

**Hanover Community Power
Electric Aggregation Plan**



May 2021

Executive Summary

Overview

Hanover Community Power is a program to provide electric power supply and services for residents, businesses, and other entities in the Town of Hanover that is authorized under RSA 53-E.

The Legislature's purpose in enabling Community Power was to encourage voluntary, cost effective and innovative solutions to local needs with careful consideration of local conditions and opportunities. RSA 53-E allows municipalities and counties to aggregate retail electric customers, including residential, non-profit, and small commercial accounts, to provide such customers access to competitive markets for supplies of electricity and related energy services. Refer to [Attachment 1](#) for more details on local control authorities and legislative context.

Community Power programs operate on a competitive basis and are self-funded through revenues generated by participating customers. The Town of Hanover will not need to raise taxes to fund the program.

Aggregations provide small customers with similar opportunities to those currently available to large electric customers in obtaining lower electric costs, reliable service, and secure energy supplies, particularly as they differ from standard default service provided by the incumbent electric utilities.

Hanover's three incumbent electric utilities, Liberty, Eversource and the NH Electric Co-op (NHEC), who each serve a specific region within the Town, will continue to own and operate the distribution grid and be responsible for delivering power to participating customers. The NH Public Utilities Commission (NHPUC) is currently drafting rules regarding the implementation and operation of Community Power programs within the state.

The Hanover Electric Aggregation Committee, a subcommittee of Sustainable Hanover, was tasked by the Hanover Selectboard with drafting this Electric Aggregation Plan, which sets forth goals, implementation and management principles, and requirements for the program required by RSA 53-E, for consideration by Hanover Town Meeting. Approval of this plan by Town Meeting as the legislative body then authorizes the Selectboard to arrange and contract for the necessary professional services and power supplies to launch Hanover Community Power.

The Town of Hanover is a founding member of the Community Power Coalition of New Hampshire (CPCNH, a nonprofit created to streamline and enhance the implementation and operation of multiple individual Community Power programs on a statewide basis. CPCNH will contract with qualified vendors and credit-worthy suppliers to provide the services, credit support and electricity required to launch and operate members' Community Power programs. These third parties are expected to fund the upfront cost of implementing member programs, with costs recovered through program revenues.

This plan enables, but does not require, Hanover to participate fully in CPCNH and to appoint representatives to the CPCNH Board of Directors to oversee these activities.

Due to the participation of several other municipalities, CPCNH will launch at a scale equivalent to Liberty Utilities and may become larger than Unitil within the 2022-23 timeframe (in terms of the number of customers on default service and quantity of electricity procured by these utilities).

Hanover Community Power is well aligned with our community's policy objectives of achieving 100% renewable electricity by 2030 and thermal and transportation energy by 2050, as voted on and approved at Town Meeting in May 2017 with the adoption of the community's Ready for 100 resolution. Hanover's program goals are:

- **Competitive Rates & Choices** that must meet or beat those offered by Liberty, Eversource or the NHEC at launch, and must offer choices in terms of the percentage supply of renewable power offered in each supply mix as well as pricing options.
- **Fiscal Stability & Financial Reserves** to ensure the program is able to maintain competitive rates over time and advance the Town's policy goals over the long-term (e.g, development of local energy resources and programs);
- **Enhanced Customer Focus** to enable customers to adopt new clean energy technologies that reduce energy expenditures and carbon emissions.
- **Consumer Protections** to ensure contracts entered in to are fair, and to represent the Town of Hanover's interests on energy issues at the NH Legislature and the NHPUC.
- **Cleaner, Local Power** to supply an affordable energy portfolio that prioritizes the use of cost-effective renewable energy, local energy projects and customer programs.
- **Community Resiliency** programs to reduce energy consumption, lower bills, create jobs, and pursue longer-term projects such as building local back-up power supplies.
- **Regional Development** in support of clean infrastructure developed in collaboration with municipalities, Community Power programs and other government agencies.
- **Grid Modernization** by supporting informed advocacy for policies, regulations, and infrastructure investments to ensure a decarbonized, affordable and resilient energy system.

The Town of Hanover's Electric Aggregation Committee began researching Community Power best practices in December 2019, in collaboration with the other founding members of the Coalition and advisors throughout the state. The Town did so after determining that the best approach to procuring renewably generated electricity for Hanover electricity customers was by combining the community's demand with that of other NH communities. See [Attachment 7](#) for a summary of the many actions the Town has taken since 2017 that led us to a determination to pursue formal municipal aggregation of electricity.

This plan reflects industry best practices and was developed by the Electric Aggregation Committee with input from CPCNH and from our residents, local businesses and the other prospective customers of Hanover Community Power.

Purpose of this Electric Aggregation Plan

This Electric Aggregation Plan sets forth the Town's policy goals for its Community Power program, summarizes Hanover Community Power's governance and implementation processes, and commits Hanover Community Power to comply with applicable statutes and regulations in terms of:

- Providing universal access, reliability, and equitable treatment of all classes of customers subject to any differences arising from varying opportunities, tariffs, and arrangements in the incumbent utilities' distribution franchise territories.
- Meeting, at a minimum, the basic environmental and service standards established by the

NHPUC and other applicable agencies and laws concerning the provision of service under Community Power.

This plan does not otherwise commit Hanover Community Power to any defined course of action and does not impose any financial commitment on the Town of Hanover.

Public Approval Process and Next Steps

This Electric Aggregation Plan was developed by Hanover's Electric Aggregation Committee with due input from the public, as required under RSA 53-E. Refer to [Attachment 7](#) for a summary of this process.

The Electric Aggregation Committee has determined that this Electric Aggregation Plan satisfies applicable statutory requirements and is in the best, long-term interest of the Town of Hanover and residents, businesses, and other ratepayers. As such:

1. The Electric Aggregation Committee may now submit this Electric Aggregation Plan for consideration by the Hanover Selectboard and, in turn, at Town Meeting.
2. Adoption of this Plan at Town Meeting, by majority approval of those present and voting, establishes Hanover Community Power as an approved aggregation with statutory authorities defined under RSA 53-E:3, to be exercised with due oversight and local governance, as described herein.
3. The Selectboard will appoint a primary and alternate representative to the CPCNH Board of Directors. CPCNH Board meetings will be duly noticed and conducted in accordance with New Hampshire's Right-to-Know Law (RSA 91-A).
4. Future decisions made by the Selectboard regarding how to implement and operate Hanover Community Power, including the execution of a Cost Sharing Agreement with the Coalition and delegation of authorities, if any, to Hanover's representatives on the CPCNH Board, will be made at duly noticed public meetings.

The program will not launch until regulations governing Community Power are adopted by the NHPUC. NHPUC staff are currently drafting rules, and Hanover Community Power and the Coalition will actively participate in the Commission's public review process.

Rules are expected to require submission of this plan to the Commission to provide formal notice that the Selectboard is planning to launch a Community Power program, and to authorize the Town of Hanover to request access to additional customer data from Liberty, Eversource and NHEC that will be needed for the implementation and administration of Hanover Community Power.

Overview of Hanover Community Power

Hanover Community Power is a new program to provide electricity to residents, businesses, and other entities on a competitive basis. Under the program:

- Hanover Community Power, once operational, will serve as the default electricity supplier within the Town of Hanover's boundaries and be self-funded through revenues received by participating customers. The Town will not need to raise taxes to pay for it.
- Liberty, Eversource and NHEC, the electric distribution companies that own and operate the local distribution system in Hanover (poles, wires, transformers, substations, etc.), will continue

to deliver electricity to customers.

- Hanover’s Selectboard, in coordination with advisory support from the Town Manager and the Hanover Electric Aggregation Committee, will be authorized to contract for the necessary services and power supplies to implement and operate the program, set customer rates prior to program launch and continue to provide oversight over the program thereafter.

All customers in Hanover will be notified and may choose to opt-out of, or request to opt-in to, participating in the program as described below:

- Customers currently on default service provided by Liberty, Eversource or NHEC will be notified, provided the opportunity to decline participation, and thereafter transferred to Hanover Community Power if they do not opt-out, by a specified date outlined in the notification.
 - Customer notifications will: include the initial fixed rate for the program’s default service compared with the Liberty, Eversource and NHEC rates, be mailed to customers at least 30 days in advance of program launch and provide instructions for customers to decline participation (for example, by return postcard, calling a phone number or using a web portal).
- Customers already served by Competitive Electric Power Suppliers will be notified and may request to opt-in to the program; and
- New customers will thereafter be notified and transferred onto Hanover Community Power’s default service unless they choose to take service from Liberty, Eversource, NHEC or a Competitive Electric Power Supplier.

All customers on Hanover Community Power default service will remain free to switch back to the Liberty, Eversource, NHEC or to take service from a Competitive Electric Power Supplier.

Liberty Utilities provides electric distribution service to almost all customers within the Town of Hanover. The table below shows the total number and electricity usage of customers served by Liberty, who would initially receive either “opt-in” or “opt-out” notifications:

Liberty Utilities Customers

(Eligible for Opt-In or Opt-Out Notifications)

	Customer Count	Annual Usage (MWh)
Municipal	39	2,387
Residential	2,497	20,900
Commercial	561	17,321
Industrial	12	71,745
Total	3,109	111,640

Aggregated data shown was provided by Liberty Utilities.

As Hanover prepares to implement the program, additional customer data will be provided by Liberty Utilities, as well as NHEC and Eversource, so that the Town will be able to notify and provide all customers the opportunity to participate in the program (as required under RSA 53-E).

Overview of Hanover Community Power



Membership in the Community Power Coalition of New Hampshire

The Town of Hanover is a founding member of CPCNH, a nonprofit joint powers agency authorized under RSA 53-A and governed by participating communities under the terms of the Joint Powers Agreement approved by the Hanover Selectboard on January 25, 2021.

The Coalition was created so that towns, cities and counties across New Hampshire could:

- Jointly solicit and contract for the third-party services and staff support required to implement and operate municipal and county Community Power programs.
- Thereafter participate in joint power solicitations and project development opportunities.
- Facilitate knowledge-sharing and accelerate the pace at which cost-effective innovations and regional collaborations on clean energy and resilient infrastructure development are implemented at the community-level throughout the state.
- Represent the interests of member communities in state policy affairs relating to Community Power and electricity (both legislative and regulatory).

Refer to [Attachment 2](#) for supporting documentation and details regarding Hanover's role in its formation of CPCNH.

Due to the design and projected size of CPCNH, the Electric Aggregation Committee anticipates that participation will result in cost savings, lower staff requirements and enhanced quality of services for Hanover Community Power and other member programs. The sections below provide a concise summary of the key features and attributes of CPCNH.

Economies of Scale

CPCNH is designed to achieve significant economies of scale, in terms of the oversight and management of Community Power program operations.

Due to the participation of several other municipalities and growing interest of communities throughout the state, CPCNH expects to launch at a scale equivalent to Liberty Utilities and may become larger than Unitil within the 2022-23 timeframe, both in terms of the number of customers on default service and quantity of electricity procured by these utilities.

Voluntary Participation

Hanover anticipates relying upon CPCNH member services to launch and operate Hanover Community Power, but approval of this plan does not commit the Selectboard to doing so.

The Selectboard retains the authority to contract for any-and-all required program services and electricity supplies, and to pursue projects independently of CPCNH.

Community Governance

Hanover will appoint a primary and alternate representative to the CPCNH Board of Directors. All founding members will be directly represented on the Board until more than twenty-one (21) members join, at which point directors will be elected by vote of the members at annual meetings (with a Board size of between 11 and 21 representatives, at the members' direction).

As a founding member, Hanover's representatives will directly oversee the initial startup and implementation activities of CPCNH, including: the adoption of Board policies and election of officers, the hiring of key staff to provide management and oversight, the solicitation and contracting of third-party service vendors to launch and operate Community Power programs, and the appointment of directors and other community representatives to committees.

CPCNH will have six standing committees: Executive, Finance, Audit, Regulatory and Legislative Affairs, Risk Management and Governance. Additionally, the Board may establish ad-hoc committees, and each direct project that members choose to pursue in the future will be overseen by a committee specific to that project.

All meetings of CPCNH will comply with New Hampshire's Right-to-Know Law (RSA 91-A), the purpose of which is to *"ensure both the greatest possible public access to the actions, discussions and records of all public bodies, and their accountability to the people"*, based on the recognition that *"openness in the conduct of public business is essential to a democratic society."*

Cost Sharing

CPCNH costs will be tracked in three distinct categories: direct project costs, member services, and general and administrative costs (which are overhead costs that are not incurred by any specific project or member service).

These costs will be allocated in accordance with Cost Sharing Agreements executed by each member, which will be the same in all material respects. General costs will be allocated based on each Community Power program's share of total electricity usage each year, while members will choose and separately pay for the costs of specific services and projects. These expenses will be factored into the electricity rates set by each member and paid for out of the revenues received from participating customers in each Community Power program.

Additionally, the debts, liabilities and obligations of CPCNH, and of other participating Community Power programs, will be non-recourse to Hanover unless expressly agreed to by the Selectboard under Hanover's Cost Sharing Agreement or a Project Contract.

Member Services

CPCNH intends to contract with qualified vendors and credit-worthy suppliers to provide the services, credit support and electricity required to launch and operate Community Power programs.

These third parties are expected to fund the upfront cost of implementing Community Power programs, the expense of which would be amortized and recovered for a specified term, along with ongoing operating costs, in customer rates.

The CPCNH business model has been designed to provide Community Power programs with:

- **Innovative local programs and customer services:** new rates, technologies and services for customers that lower electricity supply costs and risk for Hanover Community Power in aggregate, along with the electricity bills of participating customers from a “full bill” perspective (i.e., inclusive of transmission and distribution charges).
- **Energy Risk Management & Financial Reserve Policies, Procedures and Practices:** expert guidance on energy risk management, procurement of a diversified portfolio of energy contracts, rate setting, and financial reserves — sufficient to ensure the stability and operational continuity of Hanover Community Power over the long-term (as technologies, market dynamics, risk factors, consumer preferences and energy policies continue to evolve).
- **Development of Renewable and Battery Storage Projects:** joint contracting opportunities for the construction of new renewable and battery storage projects financed under long-term contracts — to diversify our energy portfolio, provide a physical hedge against wholesale market price fluctuations, enhance the resiliency of our electrical grid, and stimulate local construction and economic development in Hanover and other participating communities.

The extent of services offered by CPCNH is expected to expand over time, in response to new market opportunities and ongoing regulatory rule reforms, and to meet the local objectives of participating Community Power programs.

CPCNH also plans to hire a small number of qualified staff to ensure effective oversight of operations, as well as enhanced transparency and expert management as the Coalition’s business operations evolve.

The following sections explain how CPCNH member services are related in ways that are intended to ensure Hanover Community Power remains operationally stable, competitive and able to achieve the full range of our local policy goals over the long-term.

Innovative Local Programs & Customer Services

Cost-effective local programs provide new retail products and services that enable customers to:

- Intelligently moderate their use of electricity from the grid during times of high wholesale power prices and when the physical grid is constrained and at-risk of not being able to deliver enough power to meet all customers’ usage requirements during the hours of “peak demand”.
- Increase their use of electricity from the grid when wholesale prices are relatively lower and the physical grid is not constrained.

Examples of innovative retail products and services that enable customers to do so include time-based rate options, individual and group net metering, distributed generation and energy storage programs, electric vehicle charging rates, and other offerings that empower customers directly and support the services of third-party energy companies that are helping customers adopt and use new technologies.

Programs that enable the intelligent use of electricity will help Hanover Community Power:

- Lower electricity supply costs and risk for the program in aggregate.
- Strengthen customer relationships and local brand recognition; and
- Protect against customer attrition (the risk that customers opt-out of the program by choosing an alternative supplier) and potentially grow the program’s customer base over time.

Local programs, in order to be cost-effective, need to be designed in ways that relate to and actively help manage the various sources of cost and risk involved in operating a competitive power agency.

As explained in the section below, CPCNH will adopt a structured approach to monitoring, analyzing and actively managing energy cost and risk — both to enable the design of cost-effective local programs, and provide additional benefits such as long-term financial stability.

Energy Risk Management & Financial Reserve Policies

Hanover Community Power will not launch unless it can offer residential electricity rates that meet or beat Liberty, Eversource or NHEC default electricity prices. Maintaining competitive rates thereafter, as market prices and incumbent utility default rates change over time, will significantly reduce the risk that customers opt-out of Hanover Community Power and allow the program to achieve our medium- to long-term goals.

To that end, and working with the other members of CPCNH, Hanover Community Power will adopt Energy Risk Management and Financial Reserve policies. The purpose of these policies is to:

- Ensure that Hanover Community Power allocates customer revenues in ways that balance our community’s goals and objectives over the short-to-long term; and
- Define how CPCNH will conduct energy risk management, procure electricity and market operations on behalf of Hanover Community Power (so that the agency remains in compliance with our adopted policies).

These policies are intended to ensure that Hanover Community Power foresees and adequately plans for contingencies (such as power supply shocks, economic downturn and regulatory changes) and remains able to draw on capital reserves or credit support sufficient to maintain: (1) rate stability for our customers; and (2) adequate cash flow for CPCNH operations over the course of any adverse events and periods.

As Hanover Community Power accrues financial reserves, CPCNH will be able to facilitate additional ways to lower costs, create new value, and further enhance the financial stability of the program. As one example, the accrual of sufficient reserves will allow Hanover Community Power to begin self-providing the collateral required for wholesale power market transactions and power purchase agreements. This will lower the capital costs and risk premiums otherwise embedded into the price of power for the program. CPCNH also intends to facilitate pooled power procurement across participating Community Power programs, and to explore opportunities to jointly satisfy collateral obligations within these arrangements.

Lastly, as explained further in the section below, the combination of the Coalition’s approach to energy portfolio risk management and the accrual of sufficient financial reserves by participating members is what will enable Hanover Community Power to enter into long-term contracts — in order to construct new renewable and battery storage projects.

Development of Renewable and Battery Storage Projects

As Hanover Community Power and other Community Power members of CPCNH demonstrate the ability to accrue reserves sufficient to ensure our collective financial stability — and maintain or grow our customer base by offering competitive rates and innovative services over time — CPCNH will be able to facilitate new project developments for Hanover Community Power and other programs that elect to jointly participate in long-term contracting solicitations. As context:

- Project developers and financiers require long-term power purchase agreements (typically 10 years or longer in duration) to justify the upfront cost of constructing renewables and battery storage facilities.
- Consequently, project financiers will not execute long-term contracts with a Community Power program if they do not believe that the program is likely to remain a stable, credit-worthy counterparty (i.e., unlikely to default on payment obligations over the contract term).

Achieving the ability to execute long-term contracts and build new renewables and battery storage projects is a priority for Hanover Community Power and the other Community Power programs joining together to create CPCNH.

This objective is an important policy goal for our program and will additionally diversify the energy supply portfolio managed by CPCNH. Portfolio diversification helps to stabilize operating margins by intelligently hedging Hanover Community Power’s exposure to wholesale market dynamics and price fluctuations over time — and will further strengthen our program’s financial stability over the long-term.

Regulatory and Policy Advocacy

Changes in law and regulations that adversely impact Community Power programs are a source of risk for Hanover Community Power. Furthermore, extending and maintaining the full range of benefits that Hanover Community Power could create for customers will require informed participation and advocacy on energy issues at the NH Legislature and NHPUC.

Coordination with other municipalities and Community Power initiatives on matters of common interest have already produced meaningful results in these areas. For example, over the last year, Hanover and other members involved in the formation of CPCNH have:

- Participated in the Community Power informal rule drafting process, including by providing the initial and subsequent draft rules for discussion, arranging bilateral meetings with utilities and other stakeholders, and leading significant portions of the subsequent stakeholder workshops at the request of NHPUC staff.
- Intervened in regulatory proceedings to represent the interests of customers and Community Power programs, such as by advocating for expanded data access in the Commission’s Statewide Data Platform docket (DE 19-197), under which a settlement agreement with the utilities was negotiated and recently submitted to the Public Utilities Commission. (If adopted, the settlement would create a “Statewide Data Platform” to enables data access for customers and Community Power programs, which would be overseen by a Governance Council that includes Coalition representatives.)
- Testified in legislative hearings — and organized hundreds of people, elected officials and civic organizations to register in support of the Coalition’s position on key legislation — in order to successfully negotiate critical amendments to two proposed bills to-date:
 - House Bill 315, which would clarify and expand key Community Power authorities; and
 - Senate Bill 91, which would expand the ability of Community Power programs to buy from in-state generators and battery storage projects (under 5 megawatts in size).

Hanover Community Power will continue and expand on these activities through CPCNH.

Hanover Community Power Goals and Objectives

Hanover Community Power affords the Selectboard the capacity and flexibility to realize and build on our policies pertaining to energy, economic development and infrastructure focused on community-wide use of 100% renewable electricity by 2030 and thermal and transportation energy by 2050.

Our policy goals will need to be pursued through a combination of direct program activities, regional initiatives with other Community Power programs and municipalities, and informed public advocacy at the Legislature and Public Utilities Commission. To that end, Hanover Community Power will be guided by the following objectives:

- **Competitive Rates & Expanded Choices:** launch with residential default rates that are lower than or competitive with those offered by the three incumbent utilities — Liberty serves the preponderance of Hanover customers, although Eversource serves several off Route 10 in northwestern Hanover and NHEC serves a small number in the Goose Pond Road area — and additionally offer optional products, such as supply options with higher and lower levels of renewable energy and time-varying rates that enable the intelligent use of customer energy technologies;
- **Fiscal Stability & Financial Reserves:** adopt an Energy Risk Management Policy and deposit a portion of revenues into a reserve fund to ensure that the program remains able to offer competitive rates as market prices fluctuate over time — and is therefore able to achieve Hanover’s longer-term policy goals (such as the development of local energy resources and programs);
- **Consumer Protections:** ensure that the contracts entered in to on behalf of customers are fair and represent the interests of Hanover and the program’s customers in the NH Legislature and NHPUC on matters pertaining to Community Power and ratepayer protection.
- **Enhanced Customer Focus:** enable customers to adopt new clean energy technologies that reduce energy expenditures and carbon emissions from the customer’s perspective, by reducing household and business fuel expenses through electrification of heating appliances and vehicles, offering time varying rate structures that incentivize self-generation of electricity via solar, dispatching onsite storage or shifting power consumption when electricity market prices are high, lowering customers’ utility transmission and distribution charges by reducing onsite demand in peak hours, and other strategies.
- **Cleaner, Local Power:** prioritize the development of cost- effective projects to supply an affordable energy portfolio that prioritizes the use of local renewable energy.
- **Community Resilience:** support local contractor training and education programs to lower barriers to the installation of new clean energy technologies, and support projects such as back-up power supplies, electric vehicle charging networks and community microgrids on critical facilities.
- **Regional Collaborations:** collaborate with municipalities, other Community Power programs and government agencies to jointly develop cost-effective local renewable generation and storage projects, electric vehicle transit fleets and charging corridors, and other clean energy infrastructure developments.

- **Grid Modernization:** join with other Community Power programs to advocate for policies, regulations, and infrastructure investments necessary to enable innovative customer services and the intelligent use of new clean technologies, cost-effective integration of local and regional renewable generation and the reliable operation of customer and community owned microgrids and utility’s distribution grid.

Through strategies and initiatives like these, Hanover Community Power will achieve its goals of 100% renewable electricity by 2030 and thermal and transportation energy by 2050. Additional co-benefits include reducing fossil fuel consumption, enhancing the reliability of our electricity grid, creating savings and new value for customers, and attracting and supporting local businesses — areas that are essential to our continued success as a vital, sustainable community.

Short-Term Objectives

While many of the broader benefits Hanover Community Power could create for customers and the Selectboard will be developed over time, the program’s immediate objectives are to:

1. Launch offering competitive rates, including residential default supply rates that meet or beat incumbent utility supply rates;
2. Begin accruing a reserve fund sufficient to ensure the program’s long-term financial stability;
3. Offer voluntary products that retail customers may opt-up to receive, as well as Net Energy Metering rates that allow customer generators to participate in the program.

The following sections provide additional context relevant to our immediate objectives.

Performance Relative to Utility Default Service and Net Energy Metering Generation Rates

Hanover Community Power will need to balance customer rate levels, renewable power content and the accrual of program reserves to meet these objectives.

Compensation to customer generators under Net Energy Metering rates, the timing of the program’s rate setting decisions and the procurement of electricity will need to consider incumbent utility tariffs, processes and timing in regard to these activities.

Refer to [Attachment 3](#), [Attachment 4](#), [Attachment 5](#) and the section “[Net Metering and Group Net Metering Policies](#)” for additional documentation and discussion of these factors.

Customer Rates and Products

The table below provides an illustrative example of a default service product and optional rates that could be offered to customers:

	DEFAULT SERVICE (automatic enrollment)	OPTIONAL PRODUCTS		
		Basic Service	Green Start	Prime
Attributes	5-10% above RPS	Meets RPS	~50% Renewable	100% Renewable
Price	Meet or beat default utility rate at launch	Below default utility rates	Higher or competitive w/ default utility rate	Exceeds default utility rate

Note that the products which Hanover Community Power initially offers to customers, and the rates charged for each product, will be refined and finalized in advance of program launch.

Renewable Portfolio Standard Requirements

New Hampshire’s Renewable Portfolio Standard (RPS) requires all electricity suppliers to obtain RECs (Renewable Energy Credits) for four distinct “classes” of renewables, each distinguishing between different technologies and dependent upon the year that the renewable generators came online.

For 2021, the incumbent utilities are required to include 21.6% renewable energy in their energy supply. This minimum compliance requirement will increase incrementally to 25.2% by 2025 and remain fixed thereafter, absent a modification in the RPS by an act of the NH Legislature.

Hanover Community Power would seek to procure voluntary renewables well in-excess of the RPS minimum requirements from “Class I” resources (as defined in [Attachment 3](#)). Additionally, the program could seek to include as much renewable energy sourced from generating resources located in New Hampshire and New England as possible.

The chart below shows the different classes and quantities of renewable power required under the RPS between 2020 and 2025, along with, for the sake of illustration, Hanover Community Power’s additional voluntary purchases (assuming the default product in the above table, which exceeds RPS requirements by 5% to 10% each year):



Energy Risk Management and Financial Reserve Policy Compliance

Hanover Community Power’s power procurement, budgeting and rate-setting will be carried out in accordance with the Energy Risk Management Policy and Financial Reserve Policy that will be adopted by the Selectboard.

This decision-making framework is intended to guide the program to allocate revenues in a manner that appropriately balances our competing priorities — to ensure that Hanover Community Power will remain stable, and able to work towards achieving all of our policy goals, over the long-term.

Electric Aggregation Plan Statutory Requirements

The following requirements for this Electric Aggregation Plan, which conform to the statutory compliance requirements outlined in RSA 53-E:6, are addressed below:

- A. Organizational structure of the program.
- B. Methods of entering in to and terminating agreements.
- C. Operation and funding.
- D. Rate setting, costs, and customer enrollment process.
- E. Rights and responsibilities of program participants.
- F. Net metering and group net metering policies.
- G. Ensuring discounts for Electric Assistance Program participants.
- H. Termination of program.

Organizational Structure of the Program

Upon approval of this EAP, Hanover Community Power will be authorized to provide electricity and other related services to participating residents, businesses, and other customers in the Town of Hanover.

The Selectboard will oversee the program and has overall governance authority. Decisions regarding Hanover Community Power, such as setting program goals, adoption of an Energy Risk Management Policy and approval of customer rates, will be made at duly noticed public meetings.

The Selectboard will appoint a primary and alternate representative to the CPCNH Board of Directors, which will oversee the start-up and operation of the agency, provide input regarding the CPCNH public advocacy on matters of policy and regulation, provide direction to CPCNH's vendors and/or staff as the agency's operations and customer services evolve over time, and be responsible for advising and updating the Selectboard, for example by: assessing and reporting on program performance, evaluating how to evolve the services and products offered to customers, and otherwise elevating any matters that warrant attention to the Selectboard.

Additionally, the Selectboard may direct the Electric Aggregation Committee to continue to hold meetings for the purpose of providing community input and advisory support regarding the program.

Methods of Entering into and Terminating Agreements

This Electric Aggregation Plan authorizes the Selectboard to negotiate, enter in to, modify, enforce, and terminate agreements as necessary for the implementation and operation of Hanover Community Power.

Operation and Funding

Hanover Community Power will contract with qualified vendors and credit-worthy suppliers to provide the services, credit support and electricity required to launch and operate the program.

This plan assumes, but does not require, Hanover to participate fully in CPCNH and thereby contract for operational services jointly with other participating Community Power programs.

CPCNH third-party contractors will be expected to fund the upfront cost of implementing Hanover Community Power, the expense of which will be amortized and recovered in the program's rates and charges to participating customers. The program may also seek opportunities to apply for grant funding, either independently or through CPCNH.

Services provided by third-party entities required to launch and operate the program include portfolio risk management services, wholesale load serving entity services, financial services, electronic data interchange with the utilities, customer data management and billing services, customer notification and relationship management services (e.g., call center, website, etc.).

Additional support services such as management and planning, budgeting and rate setting, local project development support, regulatory compliance, and legislative and regulatory engagement services (on matters that could impact the program and participating customers) will be addressed through a combination of staff support and third-party services.

Hanover Community Power will provide "all-requirements" electricity supply for its customers, inclusive of all the electrical energy, capacity, reserves, ancillary services, transmission services, transmission and distribution losses, congestion management, and other such services or products necessary to provide firm power supply to participants and meet the requirements of New Hampshire's Renewable Portfolio Standard. (Refer to [Attachment 3](#) for details regarding the requirements of Renewable Portfolio Standard statute, RSA 362-F.)

Electricity supply contracts will be executed or guaranteed by investment-grade entities, and suppliers will be required to use proper standards of management and operations, maintain sufficient insurance and meet appropriate performance requirements.

Additionally, RSA 53-E provides Community Power programs with authorities pertaining to meter ownership, meter reading, billing, and other related services. These authorities provide Hanover Community Power with the practical ability to help customers adopt and use innovative technologies (for example, building management systems, smart thermostats, backup battery storage systems, controllable electric vehicle chargers, etc.) in ways that save money, enhance resiliency of the grid and decarbonize our power supply.

However, the implementation of these authorities is expected to take some time, as it requires action by the NHPUC to adopt enabling rules and coordination with the incumbent utilities to adapt existing meter and billing system processes.

Rate Setting, Costs, Enrollment Process, and Options

Customers who choose not to participate in Hanover Community Power shall not be responsible for any costs associated with the program, apart from any incidental costs incurred by the Town prior to the point at which the program starts producing revenue from participating customers. Incidental costs include, for example, staff time and attorney review of contracts, but do not include any operational or capitalized costs of the program.

Rate Setting and Costs

Hanover Community Power will only launch if it is able to offer residential default rates that are initially lower than or competitive with those offered by Liberty Utilities, Eversource and NHEC; thereafter, the program will strive to maintain competitive rates for all default service customers, as well as customers who opt-in or opt-up to receive optional retail products, while working to

achieve the program's goals as set forth in this Electric Aggregation Plan and modified from time to time at the direction of the Selectboard.

The Selectboard will adopt an Energy Risk Management Policy and Financial Reserve Policy to govern the program's power procurement cost and rate-setting decisions. Rates will be set at a level such that revenues from participating customers are projected to meet or exceed the ongoing operating and capital costs of the program.

To ensure the financial stability of Hanover Community Power, a portion of revenues will be deposited in a financial reserve account. In general, the fund will be restricted for uses such as:

- **In the near-term**, maintain competitive customer rates in the context of price fluctuations in the electricity market and other factors.
- **In the medium-term**, as collateral for power purchase agreements (including for the development of new renewable projects), and for additional credit enhancements and purposes that lower the program's cost of service.
- **Over the long-term**, may also be used to directly fund other program financial requirements, or to augment the financing for development of new projects and programs in the later years of the program, subject to the Selectboard's approval.

As required by law, the program will set rates that ensure the equitable treatment of all classes of customers, subject to any differences arising from varying opportunities, tariffs, and arrangements in the incumbent utilities' distribution franchise territory. In other words, customers will be treated the same based on their circumstances. For example, any customers that opt-in after being offered the opportunity to participate during the initial enrollment period may be offered rates that reflect how market prices have changed in the intervening period.

Changes to the program's default service rates shall be set and publicly noticed at least 30 days in advance of any rate change.

Enrollment Process and Options

Hanover Community Power intends to launch on an opt-out basis, providing an alternative default service to the utilities' default service rate. After approval of this Electric Aggregation Plan and before the launch of Hanover Community Power, all customers in the Town of Hanover will be sent notifications regarding the program and offered the opportunity to participate:

- **Customers currently on default service provided by Liberty Utilities, Eversource or NHEC** will be sent "opt-out" notifications — describing the program, its implications for the Town of Hanover, the rights and responsibilities of customers, and program rates and charges — with instructions on how to decline participation, and thereafter transferred to Hanover Community Power if they do not opt-out of the program prior to launch.
- **Customers already served by Competitive Electric Power Suppliers** will receive "opt-in" notifications describing the program and may request to opt-in to the program.

Customers will be notified through a mailing, which will be posted not less than 30 days prior to the enrollment of any customers. All information will be repeated and posted at the Town's Community Power website. A public information meeting will be held within 15 days of the notification to answer program questions or provide clarification.

Optional products, such as increased renewable power content beyond the Renewable Portfolio Standard (RPS) content of the program's default product and other energy services, may be offered on an opt-in basis.

After launch and in accordance with any applicable rules and procedures established by the Public Utilities Commission, new customers will be provided with the default service rates of Liberty, Eversource, NHEC and Hanover Community Power and will be transferred onto Hanover Community Power's default service unless they choose to be served by the incumbent utilities or a Competitive Electric Power Supplier.

Residents, businesses, and other electricity customers may opt-out of participating in Hanover Community Power default service at any time, by submitting adequate notice in advance of the next regular meter reading by the incumbent utilities (in the same manner as if they were on utility provided default service or as approved by the NHPUC).

Customers that request to opt-in to the program may do so subject to the terms of Hanover Community Power. Customers that have opted-in to an optional product offered by Hanover Community Power may switch back to the incumbent utilities or may take service from a Competitive Electric Power Supplier subject to any terms and conditions of the optional product.

Rights and Responsibilities of Program Participants

All participants will have available to them the customer protection provisions of the law and regulations of New Hampshire, including the right to question billing and service quality practices.

Customers will be able to ask questions of and register complaints with the Town of Hanover, Liberty, Eversource, NHEC and the NHPUC.

Hanover Community Power shall maintain the confidentiality of individual customer data in compliance with its obligations as a service provider under RSA 363:38 (privacy policies for individual customer data; duties and responsibilities of service providers) and other applicable statutes and NHPUC rules. Confidential data includes information that singly or in combination can identify specific customers, including individual customers' name, service address, billing address, telephone number, account number, payment information, and electricity consumption. This data will not be subject to public disclosure under RSA 91-A (access to governmental records and meetings). Suppliers and vendors for Hanover Community Power will be contractually required to maintain the confidentiality of individual customer data pursuant to RSA 363:38, V(b).

Aggregate or anonymized data that does not compromise confidentiality of individual customers may be released at the discretion of Hanover Community Power and as required by law or regulation.

Participants will continue to be responsible for paying their bills. Failure to do so may result in a customer being transferred from Hanover Community Power back to their incumbent regulated distribution utility and provider of last resort for default energy service, payment collections and utility shut offs under procedures subject to oversight by the NHPUC.

Net Metering and Group Net Metering Policies

Under the net metering process, customers who install renewable generation or qualifying combined heat and power systems up to 1,000 kilowatts in size are eligible to receive credit or compensation for any electricity generated onsite in excess of their onsite usage.

Any surplus generation produced by these systems flows back into the distribution grid and offsets the electricity that would otherwise have to be purchased from the regional wholesale market to serve other customers.

Currently, customer-generators are charged their full retail rate for electricity supplied by the utilities and receive credits for electricity they export to the grid based on their utility's Net Energy Metering (NEM) tariffs.

Hanover Community Power intends to provide new rates and terms that compensate participating customer-generators for the electricity supply component of their net metered surplus generation.

Customer-generators will continue to receive any non-supply related components (e.g., transmission and distribution credits) directly from their utility, as specified under the terms of their applicable net energy metering tariff.

Hanover Community Power's exact terms, conditions, and rates for compensating and crediting different types of NEM customer generators in the Town will be set at duly noticed public meetings and fully disclosed to all prospective NEM customers through the program's enrollment notification process and thereafter.

Certain aspects of administering net energy metering require coordination between the utilities and Hanover Community Power. The enabling services and strategies that Hanover Community Power may pursue, in order to benefit and encourage customers to adopt distributed generation, include but are not limited to:

- Dual-billing customer-generators separately for supply services;
- Offering time-varying rates and alternative credit mechanisms to compensate customers for surplus generation;
- Streamlining the establishment of new Group Net Metering and Low-Moderate Income Solar Project groups;
- Facilitating interval meter and Renewable Energy Certificate (REC) meter installations for customer-generators; and
- Engaging at the Legislature and Public Utilities Commission to advocate for upgrades and reforms to metering and billing infrastructure and business processes to enable Net Energy Metering and other innovative services to benefit customer-generators.

For additional details regarding these enabling services and strategies, refer to:

- [Attachment 5](#) which provides an overview of utility net energy metering tariffs in use today, including the "standard" and "alternative" tariffs for individual customer-generators as well as Group Net Metering and Low-Moderate Income Solar Project options, and tables showing the number of customer-generators on net metered service in each utility territory;
- [Attachment 6](#) provides an in-depth discussion regarding operational and strategic opportunities to enhance net metering and group net metering through Hanover Community Power.

Ensuring Discounts for Electric Assistance Program Participants

Income eligible households can qualify for discounts on their electric bills under the Electric Assistance Program. Hanover Community Power will support income eligible customers who enroll in the Electric Assistance Program to receive their discount.

Electric Assistance Program discounts are funded by all ratepayers as part of the Systems Benefits Charge, which is charged to customers and collected by the distribution utilities.

At present, the NHPUC and utilities only support provision of the discount to individual customers when the customer's electricity supply charges are billed through the distribution utility.

Hanover Community Power consequently plans to rely on Liberty Utilities, Eversource and NHEC to bill all customer accounts enrolled in the Electric Assistance Program. This represents no change in the provision or funding of this program.

This arrangement may be revisited if, at some point in the future, the Public Utilities Commission approves rules that enable Community Power programs to provide Electric Assistance Program customers with their discount directly.

Termination of the Program

There is no planned termination date for Hanover Community Power.

Hanover Community Power may be terminated by majority approval of those present and voting at Town Meeting. If so terminated, Hanover Community Power would cease operations after satisfying any obligations contractually entered in to prior to termination, at which point participating customers would either be transferred to default service provided by their distribution utility (either Liberty Utilities, Eversource or the NHEC) or to a Competitive Electric Power Supplier of their choosing.

Hanover Community Power will provide as much advance notice as possible regarding the potential or planned termination of the program to participating customers, CPCNH, the NHPUC, Liberty Utilities, Eversource and NHEC.

Upon termination, the balance of any funds accrued in the program's financial reserve fund and other accounts, if any, would be available for distribution or application as directed by the Selectboard and in accordance with any applicable law and regulation.

Attachments

Attachment 1: Legislative Background and Local Control Authorities

In 1996, New Hampshire led the nation in being the first state to pass an Electric Utility Restructuring Act ([RSA 374-F](#)), the purpose of which is excerpted in full below:

I. The most compelling reason to restructure the New Hampshire electric utility industry is to reduce costs for all consumers of electricity by harnessing the power of competitive markets. The overall public policy goal of restructuring is to develop a more efficient industry structure and regulatory framework that results in a more productive economy by reducing costs to consumers while maintaining safe and reliable electric service with minimum adverse impacts on the environment. Increased customer choice and the development of competitive markets for wholesale and retail electricity services are key elements in a restructured industry that will require unbundling of prices and services and at least functional separation of centralized generation services from transmission and distribution services.

II. A transition to competitive markets for electricity is consistent with the directives of part II, article 83 of the New Hampshire constitution which reads in part: "Free and fair competition in the trades and industries is an inherent and essential right of the people and should be protected against all monopolies and conspiracies which tend to hinder or destroy it." Competitive markets should provide electricity suppliers with incentives to operate efficiently and cleanly, open markets for new and improved technologies, provide electricity buyers and sellers with appropriate price signals, and improve public confidence in the electric utility industry.

III. The following interdependent policy principles are intended to guide the New Hampshire public utilities commission in implementing a statewide electric utility industry restructuring plan, in establishing interim stranded cost recovery charges, in approving each utility's compliance filing, in streamlining administrative processes to make regulation more efficient, and in regulating a restructured electric utility industry. In addition, these interdependent principles are intended to guide the New Hampshire general court and the department of environmental services and other state agencies in promoting and regulating a restructured electric utility industry.

Prior to this point, state regulators set retail customer rates to allow electric utilities to recover profits and prudently earned costs for “vertically integrated” monopoly service — spanning wholesale electricity generation, transmission, local electricity distribution and retail customer services (metering, billing, collections, call center operations and so on).

Restructuring sought to increase competition and technological innovation in the markets for wholesale electricity supply and retail customer services, by requiring electric utilities to divest of their generation portfolios, creating a Federally regulated regional electricity market or “Independent System Operator” (ISO New England is the market operator for New England), and allowing Competitive Electric Power Suppliers (CEPs) to offer electricity supply rates and other services to retail customers.

Customers that did not choose a competitive supplier were left on “default service” provided by the electric utilities — afterward referred to as “electric distribution companies” — which continue to be regulated by the Public Utilities Commission. The distribution utilities periodically hold auctions for competitive suppliers to bid against one another for the right to supply electricity to

default service customers in large groups. (Refer to Attachment 4 for additional details on this process.)

Status of the Competitive Market

Nearly a quarter century has passed, and New Hampshire’s competitive market has seen little growth since 2013. Four out of five customers remain on default service provided by the distribution utilities, and the customers that are on competitive supply only account for about half of total electricity usage.

Regulated distribution utilities continue to provide services that are not natural monopolies, and could therefore be available by competitive means, such as: default electricity supply, metering, meter data management, billing and other retail customer services (such as demand response and energy storage for smaller customers).

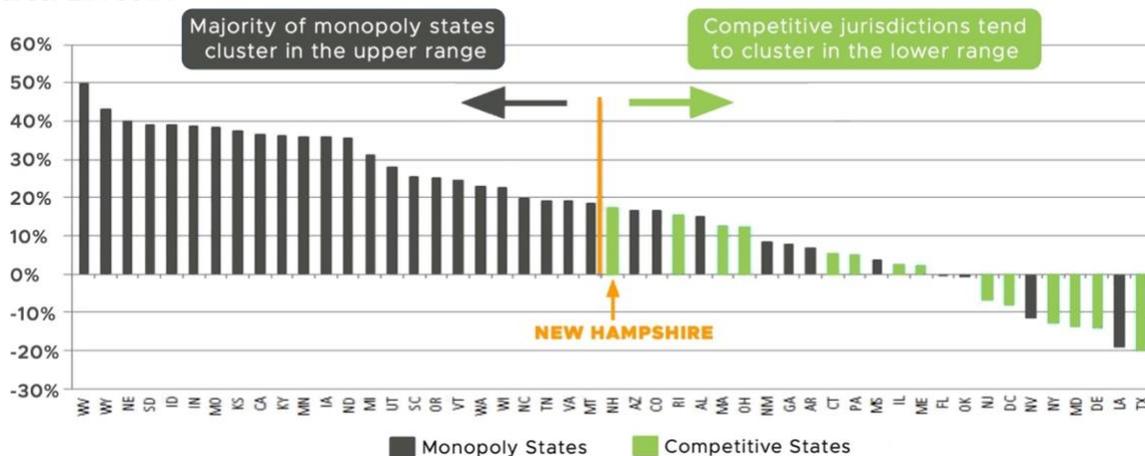
The continued reliance on utilities to provide these customer-facing services has necessitated state regulation over many aspects of the retail customer market. Utility regulation relies on administrative regulatory proceedings, which are necessarily more slow-moving and unable to respond to changing customer technologies and wholesale market dynamics (such as the increased price volatility caused by higher levels of renewable generation) compared to the nimbler, market-based framework envisioned under the Electric Utility Restructuring Act.

Residential customers are not offered many rate options or clean technology innovations today: out of the 29 competitive suppliers currently offering service in New Hampshire, only nine offer service to residential customers (and only four serve customers in every distribution utility territory).

Consequently, New Hampshire has fallen behind every other state with a restructured electricity market in terms of price competition:

All Sector Price % Price Change by State, 2008-2019

Source: EIA 861M



Credit: Retail Energy Supply Association, 2020.

The Community Power Act

In order to support the growth of competitive market services in alignment with The Electric Utility Restructuring Act, Senate Bill 286 and [RSA 53-E:6](#) have authorized towns, cities and counties to

launch Community Power programs that replace distribution utilities as default suppliers of electricity to retail customers. The purpose of RSA 53-E is excerpted below:

“The general court finds it to be in the public interest to allow municipalities and counties to aggregate retail electric customers, as necessary, to provide such customers access to competitive markets for supplies of electricity and related energy services. The general court finds that aggregation may provide small customers with similar opportunities to those available to larger customers in obtaining lower electric costs, reliable service, and secure energy supplies. The purpose of aggregation shall be to encourage voluntary, cost effective and innovative solutions to local needs with careful consideration of local conditions and opportunities.”

To achieve this purpose, RSA 53-E:3 allows Community Power programs to enter into agreements and provide for:

“the supply of electric power; demand side management; conservation; meter reading; customer service; other related services; and the operation of energy efficiency and clean energy districts adopted by a municipality pursuant to RSA 53-F and as approved by the municipality's governing body.”

RSA 53-E:3-a further provides Community Power programs with authorities and regulatory pathways to offer more advanced meters for customers, and to provide for alternative customer billing options. Both metering and billing services are important means by which Community Power programs will be able to better engage customers and offer more innovative services that lower the energy expenditures and carbon emissions for individual customers and communities.

Lastly, and to enable all municipalities to work together to achieve this purpose, RSA 53-E:3 provides that *“such agreements may be entered into and such services may be provided by a single municipality or county, or by a group of such entities operating jointly pursuant to [RSA 53-A](#).”*

Community Power program *“shall not be required to own any utility property or equipment to provide electric power and energy services to its customers.”* To ensure that utilities are fairly compensated for their continuing role in owning and operating the distribution grid, RSA 53-E:4(III) stipulates that:

“Transmission and distribution services shall remain with the transmission and distribution utilities and who shall be paid for such services according to rate schedules approved by the applicable regulatory authority, which may include optional time varying rates for transmission and distribution services that may be offered by distribution utilities on a pilot or regular basis.”

Enabling locally controlled Community Power programs to exercise local control over these authorities and bring in third-party competitors to provide more innovative services on a community-wide scale, represents a viable and stable pathway to animate competitive retail markets across New Hampshire — and thus realize a lower-cost, more innovative and sustainable future for both our community and all Granite Staters.

Hanover is committed to using its local control authorities granted under RSA 53-E to accelerate innovation, customer and community choice in electricity supply, the creation of new economic value, and a sustainable and resilient future for our community and customers.

Attachment 2: The Community Power Coalition of New Hampshire

Hanover is a founding member of the Community Power Coalition of New Hampshire (CPCNH), a nonprofit joint powers agency authorized under RSA 53-A and governed by participating communities under the terms of the Joint Powers Agreement approved by the Hanover Selectboard on January 25, 2021.

- The CPCNH webpage is online at: <http://www.cpcnh.org/>
- The Joint Powers Agreement is available on the CPCNH webpage, includes the nonprofit's Articles of Agreement and Bylaws of the nonprofit, and details the common purpose, authorities, structure, Board of Directors, committees, cost sharing principals, liability protections, and other aspects of the organization.

CPCNH was created so that towns, cities, and counties across New Hampshire could:

1. Access the resources and support required to streamline the process of establishing an Electric Aggregation Committee, drafting an Electric Aggregation Plan and approving new Community Power programs.
2. Jointly solicit and contract for third-party services and staff support to launch and operate Community Power programs.
3. Participate in joint power solicitations and local project development opportunities.
4. Share knowledge and collaborate regionally on clean energy and resilient infrastructure development at the community-level throughout the state.
5. Speak with one voice at the NH Legislature and NHPUC on public advocacy issues related to energy and Community Power.

CPCNH is designed to achieve significant economies of scale, in terms of the oversight and management of Community Power program operations:

- The initial customer base of CPCNH's founding members will be approximately equivalent to Liberty Utilities, in terms of default electricity procurement and accounts; and
- Given the high degree of awareness and interest expressed by other municipalities in joining the Coalition to-date, the Coalition may expand to be larger than Unital within the 2022-23 timeframe.

Hanover's Participation in the Design Process

Hanover has actively participated in the exploratory "Organizing Group" process that preceded the formation of CPCNH. This process began in December 2019, with communities interested in Community Power meeting regularly to research national best practices and explore the viability of establishing a collaborative nonprofit to share services across municipalities and counties:

- The initial CPCNH Organizing Group consisted of the cities of Lebanon and Nashua, the towns of Hanover and Harrisville, and Cheshire County.
- Technical and community advisors included representatives from both Thayer School of Engineering and Tuck School of Business at Dartmouth, the Monadnock Sustainability Hub, Clean Energy New Hampshire, Growing Edge Partners and Community Choice Partners.

- Activities were carried out in four working group tracks: Governance Agreements, Regulatory and Policy Engagement, Design and Implementation, and Community Engagement.

Over the last year, members of the CPCNH Organizing Group have:

- Participated in the Community Power informal rule drafting process, including by providing the initial and subsequent draft rules for discussion, arranging bilateral meetings with utilities and other stakeholders, and leading significant portions of the subsequent stakeholder workshops at the request of NHPUC staff.
- Intervened in regulatory proceedings and legislative hearings to represent the interests of communities and customers, such as by advocating for expanded data access in the Commission’s Statewide Data Platform docket, DE 19-197, and successfully negotiating the clarification and expansion of key Community Power authorities in House Bill 315.
- Assessed power agency design best practices — in terms of public governance and competitive operating models — by interviewing elected officials, senior staff and vendors operating Community Power programs in other states, along with representatives from public power associations (such as the American Public Power Association and the Vermont Public Power Supply Authority) and other industry experts.
- Hosted a virtual summit on Community Power that was attended by over eighty representatives from thirty-one municipalities, collectively representing one-quarter of the state’s default electricity market.

Most recently, the City of Lebanon, using grant funding and in collaboration with the Organizing Group executed legal, community engagement and professional service contracts to help formally establish and implement the Community Power Coalition of New Hampshire.

Joint Powers Agreement Drafting Process

The CPCNH Joint Powers Agreement includes the nonprofit’s Articles of Agreement and Bylaws of the nonprofit, and establishes the common purpose, authorities, structure, Board of Directors, committees, cost sharing principals, liability protections, and other aspects of the organization.

Municipalities that adopt the Joint Powers Agreement may apply for membership.

The Organizing Group surveyed other Community Power states and the broader public power industry, assessed the legal and governance structure of a selection of successful nonprofit power agencies that provide services to multiple municipal members, and interviewed staff and elected officials involved. After discussing joint governance issues and reviewing the governance documents of comparable entities, the Organizing Group created a draft Joint Powers Agreement for CPCNH in July 2020.

In September 2020, the City of Lebanon and Town of Hanover, in collaboration with the Organizing Group, reviewed six responses to a Request for Qualifications and retained the legal services of Duncan, Weinberg, Genzer & Pembroke (DWGP). The firm was hired to provide advice on key aspects of joint power agency governance and to finalize the CPCNH Joint Powers Agreement, in compliance with RSA 53-A., with additional support provided by New Hampshire counsel on a subcontracted basis. DWGP are national leaders with over 50 years in public power legal guidance, and the project was led by DWGP President Michael Postar Esq.

The Joint Action Agreement was finalized in December 2020.

Governance Formation Process

In January and then February 2021, the Town of Hanover and City of Lebanon became the first two municipalities to vote to enter into the agreement, followed by the City of Nashua and the Town of Exeter in May 2021. Cheshire County is also expected to vote on the agreement as well, based on their participation in the Coalition's design process and indications of political interest. Other communities are starting to consider joining the Coalition. Additionally, the Attorney General has reviewed and approved the agreement as conforming to the requirements of state law.

After the founding members jointly execute the agreement, CPCNH will be incorporated, and the Board constituted with Directors appointed by each member's governing body.

After approving and executing the CPCNH Joint Powers Agreement, founding member municipalities will each appoint a primary and alternate member representative of their respective Community Power programs to serve on the CPCNH Board of Directors.

All members will be directly represented on the CPCNH Board until more than twenty-one (21) members join, at which point directors will be elected by vote of the members at annual meetings.

The Board will directly oversee the initial startup and implementation activities of CPCNH, including: the adoption of Board policies and election of officers, the hiring of key staff to provide management and oversight, the solicitation and contracting of third-party service vendors to launch and operate Community Power programs, and the appointment of directors and other community representatives to committees.

CPCNH will have six standing committees: Executive, Finance, Audit, Regulatory and Legislative Affairs, Risk Management and Governance. Additionally, the Board may establish ad-hoc committees, and each direct project that individual members choose to pursue in future will be overseen by a committee specific to that project.

All meetings of CPCNH will comply with New Hampshire's Right-to-Know Law (RSA 91-A), the purpose of which is to *"ensure both the greatest possible public access to the actions, discussions and records of all public bodies, and their accountability to the people"*, based on the recognition that *"openness in the conduct of public business is essential to a democratic society."*

Implementation Process

In February 2021, the City of Lebanon, using previously secured grant funding and in collaboration with the CPCNH Organizing Group, contracted with Henry Herndon (formerly the Director of Local Energy Solutions at Clean Energy New Hampshire) and Samuel Golding of Community Choice Partners, Inc., to provide implementation support services prior to launch.

Mr. Herndon is advising on regulatory and legislative affairs, as well as branding and communications, drafting a recruitment strategy and compilation of resources for prospective members, facilitating the engagement of prospective members, and onboarding new members and their representatives to the CPCNH Board throughout the state.

Mr. Golding is advising on Community Power rule development at the NHPUC, supporting municipalities in drafting and adopting Electric Aggregation Plans, drafting a business plan and budget for CPCNH, advising on Board policies and staffing, preparing vendor surveys and a request for proposals for the services and financing required to launch Community Power programs, and assisting in the bid evaluation, award and contracting process.

Launch Process

CPCNH intends to contract with qualified vendors and credit-worthy suppliers to provide the services, credit support and electricity required to launch and operate member Community Power programs.

These third parties are expected to fund the upfront cost of implementing Community Power programs, the expense of which is expected to be amortized and recovered in the program's rates and charges to participating customers for a specified term. Similar at-risk and performance-based contract structures have been used to successfully launch and operate new joint powers agencies in other Community Power markets.

To ensure effective management of operations, as well as enhanced transparency and oversight, the Coalition plans to hire a small number of qualified staff.

Services will also include advisory support services to enhance the fiscal stability of participating Community Power programs, such as adopting Energy Risk Management and Financial Reserve policies.

Attachment 3: New Hampshire’s Renewable Portfolio Standard

New Hampshire's Electric Renewable Portfolio Standard (“RPS”) statute, RSA 362-F, established the renewable energy policy for the State.

The RPS statute requires each electricity provider, including Liberty and Eversource and Hanover Community Power, to meet a certain percentage of customer load by purchasing, generating or otherwise acquiring Renewable Energy Certificates (“RECs”):

- One REC represents the renewable attributes of one megawatt-hour of electricity, or the equivalent amount of useful thermal energy.
- RECs are generated by certified renewable energy facilities for power that is physically delivered into the New England wholesale electricity market operated by ISO-New England (which means the power can come from within New England, New York or eastern Canada).
- The New England Power Pool Generation Information System (NEPOOL GIS) issues and tracks RECs for the region.
- RECs are generally used for compliance in the same year as the renewable power was generated, though suppliers may “bank” RECs for up to two years to meet up to 30% of compliance requirements.

There are four distinct “classes” of renewable certificates under the RPS, each distinguishing between different technologies and dependent upon the year that the generators came online:

1. Class I is divided between thermal and non-thermal renewables:
 - Class I non-thermal electricity, from generators that came online after January 1, 2006: wind, solar, small hydroelectric, methane (biologically derived such as from anaerobic digestion of organic materials), biomass, hydrogen (from methane or biomass), ocean thermal, current, tidal or wave energy and biodiesel (if produced in state).
 - Class I thermal energy, from generators that came online after January 1, 2013 (and are producing thermal energy, rather than electricity): geothermal, solar thermal, biomass and methane.
2. Class II: solar generation that came online after January 1, 2006
3. Class III: biomass & methane that came online before January 1, 2006
4. Class IV: small hydroelectric that came online before January 1, 2006

Electricity suppliers must obtain RECs for each of the four classes of renewables as a set percentage of their retail electric load, which increase on an annual basis (until plateauing after 2025, unless the RPS is raised in future):

Compliance Year	Total RPS Requirement	Class I Non-Thermal	Class I Thermal	Class II Solar	Class III Biomass & Methane	Class IV Small Hydro
2020	20.70%	8.90%	1.60%	0.70%	8.00%	1.50%
2021	21.60%	9.60%	1.80%	0.70%	8.00%	1.50%
2022	22.50%	10.30%	2.00%	0.70%	8.00%	1.50%
2023	23.40%	11.00%	2.20%	0.70%	8.00%	1.50%
2024	24.30%	11.90%	2.20%	0.70%	8.00%	1.50%
2025 onwards	25.20%	12.80%	2.20%	0.70%	8.00%	1.50%

Note the following flexibilities in meeting Class I requirements:

- Class I non-thermal requirements may be met with Class I thermal biomass and methane resources.
- Class I requirements may also be met with Class III (biomass & methane, thermal and non-thermal) or Class IV (small hydroelectric, non-thermal) resources that have been restored through significant investment or have otherwise begun generating in excess of historic baselines.
- Solar that came online after January 1, 2006 may be used to satisfy Class II or Class I requirements.

Additionally, net metered customers (primarily customers with solar photovoltaics) that meet certain registration and administrative requirements can track and sell their RECs (which are accounted for in NEPOOL’s Generation Information System). Not all customers do, however, and the REC production from such customer generators are estimated by the Public Utilities Commission each year and applied to lower the Class I and Class II procurement requirements of the utilities and other suppliers.

If the electricity providers are not able to meet the RPS requirements by purchasing or acquiring renewable energy certificates, they must pay alternative compliance payments (ACPs). The funds are used for a variety of renewable programs in New Hampshire.

The result is that these alternative compliance payment prices essentially act as a price ceiling for the REC market in New Hampshire. The ACPs for RECs by class in recent years are:

Inflation Adjusted Alternative Compliance Payment Rate (\$ per Megawatt Hour)					
	2017	2018	2019	2020	2021
Class I (Non-Thermal)	\$ 56.02	\$ 56.54	\$ 57.15	\$ 57.61	\$ 57.99
Class I Thermal	\$ 25.46	\$ 25.69	\$ 25.97	\$ 26.18	\$ 26.35
Class II	\$ 56.02	\$ 56.54	\$ 57.15	\$ 57.61	\$ 57.99
Class III	\$ 55.00	\$ 55.00	\$ 55.00	\$ 34.54	\$ 34.99
Class IV	\$ 27.49	\$ 28.00	\$ 28.60	\$ 29.06	\$ 29.44

For example, Eversource, Unitil and the New Hampshire Electric Co-op have recently made alternative compliance payments instead of purchasing certain categories of RECs:

2019 Company	Alternative Compliance Payments (ACPs)					
	Class I	Class I Thermal	Class II	Class III	Class IV	Total
Liberty Utilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New Hampshire Electric Cooperative	\$ -	\$ 187,192	\$ -	\$ -	\$ -	\$ 187,192
Eversource Energy	\$ -	\$ 519,893	\$ -	\$ -	\$ -	\$ 519,893
Unitil Energy Systems, Inc.	\$ -	\$ -	\$ 1,029	\$ -	\$ -	\$ 1,029
Distribution Utilities Subtotal	\$ -	\$ 707,085	\$ 1,029	\$ -	\$ -	\$ 708,114

For additional information on the Renewable Portfolio Standard, refer to:

- [New Hampshire's RPS statute \(RSA 362-F\)](#)
- [Public Utilities Commission RPS Website](#)
- [New Hampshire Renewable Energy Fund Annual Report \(1 October 2020\)](#)
- [UNH Sustainability Institute Study: New Hampshire RPS Retrospective 2007 to 2015](#)

Attachment 4: Utility Default Procurement Cycles and Rate Setting

Hanover Community Power has a goal of maintaining competitive default rates compared to Liberty, Eversource or NHEC, while also offering voluntary products that retail customers may opt-in to receive.

The timing of the program's rate setting decisions and the procurement of electricity will need to consider when Liberty and Eversource, in particular, conduct these same activities (particularly for the program's default electricity product).

As context, Eversource, Liberty Utilities and Unitil all issue requests for proposals (RFPs) twice annually for competitive suppliers to assume load-serving entity obligations and supply default customers with electricity for 6-month "strip" periods, with suppliers bidding to serve individual "tranches" or segments of customers by class.

The procurement schedules, tranches and rate practices for each distribution utility are:

- **Eversource** (Public Service Company of New Hampshire): issues RFPs in May and November with bids due in early June and December for suppliers to begin serving customers in August and February, offering four ~100 MW tranches to serve small customers and a single tranche to serve large customers (five tranches in total). Retail rates are fixed over the 6-month period for small customers and vary by month for large customers.
- **Liberty Utilities**: follows the same supplier RFP schedule and retail pricing as Eversource but (1) solicits supply for small customers in a single 6-month block tranche and for large customers in two, consecutive three-month block tranches (3 tranches total), and (2) allows bidders to include and price RPS compliance obligations separately (as an additional product).
- **Unitil**: issues RFPs in March and August for delivery beginning in June and December, offering tranches of residential, small commercial, outdoor lighting and large customers classes (four tranches). The large customer RFP is structured in a distinct fashion, in that it passes through market costs for energy and so suppliers compete to price capacity, congestions, ancillary services, etc. for the large customer tranche over the 6-month term; retail rates reflect these load-serving entity costs along with the pass-through of real time locational marginal market prices (which are load-weighted by the entire class' hourly load shape i.e., not the individual large customer's usage profile). Retail rates for the residential, small commercial, and outdoor lighting classes are fixed over the 6-month term, though customers have the option to choose variable monthly pricing if the election is made prior to the start of the next 6-month term.

Supplier bids are priced in dollars per megawatt-hour (\$/MWh) monthly and generally exclude Renewable Portfolio Standard (RPS) compliance obligations (called "Renewable Energy Certificates" or "RECs"), though Liberty Utilities allows RECs to be bid as a separate product. Distribution utilities typically procure most or all their supply of RECs through competitive solicitations held separately from the auctions for default electricity service.

New Hampshire's RPS requires all electricity suppliers to procure or otherwise obtain RECs for four distinct "classes" of renewables, each distinguishing between different technologies and dependent upon the year that the generators came online.

For 2021, Liberty and Eversource are required to include 21.6% renewable energy in their energy supply. This minimum compliance requirement will increase incrementally to 25.2% by 2025 and remain fixed thereafter, absent an increase in the RPS.

Attachment 5: Overview of Utility Net Energy Metering Tariffs

Discussion of Liberty, Eversource and NHEC's Net Metering, Group Net Metering and Low-Moderate Income Solar Project Tariffs

Under the net metering process, customers who install renewable generation or qualifying combined heat and power systems up to 1,000 kilowatts in size are eligible to receive credit or compensation for any electricity generated onsite in excess of their onsite usage.

Any surplus generation produced by these systems flows back into the distribution grid and offsets the electricity that would otherwise have to be purchased from the regional wholesale market to serve other customers.

The credits and compensation customer-generators receive for electricity exported to the grid are defined under Net Energy Metering (NEM) tariffs offered by Eversource, Liberty Utilities, Unitil and the New Hampshire Electric Co-op (NHEC). Note that:

- Liberty Utilities provides distribution service to almost all customers in Hanover, although Eversource serves several off Route 10 in northwestern Hanover and NHEC serves a small number in the Goose Pond Road area.
- NHEC is member-owned cooperative and as such, its rules and regulations are approved by its Board of Directors and are not subject to regulation by the Public Utilities Commission. Additional information regarding NHEC's Net Energy Metering tariffs may be found online under their "[Terms and Conditions](#)".
- The Public Utilities Commission regulates the Net Energy Metering tariffs of Eversource, Liberty Utilities, Unitil in accordance with [PUC Rule 900](#) and [RSA 362-A:9](#) (refer to [RSA 362-A:9, XIV](#) specifically for Group Net Metering statutes).

In regard to both Liberty Utilities and Eversource's NEM tariffs, note that:

- NEM tariffs offered by the utilities underwent a significant change several years ago.
- Customer-generators that installed systems before September 2017 may still take service under the "NEM 1.0" tariff ("standard" or "traditional" NEM).
- Systems installed after August 2017 must take service under the "NEM 2.0" tariff ("alternative NEM").
- NEM 1.0 customers may switch to taking service under the NEM 2.0 tariff but cannot subsequently opt-back to NEM 1.0 (with limited exceptions, e.g., participation in certain pilot programs).

Under both tariffs, customer-generators are charged the full retail rate for electricity supplied by Liberty and Eversource and receive credits for electricity they export to the grid for some (but not all) components of their full retail rate. Refer to the next subsection for tables comparing NEM 1.0 to 2.0 tariffs.

To appropriately measure and credit customer-generators taking service under a NEM tariff, the utilities install a bi-directional net meter that records each kilowatt-hour (kWh) supplied to the customer from the grid and also each kWh that flows back into the grid. This data is recorded and collected on a monthly billing-cycle basis.

For NEM 1.0 tariff systems (installed before September 2017), any kWh exported to the grid are netted against kWh consumed. If there is a net surplus of kWh at the end of the monthly billing period (i.e., more power was exported to the grid by the customer-generator than was consumed) those surplus or negative kWh are carried forward and can be used to offset future kWh consumption (so the customer only pays for their “net” energy consumption).

For NEM 2.0 tariff systems (installed after August 2017), all customer-generators receive a monetary credit for each kWh that is exported valued at 100% of their default electricity supply rate component for the month. Smaller systems (up to 100 kilowatts in size) additionally receive credits for 100% of the transmission component and 25% of the distribution component of their retail rate. (Larger systems, up to 1,000 kilowatts in size, only receive full credit for the electricity supply rate component.)

Note that most customer-generators in Hanover Community Power are expected to be taking service under Liberty’s NEM 2.0 tariffs going forward.

Any credits that accumulate over time are tracked and used to offset the customer-generator’s future electricity bills. Customers may also request to cash-out their surplus credit once a year, after their March billing cycle, if the balance exceeds \$100 (or any balance in the event of moving or service disconnection). NEM 1.0 surplus balances are tracked as kWh credits and are converted to dollars at wholesale avoided costs, while NEM 2.0 surplus balances are tracked as monetary credits directly (in dollars). Note that these cash-outs are treated as taxable income by the Internal Revenue Service (IRS). Payments of \$600 or more remitted to the customer are accompanied by a 1099 form for the IRS. Utilities may also issue IRS Form 1099s for smaller amounts.

Alternatively, Group Net Metering is a process that allows any customer-generator to share the proceeds of their surplus generation credits to directly offset the electricity bills of other customers, which is financially more advantageous and can increase the effective value of the system. All the members in the group need to be within the same distribution utility service territory but may be served by different suppliers. The credits are calculated based on the host site’s NEM tariff and retail rate, and payments are credited to offset the electricity bills of each member directly by their respective utility (if the customers are billed for supply by their utility). These allocations are governed by a Group Net Metering Agreement between the host customer-generator and group members, which is part of the registration process overseen by the Public Utilities Commission.

Note that larger systems (up to 1,000 kilowatts in size) must register as group hosts in order to qualify for net metering in the event that the customer-generator exports more than 80 percent of the power produced onsite to the distribution grid. Additionally, if the electricity exported from larger systems exceeds the total electricity usage of the group on an annual basis, the credit for the residual amount (e.g., electricity exported in excess of the group’s total usage) is re-calculated based on the incumbent utility’s avoided cost of electricity supply. This rate is lower than the NEM credit based on the customer-generator’s retail rate, and results in a downward payment adjustment issued by the incumbent utility to the host customer. Residential systems under 15 kilowatts, however, are not subject to this adjustment.

Most recently, a Low-Moderate Income (LMI) Community Solar Project option has been implemented under Group Net Metering. The program currently provides an incentive of 3 cents per kWh (dropping down to 2.5 cents after July 2021) in addition to the host site’s NEM credits, and solar systems may be either rooftop or ground-mounted systems. To qualify, groups must include

at least five residential customers, a majority of which are at or below 300 percent of the federal poverty guidelines, and non-residential customers cannot account for more than 15 percent of the total projected load in the group.

Lastly, all group hosts (except for residential systems under 15 kilowatts) must file an annual report with the NHPUC and their incumbent utility that includes the annual load of the host and members, annual total and net surplus generation of the host site system, and additional information for Low-Moderate Income Community Solar Projects.

In addition to NEM credits, all customer-generators have the option of selling the Renewable Energy Certificates (RECs) produced by their systems. This can provide an additional revenue stream to customer-generators, but requires a separate REC meter, registration and ongoing reporting requirement.

Alternatively, the NHPUC estimates the RECs that could be produced by all customer-generators who do not separately meter and sell their RECs and lowers the Renewable Portfolio Standard procurement requirements for all load-serving entities by an equivalent amount.

Comparison of Utility “Standard” and “Alternative” Net Energy Metering Tariffs

The tables below compare the two tariff structures, which offer different credits to customers depending on the size of their installed system, for customer-generators taking service from Liberty and Eversource:

Net Energy Metering (NEM) Credit on Net Monthly Exports to Grid

	NEM 1.0 <i>“Standard NEM”</i> <i>Offered prior to 9/1/2017</i>	NEM 2.0 <i>“Alternative NEM”</i> <i>Effective 9/1/2017</i>
Large Systems <i>100 Kilowatts to 1 Megawatt</i>	Full credit (at the customer’s retail rate) for electricity supply <u>only</u>	
Small Systems <i>≤ 100 Kilowatts</i>	Full credit for electricity supply, distribution, transmission, System Benefits, Stranded Cost & Storm Recovery charges	Full credit for electricity supply and transmission; 25% credit for distribution & no credit for other charges

As shown in the table above, levels of compensation for small customer-generators (with systems up to 100 kilowatts) were lowered, such that these customers no longer receive full compensation on their distribution rate component or several other small charges (e.g., the System Benefits, Stranded Cost and Storm Recovery charges).

Additionally, the NEM 2.0 tariff modified the type of credit, and the ways credits for surplus generation are tracked and refunded, for both small and large customer generators:

- Under NEM 1.0, any surplus generation would be tracked as a kilowatt-hour (kWh) credit, which was carried forward to offset the customer’s consumption (and bill) in future months. For any kWh credits remaining on an annual basis (at the end of March each year), such customers have

the option of either continuing to bank their credits to offset future usage, or to convert the kWh credit into a monetary credit, at a rate set by the Public Utilities Commission (typically ~3-4 cents per kilowatt-hour) and to apply the amount to their account or receive a check for the amount owed.

- Under NEM 2.0, kWh credits are automatically converted into a monetary credit every month, valued at the customer’s retail rate for that specific month. Customers have the option of either carrying the credit forward to offset to their electricity bill in future months or may receive the refund directly as a check.

The crediting mechanism under NEM 1.0 was relatively more advantageous for customers in one respect. Solar systems generate more power in the spring and summer months relative to other seasons; consequently, the credits that customer-generators would accrue during the summer months would offset their consumption in the winter months on a one-to-one, kWh per kWh basis. This is advantageous because winter supply rates are above summer rates on average.

In another respect, NEM 2.0 offers an advantage to customers that accrue surplus credits over the course of the year, because the surplus is calculated based on components of the customer’s retail rate — which is higher than the ~3-4 cents per kilowatt-hour value that is applied to convert NEM 1.0 kWh credits into a monetary credit whenever customers elect to cash-out their surplus.

These changes are summarized in the table below, and apply to all customer-generators regardless of system size:

<p style="text-align: center;">NEM 1.0</p> <p style="text-align: center;"><i>“Standard NEM”</i></p> <p style="text-align: center;"><i>Offered prior to 9/1/2017</i></p>	<p style="text-align: center;">NEM 2.0</p> <p style="text-align: center;"><i>“Alternative NEM”</i></p> <p style="text-align: center;"><i>Effective 9/1/2017</i></p>
<p>kWh credit carried forward.</p> <p>May be refunded at a rate calculated by the Public Utilities Commission (typically ~3-4¢ per kWh).</p>	<p>kWh converted to monetary credit automatically each month.</p> <p>Monetary credit carried forward as a bill credit or refundable.</p>

Additional details may be found in the Eversource, Liberty Utilities and Unitil tariffs and the Public Utilities Commission website:

- [Eversource Tariffs](#)
- [Unitil Tariffs](#)
- [Liberty Utilities Tariffs](#)
- [PUC overview of Net Metering](#)
- [PUC graphic explanation of NEM 1.0 vs. NEM 2.0.](#)

Net Energy Metering Systems by Utility Territory

According to the most recent [Energy Information Agency \(EIA\) Form 861m data](#), there are about 11,000 customer-generators taking service under Net Energy Metering tariffs in New Hampshire, with a cumulative installed capacity of approximately 140 megawatts (in terms of nameplate

capacity in alternating current, or “AC”). Estimated numbers of customer-generators and installed capacity by technology are summarized below:

- Solar photovoltaics: ~120 megawatts (MW) and 10,760 customer-generators; note that:
 - Group Net Metering accounts for an additional ~1.5 MW serving 56 customers; and
 - Sixteen residential customers, in addition to solar photovoltaics, also have battery storage systems with a cumulative capacity of 175 kilowatts (an average size of ~11 kilowatts per customer).
- Onsite wind: 412 kilowatts (kW) and 72 customer-generators.
- “Other” technologies (presumably, small hydro or qualifying combined heat and power systems, or “CHP”): ~17.5 megawatts (MW) and 55 customer-generators.

The table below provides the number of customer-generators in each distribution utility territory:

Number of Net Metered Customer-Generators by Technology

	Customer-Generators by Technology				Subsets of Solar PV Customers	
	Total	Wind	Other (CHP or Hydro)	Solar PV	Group Net Metering	Battery Storage
Eversource	7,949	37	52	7,860	21	0
Unitil	1,066	3	1	1,062	0	0
Liberty Utilities	724	1	0	723	22	16
NHEC	1,204	31	2	1,171	13	0
Total	10,943	72	55	10,816	56	16

The number of customer-generators by customer class with onsite solar photovoltaic systems, total installed capacity, and average solar system size in each utility territory are provided for reference in the tables below.

Note that these tables do not include Group Net Metered systems and participating customers within groups and reflect only installed solar photovoltaic system capacity (i.e., exclusive of onsite battery storage capacity).

Net Metered Solar Photovoltaic Systems: Number of Customer-Generators

	Residential	Commercial	Industrial	Total Customer-Generators
Eversource	7,195	630	35	7,860
Unitil	973	61	6	1040
Liberty Utilities	633	77	0	710
NH Electric Coop	1,065	81	4	1,150
Total	9,866	849	45	10,760

Net Metered Solar Photovoltaic Systems: Total Installed Capacity (MW-AC)

	Residential	Commercial	Industrial	Total Installed Capacity (MW-AC)
Eversource	54.15	29.66	5.09	88.91
Unitil	7.40	2.30	0.73	10.43
Liberty Utilities	4.78	5.12	0.00	9.90
NH Electric Coop	7.61	2.46	0.60	10.66
Total	73.94	39.54	6.42	119.90

Net Metered Solar Photovoltaic Systems: Average System Size (kW-AC)

	Residential	Commercial	Industrial	Average System Size (kW-AC)
Eversource	7.5	47.1	145.5	66.7
Unitil	7.6	37.8	121.2	55.5
Liberty Utilities	7.6	66.5	N/A	24.7
NH Electric Coop	7.1	30.3	149.0	62.2
Average	7.5	45.4	138.6	52.3

Attachment 6: Hanover Community Power Net Metering, Group Net Metering and Low-Moderate Income Solar Project Opportunities

Please refer to [Attachment 5: Overview of Utility Net Metering Tariffs](#) as context for this section.

[RSA 362-A:9,II](#) grants Community Power programs broad statutory authority to offer customer-generators new supply rates and terms for the generation supply component of Net Energy Metering (NEM). The relevant statutory authority is quoted in full below:

“Competitive electricity suppliers registered under RSA 374-F:7 and municipal or county aggregators under RSA 53-E determine the terms, conditions, and prices under which they agree to provide generation supply to and credit, as an offset to supply, or purchase the generation output exported to the distribution grid from eligible customer-generators. The commission may require appropriate disclosure of such terms, conditions, and prices or credits. Such output shall be accounted for as a reduction to the customer-generators’ electricity supplier’s wholesale load obligation for energy supply as a load service entity, net of any applicable line loss adjustments, as approved by the commission. Nothing in this paragraph shall be construed as limiting or otherwise interfering with the provisions or authority for municipal or county aggregators under RSA 53-E, including, but not limited to, the terms and conditions for net metering.”

Hanover Community Power intends to offer a NEM generation rate and terms to customers with onsite renewable generation eligible for net metering from the incumbent utilities. Note that any non-supply related components of the Net Energy Metering tariff (e.g., credits for transmission and distribution) will continue to be provided to customer-generators directly by the incumbent utilities.

How Hanover Community Power calculates, accounts for and provides NEM credits to participating customer-generators for the different types of eligible system sizes, customer types and group configurations will have a number of important financial and practical implications for the program and customers in Hanover.

Hanover Community Power also anticipates encountering practical challenges of an operational nature in administering net metering and group net metering programs. This is partly because net energy metering continues to evolve in response to new policy and regulatory requirements, and the day-to-day processes that govern the coordination between the program, participating customers and incumbent utilities are subject to refinement and change over time.

In particular, Hanover Community Power will be one of the first default aggregation programs to launch in the Liberty, Eversource and NHEC service territories, and the process of transferring significant numbers of NEM customers may cause unanticipated issues due to the metering, billing and data management requirements of this subset of customers. Hanover Community Power will maintain close coordination with the incumbent utilities to expeditiously resolve any such issues that may occur.

For example, Hanover Community Power may decide to separately issue supply bills to customers that have installed systems after September 2017.

The advantage in dual-billing this subset of customers stems from what is essentially an accounting irregularity in how the incumbent utilities' billing systems may currently treat customer-generators taking service under the NEM 1.0 tariff, which applies to systems installed before September 2017, versus the NEM 2.0 tariff, which applies to all systems installed after that date. As context:

- The cumulative surplus generation exports of net metered customer-generators will decrease the amount of electricity that Hanover Community Power will have to purchase from the regional power market to supply other customers in the program. The surplus generation from both NEM 1.0 and NEM 2.0 customer-generators is tracked and netted out from the program's wholesale load obligations by the incumbent utilities for this purpose.
- However, for the purpose of netting out of the program's Renewable Portfolio Standard (RPS) compliance requirements, the surplus generation from NEM 1.0 customers is tracked and accounted for differently than it is for NEM 2.0 customers:
 - Surplus generation from NEM 1.0 customers is tracked as a kWh credit that is carried forward to offset the customer's future electricity supply requirements; these kWh credits will be counted as an offset that decreases the total electricity supplied by the program to retail customers in aggregate — which lowers the program's RPS compliance obligation.
 - Surplus generation from NEM 2.0 customers is tracked as a monetary credit that is carried forward to offset the customer's future electricity bills; even though the monetary credit is calculated each month based on every customer's kWh surplus generation, the monetary credit is treated as a re-sale or delivery of power generated by NEM 2.0 customer and provided to other participating customers through the program — it is not treated, in other words, as an offset that decreases the total electricity supplied by program to retail customers in aggregate — and therefore does not lower RPS compliance obligations in the same way.

The practical consequence of this accounting treatment is that Hanover Community Power would have to purchase Renewable Energy Certificates matching the amount of surplus generation supplied by NEM 2.0 customer-generators (but not NEM 1.0 customer-generators) in the same way as if the program had imported that amount of electricity from the regional wholesale market.

- Taking on the responsibility of billing this subset of NEM 2.0 customers directly may allow Hanover Community Power to track and account for the impact of their surplus generation in ways that lower the program's RPS compliance obligations and costs. Specifically, the program could credit customers currently on the utility's NEM 2.0 tariff in the same way that NEM 1.0 customers are credited (i.e., using kWh credits to track surplus generation on the supply portion of the bill). Note that RSA 362-A:9-II explicitly grants Community Power programs the flexibility to offer net metered customers either:
 - A *“credit, as an offset to supply”* for their surplus generation, which is equivalent to the NEM 1.0 tariff accounting.
 - To *“purchase the generation output exported”*, which is equivalent to how the NEM 2.0 tariff tracks surplus generation.

Exercising the first option listed above, by offering NEM 2.0 customers a kWh credit tracked as an offset to supply, would allow Hanover Community Power to harmonize the accounting

treatment of NEM 1.0 and 2.0 surplus generation for the purpose of program RPS compliance reporting. This would lower program rates and is an option that the program may therefore find cost-effective to implement.

Additionally, certain customer-generators currently receiving IRS Form 1099 taxable income from monetary credits under the incumbent utilities' NEM 2.0 tariff may benefit financially from receiving kWh credits for the supply portion of their monthly surplus generation instead.

While dual billing is typically avoided — as it is less convenient for most customers to receive a separate bill from their utility and supplier — customers with onsite generation systems tend to be highly informed on energy issues and respond positively to more active engagement with both their utility and supplier.

Consequently, dual billing may enhance customer satisfaction, awareness and ongoing participation in the program for customer-generators. Furthermore, dual billing could be done electronically, which is more convenient for the customer and less costly for the program than sending paper bills.

Furthermore, Hanover Community Power may be able to create additional value for customer-generators through a combination of dual billing, assistance with metering upgrades and time-varying rate structures. For example:

- Many customer-generators with solar systems may benefit from local programs that help them reduce their full energy bill costs.
- Providing the customer with a separate supply-only bill would allow Hanover Community Power to also offer a time-varying rate (which may not otherwise be available through the incumbent utilities' billing systems).
- Upgrading to an interval meter (if the customer does not have one) and installing onsite battery storage, combined with a time-varying rate, may enable the customer-generator to further lower their overall bill by shifting their pattern of electricity usage at times of high-power prices and constrained generation and transmission capacity. This could also help to manage and lower the program's electricity supply costs in aggregate as well, and thus benefits all participating customers.

Similarly, Hanover Community Power may be able to streamline the process and cost of installing REC production meters, registering customer who generate electricity and purchasing their RECs for the onsite power generated to satisfy part of the program's overall RPS compliance requirements. This would allow the program to source RECs locally and would provide an additional source of revenue for customer-generators in the Town of Hanover.

Hanover Community Power also intends to evaluate ways to enhance the value of the NEM credits that customers receive overall, from both the program and the incumbent utilities. For example, customer-generators may benefit by becoming hosts in Group Net Metering, including by establishing a Low-Moderate Income Solar Project group. The program may be able to streamline the process required to do so, which entails:

- Matching customers interested in becoming members with prospective group hosts.
- Executing a Group Net Metering Agreement together.
- Registering the group with the Public Utilities Commission and the incumbent utilities.

- Thereafter filing annual compliance reports.

Lastly, NEM tariffs are subject to revision and Hanover Community Power, through CPCNH, intends to work with the incumbent utilities, participate in NHPUC proceedings and engage at the NH Legislature on issues that impact how the tariffs evolve going forward.

Customers are increasingly adopting new energy technologies and expect to be offered rates and services that provide them with new choices and fair compensation based on their investment; the program's ability to assist customers in these ways is heavily dependent on how state policies and utility regulations evolve over time.

Hanover Community Power will seek to represent the interests of our community and customers in these matters.

Attachment 7: Hanover's Public Planning Process

October 23, 2017	Hanover Selectboard appoints Hanover Electric Aggregation Committee
Fall 2017 – Spring 2019	<p>Hanover Electric Aggregation Committee, a subcommittee of Sustainable Hanover, begins meeting monthly to pursue a range of options to provide a green power alternative electricity product for Hanover “retail” (residential, small business, non-profits) electricity customers, who, because of their small electricity demand, must purchase default power from the incumbent utility at higher retail prices. The EAC began working with consultants from 3Degrees to help the Town explore formal implementation of a municipal aggregation. Through their work it became apparent that the Town faced three constraints:</p> <ul style="list-style-type: none">• RSA 53-E established an “opt in” aggregation program available to NH municipalities, a model which has proven ineffective in other states because of relatively lower rates of customer participation. The solution was to amend RSA 53-E to convert the program to “opt out.”• Electricity suppliers required complete electricity consumption data (“load curve”) for all customer classes in Hanover on a 15-minute interval basis. Once the Town filed the request with Liberty Utilities, it took over 6 months to provide the data to Hanover, further delaying decision-making.• Liberty was unwilling to allow the electricity suppliers access to their customer database for purposes of third-party billing.
January 2019	Legislation is sponsored on behalf of the City of Lebanon and other interested parties, proposing to amend RSA 53-E to shift the municipal electricity aggregation model to “opt out” and several additional components designed to facilitate multi-community and county municipal aggregation. Legislation passes and is forwarded to the Governor for signature in June.
April 2019	3Degrees and the Town of Hanover issue an RFP to electricity suppliers, seeking pricing on a 100% green power mix based on Hanover's residential electricity load. Only one proposal was received and the respondent was unable to work with Liberty on the pricing and billing logistics.
June 2019	EAC approaches Liberty Utilities to formally request that they create a 50% and 100% green electricity product as an alternative to their default power. Liberty declines arguing that there is no demand and

urges the Town of Hanover simply to purchase Renewable Energy Certificates as an offset to the retail load consumed by Hanover. Town staff reports that the Town already does so as part of our EPA Green Power Community status.

- July 2019 Hanover approaches Clean Energy NH to ask for their staff assistance in establishing a statewide Community Power Aggregation together with the City of Lebanon. CENH agrees to make Henry Herndon available to staff a fledgling coalition.
- September 2019 A small group of communities begin meeting at Clean Energy NH in Concord to discuss the launch of Community Power NH. Participating communities include Hanover, Lebanon, Nashua, Harrisville, and Cheshire County along with the Monadnock Sustainability Hub and the CPNH Steering Committee is formed.
- October 2019 Governor Sununu signs legislation that converts RSA 53-E to “opt out”.
- Fall 2019 – Winter 2021 CPNH Steering Committee meets over a series of 16 months, formulates a plan utilizing the advisory services of a municipal aggregation consultant and the legal services of both an in-state team of lawyers and a D.C.-based attorney with specific expertise in Community Power Aggregations; develops a Joint Powers Agreement, By-Laws and Articles of Incorporation for the Community Power Coalition of NH; submits the documents to the Attorney General for review and approval; receives said approval on January 14th, 2021 and prepares to launch.
- January - March 2021 Hanover Selectboard and Lebanon City Council vote to sign the Joint Powers Agreement. Nashua and Cheshire County form Electric Aggregation Committees and begin to develop Electric Aggregation Plans.
- February 2021 Hanover EAC begins finalizing draft of Electricity Aggregation Plan for Selectboard review and 2021 Town Meeting approval.
- March 22, 2021 Hanover Selectboard conducts initial review of draft Electricity Aggregation Plan and outlines process for acquainting the public with the proposed EAP, including the holding of a virtual webinar and Board public hearing prior to Town Meeting.
- June 2, 2021 Sustainable Hanover EAC members and Town staff host a public webinar on Hanover Community Power and the Proposed Electric Aggregation Plan.
- June 7, 2021 Hanover Selectboard hosts a public hearing on Hanover Community Power and the Proposed Electric Aggregation Plan.

