

State of Rhode Island
County of Washington

In Hopkinton on the first day of October 2019 A.D. a solar power informational workshop was held in the Chariho Middle School Auditorium, 455B Switch Road, Wood River Junction, RI 02894 beginning at 7:11 p.m.

PRESENT: Alfred DiOrio, Amy Williams, Ronald Prellwitz, Keith Lindelow, Emily Schumchenia; Town Planner James Lamphere; Deputy Town Clerk Marita Murray.

Also present: Town Councilors Barbara Capalbo and Sharon Davis.

PRESENTATION – STATE OF RHODE ISLAND RENEWABLE ENERGY GOALS, STATUS AND PROGRAMS TO ENCOURAGE RENEWABLE ENERGY – CHRIS KEARNS, RI OFFICE OF ENERGY RESOURCES

Chris Kearns indicated that the State has been looking at the most recent renewable energy incentives, which he explained were shifting to encourage developers to use disturbed or previously developed sites. The actions underway for solar siting consist of a brownfield incentive program, carports, residential and commercial rooftop programs and technical assistance to municipalities. Mr. Kearns explained that the Division of Statewide Planning and Office of Energy Resources conducted a statewide outreach and held meetings during the summer through fall of 2018 and solar siting education documents were released in February of 2019 for municipal officials and interested stakeholders. They have been actively promoting roof mounted residential solar programs and there are over 6,000 homes across the state which have been awarded a federal investment tax credit. Mr. Kearns went on to state that as part of the 2020 renewable energy growth program expected to launch in April, is a carport adder, subject to PUC approval. This program will also support roof mounted residential and commercial systems in addition to ground mounted installations. The Office of Energy Resources is currently providing technical assistance to eligible virtual net metering customers and they are including language in the RFPs for the strongest consideration to be in developed/undeveloped commercial/industrial zoned lots, gravel pits, brownfields, landfills and other disturbed type properties. Mr. Kearns stated that his office has been working with an outside contractor, Synapse, on a comprehensive analysis of where solar projects could be built without destroying

forests and fields. In mid-October Synapse will be preparing an estimate of what the costs will be to achieve those objectives in certain locations. They will examine what other New England states and mid-Atlantic states have done in terms of solar siting with their state policy and incentive programs, and they are expected to present their final report to the Office of Energy Resources in March. Mr. Kearns explained that the Governor's goal was for Rhode Island to produce 1,000 mw of clean energy by 2020 and as of the second quarter of 2019 the state was at 793 mw. Mr. Kearns believed that a big chunk of that number came from off-shore wind.

Councilor Davis asked Mr. Kearns when that figure was last updated because she believed Hopkinton was producing 80 mw at this time; Mr. Kearns believed that number was due to be updated again in the near future. Councilor Capalbo questioned carport and rooftop solar panels and if weather was an issue. Mr. Kearns believed this wasn't a big issue in this area. Eric Bibler asked Mr. Kearns about the cost of decommissioning and if insurance amounts were adequate. Mr. Kearns indicated that he would have to defer to the town. Mr. Bibler stated that the town was getting no guidance and no one had a clue as to the amount needed to decommission a site; Clearway Energy had stated at a meeting that they have never decommissioned a site. He felt that most of these projects were owned by LLCs and if there was not enough money held in escrow then it would become the town's issue. Mr. Bibler indicated there was a solar array installed in Texas and within six months of the installation a tornado came through and wiped it out. This project was insured for the cost of the installation, however, that was not enough and it was believed that the cost would be 130% to 140% to take down what was remaining and put it all up again. Mr. Kearns advised that insurance was handled at a local level. Mr. Bibler thereafter asked which reduced more carbon emissions, installing a solar array or having a forest and Mr. Kearns stated that this was a local land use decision.

PRESENTATION – OVERVIEW OF BEST RENEWABLE ENERGY SITING PRACTICES – SCOTT MILLAR, GROW SMART RHODE ISLAND

Mr. Millar advised that Grow Smart supports the Governor's goal, however, Rhode Island solar siting has caused some unintended consequences such as encouraging the development of important natural areas; solar can out compete

open space preservation and housing; community character conflicts; and forest loss which was counter-productive in managing climate change. They wished to reduce community conflict and build public support for solar developments by prioritizing solar in developed and disturbed areas and to avoid and minimize impacts to natural, cultural and historic areas. Mr. Millar suggested that Grow Smart believed the best locations to be landfills, rooftops, solar canopies in parking lots, gravel banks, brownfields, business/industrial zoned lands and existing fields. He acknowledged that Hopkinton recently enacted a solar ordinance and his one concern was that it limited the height of panels to twelve feet which would not allow for a parking lot canopy. He felt that Rhode Island was in a climate crisis and we needed to reduce greenhouse gas emissions and absorb and store carbon from the atmosphere, suggesting that the forest was the most economical climate change solution. Rhode Island has approximately 368,000 acres of forest which absorbs carbon emissions from over 100,000 cars annually or 20-30% of greenhouse gas emissions annually. In 2014, DEM purported that Rhode Island's carbon storage value was \$39 Million annually. Mr. Millar suggested that forest preservation was needed to achieve the RI greenhouse reduction goals. He also indicated that DEM had performed a study of RI core forests which were unfragmented forests with 250 acres or greater. In Hopkinton the core forest is 35%. He believed that there was potential land area of 34% in Hopkinton that could still be used for solar development.

There were several questions about the RI greenhouse gas emissions reduction plan which Mr. Millar answered. Eric Bibler questioned cutting down forests in order to put up a solar array, and if anything was accomplished in reducing carbon by doing this. Mr. Millar stated it would be counter-productive to clear forests in order to put up solar. Mr. Bibler asked Mr. Millar if it made sense to put up solar in forests and Mr. Millar stated no, they wished it to be on already disturbed areas. Mr. Millar indicated that he would like to see Rhode Island take a step back to reassess how much solar is needed and how much should be in Rhode Island and how much should be out of state, with offshore wind being the biggest player. Mr. Bibler felt they should set a goal that made sense. Councilor Capalbo stated that they should protect forests, as well as open spaces and fields in order for nature to survive. Mr. Millar indicated this was a good point and stated that

meadows and forests are also good for absorbing carbon and storing it and those areas should not be disturbed.

**PRESENTATION – PERSPECTIVE FROM A RENEWABLE ENERGY DEVELOPER:
SOLAR DEVELOPMENT EXAMPLES ON DEVELOPED AND DISTURBED SITES –
PAUL RADUCHA, KEARSARGE ENERGY**

Mr. Raducha advised that Kearsarge Energy operates in New England, though they currently do not have any projects in Hopkinton. He stated that a lot of their projects were on capped landfills and they sometimes use sheep to keep the grass and brush down. They base their projects on the topography, wetlands, flood zone, trees and other obstructions; they determine what the landowner's expectations may be; program incentives; and, off-taker terms and conditions. A potential issue with a promising site, such as a landfill, might be because it is located in a residential zone where the town prohibits solar development. If you eliminate solar from a residential area or from certain zones, which makes sense, if a landfill or brownfield or contaminated site is in that residential area, the town should allow this by special use. In such cases lot coverage should also be flexible. Mr. Raducha stated that the panels they use are rated for wind speeds up to 200 mph. As these panels grow old and need to be replaced the technology improves and they don't need as many panels to produce the same amount of megawatts. Regarding decommissioning, Mr. Raducha stated that on a recent project they were working on, they received a shipment of broken panels which they sent back to the factory where they would be repurposed. He advised that Kearsarge Energy would be changing the Chariho solar panels with new panels which were a lot stronger and they would take up less of a footprint. The old panels, he believed, were going to be used to build a kiosk for charging cell phones.

Councilor Capalbo asked about battery storage and Mr. Raducha advised that they do use battery storage and National Grid was addressing that. There was further discussion from the audience. Eric Bibler asked about the cost of decommissioning and Mr. Raducha stated that he would get back to him on that. Amy Williams asked if the panels were all made of the same materials and Mr. Raducha indicated that all of the components were the same, the panels were just different sizes. He felt the one flaw regarding decommissioning was that it was based on a per megawatt amount and he felt it should be based on a per panel

cost. Mr. Prellwitz asked what was in the panels and Mr. Raducha stated that he would email him that information. Ms. Williams asked him to send that information to the Town Planner who could then provide it to all Planning Board members. Mr. Raducha indicated that Kearsarge Energy owns most of their sites and monitors them. Councilor Capalbo asked if they owned the land or leased it and Mr. Raducha indicated that they mostly leased the land but in some cases they did purchase it. Carolyn Light asked Mr. Raducha if there were any projects that they have or may reject and Mr. Raducha stated that they had rejected a lot of projects. Councilor Davis questioned Mr. Raducha on how they maintained their sites and he indicated that they have someone mow the property and they have inspectors (electrical and contractors) that do quarterly inspections. Someone asked about decommissioning and if they would replace the panels or take them down. Mr. Raducha indicated that it would depend on the owner of the property. If they were to replace the panels, he believed the footprint of the array would be significantly smaller. It was asked if the Governor's goal for 2020 of 1,000 megawatts was final or if in 2021 they would set an additional goal. Chris Kearns stated that a new Governor may have other plans and may issue an executive order, but that would be determined by the next administration. Councilor Davis asked if anyone reviewed how many megawatts each town used. She stated that Hopkinton has replaced its own energy by 50%, which she believed was enough. Mr. Kearns stated that other towns in RI may not see so many applications. Hopkinton has seen an over-abundance because we have empty land here. Carolyn Light inquired if other communities have experienced applications to change residential areas and Mr. Kearns stated yes, but Hopkinton sees more because we have more land.

Mr. DiOrio thanked the three presenters for their time.

THE WORKSHOP WAS CLOSED AT 9:18 P.M.

Marita D. Murray

Deputy Town Clerk