City of Keene
New Hampshire

ENERGY AND CLIMATE COMMITTEE MEETING MINUTES

Wednesday, February 5, 2025 **8:00 AM** **Room 22, Recreation Center**

Members Present:
Paul Roth, Vice Chair
Councilor Bryan Lake
Maureen Nebenzahl
Steve Larmon
Clair Oursler
Lisa Maxfield
Kenneth Swymer, Chair
Gordon Leversee
Timothy Murphy
Charles Redfern, Alternate (remote)
Rowland Russell, Alternate

Staff Present:
Megan Fortson, Planner
Emily Duseau, Planning Technician
Mari Brunner, Senior Planner

Members Not Present:
Annu Joshi Bargale
Jude Nuru
Jake Pipp, Alternate

1) Call to Order and Roll Call

Vice Chair Paul Roth called the meeting to order at 8:03 AM.

2) Election of Chair

Vice Chair Roth welcomed nominations for Chair. Ms. Megan Fortson informed him that he could make a nomination. Vice Chair Roth nominated Mr. Ken Swymer, who Councilor Bryan Lake seconded. Upon no further discussion from members, Vice Chair Roth called for a vote. With all in favor and no opposition, the nomination was approved. Vice Chair Roth thanked Mr. Swymer for stepping into the role.

3) Approval of Minutes

Chair Swymer welcomed any discussion on the minutes. Councilor Bryan Lake moved to approve the prior meeting minutes, which Mrs. Lisa Maxfield seconded. With all in favor and no opposition, January 8, 2025, minutes were approved.

4) ISO New England Presentation - Nathan Raike, NH Associate State Policy Analyst

Chair Swymer welcomed Nathan Raike, NH Associate State Policy Analyst. Mr. Eric Johnson, Director of External Affairs for ISO New England, and Mr. Raike joined virtually. Mr. Johnson explained that he would be presenting and would welcome any questions along the way.

Mr. Johnson explained that ISO New England, located in Western Massachusetts, runs the bulk power system for the six New England states. Mr. Johnson presented ISO New England's mission. He explained that they have three significant areas of responsibility for the region: they operate the bulk transmission system, administer wholesale electricity markets, and manage the grid in real-time. All of New England's utilities and power plants are controlled by a Control Center in Western Massachusetts, where they work. Their mission is part of a series of documents approved by their regulator, the Federal Energy Regulatory Commission (FERC).

ISO's vision is more aspirational and does not require FERC's approval. It indicates that it is working to align the wholesale markets with the regional states' policies. It highlights that its primary objective is to ensure a reliable power system during the transition to cleaner energy.

Mr. Johnson noted that ISO New England is independent of all companies participating in the wholesale market. All employees sign an annually renewed code of conduct to attest that they do not have any financial interest in any companies in the market when they join the organization. He added that they are also neutral regarding technology and noted they would discuss that in more depth later in the presentation. He said they also do not plan systems around nuclear or solar power as the markets determine the types of resources that come forward in New England.

Mr. Johnson likened the grid administration/operations to air traffic control for the power system. They manage the supply and demand for the fifteen million people who live in New England and have been doing so since 1997. The wholesale market platform can be considered a stock exchange, where ISO New England provides the platform for buyers and sellers. The buyers are typically utilities or companies that serve retail customers. The sellers would be power plants or suppliers buying from power plants and selling to customers. On the planning side, they look 10-15 years into the future to ensure the transmission system can support the expected demand from the New England population.

ISO does not own any grid infrastructure. The only assets ISO New England owns are the Western Massachusetts control center and a Connecticut backup facility. Mr. Johnson explained that ISO New England has no jurisdiction on the fuel side and only operates the electric grid. They also do not have any control over site location decisions for new infrastructure, as the individual states approve that.

Mr. Johnson presented a diagram illustrating the entities that oversee ISO New England, including the previously mentioned FERC. Also, providing oversight is an organization that establishes

reliability standards for North America and the Northeast. An independent board of directors supervises the management team at ISO, and the profiles of those board members are available on the ISO website.

He continued explaining that on the right side of the diagram were two groups that ISO spent considerable time with: market participants and the states of New England. The market participants are entities that own resources and hold a financial position. This group encompasses six sectors, from generators and transmission owners to large industrial users. While FERC regulates them, they also collaborate closely with the states, including governors, consumer advocates, Public Utility Commissions, and environmental agencies, allowing them to understand the work involved in planning the transmission systems.

On a larger scale, New England and the ISO New England grid are part of a much larger interconnected system in the United States. On the other side of the Rocky Mountains is the western interconnection, while the Eastern interconnection, which ISO New England is part of, has limited transmission connecting the two systems. Finally, there is the Electric Reliability Corporation of Texas, which operates as a separate interconnection. Additionally, they import power from Quebec.

Mr. Eric Johnson offered an overview of ISO New England's role in managing the region's electricity grid and future energy outlook. He explained that while New England maintains separate interconnections, it preserves ties with Hydro-Québec, which supplies a significant portion of imported electricity—around 9% in the past year alone.

He highlighted the region's high-voltage transmission network, specifically the 345,000-volt lines that connect New England to New Brunswick, Quebec, and New York. Historically, New England's electricity demand has peaked in the summer due to air conditioning use; however, as transportation and heating become increasingly electrified—with a shift to electric vehicles and heat pumps—the region is expected to transition to a winter-peaking system by 2050, potentially doubling peak winter demand to over 50,000 megawatts.

Mr. Johnson discussed changes in the region's energy generation mix, noting the retirement of coal, oil, and nuclear plants. In 2000, coal and oil accounted for 40% of electricity generation, but today, they contribute only a tiny fraction, utilized mainly during extreme cold. Natural gas has become the dominant energy source, but renewable energy—wind, battery storage, and large-scale solar—is anticipated to play a more significant role.

New England states, including New Hampshire, have set renewable energy goals, requiring utilities to increase their reliance on renewable sources. ISO is seeing a shift in proposed projects, with a growing number of wind, solar, and battery storage projects seeking to connect to the grid. While not all proposed resources will be developed immediately, these trends indicate a long-term shift toward renewable energy.

Mr. Johnson concluded his presentation by emphasizing the region's progress in reducing emissions and the need for continued development of renewable resources to meet future demand. He then opened the floor for questions.

Vice Chair Roth asked about the time frame for the region to reach the point where all of the proposed resources are connected. Mr. Eric Johnson explained the multi-stage process developers must follow to connect new energy projects to the grid. First, ISO New England conducts a reliability assessment to ensure the interconnection will not compromise grid stability. This study process can take several years and requires significant coordination with utility companies.

In addition to ISO approval, developers must secure permits from state and federal agencies. Offshore wind projects, for instance, require access to federal lease areas, adding another layer of complexity. The 38,000 megawatts of proposed projects depend on how effectively developers can navigate these regulatory and logistical challenges.

Mr. Johnson highlighted that ISO New England's primary role is to ensure all new interconnections are completed reliably. Meanwhile, developers and regulatory agencies have broader permitting and development responsibilities.

Mr. Roth questioned whether a five- to ten-year estimate is reasonable. Mr. Eric Johnson pointed out that some energy projects might be finished within that time. However, the Federal Energy Regulatory Commission (FERC) is making changes to streamline the project queue by raising the threshold for study eligibility.

New requirements will necessitate developers to make a significant financial commitment, which is anticipated to discourage speculative projects. This change aims to allow ISO New England to focus on projects with a higher likelihood of success. As a result, the number of projects in the queue will likely decline in the short term, but may rise again as states set new renewable energy goals.

Vice Chair Roth recognized Mr. Peter Hansel, who noted that Mr. Johnson mentioned that his organization was overseen by FERC and discussed the plans to transition to renewable energy. He questioned how the new administration in Washington would affect FERC's help. He wondered if Mr. Johnson or his constituents were planning any change in their process depending on how policies change. Mr. Eric Johnson emphasized that most energy projects in New England are driven by state policies rather than federal decisions, meaning they are likely to move forward regardless of administrative changes in Washington.

However, Mr. Johnson acknowledged that the new administration appears less supportive of offshore wind—an area where New England has made significant investments. Since offshore wind projects require federal lease approvals, any policy shifts at that level could create challenges.

Regarding transmission planning, Mr. Johnson noted that FERC operates as an independent agency, though the administration-appointed chair influences its direction. As a result, the energy sector is in a transitional period, waiting to see how federal policies will shape future developments.

Mr. Hansel followed up, stating that Mr. Johnson mentioned that much of it depends on what happens in the states. New Hampshire is currently assessing whether or not to maintain its renewable portfolio standard. Mr. Hansel pointed out that New Hampshire's standard is already one of the lowest in New England, but there is ongoing discussion in Concord about potentially phasing it out entirely, and he inquired if Mr. Johnson had any thoughts on this.

Mr. Johnson replied that individual states fully control their renewable portfolio standards (RPS) and energy goals. ISO New England monitors these policies to evaluate the pace of renewable energy development, but does not make decisions regarding the existence, adjustment, or specific energy sources of a state's RPS. He remarked that New England states have diverse approaches, with some being more aggressive than others. The definitions of renewable energy also vary, with certain states including large-scale hydro or other clean energy sources as part of their definition. Ultimately, each state independently establishes its energy policy based on its priorities and objectives.

Mr. Charles Redfern, who was joining remotely, questioned the relationship between federal government funding and ISO's operations and wondered whether there was any dependency or if they were self-sustaining. Mr. Johnson responded that ISO New England is not an appropriated entity. FERC approves ISO New England's funding through a budget proposal, review, and approval process. Approvals are made on a calendar year basis, and costs are recovered from the market participants. They have a tariff that identifies what their cost and contribution would be to ISO. A more significant participant with more volume in the market would pay more than a small co-op in New Hampshire, which is part of the system. As such, there is no change to ISO New England's situation regarding what happens on the federal budget side.

Mr. Tim Murphy noted he heard Mr. Johnson speak of some anticipated energy-peaking expectations in the winter for New England and was interested in whether Mr. Johnson could provide additional background analysis or assessment. Mr. Johnson said he could and suggested it as a follow-up item. He added that they put together a ten-year forecast of growth and electricity demand each year with a separate forecast of how much electrification will contribute to the demand. That forecast is public information, and he offered to provide more details.

Mr. Murphy acknowledged that he could search for the information, but would appreciate it if it could be provided to save time. He also noted that while 2050 may seem distant, it is not far from his perspective. Additionally, he inquired whether the presentation would be made accessible, as he found it difficult to absorb all the information from his current position. Mr. Johnson noted that ISO New England would make this information available electronically. Ms. Fortson offered to send it out electronically once received.

Mrs. Maureen Nebenzahl questioned how much battery storage is happening in New England. Mr. Eric Johnson explained that while battery storage is a small part of New England's electric grid, it plays a crucial role in grid stability. He highlighted a 70-megawatt battery project in Maine that responds to ISO instructions every four seconds to help manage short-term fluctuations in electricity demand.

He noted that most proposed battery storage projects use lithium-ion technology with a two- to four-hour capacity, which can help balance renewable energy when wind and solar generation are low. However, long-term energy storage solutions—capable of holding a charge for days or weeks—will be necessary in the future to maintain grid reliability during extended periods of low renewable output. He emphasized that while battery storage is currently limited, it has significant potential for future development.

Members thanked Mr. Johnson for presenting, and Mr. Johnson thanked the committee for having ISO New England.

5) Community Power Program Continued Discussion - Mari Brunner, Senior Planner & Patrick Roche, Good Energy

Ms. Megan Fortson explained that the Community Power Work Group met recently with Senior Planner, Mari Brunner, to discuss potential proposed changes to the Community Power Program. She said that Mr. Patrick Gross, Good Energy, presented last month and was back to present to discuss the work group's findings.

Mr. Patrick Roche from Good Energy updated discussions regarding the next community power contract. He highlighted two key considerations: removing the 50% renewable energy product option and incorporating a small adder fee into the rates.

He noted that discussions so far indicate a recommendation to the City Council to eliminate the default product and amend the Community Power Plan to allow the City to collect a smaller adder fee. He noted that they have been working on some draft language. He suggested it be written as a very broad document to allow the City to make implementation decisions without having to go to City Council to amend the plan again. The proposed fee would be held in a separate account and potential uses could include funding solar projects or providing rebates for electrification improvements, like installing heat pumps.

Mr. Roche emphasized that other communities have successfully implemented similar fees, and while approval from the Public Utilities Commission (PUC) is not guaranteed, there is a strong precedent for acceptance. He sought input from the group on whether the fee should apply to all rate options or just the default product and whether they support removing the default option. He then turned the discussion to Senior Planner Mary Brenner for further input.

Ms. Brunner emphasized that the City Manager is seeking recommendations from the group to present to the City Council regarding the next phase of the Community Power Program. Specifically, she requested input on how a proposed Community Power Fund could be used.

Currently, the City has a small Community Power Fund, built through funds from a virtual group net metering agreement, amounting to approximately $35,000. If a small adder fee—such as a tenth of a cent — were included in the following program iteration, it could generate around $58,000 annually. She looked to the group for guidance on these decisions.

Ms. Brunner discussed the potential adjustments to the Community Power Program, which could include speeding up the build-up of the Community Power Fund and introducing an adder fee. The goal is to allow programming to begin about a year after launching the next phase. She highlighted discussions from a previous workgroup, where it was suggested that the 50% opt-up renewable energy option be removed due to low utilization.

Additionally, it was proposed that the default renewable energy percentage be increased to 50%, with a corresponding adder fee. This change would give the City Manager flexibility in bidding to ensure the default product remains competitive. She also requested input on utilizing the Community Power Fund for maximum impact.

Ms. Brunner clarified that increasing the default to 50% would only raise costs by about $60 per year for an average customer, and the adder fee would also be approximately $60. She invited feedback on the price points and structure of the plan, especially considering past participation patterns in the 50% option.

Mr. Roche sought clarification regarding the renewable energy percentages for the default product. He wanted to confirm whether the proposed change would result in 50% renewable energy in the default product or if the plan was to add 15% to the existing 35% (which includes the state minimum of 25% and an additional 10% from Keene). He was trying to ensure he understood the proposed changes accurately. Ms. Brunner responded that the idea was to bring it up to fifty on the default product (another 15%).

Mr. Roche clarified that instead of adding 10%, they would add 25% renewable energy on top of the state's twenty-five. He emphasized that the Community Power Program is flexible, and participants can always opt out without penalties. He pointed out that significantly increasing the default product's renewable energy could lead some participants to switch to lower-cost options or leave the program altogether. Additionally, higher default rates could attract third-party marketers offering competitive rates, which could impact program participation. He suggested that while the program's goal can be achieved, such decisions must be carefully considered.

Mr. Roche acknowledged that increasing the default renewable energy to 50% would significantly impact the program, but could also make it more expensive than most other market offers. He noted that many communities prefer to maintain their voluntary impact while gradually increasing it. The challenge is balancing the desire for higher renewable energy with the potential risk of losing participants due to higher costs, which could lead to program attrition.

Chair Swymer asked if there were a range within that 50% that Mr. Roche would recommend that would allow the City Manager the ability to deviate from that. Mr. Roche explained that increasing the renewable energy source of the basic product to 50% would likely increase the price by about one cent, compared to the current price with 10% additional renewable energy. He suggested giving the City Manager some flexibility in deciding how much renewable energy to add, proposing a range of 15% to 25% additional renewable energy. This flexibility would help balance the environmental goals with the need to keep the price competitive. He cautioned that if the price increase is too high, some customers might leave the program, which could undermine the goals of increasing renewable energy.

Mr. Hansel commented that the goal of reaching 100% renewable energy by 2030 must be considered. He also pointed out that the county offers an alternative option through the Clean Energy Cooperative, which could be an alternative for community members if they are unsatisfied with the proposed 50% renewable energy option. He mentioned that the county's rates change more frequently (every six months) compared to the City's fixed contract rates.

Councilor Bryan Lake said that reaching 100% renewable energy by 2030 is critical, and a significant increase now will prevent the need for a large jump in future contracts. He emphasized the importance of making substantial progress toward this goal, as future price hikes could be steep if they wait. Councilor Lake also highlighted the need for the City to continue leading in renewable energy within New Hampshire and the region. He believes pushing the default to 50% renewable energy is a reasonable move, with the option for residents to switch to a basic plan if the increase is too high. He supports simplifying the options to 25%, 50%, and 100% renewable energy.

Ms. Lisa Maxfield added that most people stay on the default plan as it's the easiest option. Currently, 95% of people are on the default, and even if 30% switch to the basic plan, 70% would remain on the 50% renewable energy plan, increasing overall participation in the higher renewable energy option.

Ms. Brunner clarified that the City Council is looking for a specific number for renewable energy, not a range. The adder fee could range from 0.1 to 0.3 cents, though she thinks 0.3 cents is a bit high. She also emphasized that the committee's input is needed on how to use the Community Power Fund, which has been built up over time. One suggestion she mentioned was using the fund to help reduce electricity costs for residents, especially if the increase in renewable energy adds some additional cost.

Mr. Roth asked Mr. Roche if he had the number of people who opted out of the program. Mr. Roche did not have the exact numbers, but estimated there were roughly 10% during the initial launch, primarily due to people moving out of town.

Mr. Roth noted that Ms. Brunner had mentioned other towns were doing an adder and questioned whether that was New Hampshire Community Power. Ms. Brunner responded that it varies. Ms. Brunner explained that several models exist for using discretionary funds from Community Power Programs, with many communities, including Nashua, planning to use their funds for energy efficiency programs. Other communities are considering using the funds for renewable energy projects. However, she noted that the City is already progressing with solar projects, so using the funds for similar initiatives might not be the best fit. She also mentioned that no community has yet fully implemented a program with discretionary funds.

Mr. Luse suggested using the community power funds for rebates or incentives, such as purchasing new appliances, which would be more effective compared to investing directly in solar arrays. He emphasized that matching rebate funds would provide more value for the available money. Additionally, he recommended keeping the adder fee minimal to avoid significant cost increases while still achieving renewable energy goals.

Councilor Lake agreed with using the community power funds for energy efficiency programs, particularly rebates. He also questioned whether the proposed adder fee of a 10th of a cent was on the high end, suggesting it might be better to set the fee lower, possibly even below a 10th of a cent, but not as low as a 20th. He expressed support for keeping the funds manageable and avoiding an excessive fee.

Ms. Brunner responded that she has been hearing that the typical range in New Hampshire seems to be between 0.1 and 0.3 cents. Given that Patrick works in multiple states, she was curious to hear Patrick's thoughts on the adder fee range.

Mr. Roche noted that a 10th of a cent is typically at the lower end of the range for adder fees, but he suggested flexibility to adjust the rate lower if needed. He mentioned that some communities, like Peterborough, have set even smaller rates, such as about 0.03 cents, which could be an option to consider. He acknowledged that many communities set their rates every six months, allowing for adjustment based on circumstances.

Mr. Roth asked if the plan was for a thirty-month term. Mr. Roche responded that a thirty-month term or something in that range would be likely, but reassured them that they were looking at multiple options.

Ms. Brunner mentioned that the International Council of Local Environmental Initiatives (ICLEI) contacted the City regarding a grant opportunity. The City plans to apply for the grant, which could fund hiring someone to help develop the program, provide outreach and education, and build partnerships. She noted that the application is still in progress, so it's not yet confirmed.

When asked if she was talking about a sustainability project manager, Ms. Brunner explained that it would probably be a contract employee who would help them figure out the program's implementation and functioning details, assist with implementation, and create partnerships.

Ms. Maxfield clarified that the funds raised through the adder fee might benefit only those who contribute to it. She suggested that people who pay the adder fee could receive extra benefits, such as rebates for new appliances or home improvements like windows. Those not paying the adder fee, such as those on the basic plan, would not be eligible for these benefits.

Ms. Brunner noted that the current plan suggests that funds would only benefit participants paying the adder fee, though it isn't explicitly detailed. Initially, the plan seemed broader, potentially applying to all program participants. This distinction is still up for decision and was part of the work group's discussions.

Chair Swymer welcomed a motion. Councilor Lake questioned whether this would go to the Council or the FOP. Ms. Brunner responded that the recommendation could be made to the Council, but they will bring it directly to the FOP next week so that it can go to the Council the following week.

Councilor Lake made a motion to recommend to the City Council that the updated plan include three levels: Keene Basic at the standard 25% renewable, Keene Default at 50% renewable, and

Keene Opt-Up at 100% renewable. He also proposed an adder fee for the City Manager to negotiate, ranging between $0.075 and $0.125 per kWh. He noted that after the motion is seconded, there would be open discussion and amendments before voting.

Ms. Lisa Maxfield seconded Councilor Lake's motion. Ms. Maxfield questioned whether they wanted to say that the adder fee would not be added to the basic plan. Members agreed to make that adjustment.

The amended motion reads: Councilor Lake made a motion to recommend to the City Council that the following plan include three levels: Keene Basic at the standard 25% renewable, Keene Default at 50% renewable, and Keene Opt-Up at 100% renewable. Additionally, he proposed an adder fee for the City Manager to negotiate, with a range between $0.075 and $0.125 per kWh to be added to the Default and Opt-Up options only.

The motion passed with all in favor and no opposition. The committee thanked Ms. Brunner and Mr. Roche for their time and attendance.

6) Master Plan Updates- Discussion Boards & Task Forces

Ms. Forston provided an update on the Master Plan project, which she said is progressing quickly. She mentioned they are currently in the second phase, which has involved forming six task forces based on the plan's pillars: flourishing environment, vibrant neighborhoods, thriving economy, livable housing, adaptable workforce, and connected mobility. She encouraged participation in these task forces and emphasized the importance of adding comments to the discussion boards on the master plan website. The feedback will be used to shape the plan moving forward. She plans to send out more details soon and urged everyone to get involved.

7) Other Updates

- **A) Solar Pavilion- Northen Borders Timber for Transit Grant**
- **B) 2025 Monadnock Region Earth Day Festival**
- **C) 2025 Meeting Schedule & Annual Retreat**
- **D) Annual Reports from Boards and Commissions**

There was no discussion of these items.

8) Work Group Report Outs

- **A) Community Solar**
- **B) Grants, Fundraising, and Partnerships**
- **C) Education and Outreach**
- **D) Legislative Track**
- **E) Food Security**

There was no discussion of these items.

9) New Business

Dr. Rowland Russell announced the 60th anniversary of Antioch University and shared that he is curating an exhibit at the Historical Society. The exhibit will highlight Antioch and past iterations of the Committee, including Mary's work as a graduate student. The exhibition opening is on Friday, February 21st, with a reception from 4:00 to 5:30 PM, and Dr. Russell encouraged everyone to attend. He also mentioned the significant contributions from Antioch, including over 50 startup businesses in the Monadnock region. Event details are available on the Historical Society's website, and articles have been published in the Sentinel. Dr. Russell will send out further information soon.

10) Next Meeting: Wednesday, March 5, 2025

11) Adjournment

With no further business, Chair Swymer adjourned the meeting at 9:08 AM.

Respectfully submitted by,
Amanda Trask, Minute Taker

Reviewed and edited by,
Megan Fortson, Planner