

## Information #2 submitted by Tom Schuerman

At the March 29th meeting it was stated that "The maximum distance ice can be thrown is approximately 500 feet..." This is simply not true. That distance depends on the speed of rotation, height of the tower and at what angle the ice departs from the blade. My calculations show that nearly 3000' is possible with the 80 m tower and 54m blades of what I understand is the proposed Siemens turbine. I chose not to start an argument over theoretical values though, because I thought it was more important to determine what the manufacturer says is a safe minimum distance that minimizes their risk of injury and/or property damage. From what I've seen, Siemens in particular seems reluctant to give out that information, and that concerns me a great deal. If the manufacturer won't tell me what a safe distance is, then I don't want it anywhere near my house.

I also have a question about the shadow flicker that was discussed by others but not really answered at the March 26th meeting. The meeting notes state: "There was an assumption that with a 1,000 foot setback to a property line, there would be no "shadow flicker" impact to the adjacent properties." Several people noted that these shadows would be much longer at dawn and dusk, and I'm curious why it was assumed a maximum of 1000 feet here. As the sun reaches the horizon, those shadows would surely be much longer than 1000 feet at some point. I didn't feel we got an answer on this in the meeting.

With whatever setback we choose, the absolute minimum is what the manufacturer recommends. We can add to that if that makes the neighbors more comfortable, but anything less than that puts the county (aka taxpayers) at risk of assuming the liability should something go wrong.

Of course, that's going to be a challenge to word correctly - turbine heights change (I don't know why they wouldn't continue to get taller as the technology is improved) and one manufacturer may be willing to assume more risk than others. This is going to take some work to get right.