

TheNew Falcon Herald,

Wind farm and health issues

May 2016

By [Lindsey Harrison](#)

According to an Aug. 26 El Paso County press release, construction at the NextEra Energy Resources wind farm project in Calhan is nearing completion. "All 145 concrete foundations to support the wind turbine towers have now been completed ... and 120 of the authorized 145 turbines are now fully erected, with only electrical work remaining to be completed."

Although the press release states that the turbines will not be functional until the electrical work has been finished, it also states that the turbines could move in the wind, which is already causing health concerns for residents living within the wind farm's footprint.

One resident, who wished to remain anonymous, said she knew right away that the turbines were moving because she began to feel nauseous, along with a headache. "I have 100 turbines to the north of me, 25 to the west and 20 to the southwest," she said. "When the wind was coming out of the north, I woke up feeling dizzy and nauseous."

She also said her animals were acting strangely. "My donkeys and horses keep wanting to go back into their stalls," she said. "They have not wanted to leave the barn all day."

Robert Rand, a Boulder, Colorado, resident and an acoustic investigator and member of the Acoustical Society of America, said the reason for the headaches and nausea is directly related to the wind turbines. It has to do with infrasound and low frequency noise, he said.

According to an article written by acoustic engineer Richard James, published at <http://wiseenergy.org> Feb. 20, "Infrasound is acoustic energy, sound pressure, just like the low to high frequency sounds that we are accustomed to hearing. What makes infrasound different is that it is at the lowest end of the acoustical frequency spectrum even below the deep bass rumble of distant thunder or all but the largest pipe organ tones.

"As the frequency of an infrasonic tone moves to lower frequencies: 5Hz, 2Hz, 1Hz and lower, the sounds are more likely to be perceived as separate pressure pulsations Unlike mid and high frequency sound, infrasound is not blocked by common construction materials. As such, it is often more of a problem inside homes, which are otherwise quiet, than it is outside the home."

Rand said the separate pressure pulsations are like the "whump, whump, whump," people sometimes experience when they are riding in a car with the windows down. "I have been attempting to acoustically measure phenomena that could present a conflict to human physiology that could then provide a basis to do more research," Rand said. "My work in acoustics has really been designing and planning. I don't need more medical research because I know what they (wind turbines) do to people because it happened to me."

According to an article accepted into The Journal of the Acoustical Society of America Feb. 4, when the body experiences an external force on the inner ear, such as acoustic pressure pulses — but there is no visual input to associate with that pressure — a sensory conflict occurs. That conflict is felt as motion sickness, and it is felt to the same degree as seasickness.

The wind energy industry has claimed for decades that this phenomenon does not exist, in part, because about one-third of the human population is essentially immune to the effects of motion sickness, which is what these pressure pulsations induce, Rand said. Similarly, about one-third of the population appears to be readily prone to motion sickness, he said. "The third that is not affected by this will never understand it and will not know what you are talking about," Rand said.

According to an article published in the Bulletin of Science, Technology & Society March 2, 2011, written by Dr. Alec Salt: "Infrasound from wind turbines is unlikely to be harmful in the same way as high-level audible sounds."

However, Salt also states that numerous reports “are highly suggestive that individuals living near wind turbines are made ill, with a plethora of symptoms, which commonly include chronic sleep disturbance. The fact that such reports are being dismissed on the grounds that the level of infrasound produced by wind turbines is at too low a level to be heard appears to totally ignore the known physiology of the ear.”

Dirty electricity concerns

Rebecca Rivas, a Calhan resident with a wind turbine located about 1 mile from her house, said there are other serious health concerns to consider. “My husband had open heart surgery in 2007 and had a mitral valve replaced,” she said. “It is a metal valve now, and he can’t go through metal detectors or any thing.” Rivas said her husband’s cardiologist told him that, with wind turbines that close to their residence, staying there would be like playing Russian roulette with his life.

Rivas said the reason is because the wind turbines emit not only sound waves or pressure waves, but electromagnetic waves as well.

According to an article published online in the Bulletin of Science, Technology & Society Sept. 30, 2011, “The electromagnetic waves are generated by the conversion of wind energy to electricity. This conversion produces high-frequency transients and harmonics that result in poor power quality High-frequency transient spikes that contribute to poor power quality, also known as dirty electricity, can flow along wires, damage sensitive electronic equipment, and adversely affect human and animal health.”

Rivas said she was advised that the electromagnetic waves could send her husband into atrial fibrillation. AFib is a quivering or irregular heartbeat that can lead to blood clots, stroke, heart failure and other heart-related complications, according to the American Heart Association. “I’ve watched doctors flatline my husband (stop his heart) five times to try to get his heart back into rhythm,” Rivas said. “Because my husband’s life is at stake, I have to speak up.”

Brown County, Wisconsin

Residents of Brown County, Wisconsin also decided to speak up when the Shirley Wind Farm, owned by Duke Energy, was under construction.

Barbara Vanden Boogart, vice president of the Brown County Citizens for Responsible Wind Energy, worked with other members of the BCCRWE to present a case in front of the Brown County Wisconsin Board of Health about the dangers of the wind turbines.

Vanden Boogart said the presentation contained various pieces of evidence, including the following: 21 peer-reviewed articles on health and industrial wind turbines; analyses of the effects of wind turbines on property values; personal accounts from residents near the wind farm; and studies done in the homes near the Shirley Wind Farm where infrasound and low frequency noise was detected that emanated from the turbines.

According to the minutes from the Brown County Board of Health meeting on Oct. 14, the board voted 4-0 to “declare the Industrial Wind Turbines at Shirley Wind Project in the Town of Glenmore, Brown County, WI a human health hazard for all people (residents, workers, visitors, and sensitive passersby) who are exposed to infrasound/low frequency noise and other emissions potentially harmful to human health.”

“They (Duke Energy) were planning to put up 100 turbines within our town and two other adjacent ones, with six on our country block alone,” Vanden Boogart said. “We fought hard, fast and loud in every way we could, and they succeeded in shutting down the wind farm.

“Wind farms are making people ill and the wind energy industry has known about it since 1979. They knew for decades and instead of notifying people, they have been changing the attention to audible noise. This industry is filthy, dirty, corrupt and committing crimes knowingly against people.”

Laura Wilson, a member of the El Paso County Property Rights Coalition, said Vanden Boogart shared all the information that the BCCRWE presented to their board of health with her; and, on Aug. 26, Wilson and 11 other concerned residents attended the El Paso County Public Health board meeting.

“I gave them all the information and told them everything I knew, and they just looked at me with

total indifference,” Wilson said. “They were actually eating their lunches while we were all testifying.”

The EPCPRC has a lawsuit pending against the El Paso County Board of County Commissioners and NextEra, citing that the BOCC “exceeded its jurisdiction when it approved the (Golden West Wind Farm) project” at the Feb. 5 meeting, according to the article, “Wind farm goes to roads,” in the May issue of The New Falcon Herald. No hearing date has been set yet. Because of the pending lawsuit, EPC Public Health declined an interview with the NFH.

David Gil, project manager with NextEra, also declined an interview but sent an email to the NFH, with this statement about the Brown County Board of Health declaration: “I am not aware of the declaration.”

Chris Ollson, who testified on behalf of NextEra at the Feb. 5 BOCC meeting also declined an interview, but sent an email stating he was “on holiday.”

Ollson, vice president of strategic development for Intrinsik Inc., is considered an authority in environmental health issues related to the energy sector and has provided risk communication support for wind turbine projects, according to Intrinsik's website. Ollson has a doctorate in Environmental Sciences from the Royal Military College of Canada.

Wilson said the property rights coalition is hoping to raise more funds to pay the attorney's fees for the pending litigation; she and the other coalition members intend to keep fighting.

View the original report at:

<http://www.newfalconherald.com/DisplayPrintArticle.php?ArticleID=10669>