

Minutes: Russell Township Zoning Commission
Russell-Fire Rescue Station
October 27, 2010

Present: Richard E. Snyder, Chairman
Bruce Murphy
Donna Weiss Carson
Ben Kotowski
Diana Steffen, Secretary

Also in attendance: Ric Machnics, Zoning Inspector.

The Chairman called the meeting to order at 7:32 p.m.

MINUTES OF SEPTEMBER 22, 2010 – *Mr. Murphy moved to approve the minutes as submitted, Mr. Kotowski seconded and the motion passed unanimously.*

HIRE EXPEDITE RENEWABLE ENERGY – As part of the Commission's research and education about wind and solar energy Mr. Snyder had invited consultant Stefanie Spear, President of Expedite Renewable Energy, to tonight's meeting. Ms. Spear has consulted for the applicants for a wind turbine on a farm in Auburn Township, and assisted the City of Cleveland and Munson Township with wind energy amendments. Ms. Spear is willing to give a presentation on wind energy tonight and to assist with creating an amendment for the same remuneration she received from Munson. Mr. Snyder said that at his request the Board of Trustees on 10/06/10 approved \$250 to enable the Commission to hire a consultant for its study of wind energy.

Mr. Murphy made the motion to hire Expedite Renewable Energy for a fee of \$250, Mr. Kotowski seconded and the motion passed unanimously.

WIND & SOLAR ENERGY – Stefanie Spear of Expedite Renewable Energy was in attendance, and explained she has been an environmental activist for 20 years, publishes the Eco Watch Journal, and as President of Expedite Renewable Energy she helps businesses with their solar and wind projects. She has been assisting the Joneses with their application for a wind turbine in Auburn Township. Ms. Spear detailed that case for the Commission. She then gave a presentation on wind turbines using slides. She discussed the reasons why businesses and residents invest in wind energy, types of towers and turbines, sizes and types of projects, funding through grants and zoning specifics.

During her presentation Ms. Spear emphasized that height is very important since wind speed increases with height. Turbines must be higher than anything around them or they do not work efficiently. Although she understood that safety is vital for any legislation passed, she said that if the regulations severely limit height it does not encourage residents to erect wind turbines. Some communities regulate the fall zone rather than limiting height.

With regard to zoning Ms. Spear recommended that an amendment include a Statement of Purpose and definitions. The Commission should consider shadow flicker, where the sun shines through the spinning blades, and ice throw, where the blades have ice buildup. When there is an imbalance in the blades the turbine will yaw out of range and the ice will fall off. Other issues to consider are decommissioning and removal of the foundation, the type of tower permitted (lattice or monopole) and guide wires, noise, and a maintenance plan. If a turbine is well maintained then noise is not a big issue, but with high wind speed there is a potential for noise; however, the higher the wind speed the more the wind is louder than the turbine. They are not silent and if close to homes they can have an impact. Lighting is required for a tower over 200 feet high, but typically residential towers would not be that high, so a lighting rule may not be necessary. Vibration is only an issue for the large turbines in a wind farm, not for residential towers. Lattice towers can attract birds to nest or perch on them, causing some to be killed. However, it is not a big issue as many more birds are killed by hitting buildings. The smaller towers do not have an effect on birds or animals.

