

Planning Board Meeting Minutes
August 5, 2019 Shutesbury Town Hall

Planning Board members present: Deacon Bonnar, Jeff Lacy, Steve Bressler, Linda Rotondi, Robert Raymond, Michael DeChiara, and Jim Aaron
Staff present: Linda Avis Scott/Land Use Clerk

Guests: Melissa Makepeace-O'Neil/Abutter, Maurice Gregoire/Shutesbury Electrical Inspector, Mike Vinsky/Abutter, Walter Tibbetts/Shutesbury Fire Chief, Michael George/Nextera, Kevin Medei and Jeffrey Macel/Lodestar Energy LSDP 12, and Penny Jaques/Conservation Commission

In the absence of a chair, Bonnar calls the meeting to order at 7:15pm.

DeChiara moves and Rotondi seconds a motion to nominate Deacon Bonnar to continue as Chair of the Planning Board; the motion passes unanimously.

Webpage: DeChiara: the Board's webpage has been updated and feedback is requested. Lacy appreciates the reorganization and availability of information for applicants; Approval Not Required and Preliminary and Definitive Subdivision Plan information needs to be added. DeChiara suggests a paragraph about the role of the Planning Board which Lacy agrees to work on.

Complete Streets: DeChiara: the Select Board is willing to consider a draft policy statement which he is willing to write. Lacy requests the Planning Board have the opportunity to review the draft prior to submission to the Select Board.

Public Comment: None offered.

Raymond moves and DeChiara seconds a motion to approve the 6.24.19 meeting minutes; the minutes are unanimously approved as presented.

Case 19.02 Planning Board Special Permit: LSDP 12:

At 7:30pm, Bonnar calls the hearing to order. As an abutter to the proposed project, DeChiara recuses himself.

Jeffrey Macel/Lodestar: the special permit application proposes an energy resilience system and storage; there will be four concrete pads – two for inverters and two for battery storage; two of the pads will be 4'x12' and two will be 4'x20' (Samsung SDI Battery Specifications dated 6.8.17 and Rack Specifications). Macel introduces Michael George of Nextera. Per Macel, Nextera is the largest renewable energy provider in the United States and experienced with energy resilience systems. Macel reviews the site plan ("System Resiliency Plan, dated 6.4.19, by J.R. Russo & Associates, LLC). Per Macel, the fire prevention plan has been reviewed with Fire Chief Walter Tibbetts and Alternate Electrical Inspector Jim Slowinski who is working with Maurice Gregoire/Electrical Inspector. Michael George/Nextera reviews the "Nextera Energy Resources Battery Energy Storage Systems and Fire Safety" packet. Per George, lithium ion batteries are the leading technology; the system looks like a server room; Nextera's 24-hour

remote operation center has visibility for each site and each site has a fire detection and suppression system and each container has its own cooling system; the battery management system detects warnings remotely. George: Nextera also has a lab in which batteries are tested for how they perform and react over time; there are checks in place to ensure safety. George to Raymond's question: the batteries create system resilience and ensure system reliability by storing extra energy and dispatching it a later time, i.e. later in the day or at peak or critical times; without batteries for storage, the extra energy dissipates as heat/inefficiency; the batteries enhance the system by allowing the panels to produce maximum energy. Kevin Medei/Lodestar to Raymond's question about power output: the batteries will be able to store 1.5- 2% of the energy produced specific to this site. Macel: in addition, the batteries will deploy energy to cover unmet demand later in the day; they allow increased use of renewables. Medei to Bressler's question: in December, the system produces about ½ of what is produced in July; battery storage is the future of solar. Michael Vinskey/Abutter asks for clarification on the enhancement. Macel: there will be a 1-2% enhancement of production; the panels generate in DC power and the inverter converts the power to AC; battery storage allows capture of the extra power generated by the panels that would otherwise be lost; the size of the storage is 2 Megawatts or 1/3rd the size of the DC component which is the ideal size for this case in Massachusetts. George to Vinskey's question: the remote center "sees" the system electronically by viewing the data and noting anything out of the normal range. Medei: the cell modem was inspected by Verizon to ensure there is enough service to transmit data. George: there are fire, safety, and door alarms; if one goes off, the system shuts down; there are staff who figure out the best times to charge and discharge the batteries; Nextera has relationships with local partners. Medei, to Bonnar's question, explains the concept of "clipped energy" – the energy at the top of the production curve that, without battery storage, is lost. George to Bressler's question: there has never been a battery fire at any of Nextera's facilities; prevention is the focus that is why each battery module has sensors for temperature and voltage and the system will shut off an individual battery or the entire rack if indicated; there is 24-hour facility monitoring and support is dispatched as needed; the containers have smoke detectors, and if alerted, the remote will check the container's temperature and, if there is a second alarm, smoke suppression will deploy; site inspections are conducted to ensure these work. Fire Chief Walter Tibbetts: two points – a lithium fire is caused by physical damage to the battery or thermal runaway when the battery gets too hot to stop and these batteries are no more unsafe than car lithium batteries. George to Bressler's question: the batteries' life span is over ten years; the lab cycles the batteries and calculates their "state of health"; in some instances, there are extra racks for extra batteries. Macel refers Board members to the battery specification sheets in the packet. George refers to the spec sheets for Tibbetts' question: the batteries meet UL standards; Nextera takes the selection of battery manufactures seriously and ensures that they have these certifications. Lacy: other than placing the battery storage structures, will there be any other changes to site? Macel: none what so ever; there will be trenching between the concrete pads and Lodestar will file a building permit application for the four structures and an electrical permit for the trenching. Medei: the trenching will be very minimal. Lacy: one of the enclosures is at the bottom of the no cut area. Macel: it is located directly outside of the no cut area. Maurice Gregoire/Electrical Inspector: Slowinski and I will be studying the application and related materials. Macel to Raymond's question: this project is part of the SMART (Solar Massachusetts Renewable Target) program. Bonnar to Vinskey's question: Town Counsel Donna MacNicol recommended a special permit application be filed because the proposal to install system resiliency represented a sufficiently large enough change to what had

already been permitted. Lacy notes that the expansion of solar panels on the eastern side also required a special permit. Penny Jaques/Conservation Commission asks if the Planning Board has visited the site during the current growing season. Lacy: the site was seeded however the Planning Board has not conducted a recent site visit; the last visit was during the wet spring. Tibbetts notes that there are places where small shrubs are growing up. Jaques: there is a special permit condition requiring a certain percentage of vegetation be present. Macel: the site was reseeded this spring, however, because he does not know how it is doing, suggests revisiting the site in September, a good time for spot reseeded. Jaques recommends ensuring the site is stable. Lacy suggests continuing the public hearing and conducting a site visit, that includes members of the Conservation Commission, before the next meeting. Macel will have the battery storage/inverter sites staked out. Lacy moves the Planning Board close the public hearing discussion for this meeting and continue the public hearing for Case #19.02 until 9.9.19 at 7:15pm with the applicant's agreement and, in the interim, conduct a site visit on 8.19.19 at 5pm; Raymond seconds the motion: the motion passes with six members in favor and one abstention.

Webpage (continued): DeChiara: perhaps the site might include a listing of current special permits or other items worth sharing. Lacy notes the importance of attracting folks to Planning Board meetings, however, including a list of active cases will merit more discussion; it is important to keep the site as discretionary as possible. DeChiara suggest a future agenda item to consider a strategy for the Board's webpage; it will be useful to post documents that are helpful in orienting the public.

Items for the next meeting's agenda: a recap of proposed Zoning Bylaw amendments, the Mass Vulnerability Preparedness grant and Lot O32. Bonnar requests that members read the 7.20.19 "Objection to Cell Tower" email from Mary Lou Conca.

At 8:24pm, Raymond moves and Lacy seconds a motion to adjourn the meeting; the motion passes unanimously.

Documents and Other Items Used at the Meeting:

1. Samsung SDI Battery Specifications dated 6.8.17 and Rack Specifications
2. System Resiliency Plan, dated 6.4.19, by J.R. Russo & Associates, LLC
3. Nextera Energy Resources Battery Energy Storage Systems and Fire Safety" packet
4. 7.20.19 "Objection to Cell Tower" email from Mary Lou Conca.

Respectfully submitted,
Linda Avis Scott
Land Use Clerk