

State of Rhode Island  
County of Washington

In Hopkinton on the eleventh day of September 2017 A.D. a workshop was held in the Town Hall Meeting Room, 1 Town House Road, Hopkinton, RI 02833 beginning at 6:30 P.M. to discuss the following: Recent changes in renewable energy in Rhode Island and two new State laws being enacted relevant to solar.

PRESENT: Frank Landolfi, Thomas Buck, Sylvia Thompson; Town Clerk Elizabeth Cook-Martin, Town Manager William McGarry; Town Planner, Jim Lamphere; Tax Assessor Elizabeth Monty and Beth Metcalf. Absent: David Husband and Barbara Capalbo.

Also present: Christopher Kearns, Chief of Program Development at the RI Office of Energy Resources (DOA) (OER).

**DISCUSSIONS REGARDING RECENT CHANGES IN RENEWABLE ENERGY IN RHODE ISLAND AND TWO NEW STATE LAWS BEING ENACTED RELEVANT TO SOLAR.**

Statewide Solar Permit (Building/Electric) Application

Christopher Kearns indicated that during this past legislative session they worked on a bill to streamline the building electric permit process just to have some consistency statewide. This applies to electrical permitting for all scales of solar projects whether it is residential, commercial or a ground mount system. Basically they are working with various stakeholders and have invited nearly all of the building officials, local officials, and electrical officials within the towns that we have electricity with and also asked the State Building Commission Office and the RI League of Cities and Towns to weigh in. They are currently on the second draft of a statewide Building and Electric Permit Application. The goal is to have this wrapped up late October, early November and then go into the full regulation process, so that it will go into effect statewide. Then all municipal, building, electric officials and renewable developers will use that new statewide building permit type application. Building fees and electrical fees, those are still pre-determined at a local level so the Town will determine what the appropriate charge is, but we will just have consistency in terms of a statewide type application going forward in the new year. Council President Landolfi indicated that he felt it would be helpful to have that in terms of having one process or one place where you can get the permits so you know how many are out there. Mr. Kearns stated that basically a residential solar group installation is no different whether it is in Westerly or Woonsocket. It is the same and has to meet all the applicable building code standards so

the intent is to have one statewide permit so the building officials know exactly what the market is and the developers know what they are getting into. This has been non-controversial. The second draft of the application will be out for stakeholders and municipalities to weigh in on; another stakeholder meeting is set for next week to get additional feedback. Pending the result of that meeting we will proceed with the renewal regulation process and have it wrapped up by early November at the latest. Councilor Thompson asked if everybody is going to be collecting different fees and where would the fees go? Mr. Kearns indicated it is revenue and no different from the existing building electric fees collected by the Town. Councilor Thompson asked how we would pay back the State and Mr. Kearns indicated that was not required. Councilor Thompson asked how the State could afford this. Mr. Kearns stated that ultimately, this is handled by the existing OER and State Building Commission Office staff time and that they are committed to handling this process. So in reality, it is not a lot of work because it is basically pulling together the existing building and electric permit processes being used right now for solar projects and streamlining it into a two or three page application whereas basically you check all the boxes; submit all the critical information and that building or electric application will be at the local level. It is really not a lot of work on their part because they are just basically pulling from existing processes; the Town already collects building and electrical fees for solar projects, so ultimately you will continue to collect the fees, but you are just using the statewide application form instead of 39 different forms that the towns have. Councilor Thompson asked who does the inspections themselves. Who actually goes to the site to make sure they are doing the work they said they do? Mr. Kearns indicated that in terms of the installations of development systems, he believed they are randomly inspected by the State's electrical officials, so you have licensed electricians that would randomly go out to job sites to check the installations. He knows that is done on the electrical side. He is less familiar personally with what the building officials do once they issue building permits, whether it is a solar project or a new extension on a property or a new commercial building within the Town, as to what inspections they do. He did not have the answer and would have to find out. Councilor Thompson asked what is going to be expected at this time from the Town; what part does the Town play? She gave an example: They file for an application, the OER looks it over and decide if what they are proposing makes sense electrically or whatever, and then it gets kicked back to the Town? Mr. Kearns said no,

basically what we are going is developing the application form and once it goes into effect on January 1<sup>st</sup>, they don't have any roll. The town is just using the statewide application form and the town is the one that is basically saying, okay this meets all the criteria, and they submit a check for processing payment. The only thing they are doing is having consistency across the State. It is still submitted to the local building official/local electric official office. They are just developing what the application has to look like statewide. Council President Landolfi asked if Mr. Kearns thought it would be on the OER website and he indicated that it would be on the OER website. Mr. Kearns added a lot of municipalities are transitioning to e-permitting, everything being done online. He thought there were about 15 or 16 municipalities that have everything done and were shifting to e-permitting instead of having to drive to that specific town to apply. He is not sure how Hopkinton stands regarding that process. Council President Landolfi indicated that he had heard something recently that we had started to think about this. Mr. Kearns said the objection would be a new application statewide and ultimately everybody would be doing the e-permitting process. Council President Landolfi confirmed a bit more had to be done on this and Mr. Kearns agreed, saying he felt it would be four to five weeks and then they would distribute it internally and the final version of the draft application would be put out for public comment.

#### Statewide Renewable Energy Tangible Tax Value Formula

This matter was from the 2016 legislative session, relating to establishing a statewide commercial tangible tax formula. Mr. Kearns explained what they were seeing prior to that was all the projects were popping up across the State and Tax Assessors were wondering what they assess the tangible tax value on for these systems. This law was passed over the 2016 session and they worked with Rhode Island League of Cities and Towns, the renewable energy community and Tax Assessors' organizations in the Summer of 2016 to implement this new law where we basically went out and asked the Tax Assessors, prior to this law what was the dollar value that you were assessing for these projects? So there were a half dozen to a dozen projects across the state and they looked at what that average dollar value was and it was \$4.76, so they kept it simple and used a baseline of \$5.00 per KW. This went into effect on January 1, 2017. Mr. Kearns indicated that he had seen the tangible tax ordinance that Hopkinton had recently prepared. He indicated that basically this would be for the projects that were popping up in the Town where the people are building a solar system and were selling the revenue

back to National Grid through a 20 year tariff. This portal will be in place where it is \$5.00 per KW, so he believed there are about 250 1- megawatt systems so you calculate \$5.00 per KW multiplied times the 1,000 KW and it would spit out what that dollar amount would be and that would be your revenue source for each year, for the duration of the tariff period that they are receiving revenue from National Grid. Council President Landolfi indicated that the one they approved on Route 91 was 13.8, so about \$69,000, something like that. Mr. Kearns said that it is required for municipalities that have the ordinance and have entered into the tax treaty agreements. So this has been in place for nearly a year now. Several municipalities have adopted an ordinance like what the Council did last week. This is just to develop some consistency across the State because one thing that we are mindful of is all of these programs are paid for by Rhode Island rate-payers through their electricity bill, so for us to have a consistent fair dollar value to compensate the towns, we can incorporate that into the program design and thus minimize how much these programs cost the rate-payers.

Overview of Renewable Energy Programs that are available to Hopkinton constituents who want to pursue projects.

Mr. Kearns next addressed the State's policies and went through a Power Point presentation. Ultimately, all of the programs that we have available or at least the primary technologies that we are seeing proposed associated with them, he would say 90% of it is solar related and the remaining 5% to 10% is the other three technologies, probably with about 7% to 8% of that coming from wind projects in certain parts of the State. Council President Landolfi asked what the third one was. Mr. Kearns indicated that the third one was Anaerobic Digestion which is converting biomass such as wood pulp from trees that are cut down that would enter the landfill, instead of going to the landfill they put them through a facility where basically its burned, converted into electricity and sold back to the grid. So it is similar to the biomass facility up at the Johnston landfill where they are extracting the methane gas and producing electricity. Anaerobic Digestion type of projects that they are seeing proposed potentially are at 500 kw to 1 megawatt, so they are much smaller than the types of projects that you see at the Johnston landfill.

Net Metered Systems

Net metered systems are pretty straight-forward in terms of installing solar satellite panels on your rooftop and selling power back to the grid. It tracks the solar generation

so if your system is producing more than you are using your meter goes backwards. Net metering is a pretty straight-forward process. It is generally roof mounted for residential, commercial or school-type projects. There are really no controversies that they have encountered at the local level. This is a really pretty straight-forward process. The Net Metering Program is available to a wide variety of customers. Mr. Kearns believes a majority of their net metered projects are overwhelmingly residential based projects where they are just sizing the system to meet the needs of their property. Homeowners generally have two options; one is where they can directly own it or they can enter into a third party arrangement where you enter into a PPA at a price per kilowatt that is lower than what you are paying National Grid. That is sometimes attractive for homeowners that want to do that but they don't have the \$10,000 to \$15,000 out-of-pocket for a down-payment, so this is pretty common. There are twenty-seven states that allow third party financing. They allowed it starting in 2016 so Tesla, Solar City, those types of companies will come in and install the system and enter into such an arrangement with the homeowner. They will monetize the federal tax credit because they had a tax appetite to monetize that and then generally they will give you an agreement and then you have the option to purchase the system five years from now at a depreciated value, so it's an attractive option for those that don't have that much cash in their accounts. Mr. Kearns showed an example in Wakefield. He indicated that generally, a solar developer will look at the entire roof space and figure out where the appropriate southwest facing orientation is. This is the program that you are likely to see quite a few projects if you haven't already. Mr. Kearns believes one example is Southern Sky Renewables who are proposing a project on undeveloped residential lots of land which is consistent with state law. It is likely a virtual net metered project where you'll build that system at that location and the power produced or the credits produced from that solar system will be linked with an energy off-taker whether it is in Hopkinton or any other part of the state where you basically enter into a net meter arrangement. This is becoming more and more common. An example of this is in Cranston on privately owned land, they are going to build a solar project and the off-taker is the City of Providence. Another example of this is the three or four wind turbines built on privately owned land in Coventry and the energy off-taker was the Town of West Warwick. So the Town of West Warwick gets the energy criteria from that solar system. This is likely to be the predominant program because there is no programmatic megawatt cap associated with it whereas there is either

fiscal or other cap rates with other programs. Generally these projects are the three, five or the ten megawatt scale projects. He is aware the Town had one and you will start seeing other project proposals of this type. Obviously if the Town of Hopkinton had any parcels of land that there couldn't be any kind of economic development for, such as a closed landfill, the Town of Hopkinton could do this by entering into an arrangement with a solar developer and enter into a lower price per kilowatt that they currently pay to National Grid through standard offer. Mr. Kearns reported they are actually assisting the Towns of Barrington and Bristol now. They put out an RFP in the Fall of 2016 and mapped out certain parcels, either rooftop, Town owned buildings or the closed landfill in Bristol. They advertised the RFP and they have between 15 and 18 really solid proposals for the renewable market that they are reviewing right now and will at some point announce the top 3 or 4. The Town will enter into an arrangement and this will be a revenue source for them on land they wouldn't otherwise use. His office can assist the Town in this way.

Mr. Kearns went on to discuss another component of the virtual net meter program indicating that sometimes they have a residential community that is surrounded by trees or does not have south-facing roof spaces, the state developed a program to allow homeowners that wanted to pursue solar installation but can't do it on their respective properties, also on affordable housing complexes, so if you have 30 homes in one part of Hopkinton and you have another parcel in another part of town which is an undeveloped residential lot, instead of building 15 homes on the property you could have one solar system and then identify the residential off-takers within the Town and enter into an agreement with that solar arrangement. Virtual Net Metering is the key program that will be seen as projects over the next couple of years. Council President Landolfi indicated that he had thought the virtual net metering program as being more commercial in nature, but it sounds like it could be also residential. Mr. Kearns agreed and explained that the energy off-takers for these systems could be state agencies, quasi state agencies, municipalities, public schools, private schools, hospitals, nonprofits and the federal government. They are allowed to virtual net meter because they can't do a system at their own property because they don't have enough geographical space. An example of this is Brown University. They don't have enough geographical space so they are looking into a virtual net metering arrangement with another portion of the state. Virtual net metering is limited to a customer pool so if you are a Dunkin Donuts business owner

or homeowner you may not be able to participate. There are key provisions in the state law that dictate who can virtual net meter.

### Renewable Energy Growth Program

The final program that he mentioned at state level is the program the Planning Director probably mentioned to you. There are probably about 250 KW ground mount, solarized, and a couple of farm land-type properties within Hopkinton. This is a program they are likely participating in, it is the renewable energy growth tariff program and this is where you install the solar system and then sell that revenue stream back for a 20-year duration. This is also the program applicable to the tangible tax formula that Hopkinton adopted last week. Council President Landolfi indicated that the one they approved on Route 91, he thinks it is virtual, because he thinks that there is a division of the state that is going to be the off-taker and that is the 60 acre site. There is going to be revenue for us and the developer but he thinks there is a division within the State of Rhode Island that is going to be benefiting as off-taker. Mr. Kearns indicated that there is nothing preventing the developer from adding new off-takers to the system. They are seeing this up in Johnston in some industrial zoned areas where they are going to put a couple of turbines up and they are going to be selling the power back to the grid and the town is going to be receiving revenue stream from them. He believes two of the projects are going to be virtual net metered where they will identify who the possible off-takers could be from across the state. Mr. Kearns showed an example of a closed landfill up in East Providence. He indicated that this is a 3.5 plus megawatt scale solar system. It was installed in late 2012 and the early part of 2013. It has been in operation for just under four years and this is the project where the City of East Providence put out an RFP. They had a parcel of land that they were never going to use for any type of economic development. They entered into an arrangement with the Renewable developer; that developer is now paying them a revenue stream for the next twenty years at that location and the City is actually expanding that system out by an additional 4 megawatt capacity so that will actually increase the city's revenue stream from that closed landfill for the next twenty years. The last thing Mr. Kearns wanted to highlight was the 30% federal tax credit which is available to a homeowner or business. Generally what they would do is obtain their total project cost and depending on the state program that you leverage when you pull the trigger, so if you pull the trigger this year, when you do your tax return for 2018 in February of next year, this is when you get the tax return check for this 30%

federal tax credit. The Federal tax credit is in place for the next couple of years. It will start to decrease in value, I believe, starting 2019 or 2020, but pretty much all of the projects that you see across the state and the projects being proposed in the Town, they are leveraging the state program with the federal tax credit. Council President Landolfi asked how that is connected with our turbo tax as he used this to prepare his taxes. He wondered if it would connect when he chose where he lived. Mr. Kearns indicated that they always tell homeowners to make sure they knew what that step is before they proceed with a project. Mr. Kearns showed an example of a two megawatt ground mount project at the Leyden Christmas Tree Farm in West Greenwich which showed a solar array being kept away from the main road on the back part of the property where is wasn't visible. Council President Landolfi asked Mr. Kearns if he had seen some of the Senate and House bills. There is a Senate bill that has to do with Farm, Forest and Open Space and indicated that it is a little confusing. Mr. Kearns indicated there are solar projects that are within the DEM Farm, Forest and Open Space program. Those farms entered into the DEM program several years ago, if not decades ago, where they are assessed at a different land value that they could otherwise be assessed. So what they did was OER, DEM, several environmental/conservation groups, the RI League of Cities and Towns, and he knows that the RI League of Cities and Towns looks at legislation and they generally reach out to different groups representing municipalities including the RI Tax Assessors Organization. So a compromise was reached basically saying that if a farmer wants to pursue a solar system or renewal energy system on their farmland property, they could do so and not be impacted by the land value taxation process if they restricted it to no more than 20% of the total acreage at the site. That legislation became law in July. When the Tax Assessor receives a solar project on farmland and it is listed as being within the DEM program, it will have to identify the total acreage, the geographic footprint of the project being proposed, that 20% could be re-designated as a commercial land value taxation, it is no longer farmland because it is producing an energy source of revenue. The rest of the property would stay within the land value taxation of farmland as its assessed value and this would bring clarity statewide because the dynamic that they faced was if a farmer wants to do a project and they go through the hoops of the interconnection study and all this other stuff, and then they bring it to the town and the town agrees, then they re-assesses the tax value of the entire farm it throws off the economics of the solar project. So for consistency, all farms will know what they

are getting into. DEM is working on a rule or regulation. As part of this conversation, they want to try to maximize the property so there is a dual purpose. Depending on the solar array proposed and the height variance from the ground up in terms of these solar mounts, you can still cultivate and utilize the property around the solar panels depending on how high up those solar systems are. Some are 5 to 10 feet off the ground and some are 15 to 20 feet off the ground. If you do a solar system properly it could still allow that farmer to cultivate and maximize that land surrounding the solar system. We wanted to have renewable developers and farmers think about that option within the DEM program, so DEM has to develop guidelines as to what they would deem a dual purpose. Council President Landolfi indicated that it was a little bit confusing. Mr. Kearns indicates that other states have done it. Massachusetts has a designation in terms of a dual purpose. Council President Landolfi indicated that he didn't know how you could have a dual purpose when you had "x" amount of space. Mr. Kearns said that it depends on how high these solar systems are built. Councilor Buck questioned if he had a 100 acre farm and was in Farm, Forest and Open Space, he could take 20 acres and would be re-assessed on that 20 acres and there would be no penalty in taking that portion out of the Farm, Forest and Open Space? Mr. Kearns indicated that was correct – just the 20 acres would be reassessed. Councilor Buck asked, if they do reassess the 20 acres and the farmer plants pumpkins or something like that under the array, how would that be reassessed because they are still using it as agriculture. Has that been determined yet? Mr. Kearns indicated that it is in the beginning stages. Ken Ayer, the Chief of DEM Agriculture Division, is in charge of working on this. Basically it is an update to the Farm, Forest and Open Space rules and regulations. He has to start developing that and what they are doing is drafting the language and then he will put it out to municipalities to get comment back. They are also looking at what other states have done in terms of trying to maximize that land for multiple purposes. The law passed in July. It doesn't go into effect until January of next year. They are reaching out to all municipalities to get their feedback so when this thing is formally adopted everybody has had a chance to weigh in and give their input. Councilor Thompson indicated that we need to identify whether or not a community can determine its own Farm, Forest and Open Space. She explained the Council passed a couple of ordinances regarding solar, one of them was amending the Farm Viability Ordinance; we only allow farms, based upon their size, anywhere from 1 to 3 acres of their land. Can the Town of Hopkinton decide that the land, let's just say they do one

acre, and they need that one acre. As an example: Let's say they have to have 15 acres for the program and they take 1 of those acres out of Farm, Forest and Open Space, so now they only have 14 acres. Her concern would be if someone should get kicked out of the program because they really needed that one acre. The Council's intent is to help the farms find a way that they could come up with a little more revenue so that they could sustain the farm and perhaps grow it. What the Council was hoping for was that the farmers wouldn't have to pay more; that if they took that land, say the one acre, that it would still be assessed at a lower rate as a part of Farm, Forest and Open Space. Could we see solar as agriculture, as a part of the farm aspect? We would like to do that; can we do that? Do we have the authority to do that? Council President Landolfi indicated that Mr. Kearns may not know that we have a Farm Viability Ordinance which he probably has not read or seen. It is our intent as a Council to perhaps not reassess that part of the solar on the farmer's land but to keep it as it is and maybe tax on the tangibles. Mr. Kearns rephrased the question and said that now you have a state law and if the Town wanted to waive that requirement and they don't want to collect an additional tax revenue on that one acre, would that be allowed? He stated that is a legal question and he would have to question DEM and get back to the Council on that. There is a state law that allows municipalities to waive tangible property taxes on renewable systems, so most are waiving them for net metered systems. Council President Landolfi noted Hopkinton is doing that too. Mr. Kearns said there is some flexibility if the Town doesn't want to collect tangible taxes on solar systems, say it is a school within the district, they want to see that revenue go back into the school, so there is flexibility, but he didn't have the answer to that question. He added one of the things related to this topic is renewable energy siting, a very hot button issue, all over the state over the last several years. There were various bills filed this past legislative session by various stakeholders who want some level of consistency on siting projects. One bill focused on agricultural land-type properties; a second bill focused on solar siting in general. They recognized that these bills are going to, in some fashion get re-introduced, similar to the farm-land bill as it pertains to rights to hold weddings and concerts. Mr. Kearns indicated that if they knew something was going to be reintroduced and come up in January why waste the next five months by ignoring it. Generally, they schedule stakeholder discussions concerning the matter recognizing that there are going to be bills filed in January or February. He believes somebody from the Town of Hopkinton has been participating in the stakeholder

meetings on renewable energy discussions. They meet with the RI League of Cities and Towns, Rhode Island Tax Assessors, the Farm Bureau, Conservation groups and developers who are all at the table, so we have all of those meetings pre-booked and part of those meetings are for discussing the dual purpose designation criteria. He noted DEM has to go through their formal rule or regulation process. There will be ample opportunity for the Town of Hopkinton to weigh in on that regulation that is developing. Councilor Thompson asked if there was going to be a limit on the number of megawatts the whole state can have. She indicated that Hopkinton has a landfill, a total of roughly 60 acres, but it has been capped already. She asked when does it come to a point when they say that's enough. She asked if we are going to miss any deadlines because we haven't done anything about the landfill yet. Mr. Kearns replied that most of the programs are in place indefinitely so with the virtual net metering program there is no statutory end date for that program. With the renewable energy tariff program, the 250 kw solar projects, that program has been extended to 2029. The State programs are in place for the next several plus years. The federal level program deadlines are unknown at this time. The federal tax credit is in place for the next couple of years. There are always ways around it. You can create properties that are limited liability companies that therefore are taxable. There are some towns across the country where they don't pay federal taxes so they can't monetize the federal tax credits but you can enter into tax arrangements for LLCs with the developer where that land is re-designated so it is paying federal taxes. He stated there are ways to do this as it relates to the Town of Hopkinton's property. Mr. Kearns indicated that he would like to know more about that location because they are encouraging municipalities if they have closed landfills that they will never do anything else with, to at least put out an RFP to see what they get back. The OER assists the towns in reviewing proposals and give feedback and they don't charge for this. Councilor Thompson said that they were told by one of the solar companies that looked at the landfill that the landfill is a distance out, so the revenue would be less but it is doable. Council President Landolfi explained it was a Phase III line that was too far from the site and was cost prohibitive to connect it. Councilor Thompson said that before they could do an RFP they were told that they would need to know what the cost is going to be at National Grid. So they said we needed to do an audit and then when you go out to bid and you select somebody that you require as part of the bid documents that we recoup the cost. Mr. Kearns said that generally, that is what happens as it relates to

National Grid, any renewal project has to do an interconnection impact study to assess the distribution system in order to be tapped into the grid. The developer you spoke with may have had some valid points, but he would always air on the side of caution about putting out an RFP because while one developer says it is not possible, it is more than likely that there are five or six developers that say you can do it. They work with National Grid in terms of trying to get preliminary information regarding the location. An example, they are going to be putting out an RFP over the next few months for some undeveloped land over at the Ladd Center in Exeter. This will be a 5 megawatt ground-mount project. They reach out to National Grid and give them the preliminary assessment of the location, what the interconnection points are, where the certain hot points are that you have to be mindful of, and we attach that as an addendum to the RFP, so when the developers look at the site they have a reference point of what National Grid's high level assessment will be. Ultimately, any developer that gives you a proposal is going to be with contingencies when they submit to an RFP because the nuts and bolts about what that specific interconnection cost will be won't be known until that developer formally files an interconnection study and National Grid's civil engineer team does a full dive through. That review process generally takes anywhere from two to four months to complete. So they will give a high level assessment to the State, which they are happy to help the Town of Hopkinton with, but the nitty gritty as to what is truly feasible won't be known for a couple of months after the Town selects a developer. That is what they are doing with the Towns of Barrington and Bristol. The developers are saying here are all the economics, here is what we are offering you for incentives such as a lower electricity bill, or we are going to lease the land from you and we are going to give you a portion of the revenue generated when that power is sold. The Towns are probably going to select that developer within the next two to three months and the next step will be that the developer formally files the interconnection studies for some of the Town's green spaces, for the Bristol closed landfill, and then we will re-circle back. When the Town is looking into a project, you are realistically looking at two to four years from the start of the process to the system being installed and operational. Mr. Kearns can get the information for the Town if the Town can give them the street address and other particulars and they don't charge for this service.

Councilor Thompson indicated that her biggest concern was the Farm, Forest and Open Space aspect because in some instances farmers have entered into a contract and they

don't know those answers. She is worried about people signing up and then you find out something later. Mr. Kearns stated that if the Council knows of someone who has been approached by a solar company to feel free and give them the OER contact information and they would put them in touch with his office and DEM. They are happy to answer questions at no cost and the best way to reach them is by email. They will meet with the appropriate people within the Town. They would come down and sit down with the Town, fill out the RFP and go out to the site. They also reach out to the director of National's Grid interconnection team to inform them of this location and get feedback. Everything should be put in the RFP. You don't have to choose anything but at least include all the parcels and properties that may be viable for solar and let the market tell you what is feasible because the developer is going to do the three dimensional drawings, the shade analysis and all those type of things. They are not going to charge you, they are going to be thrilled. He suspects because of the situation that they saw in Barrington and Bristol, the Town put out an RFP, advertised it and at a minimum they probably will get 16 proposals. That is a good situation to have because a lot of the proposals looked very financially attractive for the town and it is all free. Council President Landolfi asked if they would like to have a copy of our Farm Viability Ordinance and Mr. Kearns indicated they would and he could pass it along to the DEM. It was indicated that the Hopkinton Town Clerk would provide them to Mr. Kearns.

Councilor Buck asked about the East Providence landfill. He wanted to know how many acres that was. Mr. Kearns indicated that he estimated that project at 10 to 20 acres of land and located near I-95. They started this project in 2010/2011, so they put it out to RFP. Now bear in mind that when they put out this RFP there were minimal solar market in Rhode Island. There was not the level of competition and proposals that we are receiving now. It was an unclosed landfill too, so they had to get crushed stone and debris. He believed they were able to secure a lot of crushed stone material from the I-95 and 195 undeveloped lot so they were able to redirect that, but if the Town has a closed landfill and it is in good shape, you would want to check with DEM to see if there is anything you should be aware of for the environmental permitting process that they would want to reference within the RFP. Councilor Thompson reiterated that the size of our landfill is approximately 60 acres. She also indicated that the two parcels that seem to be viable to the Town are the landfill and the land behind the Town Hall which is 19 acres. Mr. Kearns indicated that this was another thing, if you have property and you

can't do anything else with it, you can do this in a responsible manner. There is nothing preventing you from doing a virtual net metered project and entering into a price for your electricity at a lower rate, long term, so you know exactly what your price per kilowatt will be and a separate parcel of land used to install a solar system and sell the revenue, then you will have a revenue stream and you can use that revenue for other purposes within the Town with that developer. So there are different ways that we can go about it. He wanted to give different options to evaluate and thereafter the Town can give him a comfort zone and decide what makes economic sense. Council President Landolfi stated that we should identify the properties and Mr. Kearns said just to send him an email with the street address of all the properties that may be feasible. Councilor Buck asked what would be the minimum size property to make a project feasible, five acres, ten acres? Mr. Kearns indicated five acres. He stated that usually a 1 megawatt ground mount system requires about four to five acres of property.

Town Planner, James Lamphere, spoke to Mr. Kearns indicating that when these projects came before the Town they generally came presented as DC projects, 5 megawatts DC. When it comes back to tax them the developer likes to talk in terms of AC. Mr. Lamphere indicated that this can lead to a lot of confusion for people when they are presented with a 5 megawatt and then they do the mathematics and find out that they are not getting that. What is the rationale? Why do we switch from DC to AC for the purposes of that \$5 taxation? Mr. Kearns said that regarding the DC to AC, and he is not an electrical engineer so he cannot go there as far as his understanding of that process, but his understanding is that AC is what the formula was for the tax treaty type of agreements that were executed between developers and municipalities from the end of 2010 through the end of 2015 so when we were negotiating and discussing legislation between the renewable energy market and the League of Cities and Towns, they said to make sure it was in an AC formula. He wasn't a part of that negotiation, so he didn't have the specific answer as to why that was done, but it was his understanding that all prior tax treaty agreements were executed for an AC value, he believed all for solar. He believed there was a discrepancy between some of the solar projects and the wind projects; wind being in a DC value and solar being in an AC value, but ultimately through the legislative negotiations they settled on the AC value as the principle that applies to the formula. Mr. Lamphere said there was a name-plate for that and he could see the name plate for the DC system all set up, that's the boiler plate on the system, but

when you convert from DC to AC there are various percentages that you get. I have seen everything from 70, it all depends on the type of inverter you use, so what name plate are they going to be looking at to determine the amount of AC that is produced? Mr. Kearns said that the DC is the name plate capacity rating for the solar system. Mr. Lamphere questioned if there was an AC name plate as well as a DC name plate? Mr. Kearns responded that this was a good question and he doesn't have the legislation or law in front of him. He understands that AC is the reference point because that is the actual amount of what is produced at the perspective site. You can install a 1 megawatt ground mount solar system and it is rated for a 1 megawatt ground mount output in optimal conditions; i.e. it is not snowing out, it is not raining out, so they adjusted the AC to reflect the actual output of the solar system because National Grid tracks the solar system, all the electrons that are produced. They track every single criteria of that because they are required to compensate for the actual generation of the solar system for an AC value. They use an AC formula because they don't want to over compensate a solar system that actually isn't producing. It is great as a 1 megawatt ground mount at the landfill, but the reality is that if it is raining out three weeks, twelve months of the year then it is not actually producing 1 megawatt, so you don't want to have ratepayers paying for energy it is not actually generating. I believe AC is what is actually transmitted back to the grid as credit and that tracks from National Grid in terms of what they need to cut a check to the developer and ultimately the property owner as well. Mr. Lamphere indicated that he felt this was a good reason for doing it this way. He asked if the Town was to get that electric bill? How would the Town know how much AC was used? Mr. Kearns indicated that this is what he told the Town not to get involved in regarding terms of what the solar system is producing. We have some cities and towns that want to draft net metering ordinances at the local level and they want to get into what that particular solar system is producing on that building or roof space. We are seeing laws now that are very strict the terms of the generation of these systems. National Grid is the entity that tracks all the electrical generation of the output. People still have to go through the local level and the process of pulling a building permit and electrical permit, but in terms of electrons flowing and how much criteria is being produced, that is all overseen by National Grid. Mr. Lamphere asked won't the Tax Assessor have to know how much AC is actually being produced to levy that tax. Mr. Kearns said that part of the issuing of the tangible tax revenue is the developer will have to provide a copy of the Interconnection

Service Agreement with National Grid and that will tell you exactly what the output of the solar system is and that way your local Tax Assessor will have that specific line item in that agreement that will say it is going to produce “x/y” kilowatts and that times \$5 is what you will be required to pay the municipality when it goes online. Councilor Thompson spoke regarding the proposed Senate bill that the Council was provided on Farm, Forest and Open Space, No. S0570, and it is confusing, but it does in the end seem to state that a farmer may take a portion of their property out of the Farm, Forest and Open Space and use it for solar, so I guess that would be a DEM question. Mr. Kearns agreed. He asked that someone send him the questions the Council had and he would respond. It was indicated there should be a legal ability to waive this provision and Mr. Kearns would bring this up again at the next legislative session.

There were no questions from the public.

The Workshop closed at 7:35 PM.

Elizabeth J. Cook-Martin

Town Clerk