A meeting of the Electric Subcommittee was held on April 8, 2020 at 4:00pm. It was a virtual/Zoom meeting format due to the current COVID-19 pandemic.

With a quorum in virtual attendance, Mr. Mootafian called the meeting to order at 4:00 p.m.

Subcommittee Members present: Nishan Mootafian, James Engel, Whitney Hatch, Michael Schaaf, Jon Blair, Ray Leczynski, Dylan Lewellyn

Guests: Kerry Mackin, Selectperson; Dan Heiter, New England Biolabs

Recording Secretary: Kathleen Reed

Abbreviations used: ELD, Electric Light Department; IWI, Ipswich Wind Independence, LLC; LLC, Limited Liability Corporation; PPA, Power Purchase Agreement; IWI, Ipswich Wind Independence; IELD, Ipswich Electric Light Department; O&M, Operation and Maintenance; REC, Renewable Energy Certificate

I. Citizens’ Queries
   There were no citizens’ queries.

II. Approval of Minutes – March 2020
   There were no suggestions for revision or amendments.

   Voted: Mr. Engel moved to approve the minutes of March 2020. Mr. Schaaf seconded, and the motion carried unanimously.

III. Wind II
   a. Background: Mr. Blair provided a comprehensive overview of Wind II. A lengthy summary was sent out from Attorney Christopher Pollart in the packet for review prior to the meeting: The subsidiary of D&C Construction, Ipswich Wind Independence (IWI) was established in 2010 creating LLC subsidiaries to build, own and operate wind turbines in 2012 similar to Kingston Wind LLC. The land lease with the Town of Ipswich had an associated cost of $1/year. The key objectives: Ipswich ELD purchases 100% of the output and only pays for power that is delivered. There is no capital investment in the asset and the ELD does not bear any of the operational or maintenance costs.

   The attorney’s memo outlines the 2018 attempt to renegotiate rate of $116 per MW hour for first 10 years and IWI claimed they would be financially insolvent without a successful renegotiation. In order to avoid bankruptcy, the proposed rate went from $116 per MW hour to $220-$240 per MW hour which was rejected by IELD. After the failed renegotiation, an invoice was sent in excess of $1,000,000 for damages for failure of wind production with claim that the ELD had misrepresented its wind studies and the productivity of the site. This invoice was firmly rejected as well. Between the time the PPA was executed and the date of the fire, October 18 2018, the relationship between IWI and IELD had been fraught with billing discrepancies, extended outages, poor communication, and failure to follow through on several stipulations of the governing doctrine. Of note, the turbine manufacturer itself, Hyundai Wind, is no longer in operation. Their insurance policy canceled without any payout, and the
lawsuits to this point have been unsuccessful. D&C construction began arbitration proceedings, in the UK, with Hyundai Wind and IWI in February 2020 and that process is anticipated to last for a 6-9 months period. It’s thought that the arbitration process may result in further communications from D&C Construction; however, it’s unlikely that it will result in additional legal action.

b. **Status**: Brakes are installed to physically stop the turbine if wind is pushing it too quickly; however, it does operate correctly in the wind so as not to create a sail affect. The FAA light on top of the power is not operable at this point which is a safety issue with the freewheeling operation and failure to comply with light issues. The land lease and PPA are strong enough to be enforceable, and it’s notable that IWI has not met their contractual obligation as the contracts and the language clearly indicates that they are required to remove the turbine. They have admitted verbally that they would like to remove the turbine but lack the funds to do so. The availability of future funds to remove the turbine is unlikely by this LLC for this sole project and asset. The cost of removal has been explored and quoted to be $750,000 to disassemble turbine and place it on the ground and the $150,000 bond noted in terms, which was not provided, would have been grossly inadequate.

With regard to the land lease, Section II, remedies were reviewed and the legal opinion is that it is binding but the legal standing is impaired by the fact that the LLC is bankrupt. Actions to date were summarized in the document from KP Law.

b. **Future**: Mr. Blair stated that the intent moving forward is to do due diligence requesting documentation to ensure that their insurance policy was, in fact, canceled without payout and that there are no funds available to recover. In addition, the ELD is requesting the LLC to provided concurrent so that ELD can file a lawsuit for costs of removal to secure judgment in order to secure priority placement in the event settlement funds are awarded to IWI for Ipswich to remove the turbine.

Mr. Blair opened the floor for discussion and recommendations on next steps. Mr. Engel asked if it would be reasonable and less expensive for the ELD it to destructively remove the turbine and sell it for scrap value. Of note, the turbine is 80 meters tall to the hub and the prop diameter is 86 meters which is why the crane expense is required. Mr. Hatch suggested that the ELD explore the likelihood of FAA sanctions given the faulty turbine lighting. Can they require that the tower be dismantled or to have the tower relit which would require Ipswich to provide the power which would require further consideration as to next step. All agreed that objectives need to be clearly defined as next steps are set.

**Action**: Mr. Blair will explore FAA options for inoperable light on the turbine and provide the information to the ELC.

There was discussion on how much power and value of power that had been generated by Wind II. Mr. Blair stated that for the first ten years of the contract, there was an actual financial gain of 11.6 cents per KWh on residential scale which is 3-5 times of other power obtained on the retail market for other carbon-free contracts. There, the financial impact from the lack of production from Wind II would be a negative number. In addition, IWI taxes were overpaid, and a check in amount of $9,700 is currently being held due to litigation.

Mr. Blair reported that he had reached out to GE in a non-binding, conceptual way, and GE will look at the site and make a proposal under a NDA. Mr. Blair projects an anticipated expense to replace Wind II of $3M for 2.8MW turbine and, presuming nothing from IWI, likely another
$1M for disassembling and salvage hauling with another $1M contingency for an approximately cost of $5M to replace WII by the ELD. Should another entity propose to do the work, the Ipswich cost incurred would be at least $750,000-$1.5M. It is important to determine best use of the property, and Mr. Blair is framing solutions based on energy needs but there may be other options to consider. It was suggested that perhaps an attempt reach out to cell phone towers and companies to explore lease revenue opportunities in addition to exploring opportunities for energy solutions.

Mr. Blair stated that IWI is claiming to Hyundai Wind that there is some sort of material fault with the turbine. It is not anticipated that IWI will continue any legal activities post December 2020 due to lack of funds. Piercing the corporate veil was considered and would mean going after the parent company, D&C, to recoup funds; however, the legal advice is that there is a very low probability of a favorable outcome and would cost hundreds of thousands in legal fees. Mr. Blair feels that it is important for the ELD to follow through with the lawsuit which demonstrates due diligence and the likelihood that there are no options that remain. Legal fees in the amount of $20,000 has been set aside for this endeavor and will be revisited when $20,000 figure has been expended.

There was a motion made by Mr. Engel that the subcommittee recommend to the full Committee to follow the advice of counsel and pursue the friendly suit. This motion was seconded by Mr. Hatch.

Voted: To recommend to the Department that the advice of counsel be followed and that the friendly lawsuit be pursued. The motion carried unanimously.

Lengthy discussion ensued regarding the need to clarify next steps in a timely manner given that Wind II will not be productive again. Suggestions were made that possible options to be explored for the Wind II site might include exploring cell towers revenue and market, landfill use for solar operation, opportunities for the replacement of the turbine by ELD or in partnership with another entity, placing a third turbine on the Wind II site, or considering the location of a Wind II in the Great Neck vicinity. Mr. Engel reminded the group that the Wind II site is not big enough for a third turbine due to wind interference for the operation of each turbine.

Mr. Schaaf suggested that consideration be given to soliciting private entities, in perhaps a statement of interest vs an actual RFP, to see what sort of conceptual interest may be made known. Mr. Blair noted that open solicitations add another level of complexity with issues of time needed to do so and a cutback that may be significant. Mr. Blair suggested that, in terms of operational considerations, that the subcommittee may find that the best approach may be to first agree on what the future of the site looks like and whether or not a partner is desired prior to soliciting interest. It was agreed that it would be important to get input from community as well.

Dan Heiter, New England Biolabs, was present and introduced. He noted that from the PPA point of view, he had worked with Don Newell previously and recently with Mr. Blair to work on PPA as a private corporate partner such as New England Biolabs. Pitfalls are the you incentivize them not to do maintenance because money was done up front and then maintenance didn’t follow as planned. Mr. Heider agrees that it should be a GE wind turbine so that maintenance schedule would be done by GE. He noted that turbine maintenance is not an area of expertise within New England BioLabs. New England BioLabs supports the town providing turbine maintenance. Work would need to be done to ensure that the Town is
properly incentivized for the maintenance component and that New England BioLabs is incentivized into participating and keeping it running. In previous work with Don Bowen, Mr. Heider stated that they had begun the work of looking for a third foundation to put up a bigger turbine which requires placement of a third turbine of 5-7 blade diameters away. The advantages of a third turbine would be that the foundation for the new turbine can begin to be assembled, engineered and installed before Wind II comes down so that you can use the same crane set up to take old down and put new one up. The crane expense of approximately $300,000 for the two cranes to come and do the work at the same time. Mr. Heiter asked whether or not it was certain that the Wind II site is truly the only one available or is there another 400 ft W/NW of Wind II now. Mr. Engel reviewed the complex process of putting up Wind I and Wind II on the current site ensuring that it did not encroach struggle to put up I and II on the site so it did not encroach on conversation land. Mr. Heider also proposed that perhaps consideration to be given to the idea of modeling a third turbine after the Block Island wind turbines that use a four-steel post structure. Bird care issues were noted to be a significant focus in the last round of issues associated with the placement of Wind II.

*Action item: Mr. Blair was asked and agreed to prepare a draft plan that lists additional legwork that needs to be completed so that there is enough information on which to make an informed decision.*

Mr. Blair reviewed the cost comparison for the existing Wind II parameters that incorporate production and investment costs to this point and took the GE figures for a proposed 2.8MW turbine (smallest turbine offered by GE is 2.7 or 2.8MW). Production, debt, O&M, decommissioning, power, REC value were included. GE total average cost for power is approximately $93/MWh. (put in numbers from Mr. Blair’s green slide on cost comparison. REC value would be generated at $25/MWh which puts it at almost exactly the same price as Wind II but allows the necessary control and at no disadvantage to the rate payers. Mr. Blair is of the opinion that the site is viable for another wind turbine and that that should be the primary focus moving forward. In a conservative estimate, he predicts that it is likely that we can get back to where we are with Wind II and that it would be at least a desirable starting point and likely opportunity for a much better situation given the ability to control maintenance and RECs. He reviewed the anticipated greenhouse gas reduction requirements forthcoming from the Commonwealth which call for net zero by 2050 mandate. Indicative numbers have climbed and call for a 50% reduction by 2030, 75% by 2040 and 100% by 2050. Current status of carbon-free resources reviewed (nuclear (Seabrook & Millstone) – 15%; hydro (NYPa) – 5.5%, wind (Ipswich & Berkshire – 7.5%, total available – 28% shortfall – 22%). Wind 1 is almost halfway expected life of 20-year life expectancy, Berkshire 1 is a similar scenario. If no action is taken, the goal of 50% by 2030 will be reduced by about half. If you take an optimistic approach on the power portfolio, 2022 (projected) is if we built a 2.8 MWh turbine at current site, which would require significant focus and effort, the Town would be well positioned for compliance with anticipated state mandate. Mr. Blair will share the information and graphs that he developed with the group in the power portfolio design discussion in next meeting or two.

IV. FY21 Budget and Rates – Final Review and Recommendation
The issues raised in the March 2020 ELC Concern re: capital funding across three documents (Depreciation Fund Cash, Capital Plan, and the Capital Expenditure sheets). Each showing different information; however, it was agreed that clarifications should be incorporated. The sheets (Depreciation Fund Cash, Capital Plan, and the Capital Expenditure sheets) were reworked by cutting down the capital expenditures so that the cash matches the plan and inserting a routine investment figure in the capital plan document to cover the mundane, unplanned items that arise during the course of a year. With these modifications, the bottom lines on all three documents are
in alignment. Other changes were editorial in nature. Specifically discussed was the power portfolio that required aggregate figure blending the component from the market with the prescriptive sources that are obtained via PPAs or ownership. Those sources are locked in at 56% of sourced electricity is that obtained by carbon-free generated power. Mr. Blair included this for presentation in an additional pie chart. Mr. Blair was commended for his work in this regard.

A motion made by Mr. Engel and seconded by Mr. Hatch, that the ELD recommend that the revised documents as presented be presented to the Commissioners of the Finance Committee, and it was

Voted: To present the revised documents (Depreciation Fund Cash, Capital Plan, and the Capital Expenditure) be presented to the Commissioners and the Finance Committee. The motion carried unanimously.

Mr. Hatch requested that, as an item for future discussion, that there be a review of the need for a 30 year depreciation schedule and suggested that a 25-year depreciation schedule be consider in light of the fact that there are technological advances that can be predicted and that it may be good discipline to generate more depreciation expense with forecasted net income levels in order to alleviate angst in future capital discussions prior to next year’s budgeting session. Future discussion was agreed upon.

Mr. Blair requested that the ELD recommend to the full Committee that the base rate be raised by 0.4 cents/kWh to the base rate across all rate classes. This action demonstrates that the power costs coming down (PPA will drop by 0.4 cents/kWh) at no net impact to the customers.

A motion to accept Mr. Blair’s recommendation was made by Mr. Engel and seconded by Mr. Schaff

Voted: To recommend to the full Committee that the base rate be raised by 0.4 cents/kWh to the base rate across all rate classes. The motion carried unanimously.

V. Manager’s Update
Mr. Blair provided an overview on the COVID-19 virus and the associated impact on the business of the ELD. Of note, the office closed to public and a variety of policies and procedural modifications have been implemented to keep optimal readiness levels and ensure the reliability of the service and the optimal system functionality. Modified schedules settling in, water meters and solar arrays continue to be built, and partitioned for service have been processed. The team is to constantly adapting and overcoming. The staff healthy and has been cooperative and flexible. The schedules have been adjusted to dial down to 50 percent staff footprint vs. previously typical day. The Town’s Information Systems department worked rapidly to get VPN running for office desktop access in the home setting. The team will remain in this posture until at least 5/4/20. The building was fogged with disinfectant spray (all office spaces and truck cabs as well) with another round of disinfection scheduled for the upcoming weekend. Everyone doing their part to ensure that a safe environment is maintained. Field staff health and readiness is a priority as well, and the field crew split into two different sections. Mr. Blair was commended for his efforts in this regard.

Mr. Blair stated that compliance with environmental regulations requirements are unaffected by pandemic outbreak. The power plant is due to have stack testing, which is a five-year preventative maintenance item, which is required by the Mass DEP and EPA. The Environmental Compliance consultant will be in the following week as well as a private firm that has been contracted to perform the stack testing which requires that the diesels be run sequentially for approximately one hour each and reading are taken. An alignment calibration for the pressure
temperature monitors will be performed at that same time. A trailer and several lifts will be onsite during this activity. Mr. Blair is developing a timeline to resolve the groundwater penetration issues into the basement that will result in a technically industrial discharge from the sump pump, and the EPA and Mass DEP require resolution to this issue by the end of the Summer 2020. These action items are enforceable and need to be accomplished. Natural gas will be burned for the emission tests.

VI. New Business
There was no new business raised for discussion.

VI. Upcoming Meetings
a. Electric Light Commission – April 21, 2020 (Budget Presentation & Rate Hearing)
b. Finance Committee – April 22, 2020 (Budget/Strategy Review)
c. Electric Light Commission – May 4, 2020 (Rate Hearing)
d. Electric Light Subcommittee – May 13, 2020 (Sustainability Charter & RCS Review)

Mr. Blair will email the information for the upcoming meetings to the appropriate parties.

There being no further business, there was a motion made by Mr. Engel, and seconded by Mr. Hatch, to adjourn the meeting.

Voted: To adjourn the meeting of the ELD at 6:57pm. The motion passed unanimously.

Respectfully submitted,

Kathleen Reed, Recording Secretary