



TOWN OF KINGSTON
Office of the Sewer Commission/Wastewater Department
26 Evergreen Street
Kingston, MA 02364

781-585-4058
781-585-5874 FAX

Elaine A. Fiore
Peter C. Cobb
Thomas W. Taylor, Jr.

Summary
Sewer Commission at Planning Board
September 14, 2009

The Sewer Commission met with the Planning Board tonight to discuss the proposed wind turbine site at the Wastewater Treatment Facility and Transfer Station. Members attending the meeting were Elaine Fiore and Peter Cobb. This summary was prepared based on notes taken during the televised PAC TV broadcast.

The televised meeting began at 7:05 PM. There was no audio with the picture. At 7:08 PM PAC TV switched over to the Plymouth Government Replay Schedule. At 7:11 PM coverage of the Planning Board meeting continued and the audio problems had been corrected.

Elaine Fiore was reviewing a Comparison Chart of area turbines on page 7 of a 10 page handout. She discussed that she had compared the Proposed Kingston turbine to Falmouth and Hull Wind II as they are of similar size. Hull Wind I and Mass. Maritime are smaller 660 kW turbines so they were not considered equal to Kingston's proposal. Ms. Fiore did note that the minimum distance from the Falmouth turbine to the closest building was 600 feet and Hull II was 1200 feet at the closest point. The Kingston proposal will be located as follows:

Route 3	650 feet
The UV Building at the Wastewater Facility	132 feet at the closest point
Headworks Building at WWTF	232 feet
MBTA Rail	400 feet
Cars at the Transfer Station	90 feet
Road at Transfer Station	40 feet
Building at Transfer Station	180 feet

In comparison, the closest building in Falmouth would be located at about the same distance from their turbine as Route 3 is shown on the Kingston diagram. The Kingston buildings are closer.

The KEMA diagram as presented on October 21, 2008 shows the safety zone encompassing almost all of the WWTF and the Transfer Station.

DEP is now talking about permitting at landfill sites. There was a seminar held in June 2009 to review reuse of these sites for wind turbines.

The WWTF is a \$25,000,000 investment. We do not know what it would cost to insure something like this against damage to the WWTF. It would be very expensive to replace the WWTF in a worst case scenario. The Sewer Commission



TOWN OF KINGSTON
Office of the Sewer Commission/Wastewater Department
26 Evergreen Street
Kingston, MA 02364

781-585-4058
781-585-5874 FAX

Elaine A. Fiore
Peter C. Cobb
Thomas W. Taylor, Jr.

asks that CDM be included in the loop and that Weston and Sampson contact them about the project. The site is currently located over the forced sewer mains.

The Planning Board suggested that the landfill might be an alternative to the proposed site. Let's be safe in siting the turbine.

Mr. Randall felt that good information had been provided. There is flexibility in the location and public safety should be considered. Although turbine collapse may be infrequent, a development on this scale should be planned with a worst case scenario in mind. Setbacks are a requirement for accidents and should be taken into consideration. There are several alternate locations. Mr. Randall reviewed a diagram from the Feasibility Study showing other locations that were considered. He stated that within the 18 acres the specific location is portable. His recommendation is to see a location that will allow the maximum ability to comply with the bylaws. Let's have a green community, wind power and a safe community.

The WWTF expansion location was reviewed. Ms. Fiore pointed out that the turbine location limits the area that can be used for the WWTF. The Sewer Commission will be adding another SBR but if another pump station needs to be added then another headworks would need to be added. Open space is limited.

Mr. Gleason said that it looks like you need space to expand. Could you list your concerns for the public. Ms. Fiore replied that nobody knows what placing a turbine this size within 132 feet of the WWTF will mean. Ice will fall from it even when the turbine is shut down. Noise could be an issue for the staff. It has been suggested that the staff wear ear protection. The staff cannot wear ear protection because part of the job is to listen for alarms. Shadow and flicker could be a problem when the staff is outside. The safety of the staff at the site and the residents using the site is of concern. The Green Energy Committee (GEC) is pushing to have the turbine under construction by June 2010. The Transfer Station and the WWTF expansion will not be done by then. Anything that is constructed after the turbine would have to conform to the turbine which could be a problem.

The Planning Board commented that the GEC must have their reasons for choosing this site. The Planning Board wants a turbine, but wants it done safely.

Ms. Fiore stated that the Sewer Commission is not against a wind turbine project but wants alternative sites taken under consideration.

Mr. Bott stated that he is the point of contact for Weston and Sampson. He spoke with 2 representatives today that have worked on a number of turbine projects including those in Mashpee, Harwich, Chatham and Boston. They would like to set up an early meeting with all parties to look at location options. It would be good to have the sewer as-built for such a meeting. They want to set up a date by the end of September to look at potential sites. The GRANT was not specific to the +



TOWN OF KINGSTON
Office of the Sewer Commission/Wastewater Department
26 Evergreen Street
Kingston, MA 02364

781-585-4058
781-585-5874 FAX

Elaine A. Fiore
Peter C. Cobb
Thomas W. Taylor, Jr.

on the site diagram but the turbine must be within the approved site. Once everyone agrees on a site then Weston and Sampson can get working on a site plan.

Mr. Ruprecht said there needs to be expansion at the WWTF and probably at the Transfer Station.

Mr. Randall felt the meeting had been productive. If you do not like the site it doesn't mean you are against the turbine. Weston and Sampson and the Town Administrator will communicate that we want maximum compliance.

Mr. Gavigan said he was also concerned with the location. He would like to know what the noise levels will be on site. He has worked with noise and it can be very annoying to listen to a constant noise all day. Mr. Bott commented that the studies are on the web site.

Mr. Gleason said he had looked at How Stuff Works and found typical wind farms measure about 35 to 45 decibels. 40 decibels would be a car running at 55 mph. At 750 feet from a wind farm it sounds like a refrigerator. Ms. Fiore added that the closest building would only be 132 feet away.

Mr. Randall said that the bylaw requires that flicker be addressed. One of the more disturbing aspects of the project can be very disturbing to people that live or work with this effect. The Transfer Station staff would be most affected.

Mr. Gavigan asked what would happen if the WWTF were taken offline. Ms. Fiore replied that the headworks is 232 feet away. All the flow comes into this building. If this is damaged then everyone that is on sewer could not use their facilities. If power goes out at the plant the generator can power the plant. Mr. Gavigan commented that the plant can't be easily resurrected if damaged. We don't know how long it would take.

Pine DuBois spoke for the GEC stating the location selected was chosen by the engineers and CDM. The original site was deemed too close. Other choices were too close to the slip ramp. They looked at the landfill but couldn't get the MET tower on the landfill because DEP was concerned about damaging the cap. They are currently looking at the open field at the landfill for a solar array because it would not damage the cap. They did look at a lot of locations. Ms. DuBois continued that flicker was studied. They don't think it will be significant. People with epilepsy can have problems with flicker. The flicker will not be present all day. It depends on the sun. Noise was addressed and the engineers determined that the highway is louder than the quietest time at night and would be louder than the turbine. The GEC has looked at these things and are concerned with the WWTF. They are at this location because in the beginning there was a need for a large user at the site.

Mr. Bott said he would like to set a meeting up with Weston and Sampson as soon as possible and will send an email out as soon as possible.

Suzanne Richards - Administrative Assistant