NORTHAMPTON ENERGY AND SUSTAINABILITY COMMISSION

APPROVED MINUTES

January 10, 2019
City Council Chambers
212 Main Street, Northampton, MA 01060
4:00 PM – 5:30 PM

Attendees: Richard Parasiliti, Tim Smith, Bill Dwight, Ben Weil, Ashley Muspratt, Wayne Feiden, Louis Hasbrouck, Mary Biddle, Alisa Klein

Facilitator: Chris Mason, Energy and Sustainability Officer
Scribe: Douglas Renick

Review/approve minutes of 12/13/18 meeting: Motion to approve by Bill Dwight and seconded by Wayne Feiden. Motion approved with 1 abstention.

Climate Resiliency and Regeneration (R&R) Plan:
Comments from NESC members were requested. Consultant asked us to look at the Sustainable Northampton Plan and note what we have done and not done. This was addressed at the goal and objective level only. Chris asked what the R&R plan is supposed to be encompassing. Will there be an opportunity to have input on other things not there? Wayne: The STAR communities’ framework was used. STAR is merging with another organization and will disappear. See the climate adaptation and climate mitigation sections. Three things were missing from Sustainable Northampton Plan: 1. Metrics not good. 2. Walking and bike paths section weak. 3. Climate mitigation. When done there will be more in the content areas. There were weaknesses because we did not have the data we needed. The aim is to be carbon neutral by 2050. We have data from the public process. Some areas stronger than others. Comment on missing areas. For any plan there are two levels: comprehensive and strategic. The comprehensive level is valid for 20 years. The strategic level includes a long list of actions which go out of date over time. There will be lots of opportunity to provide additional input into the new SNP.

Net-Zero Stretch Code / Input to BBRS:
Public Comment from Darren Port with the Northeast Energy Efficiency Partnerships (NEEP): NEEP provides technical assistance to 13 northeastern states. We have a new grant to build a coalition in MA to move the state to a zero energy stretch code. At this time we are inviting various groups to join as we begin building the coalition. We hope that Northampton will participate. We are building from the bottom up. Opposition is beginning to arise.

Adele Franks in public comment has been reporting about input to BBRS. Adele reported that at the December BBRS meeting it was said that there was no input on the stretch code. We agreed to put this on the agenda for tonight. The Commission could provide background and arguments for the Mayor. For example, what would be the cost impact? Is there a way to mitigate the cost impact? Passive houses and net zero energy houses –comparisons--focusing on energy efficiency. Passive houses are shown on the website. EV ready chargers are included in buildings. What are the entities supporting net zero? It’s possible to find municipalities doing that. Park City, Utah has a net zero energy requirement. Comments:

Voting Members: Mary Biddle • William Dwight • Wayne Feiden • Louis Hasbrouck • Alisa Klein • Adin Maynard • Ashley Muspratt • Richard Parasiliti • David Pomerantz • Tim Smith • Ben Weil

Ex-officio, non voting: Chris Mason
• How important does it have to be to follow the DOE definition of community solar? It is important to define the system boundary as not the property boundary. Look at community solar located on the same load zone. Virtual net metering costs less. Having a common inverter is possible and lowers the cost. What would Northampton be interested in pushing them toward? US DOE has a definition of net zero.

• Passive house will become an alternative compliance path for the state energy code starting with the 2018 IECC and going forward. Darren can do a presentation on zero energy municipalities. Current code and passive house: the MA stretch code allows passive house requirements as a path. HERS rating is required on most houses.

• The current code is a little confusing and does not have the best set of amendments. BBRS is short staffed. The HERS rating you need is 55, if you do some things. It is 40 on a passive house with no PV. Average rating of new houses in Northampton are in 40’s.

• CA in 2020 codes goes to renewables, zeroing out fossil fuels. A new gas stove uses much more gas. People like gas stoves. High efficiency gas furnaces are cheaper than air source heat pumps.

• If the stretch code pushes the HERS ratings down, then all the appliances have to go down in some fashion.

• Stretch code house and passive house requirements operate totally differently. The cost of meeting the stretch code is less than the cost of a passive house. To meet passive house requirements you have to buy very expensive windows, which make people in those houses very comfortable. There is a code for renovations but it is not as demanding.

• Darren: we are pushing for zero energy by 2050. The current code adoption cycle in MA is completed. The 2021 cycle is just starting. In MA in the next code cycle the base code will be 10-12% more efficient than the national code. MA is promulgating a zero energy code now for 2021. It gives people time to prepare. The stretch code came in 2010.

• Are we saying that we should push BBRS to adopt passive house features as the stretch code? Passive house modeling has been part of Mass code since August 2016 as an alternative performance path. Northampton hasn't seen a passive house design thus far.

• Perhaps there is a new backstop that is performance based—you can’t have an envelope as bad as 2012. Use a metric standard. Stretch code says it needs to be a model path. The stretch code will fall below the base code.

• What should Northampton do: NESC push as far as we can and ask the mayor to go in that direction. Would passive houses be too costly for lower income home buyers? There are builders who are pushing passive house costs lower. We don’t want a code that forces people to build somewhere else. In questions of affordability we need to look at upfront financing costs. There are not a lot of lots for new houses. Upfront costs are the biggest hurdle; lowered costs come over time. Can we push the idea of small houses? They will use less energy. A municipality can
Incentivize options. It’s possible to use zoning mechanisms. Multifamily passive houses are being built, e.g., in Boston, built in a way that high efficiency units are not more costly. Think about tree cover and what the consequences are of using different ways of building houses. Should this topic be on next month’s agenda? – Yes

Summation of discussion:
- Prioritize (1) shell efficiency and use of passive energy and (2) efficiency of building systems\(^1\) over on-site renewable energy
  - Consider incorporating cost-effective requirements from the Passive House program to drive down overall building energy use\(^2\)
  - Allow for renewable energy systems within load zone so as to decouple conflict between required on-site renewable energy and (1) tree cover and/or (2) location.
- Increase the “backstop” prescriptive efficiency level of the code
- Concurrently, Northampton should identify affordable pathway(s) for low income net-zero rental units.
  - Understand that the increased cost to the owner is likely only to be seen in a higher down payment cost as the increased monthly finance costs are likely to be offset by the lower monthly energy bills.
  - Understand that the actual comparative costs to the renter are rent plus energy costs, however, renters are not used to comparing or considering energy costs when looking for an apartment and HUD does not take energy costs into consideration when identifying low income rental units.
  - Northampton should look for ways to “use” energy savings to reduce rental rates. E.g., Landlord pays the energy bills and heating system is held by control system within strict limits. AECs generated from ASHPs are used to reduce rental rates.
- Northampton might be able to use conditions on city approvals to effectively tighten up the energy code and/or reduce overall energy use of new buildings. Such as:
  - Reduce review requirements and/or costs in exchange for building developer, e.g., (1) prioritizing building shell in how they achieve code-required HERs rating; (2) keeping size of house below a set amount of sq-ft.

Adjournment:

\(^1\) Should include energy control systems as well as HVAC and appliances
\(^2\) E.g., Consider lower ACH levels and heat-recovery ventilators

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Ex-officio, non voting: Chris Mason
Alisa Klein made the motion to adjourn. Bill Dwight seconded the motion. The motion unanimously approved. Meeting adjourned at 5:30.