

TOWN OF BEDFORD
August 22, 2019
ENERGY COMMISSION MINUTES

A meeting of the Bedford Energy Commission was held on Thursday, August 22, 2019 at the Bedford Meeting Room, 10 Meetinghouse Road, Bedford, NH.

Present: John Russell, Chris Bandazian (Town Council Liaison), John Schneller (School Board Liaison), Bill Foote (School Board Liaison Alternate), Andrew Gillis, Bing Lu

Absent: Jeff Kerr (Chair), Catherine Rombeau (Town Council Liaison Alternate), Sarah Braese, Tim Paradis

I. Call to Order: Mr. Russell served as Chair for this meeting in Chairman Kerr's absence. Chairman Russell opened the meeting at 7:00 PM.

II. Quorum Count: (5)

III. Approval of Minutes – June 27, 2019, July 25, 2019

MOTION by Mr. Bandazian to approve the June 27, 2019 and July 25, 2019 minutes. Seconded by Mr. Schneller. Vote taken – Motion Passed – All in favor.

IV. Reports of Members and Committees

a. Legislative update – Chris

Mr. Bandazian reported that since our last meeting the full update to Building Code 2015 was signed into law by the governor. There was RGGI bill that was vetoed which was really to change the status-quo, so the status quo continues. The net metering cap it up at the Legislature again either September 18th or 19th.

Mr. Gillis said that he saw in the NH Business Review that there is a list of Green Bills in the legislature including one where towns would choose whether or not they wanted to allow the use of plastic bags and straws.

b. School projects – Bill – Mr. Schneller indicated there was nothing to report.

V. Special Orders – None

VI. Old Business

a. Green Business Award – Social media promotion update – Flyer

Chairman Russell shared that a very popular ice cream place in Town is has moved from using polystyrene to non-polystyrene and hoped they might apply for the Green Business Award.

b. EV Charging Station Encouragement Project – No report was given.

c. Landfill Solar

A. Waiting on HB 365 and SB 159

Mr. Bandazian said they find out about landfill solar on September 18th or 19th. Mr. Gillis said people want the landfill solar, but they want a 5 megawatt, not a 1-megawatt array. Mr. Bandazian stated that it is actually a 1.6 megawatt array. Mr. Gillis said that there is still a 1-megawatt limit. Perhaps it will get upgraded. Mr. Bandazian said it would bring an upgrade of utilities to the Town highway garage to Phase 3 power and about \$20,000 net to the Town on top of that with escalators every 5 years. The utility upgrade is about a \$300k proposition.

d. Solsmart – www.thesolarfoundation.org

A. Start with the Bronze level

Mr. Bandazian reported that Ms. Braese has been working on this and that he is also involved. He explained that it is a prestige designation. He feels that we already do enough to earn a Bronze level certification, so he has initiated the process of confirming what we are doing with the department heads. There will be a little bit of writing that needs to be done for the award. Mr. Gillis said that it is basically a designation saying that your town is solar-friendly. Mr. Bandazian offered the example of Bedford's Building Department which already has a step-by-step process of what you need to do in order to get a building permit. He said there are some other things in Solsmart such as a 3-day approval process which is not realistic for doing rooftop solar because you would have to submit engineering certification that the roof will support it and things like that. We may qualify for a Silver Designation once we add up the points or we may qualify for Silver Designation with little effort. Mr. Gillis explained that there is a long list with point values assigned to them, and the more things you have, the more points you get and the better designation you have. Mr. Bandazian said one thing is to allow solar in all zones. Bedford already allows it in all zones. We already do a lot of stuff and some of it is renewable. We have the geothermal system at the library. We had talked about waiting until the landfill was done because that would get us a little further toward the Silver designation; but there is no reason not to get the Bronze designation and upgrade later.

e. New Solar Up campaign

Mr. Gillis was going to go through the list and sorting about 150 people. This is the time of year to do this because if you start a new project and get it finished before the snow flies you can claim it on next years' taxes. If you wait until the spring that's a whole other year.

f. Eversource bills to calculate demand charges

1. Bing looking at demand charges
2. Adding the pool and library to see if PV will work

A. May need to consider energy storage for pumps/motors

Mr. Lu has all of the demand charges for the pool and the library, but he needs to pull them all together to see what the numbers look like. He looked at the energy storage system and it is pretty expensive; so we will have to add it up and whether it will work out or not. At this point he cannot report anything yet. Maybe, next month.

Chairman Russell asked about the pool and the library. Mr. Bandazian says that the library is such a big energy consumer it is probably not going to make a dent in the library's energy storage bills. When we started the process for the pool we learned that land is hotly contested for, so even a modest installation will have some opposition.

- g. 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. Maybe look at an outdoor screen again as part of the public education effort.

Mr. Foote reported that the Town is paying \$106/ton to dispose of mixed recyclables and throwing \$34 in with every load of mixed recyclables they haul out. He suggested throwing out the #3, #4, #6 and #7 plastics because there is no benefit putting them in the mixed stream waste. We are using the cheaper disposal cost by crushing glass to pay for throwing away plastics that nobody wants. Mr. Campbell at Waste Management told us to throw out the #4's (plastic bags) because there is literally no use for them, and they gum up the works. We do not make that decision; it would have to be a contract revision between the Town and Waste Management.

Chairman Russell said that Jeff Foote from DPW would be at the September meeting. Chairman Russell said he is inclined to agree with Mr. Foote. He thinks they should recycle #1, #2, and #5 plastics and make sure it is clean; and then the quality of the recycling goes up. Mr. Gillis said if we sort out everything we could eliminate the whole sorting facility and just sell the stuff "as is". Mr. Foote doesn't think they have the volume for it, and then they must add the handling portion to it and the building and bins to do it in. He noted that it is hard to change behaviors too, and right now it is single-stream and people just throw everything in.

Mr. Gillis thought that the behavioral change to separating glass worked well and was a pretty quick change. Chairman Russell agreed. Mr. Foote felt glass was an easy pick, though, because it is bulky and heavy and is going to fall to the bottom of the pile. It also cleans easily.

Mr. Gillis doesn't think people are going to spend time pulling out a magnifying glass to see whether their plastic is a #4 or #3 plastic, and that's a problem. The recycling label needs to be very large on things so that people know what it is. Mr. Foote said getting away from variable plastics and just having #1's or #2's so it is a single stream of plastic.

Mr. Gillis said that countries like Norway can make quick policy changes because the country is so small. Norway has done it and eliminated entire groups of plastics from their country. Mr. Lu said you could start with something simple, such as what was done with glass at the transfer station. For example say we only want you to separate water bottles out. Start with something easy and people will do it, rather than requiring them to see if #1, #2, or #5 on their plastic. Most people don't even have any idea what it is. Mr. Gillis thinks the weight would be negligible. Mr. Foote said it would get rid of volume. You would be hauling fewer loads because you would not have as much "fluff" and it makes the product more viable because they have to deal with it less. It comes in, goes through their sorting machines and they get quality product out.

Mr. Gillis says that the NH State government had a new commission that is trying to figure out recyclables for the whole state. It's a new thing they are working on this term. They are trying to get a subcommittee to iterate that this is a problem for every town and city in NH and "how can we solve this?" If it could be solved on a State level perhaps the volumes would be higher. It is something the towns are complaining about, and the State is looking at, however.

Mr. Foote said in that case all plastic would all go into the same hopper and just go away and then you would be down to good quality paper or compostable fiber. He felt they should look into compostable stuff. He is interested in seeing what Jeff Foote has to say about it next month. They don't have a strategy to move forward, but we definitely have various directions to pursue.

Chairman Russell asked if anyone had any thoughts about unclean plastics going into the waste stream and what they could do to prevent it. You see dirty food containers going into the waste stream. It would be great if they could challenge everyone to recycle clean stuff. Mr. Foote says that they are trapped with the paradigm of people not wanting to wash their trash. He washes his trash because it prevents it from stinking while it is sitting around for a week or two waiting to go to the dump. Mr. Bandazian says if people have room in the dishwasher that is the least impactful way of dealing with it; otherwise, if you run some hot water and use some petroleum-based detergent to clean it, then maybe your overall environmental impact is on the negative side. Chairman Russell re-uses straws by throwing them in the dishwasher to be cleaned. They can be re-used hundreds of times and there is no reason not to do that.

Chairman Russell discussed the idea of putting an electric display sign at the transfer station. Mr. Foote says that the transfer station once had an electric display sign that Mr. Gillis was running on a raspberry pie; however, it was not an all-weather screen. Mr. Gillis says he just found one that he threw up there, but it was only an indoor sign. There are outdoor signs, but they cost a few thousand dollars. Mr. Bandazian said that they applied for a grant for an outdoor sign that we didn't get. Mr. Gillis wondered if there was some way we could come up with the \$3,000 for a sign. Mr. Foote noted that they are going to be putting in a new road to the transfer station and wondered if the layout was going to be changed too. Mr. Bandazian thinks the layout may be changed to a minor degree. Mr. Foote asked if it would be a complete revamp of the operation, but Mr. Bandazian indicated it would not be. Mr. Schneller explained that they will be moving the scale down so that there will not be any contractors dumping things in the transfer station that they shouldn't be. Mr. Gillis said that it will also give them the chance to eyeball everyone that comes through by weighing their vehicles first on the scale. Mr. Foote asked when the construction would be completed. Mr. Bandazian indicated it would be done by winter.

h. Town Solar

1. Pool PV array size would be roughly 67' x 60'

Mr. Bandazian said recreation land is in short supply. Mr. Gillis said we own part of the hillside. The trees would have to be cut down there, but that is the obvious space to put a solar array. Mr. Bandazian didn't think that is what Chairman Kerr had in mind. Mr. Lu suggested putting an array in the parking lot and shield the area by using a carport type of array with parking underneath. Mr. Bandazian said you would have to deal with snow plowing in that situation

i. Plastic (#2) to structural plastic and wood replacement

Mr. Schneller reported that to use #2 structural plastic rather than the pressure treated wood that is currently used on the hiking paths at Pulpit Rock would cost 4 times higher but the longevity is 4, 5 or even 6 times greater and you wouldn't be screwing up the wetlands underneath. The company that creates the plastic is willing to work with us on the price and Jeff Foote the Town Engineer is interesting in talking about it.

Mr. Lu commented that the increased longevity of the plastic allows you to save money on installation costs because you don't need to install 4 times, you only need to install once.

If coordinated properly, Mr. Schneller said the town could oversee an Eagle Scout project so that the labor would be inconsequential.

Mr. Gillis felt the interesting thing about these new materials is that once there is a huge demand for it, the price goes down really quick. When nobody is using it, the price is high. Maybe once more people started using it the price would go down.

Mr. Schneller said the Ohio company that makes the structural plastic would like the Town of Bedford to be a beta-user, so that leads him to believe that they haven't done a lot of installations. The company is looking for projects so install so they can showcase them and drive their volumes higher.

Mr. Gillis said once there is a local supply house and they are getting an 18-wheeler load of this stuff, he bets the price goes down. He that maybe the company would give them a discount for being a beta-tester for the initial project, and then after that they could get it. Mr. Schneller indicated that they said they would work with us. He will connect Jeff Foote with the vendor.

Mr. Bandazian thought that they have things in common with the Conservation Commission, so they should think about having a joint meeting. Perhaps we can discuss this at our next meeting. Catherine Rombeau is on both the Energy Commission and Conservation Commissions so she may be the most likely person to tackle it. This project in particular involves trail improvements which the Conservation Commission oversees.

Mr. Gillis commented that he ran on some of the trails for the first time last week and thinks they did an outstanding job on them and the bridges were built up so that they do not get washed away when the water gets high. Mr. Schneller said another benefit of the plastic product is that the water wouldn't affect it. If you bought a small supply of the product with a volume discount so the pressure treated wood could be periodically replaced "as needed" rather than doing it all at once. Jeff Foote said that he had some other projects that may be able to use this material.

VII. New Business

a. National Electric Drive Week – Exeter September 14 – 22

Mr. Bandazian looked the event up online and found out they would be giving free test drives of electric cars. Mr. Gillis commented that everywhere he brings his electric car people always ask if they can ride in it. He says that people stop and ask him about his electric car all the time. It's really amazing because he's never had that experience before.

Mr. Russell's place of business sold software for Tesla that they use to design cars with it. He was so proud when we got our first Tesla in Bedford, then he met Jeff Kerr who was one of the earliest adopters of Tesla car and bought one the first year they came out. Mr. Russell said that you can get free trips around Tesla's Fremont, California factory if you go out there.

Chairman Russell was in Ireland and the interesting thing about European countries is that there are 27 entirely different countries all part of the Europe. Norway buys more Teslas per capita than anyone else, followed by Singapore and America. He would love to know what Norway is doing. Sweden has been ahead of everyone as far as incinerators go.

b. Town ban on plastic bags, straws, and polystyrene

Chairman Russell noticed when he goes to Ireland that you can buy a sturdy plastic bag with handles at the supermarket for about \$0.70. There aren't that many bags for sale and the Irish

government conducted studies from 1998 – 2002 about banning plastic bags and looked at different models and decided that applying a levy on the cost of a plastic bag was most effective. They implemented it and reduced plastic bag usage by 90-95% and took a lot of #4 plastic out of their recycling stream. What is interesting to him is that the amount of money that they made went down each year, so they would raise the levy to make the “pain level” greater. The idea was not so much to make money but to get people away from using plastic bags and using reusable bags instead. Ireland went from \$0.15 per bag and raised the price up to \$0.22 per bag between 2002 and 2008. From 2008 to 2013 the amount of money they raised each year actually reduced quite significantly year after year which meant they reduced the amount of bags they were actually selling. He passed around an Irish reusable plastic bag for the Commission’s review.

Mr. Gillis commented that not only do American grocery stores use flimsy plastic bags, but they often double-bag things because their bags are so flimsy, or they only put one item in a bag and use multiple bags because they are worried about them tearing. He finds the Irish plastic bag cool, and perhaps a gateway to using the even cooler cloth bags. You wouldn’t have to double-bag things because the Irish bag is more durable and a better quality bag.

Chairman Russell said that the Irish grocery store only had about 10-20 of the plastic bags available, and he was the only person buying one. Mr. Lu asked if the other people were bringing their own bags. Chairman Russell said they were either re-using their already purchased plastic bags or bringing their own cloth bags; or they just carry their item out.

Mr. Gillis said sometimes it is just a psychological thing. He was in England getting coffee at the grocery store and there were no paper cups available. The expectation was that people would bring their own cups. When he asked someone where the cups were he was told to walk halfway across the store to the customer service desk and ask them for a cup. The cup was free, it was just hard to get. They made the process so painful that it would be easier just to bring your own cup. All it took was not making the coffee cups available. By doing a tiny thing like making it inconvenient made all the difference. Mr. Lu said the problem would be if another store didn’t do that, everyone would go to that store to get their coffee. Mr. Gillis is unsure if the city enacted a law that every store had to do this.

Mr. Foote asked if paper bags are coming back in Ireland. Chairman Russell said that he didn’t see paper bags. He said in Ireland paper bags were not subject to the levy and exemptions were given to plastic bags that were used for separating foods for hygiene and food safety purposes and acceptance by stakeholders has been widespread. Bringing your own bag to the store just didn’t seem to be an issue. Ireland is the type of country where people speak up if they don’t like something, so he has to think that people are accepting of it. Mr. Gillis said it is easier to make these types of changes in a smaller country and when the population is more homogenous.

Mr. Foote commented that he thinks Ireland also closed their landfills and went from having 15 and are down to only having one. Chairman Russell said Ireland had a total of 25 landfills and closed 21 as of about 1 ½ years ago. It was also in Ireland that he first learning about the problem in shipping plastic to China to be recycled. What Ireland has done with the bags has been very pro-active. Wales has gone the same way and in March 2015 England did too. The general consensus is the levy applied to the grocery bags is an incentive not to use the plastic bag. NH is a small State of 2 million people, and Ireland is a country of 4 million people, and Northern Ireland is 1.5 million. In America there are all these small States, and wouldn’t it be cool if we could inspire the entire State of NH to go this way.

Mr. Gillis asked Mr. Bandazian why he thinks the State of NH is passing a bill to allow towns to do this, and is it legal for a town to do this right now. Mr. Bandazian said that NH is a Dillon State meaning municipalities can't do anything unless the legislature says you can. Mr. Gillis said that Bedford wouldn't be able to do this unless the State passes it, but there is a bill in the House right now allowing towns to ban plastic bags and straws. Mr. Bandazian indicated he had not been watching this bill in order to have any comment on it.

Without offering an opinion either way, Mr. Schneller said if the recommendation was made to the Town Council to implement a tax or a ban, he does not think it would pass. If you made it voluntary, people would take a little bit of extra energy and pay \$1 per bag. The Town has distribution capabilities and the library collects fines, the transfer station collects money for various things that are thrown out and the town office takes in money all the time. A handful of bags at each location may help to slowly implement the behavior on a voluntary basis, which he thinks would be better received.

Mr. Gillis thinks you can buy a reusable plastic bag almost everywhere now at a cost. He says that grocery stores even have a baler for bags that are returned to the store for recycling. Mr. Schneller thinks if there is any reasonable revenue stream that could come from selling these reusable bags we could put that toward lease payments on a baler.

Mr. Schneller thinks if you got the stores to buy into having a small training module for clerks to ask if customers would like to buy a reusable or long-term usage bag for \$1 rather than using the flimsy plastic bags. If people forgot their bags, he thinks most people would be willing to throw in \$1 for a plastic bag. Mr. Gillis thinks if they at least asked people and had the other bags more hidden to be pulled out only as a last resort.

Mr. Bandazian looked up the House Bill 102 online and found that it was retained in committee. The subcommittee has a work sessions scheduled August 27 and September 3. If House Bill 102 were to be signed it would not be signed this session, but in year two. Mr. Gillis said that during the summer when they are in recess is a time that they can study and work on bills. Mr. Bandazian said this bill has remained in the House and the Senate and haven't even looked at it at all, so it has a long way to go. It would be nice if NH was a Home Rule State and the various towns and cities that know more about a local issue could make decisions for themselves without the State having to tell us what to do. Massachusetts is a Home Rule State.

Mr. Gillis said Massachusetts was the first to have a town that banned all single use plastic and banned selling a single use water bottle. Mr. Foote commented that Nantucket did that – banned single use plastics. It has come to a head much faster there.

Mr. Russell will continue to research and was thinking about approaching the stores to see their thoughts about this. Mr. Gillis would be curious to see if they would fight it tooth and nail. Mr. Bandazian thinks a large chain store would find it awfully inconvenient for a small State like NH requiring something different. It's being dealt with different ways in different towns and eventually from a management point of view they may start charging money for bags.

Mr. Lu said an easy way to handle it might be to have a check-out counter at the store that doesn't give out plastic bags and others that do. Mr. Russell likes that idea a lot. The thing he does know is that Hannaford, Whole Foods, and Trader Joe's are all very committed to giving back and recycling and they are making moves and very serious about training their staff. Mr.

Gillis said that at Whole Foods if you only buy a few items they don't automatically offer a bag if it is something you could carry.

Mr. Russell said there are two German brothers, Aldi and Little, who own two huge supermarket chains and they are committed by 2025 no single use plastic. These German stores are very popular in Ireland. Aldi owns Trader Joe's. There is an Aldi store right here in Manchester. They will sell compostable bags for your trash and the stuff decomposes within a year and is better than using plastic garbage bags. Mr. Foote says Manchester uses paper bags for yard waste. Mr. Russell said his thought was to include plastic straws, and polystyrene along with plastic bags. He wondered if anyone was doing something about it. Mr. Gillis said House Bill 102 includes giving a town the ability to ban use of plastic straws. He said that The Friendly Toast uses paper straws. Mr. Russell says to use one plastic straw, wash and reuse and keep one in the car and use it over and over and everyone in the family has their own straw. Kids used to use their own Krazy-straws over and over. The good news on polystyrene is that one of our loved ice cream parlors in town has gotten rid of polystyrene which is wonderful.

c. Harbor Group

1. Marc Hebert showed Jeff around his building

- A. Marc is interested in presenting his solar PV experience from a financial perspective. Marc may be available later this fall.

Mr. Bandazian said Mr. Kerr was trying to get them to come in and present or apply for the Green Business Award. Mr. Foote asked where they were located. Mr. Bandazian said it was on South River Road, right next to Glenn Hampoian Heating & Air Conditioning. Harbor Group has huge ground mounted and rooftop solar arrays.

VIII. Reminders: Next upcoming meeting is September 26, 2019.

IX. Adjournment

MOTION to adjourn by Mr. Bandazian at 7:52 P.M. Seconded by Mr. Gillis. Vote taken- Motion Passed

Respectfully submitted by,
Tiffany Lewis