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TOWN OF BROOKLINE, NEW HAMPSHIRE

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Minutes *Energy committee* *June 15, 2022*

Committee members present at the meeting: Brendan Denehy, Jan Reimers, Chris Koffler, Tad Putney and Scott Butcher. Also attending: Keith McBrien from EEI.

Brendan called the meeting to order at 7:11pm.

Minutes

Chris moved, second by **Jan**, to approve the minutes of the June 8th meeting; Voted yes 4-0.

EEI Recommendations Review

Keith reviewed his HVAC recommendations for the Daniels Academy building. There was discussion about a two boiler solution versus a single boiler. **Jan** asked if the boiler solution proposed had backup/redundancy. **Keith** recommended redundancy where practical. He added that the pricing presented included new circulator pumps. **Tad** and **Chris** asked about the intake and exhaust piping and exit point from the building. **Tad** would like to see a 5-zone system to better control different areas of the building. **Brendan** wanted to know if the propane system could accommodate 5 zones. He also asked **Keith** to provide alternate pricing to allow for comparison of oil, propane and electric options. **Keith** said he would provide that. He asked if there was interest in a solution for the 3rd floor space and recommended a mini-split unit might be best. He requested the most recent electric bills for Daniels Academy, Fire Dept., Public Safety Complex and the Library so he can more accurately calculate payback periods and would like a floor diagram of Daniels Academy with the room names labeled.

The discussion shifted to the solar power proposals. **Keith** stated that he was proposing a 85 kilowatt system for the Public Safety complex which produces more power than that facility currently uses and represents roughly 2/3 of the power the four town buildings use. **Chris** said that since the Public Safety Complex uses the most electricity it is a good candidate for solar. **Keith** stated the estimated cost for the 85 kilowatt system was \$188,000 and 10 or 15 year leasing options are available with estimated annual payments of \$17,000 per year. With the town now paying \$15,300 annually, the net increase in cost would be roughly \$2,000 per year until the system is paid for and then the cost of electricity would become \$0 resulting in a net savings of at least \$15,000 per year beyond year 15. There was discussion about maintenance and support costs. **Keith** stated that solar systems require little maintenance and that the warranty of major components ranges from 20-25 years. He used a cost of 17 cents per kWh based on averaging what the town pays now to calculate payback period. **Brendan** wants to confirm the rate for the Safety Complex because it is believed to be charged a higher rate by Eversource than that. **Keith** will research it. **Tad** asked if **Keith** could factor in enough capacity to include vehicle charging stations at the Safety Complex. He also stated that the Fire Dept. had some concerns about roof mounted solar arrays

restricting their ability to fight a fire on a building and making it difficult to open up a roof with an ax to vent the fire. **Keith** said it would present some challenges for the Fire Dept., but there are workarounds. There was discussion about storage batteries for excess electricity produced and drawn from later. **Scott** asked about concerns of the weight of the solar arrays on roof structures. **Keith** said an analysis of each roof would have to be conducted.

Keith asked about the possibility of using the closed landfill site for a ground-based solar array that could be capable of providing all of the town's electricity requirements. **Tad** stated that the lack of 3-phase power in the area might make it cost prohibitive given the closest 3-phase was about ¾ mile away. **Keith** suggested perhaps a standalone array instead to provide the Public Works and Transfer Station facilities with electricity.

Brendan suggested ARPA funds could be available to pay for all or part of these projects. **Chris** asked if the goal was to provide 100% of the town's power with solar? **Brendan** stated that should be considered and requested that **Keith** provide updated cost estimates on all of the HVAC and solar proposals.

Keith departed the meeting at this point.

Chris provided a handout to help define the goals, attributes and alternatives of each proposal. There was discussion on how to identify what is a goal or attribute and what would be used as criteria to evaluate the various proposals. **Brendan** gave the examples of the maturity and reliability of the technology, ease of use and managing each system as possible criterion. **Chris** suggested that the Selectboard would have to agree on the final evaluation criteria and rank the projects by priority. He also discussed having a report ready for the Selectboard in July to start that process and review both the HVAC and solar proposals. The Selectboard can then provide the direction to go in. **Tad** felt this is an opportunity to start educating the public and planting the seeds to justify each project. **Jan** stated showing a cost savings for going 'green' is important as well.

Next Meeting

Chris requested that the goals, attributes and decision criteria be discussed in-depth at the next meeting to be held on June 30th at 7:00pm.

At 8:30 **Jan** moved to adjourn the meeting. It was seconded by **Chris**.

Minutes submitted by **Scott Butcher**