

TOWN OF BEDFORD
January 23, 2020
ENERGY COMMISSION MINUTES

A meeting of the Bedford Energy Commission was held on Thursday, January 23, 2020 at the Bedford Meeting Room, 10 Meetinghouse Road, Bedford, NH.

Present: Jeff Kerr (Chair), John Russell (Vice Chair), Chris Bandazian (Town Council Liaison), Catherine Rombeau (TC Liaison Alternate), John Schneller (School Board Liaison), Bill Foote (SB Liaison Alternate), Andrew Gillis, Bing Lu, Tim Paradis

Absent: Sarah Braese

I. Call to Order: Chairman Kerr opened the meeting at 7:00 PM

II. Quorum Count:

III. Approval of Minutes –

Correction needed in the discussion by Mr. Foote: the word “billions” should be replaced with “millions”.

MOTION by Mr. Gillis to approve the minutes with the above-mentioned correction. Seconded by Mr. Foote. 2 abstentions: Mr. Schneller and Mr. Bandazian. Vote taken – Motion Passed – All in favor.

IV. Reports of Members and Committees

a. Legislative update

Mr. Bandazian pointed out if you go to the Energy Commission Website and click on “Learn” on the left “Clean Energy “at the bottom it takes you to the Clean Energy New Hampshire website (an organization that the Town of Bedford is a member of). If you go to “Policy” and then “Energy Bills” all of the 2019-2020 Energy Bills are compiled and the site is the most convenient way to keep track of their status.

Mr. Bandazian said on the photovoltaic side, it would be exemptions. There is pending legislation and some legislation to allow condominium owners to take advantage of the property tax exemption with amendments and declarations with some expansion of the property tax exemption to include storage and permission to study micro grids. There is lots of legislation in both directions in regard to renewable energy credits and renewable energy portfolio. There is some legislation on electric vehicles in terms of parking and parking with chargers reserved for people who can use them, as well as fees to take the place of the gasoline fee. Pending from prior years is some legislation on net metering and on caps, as well as on groups and hosts (whether you can host, or whether the energy has to be consumed on site to take advantage of the higher net metering cap).

There is a regional initiative about energy efficiency, legislation about credits and how they can be used and where the money goes, system benefit charges (which fund NH Saves through Eversource for municipalities, residents, and businesses), energy efficiency measures for specific types of users, which include low income users and farm users, something specific for energy commissions, which requires annual reporting by statute to what is now called the Department of Strategic Initiatives, which used to be the Office of Energy and Planning, which got combined with another department. Mr. Bandazian doubts they have people there who can compile, let alone analyze the information; but it seems to him the Bedford Energy Commission does this already in their annual report. Unless they have a specific format, they could probably just send them a copy. There are lots of bills about the Energy Efficiency and Sustainability Board, who is on it and what it does, and some fuel diversity legislations.

Chairman Kerr discussed a bill that Clean Energy New Hampshire was pushing to correct an existing law and fix municipal aggregation to allow direct peer-to-peer sales of renewable energy to customers without having to go through a third party in order to keep the cost down. It saves transmission costs but not distribution fees, because it is consumed locally within your aggregation unit (whether that is town, county, etc.). Chairman Kerr sent a copy of the bill around and stated that if anyone else felt as strongly as he does about this, support would be good.

b. School projects

Mr. Schneller reported that the School Board was still working on the budget. Any energy items that had been submitted as part of last year's warrant article have been taken care of through maintenance, so there will not be a warrant article/energy bill.

V. Special Orders

- a. Jamie Karr, Tori Wagner, and Roisi Russell presenting status of HB559 and HB102 as it relates to allowing municipalities to set their own rules on the use of plastics.

Jamie Karr, Tori Wagner, and Roisi Russell discussed the use of plastic bags and gave a presentation. Plastic bags create unnecessary pollution (photodegradation from the sun causes the polyethylene that they are made of to degrade into molecular form and leach), which impacts animals, plants, the ground, bodies of water and drains and sewers. They also contribute to hidden costs in store (items are typically marked up about \$0.17 to accommodate the use of plastic bags). All across the world plastic bags unnecessarily deplete natural gas resources. They are made of polyethylene. Ethylene is a gas that goes through the manufacturing process that turns it into a polyethylene molecule and it never returns again to its natural ethylene state and stays in ecosystems. Plastic bags do not qualify as reusable (even if people use them multiple times) and they can never be made into anything else than other plastic bags. Plastic bags are expensive to get to the landfill (\$0.17 per bag). They thought the problem should be solved because people in Bedford who use plastic bags are hurting the trees and animals. By eliminating plastic bags from our stores, we can reduce the problem. The bags also clog up a lot of the machines at recycling plants. Around the world plastic production has increased by millions of tons over the years. There is no need for plastic bags. Reusable bags are available and very inexpensive. Many stores also offer discounts if you bring your own bags. On average, plastic bags are used for 12 minutes and then thrown

away. There really is no need for them and they are harmful and not reusable. There are countries around the world that have already banned the use of plastic bags. North America is not making as much progress as the rest of the world on this issue.

Ms. Karr, Wagner and Russell would like to see in Town is a \$0.20 levy charged for each plastic bag a person opts to use. This would incentivize the use of reusable bags, reduce Bedford's waste and harmful impact, maintain people's right to choose plastic, and funds raised from the \$0.20 levy would be donated to ensure that those who use plastic bags are still making a positive impact. Through their research they learned that paper bags are not a good alternative because cutting down trees to make paper bags increases carbon emissions leading to increased climate change. Production of them uses a lot more natural gas than plastic bags. HB 559 (the bill that charges for single use plastics throughout NH) and HB 102 (the bill that gives municipalities the power to regulate their use and distribution) passed in the State House, and it is likely the Senate will pass them too. The Governor must then sign them, and it is unknown whether or not that will happen because it is an election year and the Senate doesn't have a veto-proof majority.

Ms. Karr, Wagner and Russell felt that by passing a levy in Bedford they support HB 559 and HB 102. If HB 559 passes there is no conflict with the levy. If HB 102 passes, it will go into effect in 2021 and legal suits arguing the levy is illegal cannot be brought in.

Ms. Karr, Wagner and Russell felt they need legislation. Some Bedford businesses such as Hannaford, Market Basket, Walgreens, CVS and Marshalls have already been able to comply and are willing and able to deal with a levy being passed. Use of plastic bags is a deeply ingrained and enabled habit that needs external pressure to change. A levy would instigate and expedite cultural change and awareness.

The approach is effective. In Ireland they initiated a \$0.33 (U.S. cents) levy on plastic bags around 2002 and since then have seen a 90% decrease in plastic bag usage. Washington D.C. has a \$0.05 levy on plastic bags and they've seen a quarter decrease in plastic bag waste throughout the district. Chicago has a \$0.07 levy on plastic bags and have seen a quarter decrease in plastic bag waste. In Aspen, Colorado there is 0.7 plastic bags per \$100 with the \$0.20 levy they have passed. That means for every \$100 that is spent over the course of a year, on average people in Aspen are using only 0.78 plastic bags. In August 2018 Montreal, Canada passed legislation that would create a levy on all plastic bags and starting on September 3, 2019 for every plastic bag used there was a \$0.20 charge for a paper bag (which are still better than plastic, though not a good solution). Los Angeles has a levy and they have seen a 95% decrease in plastic bag waste. Australia has an \$0.11 levy and in the first 3 months saw an 80% decrease in plastic bag waste. The ban in Australia was initiated by stores themselves. In Lake Oswego, Oregon they've seen an immediate change in behavior in the months following the levy's implementation. At one grocery store there they have seen 0% people use a plastic bag.

Ms. Karr, Wagner and Russell created a Google survey form in November to see how effective a levy would be in Bedford. They sent it out to residents and put it on Instagram and Facebook. They received 372 responses: 71.5% said they would support a ban or levy on single use plastic bags, 16.9% would support a levy, and 11.6% would support neither. They would like to encourage Bedford voters to vote to promote a recommendation to Town Council that Bedford implement a

\$0.20 levy on plastic bags. They shared that there are many different films out there to educate oneself about this issue including: “Bag It”, “Blue Planet II”, “Plastic China”, “Waste Land” and “A Plastic Ocean”.

Chairman Kerr thanked them for their presentations and noted that this is an issue that Vice Chair John Russell had brought to our attention in the past. He found it encouraging that young people were taking the initiative to research these issues and making an effort to bring them to us. He asked them when legislation that could bring this into effect might occur in NH and was told that the Governor must sign it in order for it to go into effect. He asked if they recommend that Bedford put something into effect right now and potentially get sued because it is not allowed by law or waiting for it to go into law before we do something. Commission members said Bedford must wait for it to go into law; however, as individuals people can write to the Governor to encourage him to pass the law and write to the Senators and sponsors of the bill.

Mr. Russell asked if Town Council would vote on this pending passage of the bills. Mr. Bandazian noted that the political reality is that in the past this issue has been voted on in a very partisan manner and the Town Council is not a partisan body, therefore until legislation is passed by the Governor, he thinks there would be a great deal of reluctance to wade into those waters.

Mr. Paradis asked for a timeline, and Mr. Bandazian said it would begin 60 days after passage. He said crossover day (which is when things that have passed in the House goes over to the Senate) takes place at the end of March. The Senate will then act on it, and it will get referred to a committee, the committee will work on it and the full Senate will probably vote on it by the end of May/early June, then it goes to the Governor and there is no timeline. The Governor can spend as much time as he wants before acting on it.

Chairman Kerr suggested that they may want to make the effort to see that some of the movies they mentioned are shown at schools, libraries, etc. in order to educate people and get the word out to people before the vote. When students pushed to get things done, compostable lunch trays were implemented in all Bedford schools, and he thought that today’s speakers were in the perfect position to do the same kind of thing for plastic bags. Patience would be required for the process to play out, but if they can get all the parents and students behind them on this issue and a lot of voices saying that they want a levy on plastic bags then it is more likely to happen.

Mr. Russell asked if the Energy Commission could make a recommendation that would sit on the Town Council docket. Chairman Kerr thought if they did that now it would be dropped. He thought timing was important and to do it once it gets passed in the legislature. If they do it too early, they will have to come back and do it again. Mr. Bandazian thought it was best to build slowly and over time. He was unsure when citizens could petition to have something put on the ballot. It would require a survey of whether residents were in favor of getting it on the ballot or not. He would have to look at the Charter to see if that was possible. It would not be binding, just a survey. Chairman Kerr said if Ms. Karr, Wagner and Russell and others worked to get enough support, then residents could ask that the question if people would be in support of a ban or levy on plastic bags could be put on the ballot, then once it becomes legal, ask the Town Council to vote it in. Mr. Schneller said that February 4th was the deadline for anything going on the ballot. 25 signatures from registered voters are needed for something to get on the ballot.

Chairman Kerr noted that the stores are capable of doing this on their own, but they are not doing it on their own. He asked if Ms. Karr, Wagner and Russell had asked the stores why they are not doing it and if they could apply pressure to the stores to get them to do a levy or ban on plastic bags. Ms. Karr, Wagner and Russell found that most stores are doing it when they have to, and not just “because” due to the fact that stores think it seems to be a lot of work if it is unnecessary by law. He suggested coming up with a Bedford High Environmental Club. The club could work to award stores “green stars” for those doing good environmental practices. They could use that as external pressure to get stores to ban plastic bags without any legislation passed or levies, that way if the legislation doesn’t pass, or the Governor holds it up, they’ve got a back-up plan ready.

Mr. Lu’s suspects many business owners might be reluctant to do it if it creates an impact to their business because their #1 goal is to make money, and if they cannot sustain it and still make money they will be reluctant. Even without legislation, Chairman Kerr thinks that stores could be proactive and ask customers whether or not they want a bag, instead of just automatically putting things in plastic bags. If they could cut their bag usage in half, from a business-owner’s prospective it would be good. Mr. Lu suggested having one lane be a fast check-out lane for those who do not need a plastic bag, and that could incentivize a change in behavior. He felt that stores may argue about where the \$0.20 levy would come from. There has to be a strong argument on why to charge \$0.20 (rather than \$0.10 or \$0.25) and there must be some business model behind it to back up the price point for the levy; \$0.05 may be enough to change people’s behavior, but \$0.20 might hurt the business. Mr. Russell would argue against that premise because entire countries have done this without hurting businesses. Every time you increase efficiency prices go up, so in the real world if there is no legislation. Mr. Lu thought they would go as low as they can. Legislation would even the playing field. Chairman Kerr noted that if there is a \$0.20 levy there will have to be infrastructure in the Town to collect that levy because businesses in Town do not currently pay the Town for anything so you’d have to look at what it costs to collect that money, how you ensure they collect it, and what do you do with it. It’s more than just saying you are going to donate it to a worthy cause. You have to make sure the infrastructure is there to get it done and accounted for correctly. Mr. Russell noted that companies are able to do it in MA and CT. Bedford could do it. It just has to be set up. Ms. Karr, Wagner and Russell stated the highest levy they have seen is \$0.33 and the lowest is \$0.05 (which created a range of 25% - 90% decrease in plastic pollution), so they were using the \$0.20 figure because it was a healthy middle that would allow us to see positive results and change the culture.

Ms. Rombeau was curious about the language of the legislation “allowing municipalities to regulate the distribution of single use plastics”, which is how it is phrased. The legislation does not just say “plastic bags” so she wonders what else it encompasses: plastic bottles, straws, cutlery etc. She wondered if it is broader would it make it more difficult to pass through legislation. She also encouraged them to reach out to the people who voted in their survey to lend support by reaching out to their legislators and the Governor to encourage passage. It seems they have a supportive base there, and if they could lend their support it would be useful.

Mr. Bandazian shared that the Energy Commission visited the Billerica, MA recycling/sorting facility and found that plastic bags slow the machines and, in turn, idle 30 workers while they get it cleaned out of the machines. The amount of time and wages lost is real money that could be

added to the cost of getting rid of plastic bags. There would definitely be a value. Bedford's incremental value may be slim compared to larger MA cities, but he thinks it would be an important step. It would be persuasive data to have showing how you could bring costs down.

Mr. Paradis says it is compelling that it actually saves the company money by not having to use plastic bags (or mark their items up \$0.17 or varying fees in order to accommodate for plastic bag usage as stated previously). Legislation is the way to go, but unfortunately it is not there right now. In the meantime, if you try to create a movement towards cultural change the way to go seems to be to go to the supply side (the people who will be giving out the bags) and going to them with the costs, and the data from the 372 responses received in their survey. He suggests going to the stores with data and trying to get their support, then the stores could be an ally at the State level, and their voice will carry weight. Mr. Schneller said they could also create a petition online and request people to leave their name and email address, and they could run it as an ongoing thing, and for example, show a "Bag It" movie and other events and invite those people.

Chairman Kerr said that the Energy Commission is planning to do some things for Earth Day and invited Ms. Karr, Wagner and Russell and any group they form to be a part of that. Mr. Paradis noted that there are a lot of local Facebook communities they could post too, as well.

VI. Old Business

- a. Green Business Award – No report was given in Ms. Braese's absence.
 1. Nominations Due Wednesday, March 18, 2020
 2. Reviews completed at March 2020 BEC Meeting
 3. Awards presented /announced on Earth Day, April 22, 2020
 - A. The goal is to have some sort of town-wide event or events such as a road clean-up and formal presentation
 - B. Timeline and posting flyers on Facebook – Jeff
- b. Solsmart – No report was given in Ms. Braese's absence.
 1. www.thesolarfoundation.org
 - A. Start with Bronze level
- c. Eversource bills to calculate demand charges
 1. Pool apparently runs 24x7
 - A. This means no demand charges and might be a good PV candidate
 2. Library big electricity consumer
 - A. Investigating the purchase of IoTaWatt open source energy monitoring system for less than \$250

Mr. Lu hadn't looked at anything new and doesn't think there is more work he can do with the numbers. He thought they should investigate if there is a way we can measure in real time.

Mr. Bandazian will give Chairman Kerr Peter Barbuto's contact information so they can discuss the IoTaWatt system and how to configure it. He believes DPW will buy an IoTaWatt. They would like to use it in numerous locations to make sure they have enough transformers to monitor.

Chairman Kerr mentioned that the Bedford Library had a Kilowatt device that people can check out and plug in to any outlet to see how much electricity it is using. It's not inconceivable to him that the Town could buy an IoTaWatt and later make it available for people to check out at the library; however, it is a little dangerous to use if you don't know what you are doing, so they may not want the liability. As soon as data is available Mr. Lu would like to analyze it.

- d. Change transfer station policy to put recyclables in solid waste
 - 1. Proposal to change resident sorting to reduce costs and be ready for any future changes in recycling policy
 - 2. Is an onsite paper/cardboard baler an option?
 - 3. Maybe look at an outdoor screen again as part of the public education effort
 - A. Look at the BHS sign the PTG installed this year

Mr. Foote hadn't had any further discussions in regard to this yet. Mr. Bandazian noted that when Jeff Foote of Public Works had suggested visiting the New Boston Transfer station, and Mr. Bandazian thought a field trip would be useful. Mr. Gillis explained that staff in New Boston sorts everything there; they bundle it up; and the manager of the transfer station goes online and directly sells the recyclable materials himself to the people who will pay to use them.

Mr. Bandazian says in 5 years, combusting may end up being the thing to do. Burning refuse goes in as renewable energy to ISO New England and it generates electricity. They need to look at what they should take out of the waste stream and determine at what point it becomes too burdensome economically for the Town to handle. Mr. Schneller reminded everyone that Jeff Foote told them that the Town still had two years on its waste handling contract, so changes cannot be made until after then. It was decided now was the time to start investigating options; there may be facility changes needed to accommodate the sorting and would also need to be budgeted.

Mr. Russell asked when composting would begin in 2020 at the transfer station and Mr. Schneller said that now that the reconfiguration has been completed, composting will become a priority. He noted that Jeff Foote at Public Works thought they could cut the food waste being hauled out by the trailers by 50%, which will save a six-figure number on hauling it out.

Mr. Bandazian agreed to take the lead on organizing the New Boston transfer station field trip.

- e. Plastic (#2) to structural plastic wood replacement
 - 1. Working with the Conservation Commission to possibly address a bridge in town.

Mr. Schneller reported that he met with Beth Evarts of the Conservation Commission. They've got plenty of projects on conservation land. He hadn't talked to Jeff Foote at Public Works yet. He mentioned that there are Eagle Scouts lined up to do projects.

VII. New Business

a. 2019 Annual Report

Chairman Kerr sent out a draft of the Annual Report to members of the Energy Commission. He asks for comments since he needs to get it out in the coming days.

b. Propose language to present to the Town council to establish the Energy Commission as the body to pursue municipal aggregation

Chairman Kerr sent language to present to the Town Council to establish the Energy Commission as the body to pursue municipal aggregation. He explained municipal aggregation as a new law coming into effect that allows towns/counties/groups of different sizes to be their own third-party electricity supplier. The Town Council is aware of all this. The statute requires that the Town establish an aggregation committee before any warrant articles or voting to implement from the Town occurs and felt it made sense for the Energy Commission to do it, because it is an established body. He consulted with the Town of Hanover to see what language they used and what they did to establish their commission and edited it to tailor it for Bedford. He opened the floor for discussion so voting could occur and the language can be forwarded to Town Council to vote on. He thought municipal aggregation would save money. They need to gather the facts, and figure out what it is going to cost. If they determine it is going to save money they could move forward, and if it doesn't save money they don't move forward. If it doesn't save money right away, the Energy Commission would then keep an eye on it until such time as it would save money, and then they could move forward with it. That is why he feels we can guarantee it will save money.

Mr. Schneller noted that there were firms that do the above-mentioned tasks for a living and find the maximum savings based on a mix they select, and he thought they had agreed to have the folks from Clean Energy scout the landscape for potential partners. He didn't feel they had the expertise on the Energy Commission to execute a program and didn't think the Town would be willing to bear the cost of doing everything that would be involved. He wanted to know why they don't just vote for a firm with direct energy expertise to go to Town Council with the data. Chairman Kerr stated that at the last Energy Commission meeting it was agreed that the right way to move forward might be for them in the first 1-3 years have a turnkey company that they hire to manage it for them and realize some savings; however, they would need to pay them for that service. If they look at the numbers it may make sense, but then they may want to start their own incentives and programs that that the company didn't really want to do. It might make more sense for them to be involved. Mr. Schneller suggested trying to find someone who would work for them for free to try and do a price discovery. Mr. Gillis stated that a price proposal could be given to them for free. Mr. Schneller thought the first thing that Town Council should get might be the proposal/price discovery. Chairman Kerr thought the first step was to establish this Commission. The Town can't do anything until a commission is established. Ms. Rombeau stated that they need to have the commission established under statute and then they could go out to Clean Energy for a proposal; it doesn't necessarily mean they have to administer it themselves. Through Clean Energy NH, Chairman Kerr was put in touch with a contact at Eversource and asked how many people in

Bedford were using a competitive third-party supplier and was told it changes all the time but about 23%. That means about 75% of the businesses and residences in Bedford are using the default Eversource supply. If you look at our usage annually it's 3-4 gigawatts and that's a lot more buying power than we have as individuals to go to a company and look to get a better deal on power. Mr. Foote asked what would be a really good deal? Chairman Kerr is still figuring out the numbers, but as a guesstimate, if you take 4 gigawatts/year and get a penny per kilowatt hour, it is about \$400,000 in savings spread across the 75% of people currently using the default Eversource supply. \$400,000 would be enough to hire a company to manage it. They need to dig into some real numbers so we can get real solutions and decide how we want to move forward.

Mr. Schneller would feel more comfortable if we had an outside third party gathering that information for, because that is their area of expertise, and they are not required to pay them to gather the information. Chairman Kerr felt they were just in the fact gathering phase right now because everything is still too new and they haven't received any numbers yet from the companies who have talked with them thus far. Now that he knows that Bedford uses 3-4 gigawatts of power, he can go to Clean Energy NH and find out if that gives them enough buying power or not and whether they should go individual, a la carte, or look to a third-party firm.

Mr. Paradis pointed out that the 3-4-gigawatt figure may increase with all of the development going on in, which would conversely mean more energy usage. Chairman Kerr thought their best advantage was to go to surrounding towns like Amherst and Goffstown and combine with them to triple their buying power. Having municipal aggregation amongst three towns might make more sense and give them more buying power. Mr. Paradis agreed with Mr. Schneller about hiring a third party. Chairman Kerr explained that when you talk about hiring a third party that is exactly what Clean Energy NH is doing right now and they pay annual dues as a member of Clean Energy NH for that service.

Before taking a vote, Chairman Kerr read aloud the language he prepared:

RSA 53-E provides for the establishment of such a district for the purposes of aggregating the purchase of electricity across a community or a region. Aggregation or bulk purchase of electricity for residents and businesses results in a substantial savings to electricity consumers, can enable the purchase of far less expensive electricity during off-peak hours, and can also enable the large-scale purchase of renewably generated electricity.

Two initial actions are required at the local level to initiate the electric aggregation process. First, the Town Council must appoint an Electric Aggregation Committee and second, Town Meeting must authorize the creation of an electric aggregation district. The existing Bedford Energy Commission is a logical body to assume the role of the Electric Aggregation Committee.

The Energy Commission will explore the details of electric aggregation and report back to the Town Council with a recommendation based on the findings with the goal of being able to have a vote at the 2021 Town Meeting if the findings are favorable.

The Bedford Energy Commission requests that the Council appoint the Bedford Energy Commission as the Electric Aggregation Committee for Bedford.

SB 286 came into effect in October 2019.

MOTION by Chairman Kerr to move to establish the Bedford Energy Commission as the electrical aggregation committee for Bedford pursuant to RSA 53E. Vote taken – 2 abstentions: Mr. Foote & Ms. Rombeau. Motion Passed – All others in favor.

c. Portfolio Manager update

Mr. Bandazian stated it had been a long time since they looked at this. Peter Barbuto agreed to input Town Hall oil data. They can't make the Town Hall building envelope any tighter as it increases the snow load on the roof, which is not good from an engineers' standpoint, but there is no reason to defer improvements. There are two forced hot air furnaces that are about 25-years old and nearing the end of their lifecycles. They have enormous flues that go across the basement to the chimney. They are reasonably efficient as far as oil burning units go, but eventually when it is time to replace them it would be good to have some data compiled. He reviewed meter summaries which show energy usage changes over time since we began in January 2014 (the baseline):

1. The BCTV building added WBNH and is used quite frequently adding more energy usage despite improvements that have already been made. The cooling part of the annual cycle in summer causes energy usage to spike. It is a moderate consumer of electricity with a peak of 25K.
2. The Library usage has come down due to use of the geothermal system. 2016 was the transition year and shows as a low point on the graph of electricity usage. Each yearly cycle has gone down about 20%. Mr. Lu asked why it continual goes down. He could understand it going down incrementally, but it is going down continually. Mr. Bandazian said it is seasonal and some winter months are particularly cold, and some summer months are particularly hot. During the first year the new equipment was put in gradually floor by floor so it wasn't until the beginning of 2017 where things become normalized. We had an abnormally cold winter with many days below zero in succession and the summer was up compared to the previous summer.
3. Bedford Village Common's usage is basically for lighting and it varies year by year and is seasonal and seems to fluctuate, but Mr. Bandazian didn't have a good explanation for it. He is unsure why the lights would be on longer from one year to the other.
4. Mr. Bandazian thought there was room for improvement at the Highway Garage. It is seasonal and during the winter months it performs badly. The building envelope is not good. They've increased it incrementally by putting heat tape on to deal with the ice dams created by the back-building envelope, so they are using more electricity for that reason. There is room for modest improvement there.
5. Soccer fields at Joppa Hills usage is due to irrigation. It is largely seasonal with fluctuations from year to year. The usage seems to have come down, although he is unsure why.
6. Legacy Park's recreation facility usage is for lights and is doing relatively okay over the years, and Peter has been able to bring that down over the last couple of years through behavioral modification and change of fixtures.
7. Town Hall's usage is due to lights and forced hot air heat. It peaks in the winter months, and summers are pretty low. The pattern shows that more energy is getting used. If the old unit is replaced with a newer unit with better circulating fans or replaced with mini splits it may improve.

8. Riley Field's usage is primarily due to field lighting. Usage went down last year when it was out of commission, but otherwise seasonally when days get longer the use of lighting goes down and when days get shorter again, the lighting goes up.

9. The Safety Complex is the biggest energy user, and even though improvements were made there, the usage still climbed a little over the years. Part of that may reflect that Alcohol, Tobacco and Firearms used to rent space in the building, but they no longer rent and they have been using that space. The building shows its envelope problems during the summer. The building is heated by natural gas, but uses a lot of power in the winter, because there are huge bays to let fire trucks in and out. After the 2011 audit, infrared heaters and motion sensors were put in the bays, but it still climbs in use. It was converted to office space which was a use not initially intended for the building, so the energy cost climbs. It is also a poorly performing building where one office may have their air conditioner on, and the next office is using space heaters.

10. Sportsmen's has been dead and not in use the last couple of years, although it has some lighting. The energy usage is still pretty low.

11. At the Tennis Courts, lighting use fluctuates. New circuitry and a motion sensor light was put in before this season which may account for the difference.

12. The pool's usage went up with the addition of the splash pad, which is a big energy user for a few months of the year. For the past few seasons there has been an increase.

13) Transfer Station – 2020 usage will be a little different because things have been moved around. In general, it has been using a little more power since we started tracking, but pretty steady. They also track waste, but all of the recycled items are included together (glass, paper, plastic). Overall, we have brought total tonnage of solid waste down and everything else pretty much holds steady.

In summary, the biggest user is the Safety Complex, followed by the Library, and then the Highway Garage. The Highway Garage is something Public Works should take a look at. Eversource will do a walk-through audit and if there is engineering to be done they will pay for half of it. If there is an improvement to be made including an envelope improvement they will pay for \$50,000 of it. At the library, over the course of the year new lighting is being designed and some computers will get replaced all of which cannot take place until after the budget is passed.

Mr. Bandazian discussed the Energy Commission page on the Town's webpage (<https://www.bedfordnh.org/212/Energy-Commission>). He has been doing some work on the page, and all of the links are good now. He noted that more webinars need to be placed in the "Webinar" tab; he placed some incentives that residents can review under the "Learn" tab. He felt they should change the name of that tab from "Learn" to "Incentives" and he felt there were a few incentives that are pretty much constant. Under the "Learn" tab if you click on "ISO New England Real-Time Charts" you can see New Hampshire's real-time usage. For example, if the spot cost for fuel per hour for the State is \$20.16, you will see that over Thanksgiving the cost will be almost 10 times that because everyone is home cooking. Renewables can be tracked and consist of mostly combustion renewables, trash and woods, and wind. Coal is a very small part of the mix. Hydro is not a renewable and he would suspect most of that comes from Canada. Chairman Kerr shared that there are some towns that have big enough landfills to reclaim that. Chairman Kerr would like to see the links from the Energy Commission website shared on the Facebook page. If someone on the commission could try putting them up on Facebook, that would be great.

d. Reappointment to the Commission

Chairman Kerr stated that his term is up in March, but Dawn Boufford at the Town Offices told him that it is being pushed to May. Mr. Bandazian said that for things to get pushed to May, a charter amendment would have to pass in March. The charter says when the Town Council has to make appointments to Boards and Commissions, and right now it says that is to be done in March. His assumption is that they would be taking applications for Boards and Commissions at the end of next month as usual, and have a vote on March 10th. If it passes they would have appointments by the full Council that gets elected. Right now, they are using this old system unless the voters say otherwise.

Mr. Bandazian noted that we have a vacancy to fill on the Energy Commission. Chairman Kerr noted that they had one person visiting the meeting today who may want to fill this vacancy: Mike Mayo-Smith, a mechanical engineer and Bedford resident of 5-years. His interest in possibly being a member of the Energy Commission was piqued after he attended the Local Energy Solutions (LES) conference in Concord, NH, and he also has a high school friend who sat on his local Energy Board, so he thought this might be a great way to become more involved in the town and have an avenue to help reduce energy usage in the community which in turn reduces cost to the town. He said he would like to help lower overall energy consumption and the Energy Commission seems like a good avenue to help do that. He has enjoyed looking at ways to reduce energy consumption in his own house and thought it would be interesting to do the same for the town. He also thinks it will be interesting to learn how everything works on the local and state legislative side of things and how it intertwines with what is happening at the town level.

VIII. Reminders: Next upcoming meeting is Thursday, February 27, 2020

IX. Adjournment

MOTION to adjourn by Mr. Gillis at 8:45 P.M. Vote taken- Motion Passed

Respectfully submitted by,
Tiffany Lewis