TOWN OF STAMFORD
PLANNING COMMISSION PUBLIC HEARING
August 21, 2023
(UNAPPROVED)

Planning Commission: Aaron Malachuk, Chair, Sheila Lawrence, Maura Hawkins, Debra Burchard, and Jenifer Hughs.
Carolyn Brooks, Kurt Gamari, David Saldo, and Daniel Potvin were not present.

Visitors: Bernadette Aubin, James Bleau, Rachelle Bleau, Robert Bouchard, Nancy Bushika, Ken Butcher, Cynthia Candiloro, Richard Cristofolini, Dennis DeGrenier, Brandon Dobnick, John Dunn, Tammy Elias, John Engel, David Fierro, Lisa Gramlin, Jedidiah Gramlin, Michael Holland, Dottie Howe, Linda Hughs, Marie Kelly-Whitney, Christopher Derby-Kilfoyle, Eleanor Derby-Kilfoyle, Peter Landry, Susan Landry, Bill Levine, James Miller, Bill Murphy, Lars Parrington, Sheila Pecor, Heidi Peterson, Lisa Prevey, Debra Righi, James Righi, Linda Rodovick, Denise Rondeau, James Rondeau, April Sanders, Sid Sanders, James Senecal, Tyna Senecal, Richard Silc, Jim Stimpson, E-Jay Tatro, Pamela Tworig, and Gina Zauli.
Martha Staskus, Chief Development Officer, Jo Anna Young, Development Project Coordinator, James Merriam, Chief Executive Officer, Ryan Darlow, Solar Development Engineer, all of Norwich Technologies.
John Zimmerman, President of Vermont Environmental Research Associates.
Eddie Duncan, INCE BD CERT, Senior Director of Resource Systems Group.
Lori Shepard, Secretary.

Aaron Malachuk called the meeting to order at 6:00 p.m. and opened with the Pledge of Allegiance. He asked to have all questions submitted on index cards in an effort to keep the meeting orderly. He asked Martha Staskus to give an overview of the project.

Martha Staskus indicated that it will be a single 2.2 MW wind turbine located off Main Road in the northwest end of town. The first half of the land has already been disturbed so the changes to the landscape will be minimized. The acres directly surrounding the wind turbine will be newly disturbed. It is a long process and they are still in the information-gathering phase. Electrical energy is permitted by the state through the Public Utilities Commission and there is a long list of criteria that has to be met. This site was selected due to its great wind resource and proximity to 3 phase power. In 2013 the state legislature created the Standard Offer Program to create and deploy renewable energy across the state. The proposed Stamford Main Renewables project will be located on private land. Norwich Solar/Norwich Technologies is a Vermont-based company that helps solve decarbonization problems. Jim Merriam gave a brief history of the company.

Ryan Darlow described the components of the turbine. Ed Duncan will be conducting the sound analysis. He said conversational speech is between 55-65 decibels. Hearing loss will begin with repeated exposure to 85 decibels. Background noise averages 30-45 decibels. The turbine will also put out low, medium and high frequency sounds, but mostly medium frequency. Most of the sound will come from the aerodynamics of the wind swooshing through the blades. The second sound will be the motor sound of the generator, although the generator is designed to minimize its sound output. The turbine will increase in sound level as wind increases and it spins faster, up

to a maximum of 8 meters/second. Vermont allows windmills to produce up to 42 decibels of sound in the day and 39 decibels at night. This level is lower than several other states.

John Zimmerman will be conducting the visual and aesthetics aspects of the project. They provided a map projecting locations in town where the wind turbine will be visible.

QUESTIONS

1. Why was this location chosen? It has great wind energy and it is near 3 phase power. They acknowledged that the Planning Commission chose a preferred location in the north western portion of town and it is noted in the town's Enhanced Energy Chapter of the Town Plan. But that location of town is owned by the National Forest and the National Forest says no, they will not entertain any windmills on their property. The Planning Commission stated that this proposed site is not in the preferred location.

2. What about the side effects of headaches, nausea, sleep problems, night terrors, tinnitus, irritability, anxiety, concentration and memory problems, issues with equilibrium and dizziness, and the harm it causes to bats, birds and bees? As an abutter, I am against this. They will be doing testing on birds and bats. The state has guidance for how much clearing is acceptable and has an acceptable level for bats. As far as human health, they were not sure what the question is referring to. A resident asked about the shadow flicker. They said they are not doctors and referred to studies that have been done with more information than they could give.

3. Whose property is this going on? Kevin and Roger Rondeau's property with access through James and John Dunn's property.

4. Will there be a proposed photo from Bushika Road of the windmill? They are working on the proposed visual studies, but points of view from private property locations are not in the realm of the study.

5. How many of these turbines has Norwich built and where. Norwich has not built turbines, the company mainly does solar. Martha Staskus described her involvement in building several wind turbines such as Deerfield, Searsburg, Russell, MA and other locations in Vermont and New Hampshire. John Zimmerman and Ryan Darlow have also been involved with windmills.

6. Who will own them? Third party investors will own it once the project is complete, but they haven't begun discussions until the permit is granted.

7. What will the powerlines look like on Main Road? They will look relatively the same.

8. Who will buy the power? The Vermont distribution utilities will buy all the electricity. Green Mountain Power will get some along with the Vermont Electric Cooperative and some smaller utility companies in Vermont.

9. How much of the project's anticipated area of disturbance is already disturbed? Is any part of the area you are constructing on part of the existing Act 250 violations? Yes, the whole access parcel is under Act 250. 11 acres out of the total 20 acres is already disturbed. When they cross

onto the Rondeau parcel it is forestry that will be the newly disturbed area.

10. Did you look at any other locations? No.

11. Did you chose this site for other reasons besides wind? The area fits one turbine perfectly. It was chosen for the great wind resource and its proximity to 3 phase power.

12. Why not put the windmill near where there are other windmills? It won't fit the Standard Offer Program. Although it would be a logical placement, it is not regulatorily allowed. The agreement is that the electricity will be purchased at a set rate so it cannot be placed alongside other windmills that are generating power.

13. What is the capacity factor of 2.2 MW? What is the capacity factor overall? They are hoping for a 35-40% max capacity factor, which is the percentage of time the turbine will be running at max. They hope for 85%-90% operational hours, or rotating hours. When it is running at the full 2.2 MW is when it will be producing the most noise, but they are still doing testing and said the wind movement varies from year to year and season to season.

14. Can you provide specific details on how the visual/aesthetic impacts are assessed? Please focus on what the residents will see from different perspectives. Is there data on how visual impacts affect people? They can do simulations and provided a map showing how the windmill will look near 2581 Main Road. They do not do any analysis from private property. The negative effect declines with distance. They are still waiting for test results.

15. What ancillary equipment is needed on the site beside the turbine? They will need construction equipment during the construction phase and then the turbine and wires to the 3 phase connection.

16. Have they looked at ski areas as potential sites? Ski area insurance policies will not allow windmills at ski areas due to the liability of ice that might fall onto the trails or people below. This area is intentionally cited so that no person or building will be under it.

17. Are there federal or state subsidies involved? They are utilizing the Standard Offer Program through the state which sets a fixed rate cost. Right now the rate will provide a cheaper power price, but it is the same flat rate for 20 years.

18. Did they contact the landowner or did the landowners contact them? The landowner contacted them.

19. What assurances do we have that only 1 wind turbine will be built in this area? The Standard Offer Program only allows for one 2.2 MW turbine. You cannot put another windmill project side by side or it will merge into one plan and that would be prohibited.

20. How much will a person who is sensitive to sound hear nearby? The new sound rule in Vermont is very strict. It has stopped the development of a lot of areas. Some areas that qualified before and already have turbines on them would not qualify now. The decibel study will be on

their website when completed. They are noise engineers, not public health engineers so they cannot answer but pointed toward health studies that have been conducted near wind turbines.

21. How will we know when the studies are done? The studies will be included in their filing with the Public Utilities Commission. They are looking at filing in October.

22. What model of turbine is being proposed and what are the specifications? A GE 2.2 MW turbine. The hub height will be 89 meters with 127 meter diameter rotator blades. The total height will be just under 500 feet.

23. What will be the front facing direction of the turbine or will the hub be rotating? The hub will be active and will adjust its orientation to be upwind.

24. Will there be batteries that will need storage? If so, where will they be located and what is the plan to protect the area and residents in case of fire or emergency? There will be no batteries. They will have an emergency service plan and have reached out to local state police, sheriff, fire and ambulance. They will have an emergency plan for both the construction and operational phases and will work with local communities as to what training the departments want.

25. Will the town have access to the property for fire or other emergencies? Yes. There will be a gate at the bottom of the road but all emergency services will have the codes/access.

26. If the road is gated will the landowner be able to use it for other activities? Yes, it is their property and they can still use the land but they can't use it in violation of the permit.

27. How will you be sure the town is sufficiently equipped to deal with emergencies connected to the turbine? They will coordinate with the local emergency services.

28. Have studies been done or are any planned to measure the effects of infrasound on human beings and animals (ex. dogs with their increased sensitivity to sound)? Studies have been prepared in general but not as part of this project. A sound study will be done to cover the entire area down to 30 decibels. They will have a map and a table of the sound projected.

29. How will sound impact be measured? If already done, what were the results of the sound study and from what varying distances? Will neighbors of this project hear humming buzzing or swooping of the blades? There may be swishing, humming, or buzzing sounds. An audibility study is not required. The closer you are to the windmill, you could hear swishing and the farther away, the sound blends together as more of a steady hum.

30. Will the sound from this turbine mesh with the sounds from the turbines on the Hoosac Ridge? Yes, sounds are additive, but it does not double the sound.

31. What happens with time when maintenance is less than perfect and the sound increases due to wear and tear and an imbalance? Every odd sound affects operation and power output so changes in sound will be looked at. Maintenance will be done for the life of the project.

32. What are the expansion plans? Are there any guarantees of no expansion (addition of more wind turbines) in the future? Norwich has no plans for any future development.

33. What are the projected financials of this project? How much will it cost to install? How much electricity is it projected to produce each year? The project installation will be millions of dollars. They are still waiting for some studies to come back. They are estimating that it will produce $400,000.00 of electricity per year.

34. Exactly how will the town be compensated? Will this be over time? Is any other non-financial compensation being made to either the town or landowners? They have to pay the taxes, insurance, maintenance and the investors need to be paid back. As for the town compensation, they estimate the town would receive $30,000.00 in taxes and $12,000.00-$15,000.00 will go to the State of Vermont Education Fund. There will be no non-financial compensation to the town or the landowners.

35. What is the expected life of the project? 25 years.

36. Can the contract be re-negotiated at the end of the 25 years? Who knows where things will be in 25 years.

37. What can nearby homeowners expect with their property evaluations? They referred to a 2013 report of property sales throughout the nation after wind turbine construction and there was no documented impact.

38. What if someone buys out the investors after a few years. The owners are incentivized to keep it going.

39. What about after they make their millions and walk away, we will still have to look at this junk. They have a decommissioning plan so if someone walks away, money is set aside for decommissioning. The funds are held by the state.

40. What if the cost of decommissioning down the road is higher than the funds set aside now? The plan is reviewed periodically and can be readjusted.

41. People who live close by will definitely suffer a devaluation. They noted that Milton is a fast growing community in Vermont and a new residential development was built after the windmill project, indicating that the windmills did not have a negative impact on growth in that area.

42. Please provide copies of statements to other towns in Vermont showing how much they were paid each year for their wind turbines; please specify the size of the turbine for each statement. Georgia, Milton, Searsburg, Readsboro, Sheffield and Lowell, MA have wind turbines. You are welcome to call each town to see what they are receiving in taxes.

43. Have you done other 1 turbine projects? Norwich has not but Martha Staskus did one is 2016-2017 in Holland, Vermont.

44. How are you estimating the $30,000.00 payment to the town? It is based on the valuation. They estimated a tax rate of $1.04 on a $3 million value to arrive at $30,000.00 in tax.

45. What is the amount being paid to the landowners for the lease? They did not feel comfortable releasing that figure. They do not have an agreement with the landowners to divulge that information.

46. Does the town have a say in this? The Public Utilities Commission will make the final decision but they will take all comments into consideration.

47. How will the turbine impact the property values of nearby residents? What studies have been done? Please provide data from comparable homes and properties at other sites? It was already answered.

48. Will payments be offered in lieu of taxes so the town is guaranteed payment for 25 years? Norwich is willing to discuss this with the Selectboard.

49. Does the Planning Commission have any say? Can we kill the project? The Enhanced Energy Plan that the Planning Commission passed gives the town a seat at the table. It was suggested that all comments should be entered into the e-puc.org portal. The case no. is 23-2313-AN. Norwich will put the case no. on their website.

50. How will the power generated by the turbine be fed to the grid? If the power lines are under ground, how will the installation of those conduits affect water runoff and drainage around the site and abutting land? There will be wires that connect to the 3 phase power on Main Road near Bushika Road. Above ground wires will be installed along the access road and will go underground the final distance to the turbine. They will have a storm water plan that will address the water runoff.

51. How many homes are actually within a 1 km radius? 9.

52. How long is the proposed lease for this project? What happens at the end of the lease? What happens to the equipment when it fails at the end of its useful life? Will money be placed in escrow now to remove the equipment at failure? 25 years. Decommissioning funds will take care of the equipment. The generator, wiring, transformers and many other pieces will be recycled. Depending on the blade and other windmill components, it may be recycled or sometimes just dismembered.

53. Why is this project being considered due to the fact that this site does not meet the 1 km standard set in the town and BCRC guidelines? Especially since there is far less populated land on which to site this turbine away from residences? The verbiage in the Town Plan are guidelines, not rules. The town's Energy Plan is what gives the town the opportunity to have a say tonight.

54. Is the proposed land for this project in violation of Act 250 and, if so, how does this impact the feasibility of this project? Is there a conflict? Yes, the landowner will have to correct the situation before the Public Utilities Commission will issue a permit.

55. What is the time frame for the repairs? The Natural Resources Board will report that the Act 250 violations will have to be rectified. They cannot go forward with the project until the property is fixed. The plan is to complete installation by 2025. This project will benefit the town insofar as it requires the violations to be fixed. Norwich will not be fixing the land, it will be the landowner.

56. What happens if Norwich Technologies goes out of business and/or the equipment breaks? Who will be responsible? What recourse does the town then have? The decommission plan.

57. What other wind turbines has Norwich Technologies installed in Vermont? How long have they been operational? What issues have those towns faced in the years since the turbines were installed? Norwich has not installed other turbines in Vermont.

58. Does the Planning Board have a copy of everyone who received the notification of this project for a response? Is this available to the public? A list of the almost 40 people notified was emailed today to the town office. Yes, the list is available to the public.

59. How specifically will the town be compensated for housing this project? In what form, what dollar amount, and for how long? Approximately $30,000.00/year in taxes for 25 years.

60. How bright is the nacelle light? Will it disrupt our darkness? They will have to comply with the regulations. They do not know the lumens at this time.

61. Will the windmill at nighttime and its light be modeled? They will look into it. It was stated that the light on the Hoosac Range windmills has a sensor and is not on all the time.

62. What will the impact be on the ecosystem and the wildlife? What studies were done and what were the outcomes? How will environmental damage be mitigated? What will be put in place to restore any damage done by this wind turbine during construction and thereafter (ex. birds, bats, runoff, to name a few)? They will be doing many studies: environmental studies, bird and bat studies, large mammal (e.g. bear and deer) studies, streams, wetlands, and the threat to endangered plants and species studies. The Agency of Natural Resources has been doing a bear study near the Deerfield windmills since 2013 and they have requested to see that data.

63. Will the topography of the mountains amplify the noise emitted from the turbine? How is potential sound impact measured and modeled before the turbine is installed? The topography will affect the sound and it will be represented. They will do a 3D model which takes into consideration how the sound travels. They will use available terrain data and project the sound source.

64. Will a visual model (preferably 3D) and a detailed map of the sight of the turbine from EVERY nearby parcel be provided? No. They brought a computer generated map of the valley highlighting the areas where the turbine could be visible. It is a practical issue of how much they can do. They will consider coming to a private parcel if someone wishes.

65. Was Alpenwald Village, Inc. notified? What about Readsboro? Were any residents or town

officials notified of this project? Just abutting property owners and towns within a 10 mile radius were notified.

66. What human health effects/quality of life testing has been conducted and what was the outcome? None.

67. How many turbines can be sited in the area accessed by the access road? Wind resource management, wind direction, the terrain, and separating the turbines to be 3 diameters apart, are factors in determining how many could be placed.

68. Would this project be financially viable with smaller turbines than 2.2 MW? It would not be feasible. The costs would be the same and the energy output would be less.

69. Have you modeled where the sound of the turbine can be heard by homes in Stamford and surrounding towns and what the levels would be at different locations in the sound shed? They are not doing an audibility study. They are doing a sound study going out to 30 decibels which is not completed yet.

70. Do you know what the comparative sound level is from the Hoosac wind turbines from the Stamford School? The sound studies that were done when the Hoosac windmills were installed would not apply since they have made changes to the project to reduce the sound you hear. It was unknown whether new reports were available with the revised sound levels.

71. How will this project benefit the entire town? The town will get a tax benefit. The state education fund will benefit. This will help the state to reach its overall renewable energy goals and will bring public good to all the citizens of Vermont.

72. What percentage of energy will be used/available for Stamford residents? Green Mountain Power rate payers will receive some of the electricity generated but it is too hard to say what Stamford will get.

73. After completing the application, can we as residents decline the project? The Public Utilities Commission will listen to the town and residents' input but they make the final decision.

74. Would you personally approve a turbine project near your homes? Yes. They feel it is better to look at a windmill than smokestacks. You can see energy being produced when the blades are turning unlike solar where you cannot tell if the solar panels are producing energy or not.

75. Will there be a future town meeting to discuss the proposal? Yes they hope the Selectboard would put one together.

76. What are the intentions for additional turbines at this site over time? Norwich has no intentions. This Standard Offer Program only allows up to 2.2 MW which is one turbine.

77. Is this a done deal or does Stamford have the ability to say no? The Public Utility Commission will decide whether this project moves forward and comments from the town are addressed as

part of the review process. The PUC will weigh all elements and decide if it meets the public good.

78. How many large wind projects have you done? Martha Staskus: Georgia, Vermont in 2013.

79. Are there other potential sites in other towns for you to meet your program contract? No the Standard Offer Program ended last year. The contract is specific to this spot so it can't be moved.

80. Would you consider entering into an agreement with the 9 property owners to give them some type of financial benefit? They did not where they would meet as the perception would be much higher and there's really not enough money. First they would like to look at the sound and aesthetics study results and maybe they would consider it.

Heidi Peterson thanked the Planning Commission for conducting a high quality meeting and acknowledged the calm demeanor of everyone present.

MOTION by Aaron Malachuk to adjourn. SECONDED by Maura Hawkins. All in favor. Motion APPROVED. The meeting adjourned at 9:10 p.m.

These minutes were prepared by Lori Shepard on behalf of the Planning Commission for its review and approval.

Aaron Malachuk
Planning Commission Chair, pro tempore

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