New Hampshire Department of Energy

NEW HAMPSHIRE
RENEWABLE ENERGY FUND

ANNUAL REPORT

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LEGISLATIVE OVERSIGHT COMMITTEE
TO MONITOR THE TRANSFORMATION OF DELIVERY OF ELECTRIC SERVICES

THE SENATE ENERGY AND NATURAL RESOURCES COMMITTEE

Senator Kevin Avard, Chair

THE HOUSE SCIENCE, TECHNOLOGY AND ENERGY COMMITTEE

Representative Michael Vose, Chair

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Executive Summary

Fourteen years ago, New Hampshire established a renewable energy policy, the Electric Renewable Portfolio Standard (RPS), the legislature having found it to be in the public interest to stimulate investment in low emission renewable energy generation technologies within the state. With the enactment of House Bill 2 (2021), on July 1, 2021 the administration and implementation of RPS policy and the Renewable Energy Fund (REF) transferred from the Public Utilities Commission (Commission or PUC) to the Department of Energy (Department). The Department is required to make an annual report to the Legislative Oversight Committee to Monitor the Transformation of Delivery of Electric Services, the Senate Energy and Natural Resources Committee, and the House Science, Technology and Energy Committee, detailing how the Renewable Energy Fund is used.

The report that follows is the New Hampshire Renewable Energy Fund Annual Report which describes program results for fiscal year 2021 (July 1, 2020 through June 30, 2021) and summarizes compliance data for calendar year (CY) 2020.

Renewable Energy Fund Programs

Competitive Grant Program

As required by RSA 362-F:10, XI, the Commission issued an annual request for proposals (RFP) to fund renewable energy projects. The RFP for fiscal year (FY) 2021 (FY21) was issued by the Commission on January 8, 2021, for certain non-residential renewable energy projects located in New Hampshire that are eligible to generate renewable energy certificates (RECs) and not eligible to receive funds from other REF incentive programs.

The Commission received six proposals requesting a total of $2.053 million in grant funds. Four projects were selected for funding: installation of a wood chip boiler plant in a County Hall building; installation of a district boiler plant for a renovated school and gym fueled with locally sourced precision dry wood chips; installation of a wood residue-fueled steam boiler plant which will provide 100% of a manufacturing plant's thermal energy needs in the form of process heat to kilns for drying lumber and firewood, and space heating; and construction of an additional 4.6 MW unit at a hydroelectric facility. These four projects selected received $1,170,000 in funding through grant contracts approved by the Governor and Executive Council on June 16, 2021.

Low-Moderate Income Community Solar Grant Program

The "New Hampshire Clean Energy Jobs and Opportunity Act of 2017,"[1] included a funding allocation requirement for a program intended to reduce market barriers to solar energy participation by low and

[1] *See* www.gencourt.state.nh.us/bill_status/billText.aspx?sy=2017&id=957&txtFormat=pdf&v=current.

moderate income (LMI) residential customers. The FY21 RFP was issued by the Commission on January 22, 2021, seeking proposals for community solar photovoltaic (PV) projects providing direct benefits to New Hampshire LMI residential electric customers.

The Commission received five proposals requesting a total of $868,933 in grant funds. Two projects were selected for funding: Organization for Refugee and Immigrant Success (ORIS) to work with a developer to design and build a community solar project on land owned by ORIS, and Pine Hill Homeowners Cooperative Inc. (the Cooperative) to work with a developer to design and build a community solar project on land owned by the Cooperative. Both projects intend to qualify for the 2.5 cent LMI net metering adder. The two projects selected received $379,744 in funding through grant contracts approved by the Governor and Executive Council on June 16, 2021.

Solar Rebate Programs

Installed solar PV capacity continues to increase in New Hampshire. An additional 20 megawatts[2] (MW) of solar PV was interconnected in 2020. Net metering, the RPS, and REF programs are state incentives and drivers for participants in this market. During FY21, the incentive levels of the residential solar program remained at $0.20 per watt, up to a maximum $1,000; and $0.20 per watt, up to a maximum $10,000, for commercial and industrial (C&I) installations.

Wood Pellet Rebate Programs

The growth and stability of the wood pellet industry in New Hampshire continues to depend, in part, on the wood pellet rebate programs and the Federal tax credit. During FY21, the incentive levels for the wood pellet furnace and boiler programs remained at 40 percent of eligible project costs, up to a maximum $10,000 for residential installations and $65,000 for C&I installations. To encourage larger and more economical wood pellet deliveries, the residential program offers a supplemental rebate adder of $100 per ton for fuel storage systems larger than the three-ton minimum requirement, up to a maximum of $500. The C&I program offers additional incentives for the installation of a thermal storage tank and/or production meter to track thermal generation for REC certification.

Instead of heating oil, these homes and businesses are using wood pellets, a renewable fuel that is often locally sourced. Over 400 incentivized residential systems are operational in more than 145 municipalities, and the bulk storage containers installed with these systems have a total combined capacity of over 1,960 tons. On average, each residential wood pellet heating system replaces an estimated 627 gallons of heating oil each year. There are 62 incentivized C&I systems located in 37 New Hampshire municipalities; and the bulk storage containers installed with these systems have a total combined capacity of over 1,100 tons.

[2] *See* Final 2021 PV Forecast , slide 11, final_2021_pv_forecast.pdf (iso-ne.com).

Sustainable Energy Division Non-Program Updates

Net Energy Metering

The Commission's Sustainable Energy Division (now with the Department) continued work on the various docket-related initiatives ordered through the "Development of New Alternative Net Metering Tariffs and/or Other Regulatory Mechanisms and Tariffs for Customer-Generators" docket (PUC Docket No. DE 16-576, PUC Order No. 26,029 (2017)). Those initiatives include studies approved by the Commission in orders issued in 2017 and subsequently. Work related to those studies completed during FY21 is summarized below.

Locational Value of Distributed Generation Study

On July 31, 2020, the locational value of distributed generation (LVDG) study was completed with the submission of a final study report to the Commission. The LVDG study evaluated the distribution-level locational value of load reductions potentially achievable by distributed generation (DG) for New Hampshire's three regulated electric distribution utilities. The study approach closely followed utility planning methods, data, and practices to best represent investment decision-making in the New Hampshire context.

The study covered a 15-year timeframe beginning in 2020, and includes 5-years of historical data and forward-looking projections over a 10-year period. Electric distribution system capacity constraints were analyzed under base, low, and high load growth scenarios. The study focused on significant distribution system capacity deficiencies to be addressed through planned or potential capital investments, such as replacements or upgrades of substations or major circuits. No minimum investment threshold level for the cost of upgrades was required for a location to be evaluated; however, small capital investments such as pole top distribution transformers and capacitors were not covered in the LVDG study.

When evaluating load reductions to avoid capital investments, the study considered three specific net energy metering-eligible DG technologies: solar photovoltaic (PV), solar PV paired with energy storage, and hydroelectric generation, all with capacities rated up to one megawatt.

The study methodology included three steps:

- **Step 1:** Location Identification – Identify potential locations with expected capacity constraints requiring investments over the study timeframe, including under base, low, and high load growth sensitivity analyses.

- **Step 2:** Estimation of Investment Costs for Avoidance – Determine the value of potential avoided capacity investments at the selected locations.

- **Step 3:** Economic Analysis and Mapping of DG Production Profiles with Distribution Capacity Needs – Perform economic analysis to estimate the benefit of capacity avoidance at the selected locations and map representative DG production profiles against distribution system capacity needs taking into

account probable hourly loading data.

The results of the LVDG study are intended to be used to inform future net energy metering tariff development proceedings before the Commission. The complete study report is available on the Commission's website.[3]

Value of Distributed Energy Resources Study

The Value of Distributed Energy Resources (VDER) study was directed to be conducted in the Commission's 2017 Order No. 26,029. In Order No. 26,316,[4] the PUC directed its Staff (now the Department) to issue a request for proposals to engage a consultant to develop the detailed methodology and conduct the VDER study, based on an approved study scope developed with substantial stakeholder input. That study scope formed the basis of the Commission's request for proposals to solicit a consultant to conduct the VDER study.[5] On April 21, 2021, the Governor and Executive Council[6] approved the hiring of a consultant to conduct the study according to the scope approved by the Commission. Department staff are currently working with the consultant to refine the final methodology for completion of the study and expect to hold a first informational session with stakeholders in October 2021.

The VDER Study analysis will provide detailed information regarding costs avoided by net-metered distributed generation under general conditions, as well as at specific times and under particular circumstances, and will evaluate respective benefits and costs from the perspective of electric distribution utilities, customer-generators participating in net energy metering, and other non-participating electric ratepayers. The study will focus on impacts within New Hampshire, with consideration of regional energy market impacts where appropriate. The study will calculate avoided costs over a 15-year time horizon, with 3-5 years of historical data reviewed, where possible, to verify and validate forward projections. The study methodology will maintain consistency with energy efficiency cost-effectiveness evaluation, where appropriate, including potential incorporation of modeling tools, methods, criteria, and data from the most recent New England Avoided Energy Supply Cost Study. The VDER study will also analyze customer rate and bill impacts to determine the effects on utility ratepayers and the potential for cost-shifting between customers participating and those not participating in net energy metering.

In conjunction with the results of the LVDG study, and any relevant pilot programs, the VDER study will provide data and analysis to inform future rate design and tariff development proceedings before the Commission for customer-generators with distributed generation eligible to participate in net energy metering.

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[3] *See* Locational Value of Distributed Generation Study, puc.nh.gov/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576_2020-08-21_STAFF_LVDG_STUDY_FINAL_RPT.PDF.

[4] *See* puc.nh.gov/Regulatory/Docketbk/2016/16-576/ORDERS/16-576_2019-12-18_ORDER_26316.PDF.

[5] *See* RFP 2020-001, VDER RFP 3.27.2020 - Final.pdf (nh.gov).

[6] *See* Agenda Item #60, NH-SOS - April 21, 2021.

Overview of New Hampshire's Renewable Portfolio Standard Policy

New Hampshire's Renewable Portfolio Standard statute established the renewable energy policy for the State. Common renewable energy sources are solar, wind, hydropower, biomass, and methane gas. These energy sources provide a sustainable and affordable power supply. Renewable energy enables New Hampshire municipalities, schools, businesses, and residents to realize economic and energy security benefits.

Renewable energy generation technologies provide fuel diversity to the state and the region through the use of renewable fuels sourced locally, lowering regional dependence on fossil fuels. Renewable resources also have the potential to lower and stabilize future energy costs by reducing exposure to rising and volatile fossil fuel prices.

The use of local and renewable fuels also allows more energy dollars to be retained in the state instead of being spent on imported fuels. In addition, utilizing renewable technologies can help reduce the amount of greenhouse gases, nitrogen oxides, and particulate matter emissions generated in the state, which helps improve air quality and public health.

The RPS statute established four classes of renewable energy resources (summarized in the box to the right). Class I is split into a separate electricity requirement and thermal energy requirement. Electricity suppliers must obtain RECs for each of the four classes as a set percentage of their retail electric load. One REC represents renewable attributes of one megawatt-hour of electricity or the equivalent amount of thermal energy.

New Hampshire RPS Class Definitions*

Class I - New Renewable Energy. Sources producing electricity or "useful thermal energy" (*i.e.*, Class I Thermal) generated by any of the following resources, provided the generator began operation after January 1, 2006, except as noted below:

- Wind energy;
- Hydrogen derived from biomass fuels or methane gas;
- Ocean thermal, wave, current, or tidal energy;
- Methane gas;
- Eligible biomass;
- Class II solar electric energy not used to satisfy the minimum Class II obligation;
- The incremental new production of electricity in any year from an eligible biomass, eligible methane source, or hydroelectric generating facility of any capacity, over its historical generation baseline;
- The production of electricity from Class III or IV sources that have been restored through significant investment.
- The production of biodiesel in New Hampshire meeting all requirements.

Class I Thermal - Useful Thermal Energy. Class I Thermal resources must be used to meet a set percentage of the total Class I RPS obligation as outlined in RSA 362-F:3. Eligible Class I Thermal sources include the following technologies that began operation after January 1, 2013 except as noted below:

- Geothermal systems that began producing thermal energy;
- Solar-thermal systems that produce useful thermal energy only;
- Eligible biomass generators that meet emissions criteria;
- The production of useful thermal energy from certain biomass thermal sources which began operation prior to January 1, 2013 and have been upgraded or replaced through significant investment;
- Renewable forms of Methane gas if the output is in the form of useful thermal energy.

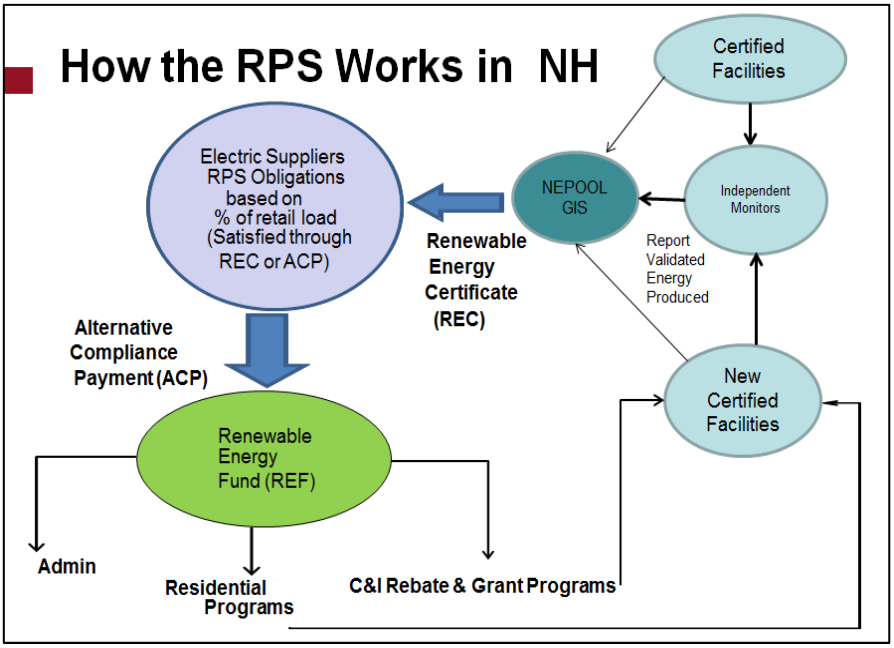
Class II - New Solar. Solar technologies; provided the electric generator began operation after January 1, 2006.

Class III - Existing Biomass/Methane. Eligible biomass systems of 25 MW or less, and methane gas, provided the generator began operation before January 1, 2006. Methane gas sources which began operation prior to 2006 and exceed an aggregated gross nameplate capacity of 10 MW at any single landfill site are not eligible.

Class IV - Existing Small Hydroelectric. Hydro facilities up to 5 MW, provided the generator began operation before January 1, 2006, and complies with certain environmental protection criteria; and hydroelectric facilities up to 1 MW that are interconnected to the distribution grid in New Hampshire.

RECs are generated by certified renewable energy facilities and sold into a regional market. Renewable energy facilities must apply for New Hampshire RPS eligibility. Facility owners submit to the Department a class-specific application for review and approval. The Department certifies the systems as eligible under state statutes and rules (Puc 2500 administrative rules) to generate RECs. Facility owners must purchase and install a revenue quality meter to record the gross output and retain the services of an independent monitor to be eligible for certification. All classes of applications that are considered complete must be approved or rejected within 45 days of receipt.

Upon certification, the Department notifies the New England Power Pool Generation Information System (NEPOOL GIS), which issues and tracks RECs for the region. Gross output from certified customer-sited facilities is verified and reported by independent monitors to NEPOOL GIS. On a quarterly basis, NEPOOL GIS issues RECs for reported generation and administers a two-month trading period. RECs generated in one state may be sold in another provided the facility is certified in that state as well.



If electricity suppliers cannot, or choose not to, purchase or obtain sufficient RECs to comply with the RPS law, they must make ACPs to the REF. On an annual basis, the Commission reviews electricity suppliers' compliance with the previous calendar year's RPS requirements. Electricity suppliers include New Hampshire's competitive electric power suppliers and electric distribution utilities (Eversource, Liberty Utilities (Liberty), Unitil Energy Systems, Inc. (Unitil), and the New Hampshire Electric Cooperative (NH Electric Cooperative)).

The REF is a continually appropriated, dedicated, non-lapsing fund which is used to support electrical and thermal renewable energy initiatives. ACPs and the interest accrued on the REF are the only sources of funding and fluctuate from year to year, depending on the price and availability of RECs in the regional market.

The Department administers three residential rebate programs, two C&I rebate programs, and two competitive grant programs with funding from the REF. Projects installed with incentives from the REF are eligible facilities which may become certified, thereby generating additional RECs to trade in the NEPOOL GIS market. Incentivizing the installation of new renewable facilities enables New Hampshire to continue to meet its increasing RPS goals.

Fiscal Year 2021: Legislative Summary

RPS Legislation

In 2021, the RPS law was amended and the change in law is summarized below.

House Bill 309 (HB 309)[7] modified the computation to estimate the percentage credit for Class II based on the capacity of the customer-sited sources that are net metered and are not certified to create Class II RECs. With the enactment of HB 309, the Department will estimate class II output using a capacity factor rating equal to the annual PV Energy Forecast issued by the Distributed Generation Working Group under ISO New England (ISO-NE), or its successor.

ISO-NE determines the PV energy forecast and average capacity factors at the state level using state monthly nameplate forecasts and state average monthly capacity factors developed from seven years of PV performance data (2014 - 2020). According to the Final 2021 ISO-NE PV Forecast, the average capacity for New Hampshire is 14.2%.[8]

Net Metering Legislation

In 2021, the net metering law was amended and the changes in law are summarized below.

House Bill 315 (HB 315)[9] establishes an exemption under net energy metering for group net metered facilities that generate electricity to offset electrical requirements of a municipal group host consisting of political subdivisions. A municipal host is defined as a customer generator with a total peak generating capacity of greater than 1 MW and less than 5 MWs used to offset the electricity requirements of a group consisting exclusively of one or more customers who are political subdivisions, A "political subdivision" is defined as any city, town, county, school district, chartered public school, village district, school administrative unit, or any district or entity created for a special purpose administered or funded by any of the above-named governmental units. A municipal host (i.e., facility) may be owned by either a public or private entity. All customers (i.e., host and members) must be customers of the same utility franchise service territory. Further, if the facility began operation after January 1, 2021, then it must be located in the municipality.

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[7] *See* Bill_Status (state.nh.us); effective September 21, 2021.

[8] *See* final_2021_pv_forecast.pdf (iso-ne.com), slide 8.

[9] *See* results (state.nh.us); effective August 26, 2021.

Senate Bill 91 (SB 91)[10] amended the Low-Moderate Income Community Solar Projects "adder" provision under group net metering. With the enactment of SB 91, the cent per kilowatt-hour (kWh) addition to the net metering credit provided to any particular low-moderate income community solar project shall be in the amount in effect on the date that the Department issues a group host registration number for that project. Additionally, the "adder" will be grandfathered in accordance with the grandfathering provisions of the net metering tariff for a customer-generator applicable to the project as in effect on the date the Department issues the project a group host registration number.

[10] *See* results (state.nh.us); effective October 25, 2021.

RPS Revenues and Costs

Revenues

Alternative compliance payments and the interest on the REF are the only sources of revenue for the REF. The ACP rate is paid for each megawatt hour of RPS compliance obligation not met by purchasing a REC. The ACP rate serves as a ceiling price in the REC market. Generally, REC prices trading at or near the ACP rate indicate an under-supply of RECs in the market, whereas RECs trading below the ACP rate indicate an adequate supply of RECs in the market.

ACP rates are defined by RPS Class and are adjusted annually. In accordance with RSA 362-F:10, III (b), the Class III ACP was $45 for 2015 and 2016, and $55 for 2017, 2018, and 2019. In accordance with RSA 362-F:10, III (c), the 2020 Class III ACP rate equaled the 2013 ACP rate adjusted by each year's CPI for the years 2014 through 2019. In accordance with RSA 362-F:10, III (a), the ACP rate for Classes III and IV are adjusted by the Consumer Price Index (CPI) and for Classes I and II by one-half of the CPI.

Basic Class Definitions

Class I (Non-Thermal)
- New Renewable
- Production of Biodiesel

Class I Thermal
- New Useful Thermal

Class II
- New Solar PV

Class III
- Existing Biomass
- Existing Methane

Class IV
- Existing Hydro

(See RSA 362-F for detailed definitions)

Table 1: Inflation Adjusted Alternative Compliance Payment Rates ($ per Megawatt Hour)

Inflation Adjusted Alternative Compliance Payment Rate ($ per Megawatt Hour)										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Class I (Non-thermal)	$ 64.02	$ 55.00	$ 55.37	$ 55.75	$ 55.72	$ 56.02	$ 56.54	$ 57.15	$ 57.61	$ 57.99
Class I Thermal		$ 25.00	$ 25.17	$ 25.34	$ 25.33	$ 25.46	$ 25.69	$ 25.97	$ 26.18	$ 26.35
Class II	$ 168.13	$ 55.00	$ 55.37	$ 55.75	$ 55.72	$ 56.02	$ 56.54	$ 57.15	$ 57.61	$ 57.99
Class III	$ 31.39	$ 31.50	$ 31.93	$ 45.00	$ 45.00	$ 55.00	$ 55.00	$ 55.00	$ 34.54	$ 34.99
Class IV	$ 31.39	$ 26.50	$ 26.86	$ 27.23	$ 27.20	$ 27.49	$ 28.00	$ 28.60	$ 29.06	$ 29.44

ACPs from electricity suppliers are made annually by July 1 for the prior calendar year. For example, ACPs for calendar year 2020 (CY20) were to be paid by July 1, 2021. Entities with RPS compliance obligations who might pay ACPs include New Hampshire's electric utilities as well as competitive electric power suppliers. The ACP funding to the REF, as designed, is expected to, and does, fluctuate over time.

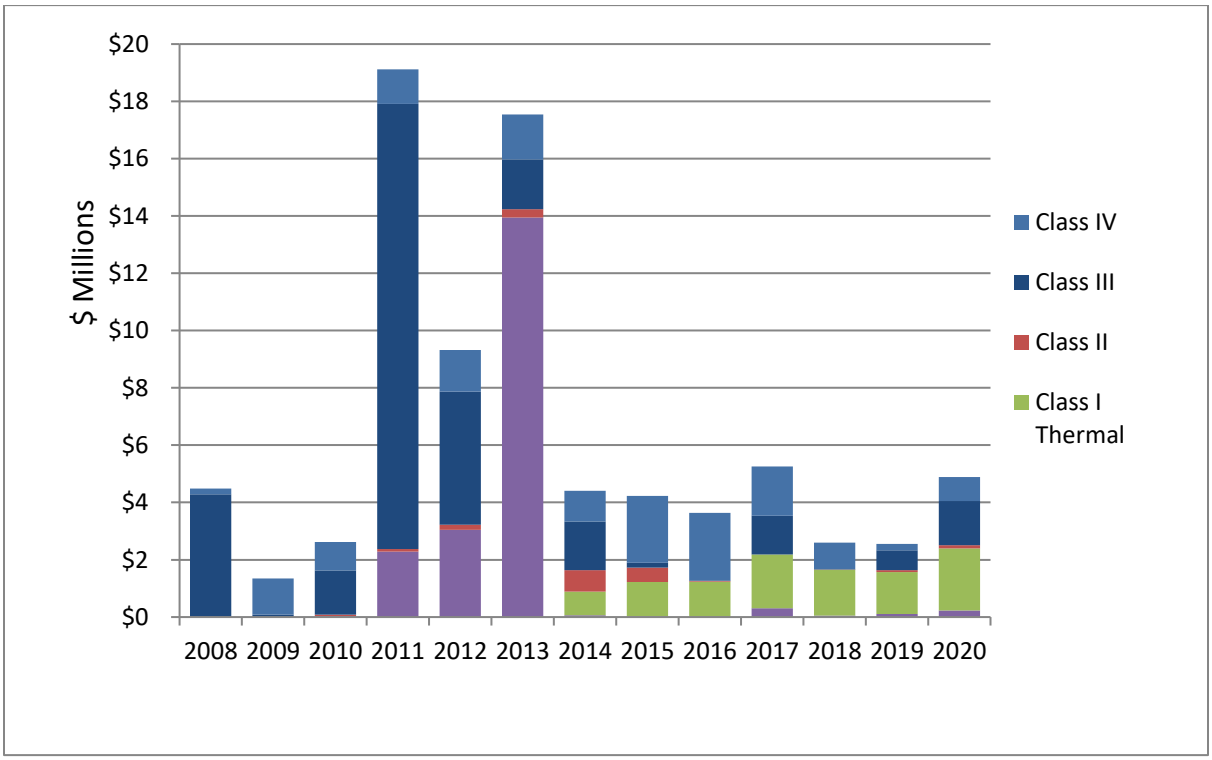
ACP revenues for compliance year 2020 were $4,890,883 as compared to the prior year's revenue of $2,558,411. The overall compliance obligation decreased from 19.7 percent for calendar year 2019 (CY19) to 14.7 percent for CY20. The decreased RPS obligation was due to the annual, legislatively defined increases for Class I, Class I Thermal, and Class II; and the Commission's Order to reduce the Class III obligation from 8% to 2%.

Table 2: ACP Revenues by Compliance Year

Compliance Year	ACP Revenue	Total RPS Obligation
2008	$ 4,483,917	4.00%
2009	$ 1,348,294	6.00%
2010	$ 2,625,499	7.54%
2011	$ 19,121,853	9.58%
2012	$ 9,323,198	5.55%
2013	$ 17,458,196	5.80%
2014	$ 4,406,804	7.20%
2015	$ 4,224,339	8.30%
2016	$ 3,633,342	8.50%
2017	$ 5,258,420	17.60%
2018	$ 3,101,432	18.70%
2019	$ 2,558,411	19.70%
2020	**$ 4,890,883**	**14.70%**

ACP Revenues by Class, and Trend by Compliance Year

The chart below illustrates the fluctuating nature of the annual ACP revenue while providing a year-to-year comparison of ACP revenues by RPS Class.



Revenues by RPS Class

This next section provides a discussion of possible market conditions contributing to the 2020 ACP revenues.

Class I & Class I Thermal: New Renewable Energy Production of Electricity or Useful Thermal ACPs

ACPs for Class I increased from $110,185 for CY19 to $227,502 for CY20, with an increased obligation requirement of 8.9 percent for CY20 versus 8.2 percent for CY19.

In addition, pursuant to RSA 362-F:6, II-a and Puc 2503.04(d), each year the Commission (changed to Department in 2021) computes an estimate of a percentage credit an electricity supplier may take for Class I based on the capacity of customer-sited sources that are net metered but are not certified to create Class I RECs. For CY20, the credit for Class I was 0.0060 percent against a total obligation of 8.9 percent. At the time of its RPS compliance filing, an electricity supplier may claim this Class I REC credit in an amount equal to the percentage credit for Class I times the total electricity (megawatt-hours (MWh)) provided to end-use customers by that electricity supplier.

ACPs for the Class I Thermal were $2,174,563 for CY20 compared to $1,457,047 for CY19. The obligation for Class I Thermal increased to 1.6 percent from 1.4 percent.

Class II: New Solar Electric ACPs

ACPs for Class II were $105,138 due to the credit for Class II net metered facilities that are not Class II REC-certified, similar to that described above for Class I. For CY20, the credit for Class II which an electricity supplier may claim at the time of its RPS compliance filing was 0.5584 percent compared to the total obligation of 0.70 percent. The ACPs paid were likely due to decisions by competitive electric power suppliers not to pursue purchase of small quantities of RECs but to expedite their compliance process by paying small ACP amounts.

Class III: Existing Biomass/Methane Electric Technologies (Prior to January 1, 2006) ACPs

The Commission did not reduce the Class III requirement for compliance year 2017, 2018 or 2019; however, the obligation was reduced to 2 percent for CY20[11]. With a Class III obligation equal to 8 percent in CY19 and 2 percent in CY20, ACP revenue was $1,546,287 in CY20 compared to $695,860 for CY19.

Class IV: Existing Small Hydroelectric (Prior to January 1, 2006) ACPs

Class IV ACPs increased to $837,393 in CY20 from $224,453 in CY19.

[11] *See* PUC Order No. 26,472 dated April 20, 2021 under PUC Docket No. DE 21-037.

Table 3 lists the distribution utilities and competitive electric power suppliers (CEPS) that filed E-2500 compliance reports for calendar (compliance) year 2020, documents each company's total ACPs, and further breaks down these payments by renewable energy class. Where no revenue appears for a class, it is because the company obtained RECs to satisfy its obligation for that class. Totals may not sum due to rounding.

Table 3: ACP Obligations by Supplier and RPS Class for Compliance Year 2020

Company	Class I	Class I Thermal	Class II	Class III	Class IV	Total
Liberty Utilities	$ 169,373	$ 139,854	$ -	$ -	$ 16,651	$ 325,878
New Hampshire Electric Cooperative	$ -	$ 77,781	$ -	$ 279,152	$ -	$ 356,933
Eversource Energy	$ -	$ 723,746	$ -	$ -	$ 338,433	$ 1,062,179
Unitil Energy Systems, Inc.	$ -	$ 49,088	$ -	$ 411,820	$ -	$ 460,908
Distribution Utilities Subtotal	**$ 169,373**	**$ 990,468**	**$ -**	**$ 690,973**	**$ 355,084**	**$ 2,205,898**
Agera Energy, LLC *	$ -	$ -	$ -	$ -	$ -	$ -
Ambit Energy, L.P.	$ -	$ 14,373	$ -	$ -	$ -	$ 14,373
Calpine Energy Solutions LLC	$ -	$ 54,324	$ 10,600	$ -	$ 56,551	$ 121,475
Champion Energy Services LLC	$ -	$ 45,867	$ 8,930	$ -	$ 47,717	$ 102,513
Clearview Energy	$ -	$ 4,660	$ -	$ 5,354	$ 349	$ 10,362
Constellation New Energy, Inc.	$ -	$ 26,704	$ -	$ 88,802	$ 31,065	$ 146,571
CS Berlin Ops, Inc.	$ -	$ 602	$ 115	$ -	$ 610	$ 1,328
Devonshire (Fidelty)	$ -	$ -	$ 1,152	$ -	$ 203	$ 1,356
Direct Energy Business, LLC	$ -	$ 304,081	$ -	$ -	$ -	$ 304,081
Direct Energy Services, LLC (First Point Power)	$ -	$ 81,184	$ -	$ -	$ -	$ 81,184
EDF Energy Services, LLC	$ -	$ 30,840	$ -	$ 159,678	$ -	$ 190,518
ENGIE Resources LLC	$ -	$ 184,700	$ 36,006	$ 241,815	$ 185,170	$ 647,691
ENH Power	$ -	$ 117,574	$ -	$ -	$ -	$ 117,574
Energy Rewards	$ -	$ 23,562	$ 979	$ -	$ -	$ 24,541
First Point Power, LLC	$ -	$ 118,491	$ 23,044	$ 195,427	$ 54,400	$ 391,362
Mega Energy of New Hampshire	$ 115	$ 3,299	$ -	$ 5,112	$ 3,429	$ 11,955
MP2 Energy NE, LLC	$ 807	$ 79	$ -	$ 104	$ 58	$ 1,047
NextEra Energy Services New Hampshire, LLC	$ -	$ 20,499	$ -	$ -	$ 1,250	$ 21,749
North American Power and Gas, LLC	$ -	$ 82,284	$ 16,016	$ 94,812	$ 85,640	$ 278,751
PNE Energy Supply, LLC	$ -	$ -	$ -	$ -	$ -	$ -
Smart Energy Holdings, LLC	$ -	$ 2,697	$ -	$ 4,421	$ 2,732	$ 9,849
Summer Energy Northeast	$ 27,826	$ 2,278	$ 461	$ 3,730	$ 2,354	$ 36,648
Sunwave US Holdings	$ -	$ 471	$ 115	$ 760	$ 494	$ 1,840
Texas Retail Energy	$ 29,208	$ 33,432	$ 6,510	$ 48,045	$ 5,725	$ 122,920
Think Energy (ENGIE Retail, LLC)	$ -	$ 6,231	$ 1,210	$ 7,219	$ 4,533	$ 19,193
Town Square Energy, LLC	$ 173	$ 25,866	$ -	$ 35	$ 29	$ 26,102
Xoom Energy New Hampshire, LLC	$ -	$ -	$ -	$ -	$ -	$ -
Competitive Energy Suppliers Subtotal	**$ 58,128**	**$ 1,184,095**	**$ 105,138**	**$ 855,314**	**$ 482,309**	**$ 2,684,985**
TOTAL	**$ 227,502**	**$ 2,174,563**	**$ 105,138**	**$ 1,546,287**	**$ 837,393**	**$ 4,890,883**

*Agera Energy, LLC recorded electric sales in New Hampshire in quarter 1 of calendar year 2020; however, as of the filing of this annual report, Agera Energy, LLC, has not submitted the E-2500 as required.

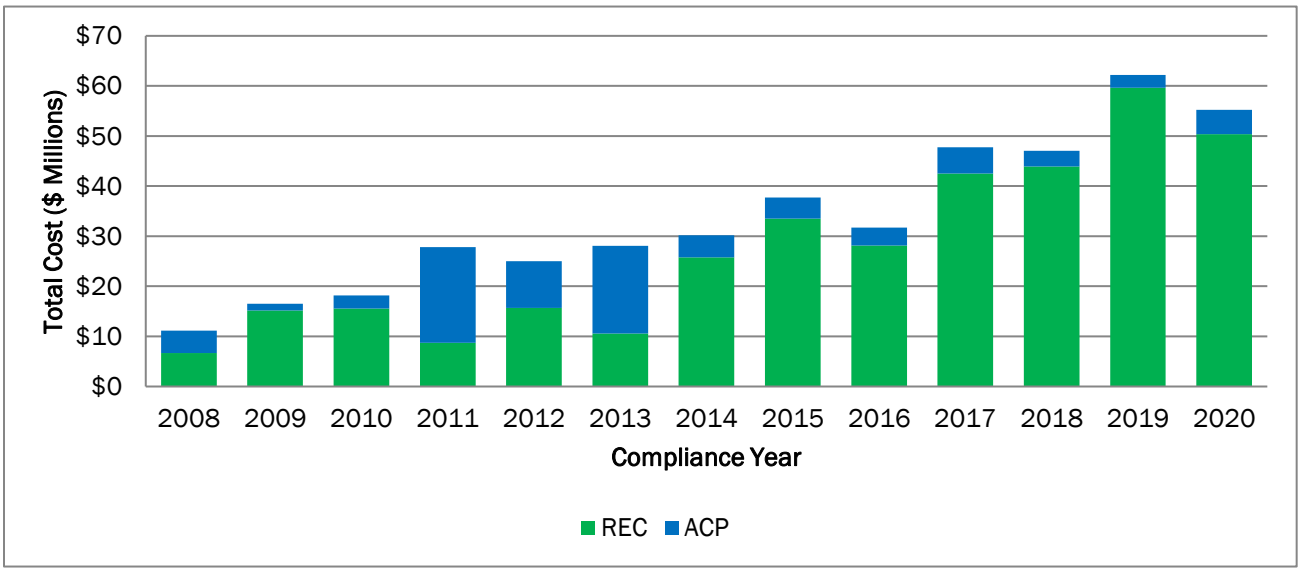
RPS Compliance Costs

The RPS is a market-based policy where RECs are traded through the NEPOOL GIS. NEPOOL GIS tracks certificates for all megawatt-hours of generation and load produced in the ISO New England control area, as well as imported MWh from adjacent control areas. Electricity suppliers comply with RPS requirements by purchasing RECs or making ACPs. Therefore, the total cost of RPS compliance is equal to the cost of RECs plus the ACPs. The average rate impact for CY 2020 RPS compliance costs is $0.0053 per kWh.

Table 4: Annual RPS Compliance Costs and Rate Impact

Compliance Year	Total RPS Obligation	Total REC Costs	Total ACP Costs	Total RPS Compliance Cost	Average per kWh Rate Impact
2008	4.00%	$ 6.65	$ 4.48	$ 11.14	$ 0.0011
2009	6.00%	$ 15.19	$ 1.35	$ 16.54	$ 0.0016
2010	7.54%	$ 15.57	$ 2.63	$ 18.19	$ 0.0017
2011	9.58%	$ 8.70	$ 19.12	$ 27.82	$ 0.0026
2012	5.55%	$ 15.70	$ 9.32	$ 25.02	$ 0.0023
2013	5.80%	$ 10.59	$ 17.46	$ 28.05	$ 0.0026
2014	7.20%	$ 25.81	$ 4.41	$ 30.21	$ 0.0028
2015	8.30%	$ 33.51	$ 4.22	$ 37.73	$ 0.0035
2016	8.50%	$ 28.12	$ 3.63	$ 31.75	$ 0.0030
2017	17.60%	$ 42.53	$ 5.26	$ 47.79	$ 0.0046
2018	18.70%	$ 43.94	$ 3.10	$ 47.04	$ 0.0043
2019	19.70%	$ 59.65	$ 2.56	$ 62.21	$ 0.0061
2020	**14.70%**	**$ 50.35**	**$ 4.89**	**$ 55.24**	**$ 0.0053**
Totals		$ 356.31	$ 82.43	$ 438.74	

All costs presented in millions and rounded.



REC Purchases

In accordance with RSA 362-F:8, IV, the annual REF report includes the number of RECs that were purchased during the prior compliance year by RPS class. Pursuant to RSA 362-F:7, I, purchased RECs not used for compliance may be banked for up to two years. Banked RECs may be used in future compliance years to meet up to 30 percent of a supplier's RPS requirements for a given class obligation. Table 5 below presents the quantity of RECs purchased during calendar year 2020.

Table 5: RECs Purchased During 2020 by Class

Class I Non-thermal	Class I Thermal	Class II	Class III	Class IV	Total
881,402	82,767	25,853	187,258	119,107	1,296,023

Rebate and Grant Program Summaries and Results

Pursuant to RSA 362-F:10, the Commission administers three residential renewable energy rebate programs, a low moderate income grant program, two C&I renewable energy rebate programs, and a competitive grant program for non-residential renewable energy projects. For all rebate programs and grants, projects funded must be located in New Hampshire.

Renewable Energy Fund Rebate Programs

Rebate programs funded by the REF are described in Table 6.

Table 6: Summary of Renewable Energy Fund Rebate Programs

Rebate Program	Eligible Technologies and Capacity Limits	Incentive Levels (Rebate)	Authority, Date of Inception
Residential Electrical Renewable Energy Rebate (PV and Wind)	Solar electric PV and wind turbines systems	$0.20 per watt up to a maximum of $1,000, or 30% of the total cost of the facility, whichever is less (*Effective January 2, 2018*)	RSA 362-F:10, V July 2009 *Program was modified in PUC Order No. 26,075 in Docket No. DE 15-302. (November 2017)*
Residential Solar Water Heating Rebate	Solar water heating systems with annual production capacity of 5.5 MMBtus/hour or greater	$1,500, $1,700, or $1,900 depending on system capacity	RSA 362-F:10, VIII April 2010
Residential Wood Pellet Boiler/Furnace Rebate	High efficiency, bulk-fed wood pellet central furnaces/boilers	40% of the eligible system cost and installation, up to a maximum rebate of $10,000. The program also provides a supplemental adder of $100 per ton for fuel storage systems larger than the 3 ton minimum requirement, up to a maximum of $500. (*Effective July 9, 2016*)	RSA 362-F:10, VIII April 2010 *Program was modified in PUC Order No. 25,921 in Docket No. DE 16-614 (July 2016).*

Rebate Program	Eligible Technologies and Capacity Limits	Incentive Levels (Rebate)	Authority, Date of Inception
C&I Solar Technologies Rebate	PV systems less than or equal to 500 kW AC, and solar thermal systems less than or equal to 100 kW AC or thermal equivalent	Incentive levels for PV systems are as follows: • $0.20/watt (lower of AC and DC) for new solar electric facilities • Up to a maximum rebate of $10,000 • Expansions to existing solar systems are not eligible Incentive levels for solar thermal systems are as follows: • $0.12/rated or modeled kBtu/year for new solar thermal facilities fifteen collectors in size or fewer; • $0.07/rated or modeled kBtu/year for new solar thermal facilities greater than fifteen collectors in size; and • Expansions to existing solar systems are not eligible	RSA 362-F:10, VIII October 2010 *Program modified and opened in PUC Order No. 26,336. In Docket No. DE 10-212 (March 2020).*
Commercial and Industrial Wood Pellet Furnace/Boiler Rebate	Non-residential bulk-fuel fed wood pellet boilers and furnaces rated 2.5 MMBtus/hour or less	40% of the eligible system cost and installation, up to a maximum rebate of $65,000. The program also provides supplemental adders for storage and metering. (*Effective July 9, 2016*)	RSA 362-F:10, VIII December 2013 *Program was modified in PUC Order No. 25,922 in Docket No. DE 13-298 (July 2016).*

New Hampshire's solar electric market continues to grow. Net metering, the RPS, and REF programs are incentives and drivers for participants in this market. Specific program results for the REF rebate programs in FY21 are summarized in Table 7.

Table 7: REF Rebate Program Results for Fiscal Year 2021

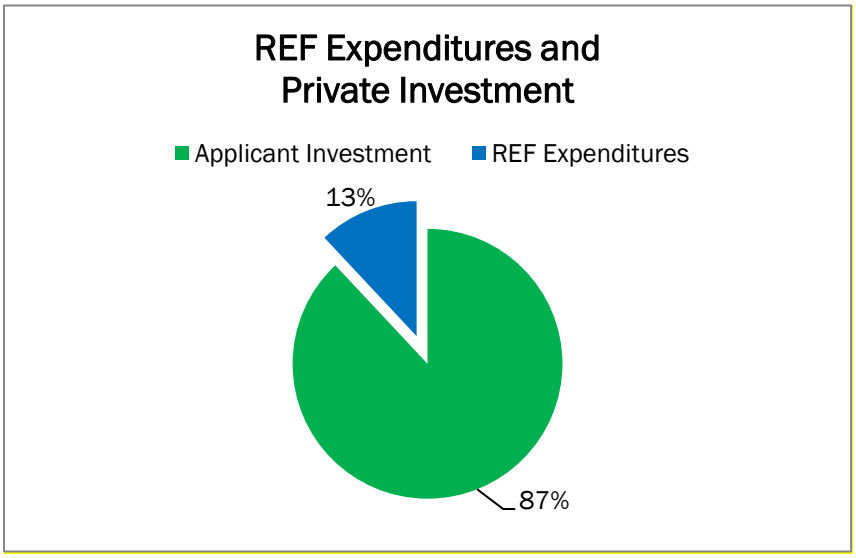
REF Rebate Program	Number of Applications Received	Number Rebates Awarded	Rebate Funds Disbursed	Average Rebate Award
Residential Electrical Renewable Energy (PV and Wind)	560	634	$ 630,444	$ 994
Residential Solar Water Heating*	n/a	n/a	n/a	n/a
Residential Wood Pellet Furnace/Boiler	29	28	$ 276,003	$ 9,857
C&I Solar Technologies (Electric and Thermal)	41	60	$ 640,696	$ 10,678
C&I Wood Pellet Furnace/Boiler	1	2	$ 132,373	$ 66,187
Totals	**631**	**724**	**$ 1,679,516**	**n/a**

**Program closed to new applications during FY21.*

Cumulative results for the rebate programs, since their inception through June 30, 2021, are shown below in Table 8. The program rebates have leveraged private investment in a ratio greater than six to one.

Table 8: Cumulative Rebate Program Results through June 30, 2021

REF Rebate Program	Number of Applications Received	Number of Rebates Awarded	Rebate Funds Disbursed	Aggregate Applicant Investment	Total Capacity of Incentivized Systems
Residential Electrical Renewable Energy (PV and Wind)	7,348	6,852	$ 16,368,138	$ 181,310,742	51.7 MW DC
Residential Solar Water Heating	510	494	$ 1,008,100	$ 3,292,000	0.92 MMBtu/hr
Residential Wood Pellet Boiler/Furnace	466	427	$ 2,933,352	$ 7,248,122	39.9 MMBtu/hr
C & I Solar Technologies (Electric and Thermal)	952	667	$ 14,734,961	$ 78,312,572	35 MW DC
C&I Wood Pellet Boiler/Furnace	86	62	$ 2,035,478	$ 6,336,073	28.7 MMBtu/hr
Totals	**9,362**	**8,502**	**$ 37,080,029**	**$ 276,499,509**	**n/a**



Non-Residential Competitive Grant Program

RSA 362-F:10, XI, requires the Department to issue an annual RFP for non-residential renewable energy projects that are not eligible to participate in incentive and rebate programs developed under RSA 362-F:10, V and RSA 362-F:10, VIII.

The Commission issued the annual RFP for renewable energy projects on January 8, 2021, stating that the RFP program had $1,100,000 in available grant funds. This RFP sought project proposals which would increase the supply of RECs from thermal renewable energy or non-photovoltaic electric renewable energy projects located in New Hampshire. Specifically, projects which would qualify to generate Class I, Class I Thermal, or Class IV Renewable Energy Certificates were eligible to apply. Six grant proposals were received by the Commission. These proposals represented approximately $20.857 million of total investment and requested $2.053 million in grant funds. The Commission recommended, and the Governor and Executive Council approved, four grant awards totaling $1,170,000.[12] Once installed and certified, these projects are estimated to create 36,266 Class I RECs and 11,043 Class I Thermal RECs annually. A complete list of grants awarded is shown in Table 9.

Table 9: Non-residential Competitive Grants Awarded in Fiscal Year 2021

Grantee	Technology	Project Description	Total Project Costs	Grant Amount	Estimated Annual RECs
Great River Hydro, Inc.	Hydro-electric	Construction of an additional 4.6 MW unit at hydroelectric facility	$ 12,316,000	$ 160,000	36,266 Class I
DCI, Inc.	Biomass Thermal	Installation of a new wood residue-fueled steam boiler plant which will provide 100% of a manufacturing plant's thermal energy needs in the form of process heat to kilns for drying lumber and firewood, and space heating	$ 2,863,000	$ 500,000	8,580 Class I Thermal
Sunapee School District (Sunapee Central School and Gym)	Biomass Thermal	Installation of a district heating plant that includes a Processed Dry Chip biomass boiler plant that will provide heating to the renovated school and gym	$ 810,000	$ 277,000	1,424 Class I Thermal

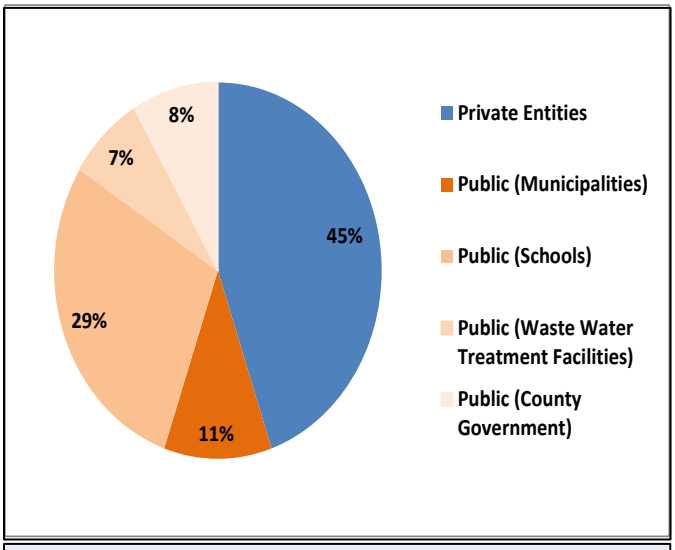
[12] *See* NH-SOS - June 16, 2021, Governor and Executive Council agenda items #83, #84, #85, and #87.

Cheshire County	Biomass Thermal	Installation of a wood chip boiler plant for a State Court House and County Hall Building	$ 433,000	$ 233,000	1,039 Class I Thermal

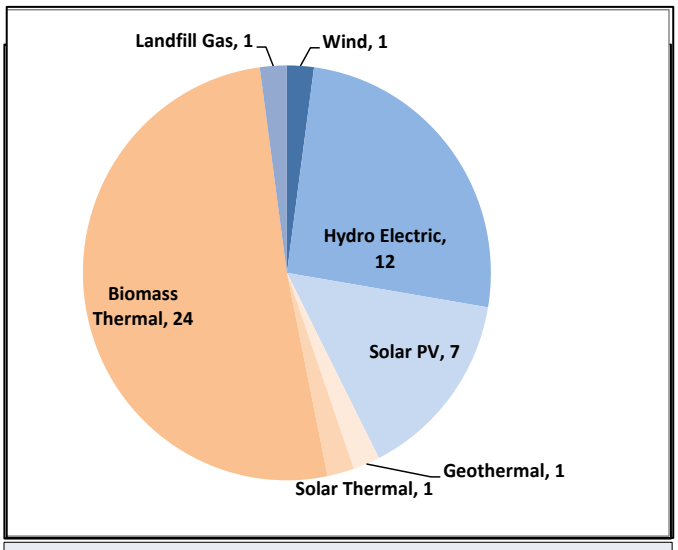
Table 10 and the subsequent charts summarize all grant awards since program inception.

Table 10: Non-residential Competitive Grant Program Summary

Year	Number of Grants Awarded	Total Grant Amount	Total Value of Projects
2011	4	$ 467,890	$ 1,280,923
2012	6	$ 654,750	$ 4,035,424
2013	9	$ 3,637,890	$ 28,888,905
2014	5	$ 2,107,199	$ 7,683,400
2015	3	$ 825,000	$ 2,327,000
2016	6	$ 1,272,425	$ 6,106,790
2017	3	$ 895,000	$ 2,425,000
2018	2	$ 950,000	$ 5,077,300
2019	5	$ 1,250,000	$ 2,910,996
2020	4	$ 1,170,000	$ 16,422,000
Totals	**47**	**$ 13,280,154**	**$ 77,232,338**



Grant Award Recipients
Private Entities in blue;
Public Entities in oranges



Grants by Technology
Electricity Generation in blues;
Thermal Generation in oranges

Non-residential Competitive Grant Completed in Fiscal Year 2021

Froling Energy, LLC (Froling), located in Keene, is a supplier and installer of European-made boilers specifically designed to burn precision dry chip (PDC) and pellet fuel. Froling also produces and delivers PDC fuel to clients in New Hampshire and Vermont. The company received a grant from the 2018 Non-residential Competitive Grant program to install a 2 MW biomass-fired steam boiler which will primarily provide process heat for expanded production of PDC fuel. Froling will also install a 100 kW steam turbine generator which will produce electricity using the thermal output of the boiler. Overall, this system will produce an estimated 4,421 Class I Thermal RECs and 295,000 kWh of electricity annually.

> Froling Energy is using locally sourced renewable fuel to manufacture renewable fuel that is then used by New Hampshire municipalities, schools and businesses.

With dryers fueled by PDCs, locally sourced and sustainably harvested wood chips are screened and dried at the Keene manufacturing plant. Froling blower trucks then deliver PDCs which are blown into above-ground silos through six-inch pipes. Many of Froling's customers were recipients of REF grants, including Filtrine Manufacturing, the University of New Hampshire, Maplewood Nursing Home and many school districts. These customer facilities are also generating Class I Thermal RECs. Froling estimates that three Thermal RECs are generated for each ton of PDC fuel consumed.

The process from delivered wet chips to screening and drying, to storing for delivery to customers.

Low-Moderate Income Program

The Department is required to develop program(s) for Low-Moderate Income (LMI) residential electric customers. The program(s) must "directly benefit a group of at least 5 residential customers, where at least a majority of the residential customers are at or below 300 percent of the federal poverty guidelines" (*i.e.*, at least three LMI participants). The program(s) may finance or leverage financing for low moderate income community solar projects in manufactured housing communities or in multi-family rental housing.

The Commission issued an RFP on January 22, 2021 for Community Solar Photovoltaic Projects Providing Direct Benefits to Low and Moderate Income Residential Electric Customers, stating that the LMI program had $400,000 in available grant funds. Five proposals requesting a total of $868,933 in grant funds. Two projects were selected by the Commission and approved by the Governor and Executive Council on June 16, 2021 to receive $379,744 in funding.

Organization for Refugee and Immigrant Success (ORIS) was awarded grant funding to work with a developer to design and build a community solar project on land owned by ORIS, and Pine Hill Homeowners Cooperative Inc. was awarded a grant to work with a developer to design and build a community solar project on land owned by the Cooperative. Once installed, these projects will provide direct benefits, including on-bill-credits resulting in a reduction to electric bills for 41 LMI families. A list of grants awarded is shown in Table 11.

Table 11: Low-Moderate Income Grants Awarded in Fiscal Year 2021

Grantee	Town	Total Project Costs	Grant Funding	Total Projected Annual Benefits to LMI	LMI Participant Households
Organization for Refugee and Immigrant Success (ORIS)	Dunbarton	$362,155	$181,000	$864	23
Pine Hill Homeowners Cooperative, Inc.	North Conway	$198,744	$198,744	$250	18 (24 total participants)

Revenues, Expenditures, and Statutory Funding Requirements

Administrative Costs

Administrative costs are estimated and include, for example, personnel, organizational dues, and IT services. REF administrative expenditures cover the cost of managing the various rebate and grant programs, monitoring and validating facility and supplier compliance with the RPS, and working on RPS related dockets such as Puc 2500 rules, Puc 900 rules, net metering, and REF program revisions. Administrative budgeted and actual costs are provided in Table 12.

Table 12: Budgeted and Actual Administrative Costs by Fiscal Year

Fiscal Year	Budget	Actual	Difference
2018	$ 894,835	$ 683,341	$ 211,494
2019	$ 916,102	$ 696,411	$ 219,691
2020	$ 768,750	$ 517,274	$ 251,476
2021*	$ 425,864	$ 428,598	$ (2,734)
2022**	$ 380,629		

*FY21 appropriated $788,069 for administrative expenses. The Governor's Efficiency Budget proposed an administrative expense appropriation of $425,864.

**FY22 Accounting Unit 1890 appropriations for administrative expenses.

Revenues

Table 13 below summarizes the REF revenues recorded for fiscal year 2022.

Table 13: Renewable Energy Fund Revenues

Revenues Recorded in FY22 and Carry Forward Funding	
Calendar Year 2020 ACP received in Fiscal Year 2021	$ 2,208,235
Calendar Year 2020 ACP received in Fiscal Year 2022	$ 2,683,020
ACP Compliance Adjustments	$ (372)
Net Calendar Year 2020 ACPs	$ 4,890,883
Interest Earned (April 30, 2021)	$ 92,977
Carry Forward from FY21 for In-house/Approved Step 1 Rebate Applications	$ 738,056
Carry Forward from Encumbrances	$ 2,640,734
With the passage of HB 2 and the insertion of "continually appropriated" the total funds available for fiscal year 2022 and program budget allocations are being determined and developed as of the date of this report. Total REF available funding and additional program allocations will be available by November 1, 2021.	

Allocation of Funding Between Residential and Non-residential Sectors

In 2010, the New Hampshire Legislature required the Commission (now Department) to balance REF expenditures between the residential and non-residential sectors over each two-year period beginning July 1, 2010, in proportion to each sector's share of total retail electricity sales. In 2012, the requirement was modified such that the Commission (now Department) must reasonably balance the amounts expended, allocated, or obligated during each two-year period.[13]

In FY21, the first year of the two-year period, new revenues deposited into the REF consisted of ACP revenues and interest. In 2019, retail electricity sales for the residential sector represented 42 percent of the total retail sales, while sales for the non-residential sector accounted for 58 percent of total retail sales. Accordingly, based on these percentages, the new revenues (less ACP adjustments and administrative cost) were allocated as follows: Residential Programs, $1,856,993, or 43.8 percent of allocated funds; Non-Residential Programs, $2,384,984, or 56.2 percent of allocated funds.

In FY22, the second year of the two-year period, new revenues deposited into the REF consisted of ACP revenues. In 2020, retail electricity sales for the residential sector represented 45 percent of the total retail sales, while sales for the non-residential sector accounted for 55 percent of total retail sales. On September 3, 2021, the Department released a preliminary budget which allocated $1 million to programs. Based on the electricity sales percentages by sector, these funds were allocated as follows: Residential Programs, $450,000, or 45 percent of allocated funds; Non-Residential Programs, $550,000, or 55 percent of allocated funds.

[13] *See* RSA 362-F:10, X.

Funding Cap for Residential Renewable Electricity Rebate Program

RSA 362-F:10, VI places a cap on spending for the residential rebate program for solar electric and wind turbines. No more than 40 percent of the REF can be allocated to this program, measured over two-year periods commencing July 1, 2010.

Use of Class II Revenues for Solar Technology Incentives

RSA 362-F:10, I requires that "Class II moneys shall primarily be used to support solar energy technologies in New Hampshire." For CY20, Class II ACPs equaled $105,138.

Use of Renewable Energy Fund Revenues for Low Moderate Income Program

RSA 362-F:10, X requires allocating "no less than 15 percent of the REF annually to program(s) that benefit low-moderate income residential customers, including, but not limited to, the financing or leveraging of financing for low-moderate income community solar projects in manufactured housing communities or in multi-family rental housing." In FY21, $400,000 of the funds allocated to the LMI program; $379,744 were encumbered for two grants.

Net Metered Capacity, Net Metered Facilities and Group Net Metering

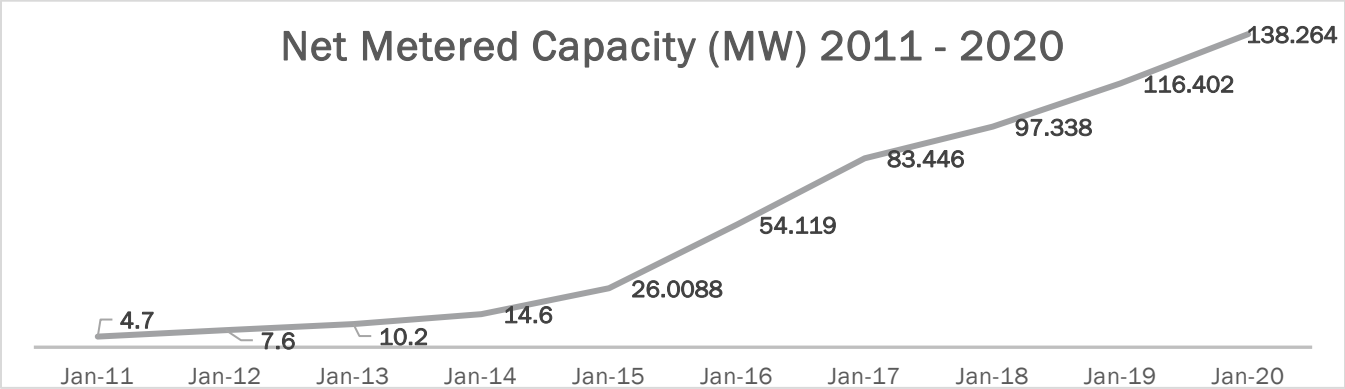
Net Metered Facilities

Each utility's total installed capacity of net metered facilities is listed in Table 14. The facility data includes PV, small wind, and small hydroelectric net metered installations.

Table 14: Total Net Metered Facilities as of December 31, 2020

Electric Distribution Utility	Total Installs in CY2020	Total Installs (End of CY2020)[14]	Capacity Added (MW) in CY2020	Total Capacity (End of CY2020)[15]
Liberty	112	715	2.554	7.648
NH Electric Cooperative	97	1,195	1.740	9.411
Eversource	875	7,847	16.264	89.653
Unitil	97	1,058	1.304	9.690
Total Net Metered Facilities	**1,181**	**10,815**	**21.862**	**138.264**

The chart below illustrates the historic trend of installed net metered capacity in New Hampshire starting in January 2011 through December 2020. Overall, at the end of 2020, the total installed net metered capacity was 138.264 MW with 21.862 MW being added or installed in 2020.



[14] Based on the utility reports to DOE (EIA Form 861M (formerly Form 826) without adjustment) and includes system expansions. Cumulative total.
[15] Based on the utility reports to DOE (EIA Form 861M (formerly Form 826) adjustment) and includes system expansions. Cumulative total.

Group Net Metering

In July 2009, the Legislature enacted Senate Bill 98, amending RSA 362-A:9 to allow for group net metering and rules were developed to govern group net metering in section 909 of Puc 900 administrative rules. The law permits net-metered renewable energy facilities, known as hosts, to share the proceeds from sales of surplus electricity generation with other electric utility account holders, known as group members. In some cases, the group host and the group members may be the same party. For instance, a town might net meter a solar array and use the proceeds to offset utility expenses associated with other town electric meters. The host and the group members must all be customers of the same distribution utility. Group net metering applications are reviewed and approved by the Department.

Table 15 provides information about group net metering applications registered by the Commission in CY20.

Table 15: Group Net Metering Applications Registered as of December 31, 2020

Electric Distribution Utility	Total Cumulative Number of Applications Approved		Total Cumulative Capacity of Approved Host Installations (Kilowatts AC)		2020 Net Generation By Host (kWh)*	2020 Total Member Load (excluding Host) (kWh)
	Solar	Hydro	Solar	Hydro		
Eversource Energy	193	35	7,792	15,068	48,226,691	80,450,966
Liberty Utilities	21	--	859	--	644,371	1,226,554
New Hampshire Electric Cooperative	11	--	297	--	202,259	893,661
Unitil Energy Systems, Inc.	21	--	636	--	485,356	790,180
Total	**246**	**35**	**9,584**	**15,068**	**49,558,677**	**83,361,361**

Conclusion

Since its inception in July 2009, the Renewable Energy Fund has been used to establish seven grant and rebate programs that have experienced substantial demand. The Renewable Energy Fund has been utilized to fund over 7,700 rebates for renewable energy systems to New Hampshire homeowners, businesses, schools, towns, non-profit organizations, and other eligible entities. In addition, the competitive grant program has provided over $13 million in funding for 47 renewable energy projects for schools, businesses, and municipalities, featuring technologies from biomass heating systems to hydroelectric project upgrades to photovoltaic arrays and solar hot air, among others.

As this report illustrates, demand for rebates and grant awards continues to be strong. Rebate and grant funds have leveraged over $350 million in private investment, providing a boost to the state's economy and creating jobs for electricians, plumbers, and alternative energy businesses. In addition, there has been substantial growth in distributed generation renewable energy systems that serve to diversify our energy supply, reduce our reliance on fossil fuels, reduce greenhouse gas emissions, and increase our energy independence.

The Department continues to monitor industry and renewable energy certificate market trends, and technological developments such as energy storage. The Department will continue to work with stakeholders to develop new methods and programs to support the renewable energy industry and incentivize renewable energy system installations.

The Department will also continue to work with the net metering working group to design and develop the Commission ordered Value of DER Study and net metering pilot programs. Data from the pilot programs and studies will be used to inform future net metering tariffs.

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