.65	$393.28
Campton	9	20	16	16	17	77	$ 37,315.23	$484.61
Canaan	8	15	14	11	29	76	$ 33,971.31	$445.53
Candia	1	3	8	6	17	36	$ 11,201.31	$309.71
Canterbury	0	0	5	2	6	13	$ 2,711.52	$207.25
Carroll	3	3	3	2	8	17	$ 8,438.70	$486.85
Center Harbor	4	7	5	6	9	30	$ 14,432.90	$487.87
Charlestown	39	34	40	36	80	230	$ 111,324.55	$485.07
Chatham						3	$ 2,104.27	$742.68
Chester	3	1	5	3	12	24	$ 9,236.35	$384.85
Chesterfield	14	8	10	10	20	61	$ 33,627.72	$551.27
Chichester	4	5	3	5	7	25	$ 8,123.70	$321.73
Claremont	110	105	100	78	174	567	$ 298,073.40	$526.01
Clarksville	1	4	3	3	9	19	$ 7,302.08	$382.64
Colebrook	26	35	33	29	41	164	$ 76,067.72	$465.25
Columbia	5	4	6	3	9	27	$ 13,022.12	$476.42

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	<75% FPG	**76 - 100% FPG**	**101 - 125% FPG**	**126 - 150% FPG**	**151% FPG - 60% SMI**	**Total HHs**	**Total Benefits**	**Avg Annual Benefit**
Concord	141	156	132	132	291	851	$ 175,777.31	$206.53
Conway	45	69	56	45	87	302	$ 145,764.18	$483.20
Cornish	5	3	2	8	7	25	$ 10,345.53	$409.72
Croydon	2	3	3	3	6	16	$ 6,644.48	$411.00
Dalton	6	10	8	6	16	46	$ 21,417.67	$465.60
Danbury	4	9	4	5	18	40	$ 14,477.28	$365.74
Danville	10	12	10	23	27	82	$ 24,994.91	$305.13
Deerfield	9	7	8	4	13	41	$ 20,963.49	$510.27
Deering	5	6	6	6	26	49	$ 20,860.64	$429.38
Derry	93	103	100	67	209	572	$ 289,122.44	$505.16
Dorchester	0	5	1	3	5	15	$ 6,477.85	$441.67
Dover	104	118	84	60	140	505	$ 268,204.07	$530.83
Dublin	5	2	3	6	7	21	$ 11,765.27	$549.35
Dummer	2	3	1	4	8	16	$ 6,127.25	$373.23
Dunbarton	7	3	3	2	6	20	$ 11,107.27	$555.36
Durham	2	7	5	6	6	26	$ 6,588.56	$255.04
East Kingston	3	3	3	1	11	20	$ 4,467.02	$226.18
Easton						8	$ 6,364.90	$821.28
Eaton						8	$ 6,356.85	$838.27
Effingham	10	15	5	2	15	47	$ 26,491.17	$562.64
Enfield	6	10	9	7	24	56	$ 20,962.04	$375.44
Epping	9	24	17	18	61	129	$ 47,658.36	$369.68
Epsom	12	9	16	22	55	113	$ 29,567.92	$261.28
Errol	0	1	4	5	5	15	$ 4,198.84	$272.36
Exeter	40	67	67	64	135	373	$ 73,388.19	$196.80
Farmington	39	40	35	32	84	231	$ 121,267.19	$525.53
Fitzwilliam	14	9	7	14	22	65	$ 33,527.51	$513.83
Francestown	2	2	2	4	8	17	$ 6,873.48	$400.40
Franconia	1	3	3	1	4	13	$ 5,588.68	$435.48
Franklin	54	61	46	41	114	316	$ 144,436.40	$457.80
Freedom	2	5	7	7	8	28	$ 11,869.15	$427.72
Fremont	4	6	8	5	21	44	$ 17,774.55	$408.61
Gilford	14	40	26	30	51	160	$ 68,023.84	$424.49
Gilmanton	12	10	8	8	24	62	$ 32,211.84	$520.95
Gilsum	4	4	4	3	13	27	$ 11,356.29	$415.47
Goffstown	18	32	30	37	104	220	$ 78,044.52	$354.48
Gorham	15	17	19	18	48	116	$ 45,655.00	$392.17
Goshen	2	7	9	5	8	30	$ 13,299.52	$442.09
Grafton	11	4	9	5	11	41	$ 22,942.05	$566.47
Grantham	1	2	2	2	10	17	$ 5,786.12	$337.06
Greenfield	2	3	6	3	15	29	$ 11,465.37	$391.98
Greenland	4	3	2	4	8	20	$ 8,771.34	$431.38
Greenville	8	16	15	18	24	81	$ 35,483.20	$439.87
Groton	2	4	3	1	7	17	$ 8,000.19	$482.42

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Hales Location						1	$ 125.11	$125.11
Hampstead	9	8	13	19	53	101	$ 33,714.86	$333.54
Hampton	25	26	27	27	68	173	$ 34,863.06	$201.13
Hampton Falls	2	1	4	3	5	15	$ 3,900.92	$264.47
Hancock	3	3	3	4	14	26	$ 11,927.61	$460.23
Hanover	1	5	5	1	3	15	$ 6,712.67	$455.10
Harrisville	2	3	4	1	3	14	$ 8,335.16	$584.92
Haverhill	9	10	10	13	22	65	$ 28,951.30	$445.40
Hebron						8	$ 4,666.45	$589.45
Henniker	16	9	9	13	24	72	$ 36,755.66	$508.73
Hill	3	3	6	7	15	35	$ 14,211.22	$403.16
Hillsborough	35	29	34	33	97	228	$ 109,072.71	$478.39
Hinsdale	35	27	27	19	56	164	$ 87,723.92	$535.45
Holderness	5	4	11	6	8	34	$ 15,886.50	$466.11
Hollis	3	5	3	3	14	28	$ 12,603.88	$455.56
Hooksett	23	39	32	26	84	204	$ 75,096.93	$368.88
Hopkinton	6	10	9	9	31	65	$ 21,421.71	$330.84
Hudson	43	43	39	38	119	282	$ 131,667.09	$467.60
Jackson						7	$ 2,390.17	$329.68
Jaffrey	17	19	22	21	44	122	$ 44,603.41	$364.61
Jefferson	7	4	5	6	12	34	$ 15,548.58	$457.31
Keene	114	96	76	66	186	539	$ 289,101.66	$536.86
Kensington	2	2	3	3	5	15	$ 3,242.18	$216.15
Kingston	7	12	13	15	39	86	$ 18,285.51	$212.21
Laconia	96	101	99	73	138	507	$ 230,744.39	$455.42
Lancaster	13	20	26	24	42	125	$ 54,943.03	$438.08
Landaff	1	2	3	1	6	12	$ 5,534.23	$454.87
Langdon	3	6	4	3	4	21	$ 12,573.39	$591.69
Lebanon	40	42	34	26	53	196	$ 97,788.55	$499.35
Lee	8	2	12	6	20	48	$ 17,672.10	$365.63
Lempster	10	4	8	5	10	37	$ 23,103.36	$618.84
Lincoln	7	16	11	8	16	57	$ 23,016.97	$404.40
Lisbon	5	12	10	10	22	59	$ 25,042.54	$426.86
Litchfield	10	10	11	11	27	69	$ 36,692.40	$531.77
Littleton						4	$ 609.52	$162.54
Londonderry	34	31	38	46	119	267	$ 111,366.19	$416.97
Loudon	10	6	15	18	29	78	$ 28,371.69	$363.74
Lyman	1	3	4	4	4	15	$ 5,449.54	$361.30
Lyme						9	$ 4,055.26	$430.65
Lyndeborough	5	3	5	2	9	23	$ 13,993.48	$619.64
Madbury						8	$ 4,379.78	$525.57
Madison	3	8	6	10	14	41	$ 16,053.66	$395.57
Manchester	716	716	528	442	1124	3526	$ 1,782,738.03	$505.65
Marlborough	15	9	12	13	18	67	$ 34,760.03	$521.40

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Marlow	2	4	5	1	11	22	$ 9,180.67	$418.89
Mason						10	$ 4,764.54	$464.83
Meredith	46	44	34	18	56	198	$ 115,193.90	$582.28
Merrimack	21	20	24	31	99	195	$ 76,987.68	$394.64
Middleton	8	6	6	5	16	40	$ 19,153.05	$477.83
Milan	7	13	10	11	31	71	$ 29,738.95	$421.33
Milford	30	37	46	40	123	276	$ 100,941.94	$366.06
Millsfield						1	$ 81.76	$81.76
Milton	15	21	27	24	49	135	$ 65,324.73	$484.49
Monroe	1	1	3	4	6	14	$ 5,008.58	$364.26
Mont Vernon	4	1	3	2	5	15	$ 10,391.43	$685.15
Moultonborough	9	6	10	6	22	53	$ 25,604.26	$485.39
Nashua	397	377	282	246	647	1948	$ 966,170.24	$495.98
Nelson	3	4	2	1	3	13	$ 6,079.56	$476.83
New Boston	1	6	6	6	22	42	$ 18,622.82	$447.84
New Castle						1	$ 155.50	$155.50
New Durham	2	12	7	5	14	40	$ 20,800.97	$525.50
New Hampton	6	6	9	5	13	39	$ 18,761.78	$487.32
New Ipswich	9	11	12	11	26	68	$ 31,885.40	$468.90
New London	2	2	2	3	6	15	$ 5,382.23	$349.12
Newbury	2	2	2	5	14	25	$ 7,481.68	$302.29
Newfields						6	$ 3,299.95	$573.90
Newington						5	$ 1,502.05	$290.72
Newmarket	20	24	22	20	46	132	$ 55,751.70	$423.97
Newport	56	65	50	57	105	333	$ 164,693.78	$494.95
Newton	5	10	7	5	17	44	$ 10,774.46	$244.87
North Hampton	2	4	4	5	23	38	$ 12,730.45	$333.55
Northfield	6	18	18	23	36	101	$ 41,815.27	$415.73
Northumberland	16	24	26	27	45	137	$ 58,238.08	$425.10
Northwood	13	7	11	13	38	80	$ 33,874.71	$423.43
Nottingham	4	4	10	7	25	50	$ 17,537.10	$348.42
Orange						2	$ 1,140.01	$570.01
Orford						10	$ 4,672.83	$455.89
Ossipee	30	35	40	25	66	197	$ 95,456.83	$485.79
Pelham	12	17	20	15	50	114	$ 54,137.83	$474.20
Pembroke	18	25	25	24	50	141	$ 55,229.35	$391.93
Peterborough	26	13	20	21	50	130	$ 57,540.34	$443.76
Piermont						10	$ 3,367.64	$336.76
Pittsburg	4	10	7	6	10	36	$ 18,887.43	$525.87
Pittsfield	23	22	29	19	33	127	$ 63,547.83	$501.03
Plainfield	2	3	4	7	12	28	$ 9,750.34	$350.31
Plaistow	13	18	19	12	61	122	$ 24,507.71	$200.88
Plymouth	22	38	28	16	38	142	$ 66,556.88	$469.26
Portsmouth	64	72	54	38	92	320	$ 133,286.08	$416.84

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Randolph						5	$ 974.52	$212.62
Raymond	41	44	40	52	136	313	$ 137,933.73	$441.04
Richmond	3	4	2	2	10	22	$ 9,018.94	$408.40
Rindge	13	13	16	12	28	81	$ 36,766.14	$453.90
Rochester	162	210	202	159	368	1101	$ 545,688.06	$495.63
Rollinsford	2	6	7	5	11	31	$ 13,509.55	$436.97
Roxbury						7	$ 2,925.77	$423.00
Rumney	2	10	7	2	8	28	$ 15,381.19	$544.47
Rye	5	1	1	4	11	22	$ 8,859.95	$408.92
Salem	52	60	61	72	191	436	$ 161,847.34	$371.56
Salisbury	2	2	3	6	10	23	$ 4,676.65	$204.82
Sanbornton	7	2	8	6	14	37	$ 17,353.85	$464.84
Sandown	8	9	10	10	34	70	$ 29,887.62	$424.94
Sandwich	1	4	4	3	5	16	$ 6,956.86	$428.11
Seabrook	61	80	76	42	134	393	$ 93,052.20	$236.67
Sharon						3	$ 1,748.91	$538.13
Shelburne						9	$ 3,684.43	$421.08
Somersworth	52	54	48	45	91	291	$ 150,497.50	$517.62
South Hampton						8	$ 1,290.15	$154.82
Springfield	7	5	2	3	13	31	$ 13,412.95	$438.57
Stark	6	3	6	6	5	25	$ 12,321.25	$494.50
Stewartstown	9	4	11	12	14	50	$ 21,906.47	$438.86
Stoddard	6	5	7	4	9	31	$ 15,149.94	$495.37
Strafford	5	4	5	6	18	38	$ 16,436.76	$429.72
Stratford	15	16	18	11	14	74	$ 35,312.27	$478.27
Stratham	4	5	4	5	15	32	$ 6,009.33	$185.38
Sugar Hill						8	$ 3,612.63	$433.52
Sullivan	3	2	2	3	9	18	$ 6,878.61	$380.38
Sunapee	6	5	4	9	15	38	$ 17,574.79	$462.49
Surry	3	4	3	3	7	20	$ 9,898.65	$507.62
Sutton	0	2	3	2	6	13	$ 4,980.61	$378.27
Swanzey	40	40	44	39	88	251	$ 120,491.65	$479.41
Tamworth	17	25	21	23	47	133	$ 59,070.24	$443.58
Temple	7	1	4	2	10	23	$ 13,456.75	$574.67
Thornton	6	11	11	4	13	46	$ 23,069.80	$505.18
Tilton	17	16	19	17	50	119	$ 42,905.34	$360.04
Troy	23	23	17	10	25	100	$ 58,511.86	$588.06
Tuftonboro	4	12	9	11	25	61	$ 26,645.73	$433.85
Unity	4	7	6	8	10	35	$ 16,031.80	$460.24
Wakefield	11	21	18	26	41	118	$ 50,644.50	$430.71
Walpole	9	8	8	5	16	46	$ 33,086.05	$727.17
Warner	11	7	13	7	25	63	$ 28,088.85	$444.68
Warren	6	10	5	9	8	37	$ 19,332.48	$516.68
Washington	5	3	3	4	15	31	$ 11,572.84	$371.32

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Weare	13	16	18	16	51	114	$ 50,130.45	$439.74
Webster	4	2	2	1	7	16	$ 5,759.69	$369.61
Wentworth	5	5	3	3	12	28	$ 11,080.21	$401.70
Wentworths Location						1	$ 256.32	$256.32
Westmoreland	4	1	2	2	7	17	$ 10,047.11	$608.92
Whitefield	11	15	15	14	29	84	$ 34,834.84	$413.06
Wilmot	6	2	5	1	13	27	$ 13,082.35	$481.56
Wilton	10	14	8	9	26	68	$ 29,317.84	$429.57
Winchester	39	41	37	39	83	238	$ 129,979.84	$545.75
Windham	8	5	7	8	24	51	$ 24,993.41	$486.88
Windsor						6	$ 3,046.47	$514.90
Wolfeboro						1	$ 1,100.87	$777.08
Woodstock	6	7	6	4	16	39	$ 17,437.54	$448.07
Totals	**4318**	**4737**	**4329**	**3896**	**9426**	**26705**	**$ 11,935,882.54**	**$432.16**