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Most of the effects from wind turbines (their visual impact, noise, shadow flicker, icing and throwoff, etc.) change dramatically from minute-to-minute, hour-to-hour, and day-to-day. They change without any change in the number of turbines, their height or their location. These changes result strictly from changes in the weather. The most obvious weather changes are in the wind speed and direction, but air temperature, humidity, atmospheric stability, precipitation, visibility, sun angle and intensity will also produce substantial changes in these parameters. MORE IMPORTANTLY, weather changes will produce substantial changes in the effects of the turbines on their surrounding environment, and its residents. The magnitude of these minute-to-minute, hour-to-hour, and day-to-day changes is much larger than any differences between the effects of 10 or 9 turbines.

Few of us stare at a view. We note it quickly and pass on to another view, going through billions of instantaneous views in the course of our day. We recall only a few of our daily views. The next dawn affords the opportunity to collect a billion more views. Certain views are repeated over and over, so we retain a memory of them. The views with this longer-term impact are the ones that change little from minute-to-minute, hour-to-hour, or day-to-day, while the changeable ones are easily forgotten. This distinction is important in any discussion of the visual impact, because an unchanging view can be described fairly accurately, while the changing view cannot. However, the meteorology of IWFs ensures regular, rapid changes in their visual impact. No two views, no two photographs (unless manipulated) will ever match, nor will their memories ever be the same.

Therefore the discussion of the visual impact of an ever changing, ever different view of an IWF should not center around either a picture or some average, or typical, view of the facility. There is NO TYPICAL VIEW of either 9 or 10 turbines, which means THERE ARE NO TYPICAL DIFFERENCES between 9 or 10 turbines. If an experiment were carried out with 10 turbines, but with one randomly shut off, few people would be able to tell which one, or when? The minute-to-minute, hour-to-hour, and day-to-day changes in the rotation and orientation of each, and the amount and broadcast of noise, flicker, reflection, icing, etc., are so large that they mask the much smaller AVERAGE differences between 9 and 10 operating turbines.

There is an additional concern due to the weather changes. Changeability magnifies ALL the effects as compared to a situation in which there were no changes! The models and the averages share one common failure, they ignore the changes caused by weather, and completely ignore the correlations between the various weather parameters, and their resultant effects on the neighborhood. These weather changes suggest you should be asking questions like: under what weather conditions will the turbines have their maximum visual impact, emit their maximum noise, send out the most annoying shadow flicker, cause accidents on Route 9 because of flicker and glint in the eyes of drivers, and which weather produces icing on the blades, defining the few directions that will need to be off limits? Will 9 turbines cause less of these problems than 10, or be less noticeable?

Finding a needle in a haystack depends on the size of BOTH the needle and the haystack.

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