



**LEBANON ENERGY ADVISORY COMMITTEE (LEAC)
SEPTEMBER 16, 2021 - 4:00 PM
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE**

-
- 1. Call to Order**
 - 2. Approval of Minutes**
 - A. July 15, 2021, Public Hearing
 - B. July 15, 2021, Regular LEAC Meeting
 - C. August 18, 2021, Joint Public Hearing with City Council
 - D. August 19, 2021, Regular LEAC Meeting
 - E. July 9, 2021, Municipal Aggregation Subcommittee
 - F. July 13, 2021, Municipal Aggregation Subcommittee
 - 3. Old Business**
 - A. Lebanon Community Power, Community Power Coalition of NH & Related Legislative and Regulatory updates
 - B. Disband Municipal Aggregation Subcommittee?
 - 4. New Business**
 - A. Anerobic Digester Study Presentation
 - B. Discuss planning for development of a City Climate Action Plan
 - C. Upcoming Conference or Webinars of note:
Local Energy Solutions Conference Friday, October 8th, 2021
Other
 - 5. Open to the Public**
 - 6. Future Agenda Items**
 - 7. Next Meeting Date**
 - A. October 21, 2021, 4pm
 - 8. Adjournment**

Meetings are open for in-person and remote attendance. Members of the public that wish to attend remotely may do so by going to LebanonNH.gov/Live where you will find instructions on how to enter the meeting. Members of the public will be able to participate and ask questions through the City's virtual platform or by phone. Please note: Should technical difficulties occur during the meeting that disrupts virtual or phone connection(s), the meeting will continue without remote access capabilities.

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
SEPTEMBER 16, 2021

AGENDA ITEM 2
APPROVAL OF MINUTES:

JULY 15, 2021 PUBLIC HEARING

LEBANON ENERGY ADVISORY COMMITTEE PUBLIC HEARING

Council Chambers, City Hall

July 15, 2021

7:00 PM

Public Hearing on Lebanon Community Power Electric Aggregation Plan

LEAC MEMBERS PRESENT: Clifton Below, Gregory Ames, Jonathan Chaffee, F. Woody Rothe, Meghan Butts, Devin Wilkie (Alternate Council Representative)

LEAC MEMBERS ABSENT: Gene Homicki (alternate), Joan Monroe (Planning Board Representative)

STAFF PRESENT: Everett Hammond

CALL TO ORDER: Meeting called to order by Clifton Below at 7:00 PM.

PUBLIC HEARING TO RECEIVE PUBLIC INPUT ON DRAFT ELECTRIC AGGREGATION PLAN FOR LEBANON COMMUNITY POWER

1. Meghan Butts gave an overview presentation for the Lebanon Community Power with supplemental remarks by other LEAC members.

PUBLIC QUESTIONS/COMMENTS:

1. <Missed Name> – “Are there fees or dues to join Community Power of NH?” – No
2. John Procidano – “On average, what percentage will my electric bill go down” – We don’t know yet, but you will be notified before the program starts. Also “Will I receive one monthly bill or 2?” – One, from Liberty.
3. Tom Cormen – “Will Liberty have the same incentives to repair outages?” – Yes, they are compensated on how well they manage the distribution grid. They have told us they are ambivalent on who supplies the power. “In the state-by-state chart, Texas had the most savings. Will this be an issue?” – No, Texas does not pay for generators to have capacity (forward capacity market), lower regulation, no interstate cooperation, NE has penalties for generators who do not perform, do not have backup fuel sources, etc. “Will all member towns use the same supplier” – Not necessarily. Likely one broker/consultant providing support, but they could have separate supplier agreements. “This sounds really good, why are all towns doing this” – New, legal framework in-flux and just recently settled with bi-partisan support. Many municipalities have expressed interest, but are waiting for PUC rules, etc.

4. Sherry Boschert – “We moved from San Francisco, where many utilities have fought back against this. We want to be part of this. If there is anything I can help to do, I support it. This has worked well in San Francisco. This is essential.”
5. Lorraine Kelly – “I think this is a fabulous plan. When the City reaches the point of producing more power than it consumes, will this plan allow residents to purchase the excess power?” – Yes. “Do you know when the landfill gas-to-energy project will go online?” – Possibly next year
6. Bruce Garland – “How comfortable are we in begin able to work with the utility billing/accounting system?” – NH, and other deregulated NE states, have an Electronic Data Interchange (EDI) system that has been used for alternative supply billing.
7. David Millstone – Supports. Financial savings are one part of this. “Will we use group buying amongst communities vs competing with each other?” – Likely, yes. “Main interest is that the people supporting this will be more likely to support green energy. Where would funding for battery and EV incentives come from?” – One long-term goal is to build financial reserves, which could help with incentives in the future. Revenue bonds could be used for low-cost financing (already authorized by statute).
8. Darla Bruno – “I support the plan; I think the team has done a great job.”

ADJOURNMENT:

Clifton closed the public hearing at 8:03 PM.

Respectfully submitted,
Gregory Ames
Clerk (Recording Secretary)

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
SEPTEMBER 16, 2021

AGENDA ITEM 2
APPROVAL OF MINUTES:

JULY 15, 2021 REGULAR LEAC MEETING

LEBANON ENERGY ADVISORY COMMITTEE MEETING MINUTES

Council Chambers, City Hall

July 15, 2021

8:00 PM

DRAFT

MEMBERS PRESENT: Clifton Below (Chair, Council Representative), Greg Ames (Vice-Chair), Jon Chaffee (remote), Meghan Butts, Woody Rothe, Joan Monroe (Planning Board Representative)

MEMBERS ABSENT: Gene Homicki (alternate), Devin Wilkie (Alternate Council Representative)

STAFF PRESENT: Everett Hammond, Shaun Mulholland

GUESTS PRESENT: None

CALL TO ORDER: Meeting called to order by Clifton Below at 8:15 PM.

ACCEPTANCE OF MINUTES: Woody moved to accept the 6/17/2021 minutes; Meghan seconded. The minutes were approved unanimously, with one abstention (Joan, who was not at the meeting).

SUBCOMMITTEE REPORTS

Municipal Aggregation Subcommittee: Clifton commented on how much work has gone into the process. Jon commented that Clifton and Meghan did a great job on the presentation, and that he found it very informative.

OLD BUSINESS

Community Power Coalition of NH & Related Legislative Updates: Still waiting for HB315/SB91 to be signed into law, but the Governor is planning a signing ceremony at one of the Nashua-owned hydro dams in Nashua. Initial rulemaking meetings with the PUC have started. Hanover and Dover voted to join.

Lebanon Community Power (LCP) - Review feedback from public hearing: The committee discussed the presentation and felt it went well. See minutes for more details. Possibly update the FAQ's from questions asked by the public.

NEW BUSINESS

Brief update on City Solar: Solar panels will be going back on the Police Station with Enphase micro inverters, which should solve the radio interference issues. If this works, they will likely move forward with the landfill maintenance building as well. Possibility of 50kW at each of the airport T-hangers. Also, possible systems at Cemetery and Recreation maintenance garage.

Brief update on Landfill Gas-to-Energy project and Digester study: New landfill gas-to-energy interconnection study underway. Digester study should be ready in August.

OPEN TO THE PUBLIC: None.

FUTURE AGENDA ITEMS: Discussion of possible updates to building codes to address energy efficiency. Discussion of climate action plan and CIP planning.

NEXT MEETING:

Next public hearing on LCP Electric Aggregation Plan scheduled for August 18, 2021, at 6pm.

Next LEAC meeting scheduled for Thursday, August 19th at 4pm.

ADJOURNMENT:

A motion was made by Greg to adjourn the meeting at 9:09 PM. The motion was seconded by Jon. The motion was unanimously approved by roll call vote.

Respectfully submitted,
Gregory Ames

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
SEPTEMBER 16, 2021

AGENDA ITEM 2
APPROVAL OF MINUTES:

**AUGUST 18, 2021
JOINT PUBLIC HEARING
WITH CITY COUNCIL**

JOINT LEBANON LEAC/CITY COUNCIL

MINUTES

SPECIAL SESSION

Wednesday, August 18, 2021 6:00 p.m.

Remote Via Microsoft Teams: LebanonNH.gov/Live

City Councilors PRESENT: Mayor Tim McNamara Assistant Mayor Clifton Below, Erling Heistad, Karen Liot Hill, George Sykes, Douglas Whittlesey, Devin Wilkie, Jim Winny and Karen Zook

City Councilors ABSENT:

STAFF PRESENT: City Manager Shaun Mulholland, Deputy City Clerk Paula Maville, City Clerk Kristin Kenniston, GIS Coordinator Mark Goodwin, and Assistant DPW Director Everett Hammond

LEAC Members Present: Joan Monroe, Jonathan Chaffee, Woody Rothe, Meghan Butts, and Clifton Below

LEAC Members Absent: Greg Ames and Alternate Gene Homicki

7:00 PM: JOINT LEAC/CITY COUNCIL SPECIAL SESSION

1. CALL TO ORDER: Mayor McNamara called the Regular Session meeting to order at 6:00 p.m.

2. PUBLIC HEARING:

- A. A public hearing for the purpose of receiving public input on its draft Electric Aggregation Plan for Lebanon Community Power, which, if adopted by the City Council, would allow the City to become the alternative default energy service supplier for electricity customers within Lebanon on an opt-out basis. The presentation at 6:00 pm preceded the public comment period.**

Included in agenda packet: Detailed draft Electric Aggregation Plan for Lebanon Community Power presentation (pages 2-84).

The DRAFT Electric Aggregation Plan and Frequently Asked Questions (FAQs) can be viewed at: <https://lebanonnh.gov/1513/Lebanon-Community-Power>

Assistant Mayor Below and LEAC Chair presented the background behind Lebanon's Community Power Electric Aggregation Plan, noting that in October 2017, in accordance with RSA 53-E, LEAC was designated as Lebanon's Electric Aggregation Committee. Their intent is to help the City achieve its sustainability goals, lower costs for residents and businesses, and enable accelerated cost-effective integration of renewable energy, reduction of fossil fuel use, and decarbonization.

Ms. Meghan Butts gave a brief overview of what Lebanon's Community Power is, what it means for Lebanon's residents, and why it is a good thing for our community, noting the benefit of the Community Power method is that the City can procure electricity at affordable rates on its own, which can make it cheaper for residents and increase energy savings at the city level. It can open us up to more options such as access to more green power options; the options to source more locally; consider time of use rates; and would also include support for solar, storage and electric vehicle charging. Liberty Utilities will still maintain the grid and deliver the power, and is still responsible to provide reliable electric service. She also presented an overview of the Electric Aggregation

Plan's goals and objectives, noting that Lebanon Community Power will only launch if it can offer a rate lower than the default energy service rate offered by Liberty Utilities. They are not proposing to start Lebanon Community Power if it is not going to be more affordable for the city's residents.

How Lebanon Community Power will work

Lebanon Community Power (LCP) will:

- Serve as the default electricity supplier on an "opt-out" basis;
- Offer innovative service and rate options to customers on an "opt-in" basis (such as time-varying rates and Net Energy Metering generation credits);
- Operate on a competitive basis – customers will be able to switch back to Liberty energy service or other supplier with no penalty; and
- Be self-funded in rates paid by participating customers – the City will not use taxes to cover program operating expenses or capitalized costs.
- The City Council, with advisory support from the Lebanon Energy Advisory Committee (LEAC), will authorize the City Manager 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 thereafter

Customer Notification and Enrollment Process

- At least 30 days before program launch, all Lebanon electric customers will be mailed notifications that will include the initial fixed rate for LCP service compared with Liberty.
- Customers currently on default energy service provided by Liberty Utilities will be able to decline participation or "opt-out" of LCP such as by return postcard, online, or by calling a number.
- If a customer is already getting their power from a competitive supplier, nothing will change unless they choose to switch and "opt-in".
- New utility customers will get similar opt-out notices.
- All Lebanon Community Power default service customers will always be able to know the fixed rate at least 30 days in advance and be able to switch supplier at next meter read upon request with no penalty or exit fee.

Assistant Mayor Below noted the key feature of this program is being able to provide the opportunities to take advantage of competitive supply options for residential and small commercial customers. The majority of very large customers already use a competitive supplier because they can find better deals.

Assistant Mayor Below reviewed Net Metering for Lebanon Community Power, how LCP plans to serve Net Energy Metered (NEM) customers, and the 3 types of NEM which are:

1. On-site (behind the meter or BTM) NEM customer-generators grandfathered into traditional or standard NEM 1.0 (< 9/1/17) will continue to receive kWh credits for exports to the grid to offset future electricity load.
2. On-site BTM customer-generators on newer NEM 2.0 (since 9/1/17) may switch to traditional NEM kWh credit for generation supply from LCP but will continue to receive monetary credit for net monthly exports for distribution and transmission rates from Liberty.
3. For Group NEM the group host (generator) should stay on Liberty default service while group members may switch to LCP, get LCP rate for supply, and continue to receive on-bill credits for their share of group host output.

Assistant Mayor Below also reviewed Lebanon's Policy Goals, Program Objectives & Requirements, Program Design Requirements, and the Start-Up and Launch Process as detailed in the agenda packet (pages 23-28). He also explained the financial aspects of LCP, market timing, and locking into contracts to Councilor Whittlesey.

Mayor McNamara opened the Public Hearing, and the following people came forth to speak:

Ms. Pat Button: She asked about the timeframe this process would take place. Assistant Mayor Below said they plan to come before the Council at their second meeting in September with LEAC's Aggregation Plan for the Council to approve. Ideally, they would like to launch in the spring of 2022.

Ms. Renee Dunn: She spoke about the NH Electric Co-Op and was wondering if this program differs or is a continuation of this work. Assistant Mayor Below said he was using the NH Electric Co-Op as an example of a utility that uses a portfolio management approach to energy supply procurement in NH. While they own distribution facilities, LCP will not own distribution facilities.

After hearing no further comments from the public, Mayor McNamara closed the Public Hearing.

ACTION: No action required by the Council. For information purposes only.

The meeting was adjourned at 6:51 PM.

Respectfully submitted,
Dona E. Gibson, Recording Secretary

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
JULY 15, 2021

AGENDA ITEM 2
APPROVAL OF MINUTES:

AUGUST 19, 2021 REGULAR LEAC MEETING

LEBANON ENERGY ADVISORY COMMITTEE MEETING MINUTES

Meeting Room 2, City Hall

August 19, 2021

4:00 PM

DRAFT

MEMBERS PRESENT: Clifton Below (Chair, Council Representative), Greg Ames (Vice-Chair), Jon Chaffee, Woody Rothe, Joan Monroe (Planning Board Representative), Gene Homicki (alternate, remote)

MEMBERS ABSENT: Meghan Butts, Devin Wilkie (Alternate Council Representative)

STAFF PRESENT: Everett Hammond, Mark Goodwin

GUESTS PRESENT: None

CALL TO ORDER: Meeting called to order by Clifton Below at 4:08 PM. Clifton appointed Gene Homicki to serve in place of Meghan.

SUBCOMMITTEE REPORTS

Municipal Aggregation Subcommittee: Clifton suggested that the Subcommittee could be dissolved since it has finished its work to develop Lebanon's Electric Aggregation Plan. Final meeting minutes to be approved by LEAC.

OLD BUSINESS

Community Power Coalition of NH & Related Legislative Updates: Still waiting for HB315/SB91 to be signed into law (will become law by default if not signed). Plainfield and Newmarket have voted to join the Community Power Coalition; Cheshire County is expected to join as well. Expect to incorporate CPCNH on Friday, October 1, 2021.

Lebanon Community Power (LCP) - Review feedback from public hearing: Final public presentation took place during the August 18th City Council meeting (last night). The City Council is expected to take up the Electric Aggregation Plan at the September 15th meeting. Clifton presented, and the Committee discussed, the latest draft of the Electric Aggregation Plan. Jon moved that the Committee approve, and recommend to the City Council for approval, the draft electric aggregation plan presented with edits as discussed and possible update to the aggregated load data on page 3. Woody seconded. Approved unanimously by roll call vote.

NEW BUSINESS

Climate Action Plan: Jon and Woody hoped that LEAC could promote clean energy and climate action goals during the CIP process. Unfortunately, the CIP process has progressed past the point where LEAC could make meaningful input. There was further discussion around how the City could reach the Climate Action Goals in the Master Plan. Clifton presented the "Final Report of the 2020 New Hampshire Ad Hoc Emissions Commission" included in the meeting packet. Specific discussion around the Report's conclusion that society, and NH, need to achieve net zero carbon emissions by 2050. Should purchasing policies be updated to incorporate Climate action goals? Woody suggested that we work with Planning Department staff to investigate updates to building codes to reduce carbon emissions. Jon suggested that LEAC advocate for CIP funding to hire a consultant to develop a Climate Action Plan. Clifton suggested that committee members read the recent IPCC report, specifically the summary sections.

Local Energy Solutions Conference: Conference will be hybrid this year (virtual and in person). Date is Friday, October 18th.

OPEN TO THE PUBLIC: None.

FUTURE AGENDA ITEMS: Presentation of Anerobic digester at the next September meeting.

NEXT MEETING:

Next LEAC meeting scheduled for Thursday, September 16th at 4pm.

ADJOURNMENT:

A motion was made by Joan to adjourn the meeting at 5:46 PM. The motion was seconded by Jon. The motion was unanimously approved by roll call vote.

Respectfully submitted,
Gregory Ames

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
JULY 15, 2021

AGENDA ITEM 2
APPROVAL OF MINUTES:

JULY 9, 2021
MUNICIPAL AGGREGATION
SUBCOMMITTEE

MUNICIPAL AGGREGATION SUBCOMMITTEE MEETING MINUTES
(Subcommittee of the Lebanon Energy Advisory Committee)

Council Chambers, City Hall
July 9, 2021
9:00 AM

DRAFT

MEMBERS PRESENT: Clifton Below, Gregory Ames, Jonathan Chaffee, F. Woody Rothe

MEMBERS ABSENT: Cate Homicki

STAFF PRESENT: Everett Hammond

GUESTS PRESENT: Meghan Butts

CALL TO ORDER: Meeting called to order by Clifton Below at 9:20 AM.

APPROVAL OF MINUTES:

A motion was made by Woody Rothe to approve the 6/10/2021 minutes. The motion was seconded by Jon Chafee. The motion was unanimously approved.

If any action is taken by the Subcommittee, list motions and votes:

1. The Subcommittee discussed plans for the 7/15 and 8/18 Lebanon Community Power public hearings.
2. The Subcommittee discussed potential logos for Lebanon Community Power.
3. The Subcommittee did not schedule its next meeting.

ADJOURNMENT:

A motion was made by Jon Chafee to adjourn the meeting at 10:19 AM. The motion was seconded by Greg Ames. The motion was unanimously approved.

Respectfully submitted,
Gregory Ames
Clerk (Recording Secretary)

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
JULY 15, 2021

AGENDA ITEM 2
APPROVAL OF MINUTES:

JULY 13, 2021
MUNICIPAL AGGREGATION
SUBCOMMITTEE

MUNICIPAL AGGREGATION SUBCOMMITTEE MEETING MINUTES
(Subcommittee of the Lebanon Energy Advisory Committee)

Council Chambers, City Hall

July 13, 2021

3:00 PM

DRAFT

MEMBERS PRESENT: Clifton Below, Gregory Ames, Jonathan Chaffee, F. Woody Rothe

MEMBERS ABSENT: Cate Homicki

STAFF PRESENT: Everett Hammond

GUESTS PRESENT: Meghan Butts

CALL TO ORDER: Meeting called to order by Clifton Below at 3:11 PM.

APPROVAL OF MINUTES:

Approval of 7/9/2021 minutes deferred to next meeting.

If any action is taken by the Subcommittee, list motions and votes:

1. The Subcommittee discussed its presentation for the Lebanon Community Power public hearings.
2. The Subcommittee discussed potential logos for Lebanon Community Power.
3. The Subcommittee did not schedule its next meeting.

ADJOURNMENT:

A motion was made by Jon Chaffee to adjourn the meeting at 4:18 PM. The motion was seconded by Greg Ames. The motion was unanimously approved.

Respectfully submitted,
Gregory Ames
Clerk (Recording Secretary)

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
SEPTEMBER 16, 2021

AGENDA ITEM 4
NEW BUSINESS:

ANEROBIC DIGESTER STUDY PRESENTATION



westonandsampson.com

WESTON & SAMPSON ENGINEERS, INC.
100 International Drive - Suite 152
Portsmouth, NH 03801
tel: 603-431-3937

FINAL

September 2021

CITY OF
Lebanon
NEW HAMPSHIRE

Anaerobic Digester Feasibility Study
(Revised)



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Anaerobic Digester Feasibility Study

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Anaerobic Digester Feasibility Study

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Anaerobic Digestion Feasibility Study

EXECUTIVE SUMMARY

Weston & Sampson, on behalf of the City of Lebanon, has completed this Feasibility Study which examines the technological and economic aspects of implementing an anaerobic digestion project in the City. Based on the results of this study, the construction and operation of an anaerobic digestion facility at the existing Lebanon Wastewater Treatment Facility (WWTF) is recommended as a technically feasible and economically possible endeavor.

Based upon our in-depth understanding of this technology and past successful project history with anaerobic digestion, we find that it would be technically feasible to incorporate anaerobic digestion into the solids stream process at the Lebanon WWTF. The WWTF site and operational impacts are minimal and within existing design constraints of the WWTF. The addition of anaerobic digestion will increase the influent ammonia load and warrants further analysis to assess the possible impacts to the WWTF processes to ensure adequate treatment is maintained.

However, upon considering availability of organic substrates, construction, long-term operation costs, fuel and electrical power off sets and potential solar power revenue (discussed in detail later in this report), the economics for this project are unfortunately not favorable. Total probable costs for the project range are on the order of \$13.13M with a corresponding increase in annual O&M Costs of approximately \$337,000 per year. When considering the savings in electricity, heating oil, LP Gas and factoring in additional solar power revenues (now available) and biosolids disposal fees, the annual cost of ownership for the City's Wastewater Treatment Facilities would see a net increase of approximately \$1,000,000, should this project be undertaken.

While anaerobic digestion will reduce the volume of digested materials, which are currently landfilled, the anticipated volume reduction will be on the order of 2.7% annually, which is not a significant enough reduction to offset the added costs of the digester project. The City may wish to consider the value of their limited landfill capacity and environmental stewardship; however, based on the limited scope of this evaluation, we are unable to recommend that the City undertake a digester project.

Recommended next steps, should the City wish to continue to develop an anaerobic digestion project, would include:

- Further review and additional discussions with state and federal agencies regarding the potential of additional grants for an anaerobic digester in Lebanon.
- Gaining a better understanding of the true value of the remaining space at the Lebanon City Landfill.
- Further discussions with major SSO producers to develop relationships and get secure commitments to ensure additional feedstock to the digesters.
- Further review and implementation of local ordinance and enforcement require installation and maintenance of grease interceptors on commercial facilities (including routine pump out and cleaning), this will remain an issue for the Sewer Department. The City would also benefit from a system to acquire grease directly from homeowners, including those on both City sewer and private septic systems. The grease from homes on private septic systems likely ends up in the trash. FOG has the single highest energy value of all the organic substrates

Anaerobic Digestion Feasibility Study

available. Our conceptual design did not account for FOG as we found that major contributors within the City have already dedicated this waste stream to other beneficial uses. Residential grease could be a potential future revenue source.

- Further consideration of the economics of the digester project along with the value of related issues such as limited landfill capacity, green energy production and environmental stewardship.

Should the City find that this project is not feasible at this time, no further action would be needed.

Acknowledgements

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