



February 2, 2012

Mr. Roger Ebert
Chicago Sun-Times
350 N. Orleans St., 10th Floor
Chicago, IL 60654

Dear Mr. Ebert,

This letter concerns your February 1, 2012 review of the film “Windfall,” by director Laura Israel.

It was disappointing to see such a normally clear-eyed film critic taken in by such a fact-free and slanted take on wind power.

Accordingly, we invite you to tour a wind farm within a two-hour drive of your home in Chicago, and to meet with wind workers for a roundtable discussion of how misinformation is impacting their lives and careers – at which they will answer any questions you have.

No energy source, or human activity for that matter, is completely benign. Regardless of how we decide to power our society, there will be some impacts. However, different energy sources will have different impacts, and some sources have been shown to have especially acute, negative impacts on things that we care about, like the health of our children, the quality of the air we breathe and water we drink, and wildlife populations.

It is important to keep in mind that wind power won't produce any pollution — today, tomorrow or over the next 10 or 20 years. The National Academy of Sciences has estimated the "hidden costs" of traditional energy sources — largely due to the human health impacts from pollution — at \$120 billion per year. Because of this, wind power has remarkable health benefits when compared to other energy sources.

Wind power was also recently given a clean bill of health by an independent expert panel established by the Massachusetts Department of Environmental Protection and the Massachusetts Department of Public Health. Their definitive scientific analysis conducted by academic experts with backgrounds in public health, epidemiology, toxicology, neurology and sleep medicine, neuroscience, and mechanical engineering clearly demonstrated that wind turbines are safe and the health-related claims of project opponents are unsubstantiated.

Among the key findings of the panel:

- There is no evidence for a set of health effects, from exposure to wind turbines that could be characterized as “Wind Turbine Syndrome.”

- Claims that infrasound from wind turbines directly impacts the vestibular system have not been demonstrated scientifically. Available evidence shows that the infrasound levels near wind turbines cannot impact the vestibular system.
- The strongest epidemiological study suggests that there is not an association between noise from wind turbines and measures of psychological distress or mental health.
- None of the limited epidemiological evidence reviewed suggests an association between noise from wind turbines and pain and stiffness, diabetes, high blood pressure, tinnitus, hearing impairment, cardiovascular disease, and headache/migraine.
- Scientific evidence suggests that shadow flicker does not pose a risk for eliciting seizures as a result of photic stimulation.

The full report of the panel of independent experts can be found here: <http://www.mass.gov/dep/energy/wind/impactstudy.htm>

The development of wind power and other renewable energy sources is important for the future of the country and health of the environment. Even so, the wind industry recognizes the need for identifying and minimizing its impacts on the natural and human environment.

We will continue to work to lessen our already small impacts, but when you step back and look at the facts, it becomes clear that wind energy is the least impactful form of energy production available to our society today and the benefits it provides far outweigh the negligible impacts.

Some other facts “Windfall” neglects to mention:

Sound: Typically, two people can carry on a conversation at normal voice levels even while standing directly below a turbine. Often the loudest sound heard is the whooshing sound of the wind hitting the blades—similar to the sound of a flag in the wind. Guidelines for locating wind farms as well as local agreements keep turbines at safe distances from homes and businesses.

Shadows: Shadows from moving wind blades typically last just a few minutes near sunrise and sunset in bright sun conditions, and can be addressed through the location of turbines and plantings. German researchers found that flicker would affect residents for 100 minutes per year under the worst conditions and 20 minutes per year under normal circumstances. The rate at which wind turbine shadows flicker is far below the frequency that, according to the Epilepsy Foundation, normally is associated with seizures. A 2007 report by an expert panel for the National Academy of Sciences found it to be "harmless to humans."

Popularity: In a poll conducted in the same state where *Windfall* is set, residents of Lewis, County, N.Y., said by a 4 to 1 margin that the development of a local wind farm had a “positive effect” on the county, and 77% supported its expansion. Surveys routinely find that over 80% of Americans support wind power. And many local communities welcome it because of the homegrown jobs the industry creates.

Developers and communities: Wind farms sites are typically chosen with public input, and it’s in developers’ best interest to cultivate public support for their projects. That is often not

difficult to do, given that projects can contribute millions in tax revenue to rural communities that often need it most. Wind farms also provide regular lease payments to many farmers and support small-town economies.

Wind's contribution: Over 46,000 megawatts of wind power in the U.S. are in place today, enough to power well over 10 million American homes. A new study by Navigant Consulting finds that with stable tax policy, the wind industry can grow to nearly 100,000 American jobs in the next four years – and the Department of Energy projects wind will employ 500,000 Americans by 2030.

Tax Incentives: Wind farms receive government incentives, but so do fossil-fuel industries. Through permanent measures in the tax code, fossil fuels have been subsidized for more than 90 years. American taxpayers have paid well over \$500 billion to fossil-fuel industries over the years, and they are still paying. A September 2011 study by industry analysts entitled “What would Jefferson do?” found that fossil fuel received five times the government support during their startup period that renewables are getting today, and nuclear power got 10 times as much. Wind power is affordable despite this lopsided playing field.

Manufacturing: Today 60 percent of a wind turbine's value is produced here in America, compared to 25 percent before 2005. With the support of a stable Production Tax Credit, wind energy recently has powered one of America's fastest growing manufacturing sectors. Over the past six years, U.S. domestic production of wind turbine components has grown 12-fold, to more than 400 facilities in 43 states. That has shifted manufacturing jobs from overseas back to the U.S. Navigant Consulting found that wind manufacturing can grow here by a third within four years, to 46,000 American manufacturing jobs.

Decommissioning: Decommissioning responsibilities, like equipment removal, are typically covered in legal documents created when a wind farm first goes up. The value of the parts at resale is typically greater than the cost of removal, so wind farmers have an incentive to responsibly decommission their parts. And with roads, transmission systems, etc. already in place, wind farm sites are likely to get new turbines when old ones reach the end of their lifespan. A single new larger turbine can replace several older, smaller ones. That reduces impacts even further, especially compared with other ways of generating electricity.

Cost: Numerous studies have confirmed that increasing wind power and other renewable energy is already lowering electricity costs, such as by serving as a hedge against fluctuating natural gas prices. Since a wind turbine's “fuel” (i.e., the wind) is free throughout the 20-plus-year lifespan of a project, wind energy is inflation-proof, protecting public utilities and their electric ratepayers. A recent report from Bloomberg New Energy Finance predicts that land-based wind farms will be “fully competitive” with conventional electricity sources by 2016. Wind diversifies America's energy supply with clean, safe, affordable, homegrown electricity.

To help give you a more balanced view of wind power, we would be pleased to organize a tour for you of one of our projects. Furthermore, we will be happy to arrange the roundtable discussion at your convenience, with wind power workers, neighbors of the project, and health experts.

Please let us know when it would be possible for you to take us up on this offer.

Sincerely,

Peter Kelley
Vice President of Public Affairs
American Wind Energy Association