

# ANDREWS MECHANICAL, INC.

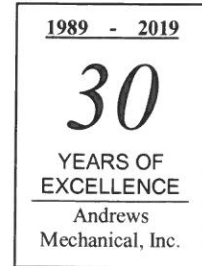
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September 27, 2019

Written Comments Regarding Proposal R405.3 Performance – based compliance. Please remove this proposal for the following reasons.

- 1) This approach doesn't meet the intent of 19.27A.210. In the Notes: (5), it states: "The legislature therefore determines that it is in the state's interest to maximize the full potential of energy efficiency standards, retrofit incentives, utility programs, and buildings codes to keep **energy costs low** and to meet statutory goals for increased building efficiency and reduced greenhouse gas emissions."  
The course of this proposal would increase the cost of energy by 4 times more, this is not the intent of 19.27A.210.
- 2) 19.27A.210 talks about reducing energy use by 70 percent reduction in annual net energy used. It also talks about the best way and most cost-effective way is by being **more efficient**, not by going to all electric heat for our building heating. What it does say is that we should be more efficient, so we don't have to build more electrical generation. Also, in the Notes (3), it states: "Energy efficiency investments that reduce energy use in buildings bring cobenefits that directly impact Washingtonians' quality of life. These benefits include improved indoor air quality, more comfortable homes and workplaces, and **lower tenant energy bills**."
- 3) By constructing buildings that are more efficient, you will reduce the carbon footprint because less BTU's will be needed to heat and cool these buildings. Thus, the natural gas that is used to heat these buildings will be reduced and so will the carbon footprint. Natural gas used in the Spokane climate has less of carbon footprint than a heat pump because you won't have to build another gas fired power plant to run those heat pumps.
- 4) I feel that this council has been influenced from the political force in this state instead of doing what is best for all the Washingtonians and what is in 19.27A.160. It was made clear that the United States is not as concerned over Global Warming as our Governor is by the lack of support he had during his run to be the president, which lead him to drop out of the presidential race.

- 5) Table in R405.3 is not correct for the Spokane area because the electric factor is way to low. The other factors are based off stoichiometry burn rates which is not possible. When we set up a burner, we can set the CO<sub>2</sub> as needed. The percentage of the CO<sub>2</sub> can vary considerably.
- 6) Now we are seeing that the windmills power generation is killing the bat population (Spokesman Review, 9/23/19, page 2). Plus, the cost of this generation is more than 4 times our present sell cost to the customer. For example, if you had a \$300.00 electrical bill now, it would be well over \$1,200.00 if we only had wind power.
- 7) In the future, when the wind picks up, the utility electrical system that is being powered for people to use their heating or cooling will be turned off by the utility company to prevent fires from happening for large areas of the country. How would heat your house with the power off during these periods and what about the people who need the power to survive? Plus, the fire that killed 86 people when the electrical lines set fire to the area. It could take days to bring the power back on due to the utility company having to clean all the debris under the lines that could catch fire (Spokane Review, 9/24/19, page 2). This is happening now in California, this week the power being turned off. Also, now the photovoltaic that is generated from homes and buildings could come back down the lines that are shut off by the utility company and start the fires, too.
- 8) I think we are rushing to judgement of the cause of global warming and here is just one reason why. In 1942, six P38 airplanes and two B17 airplanes landed on Greenland due bad weather. In 1990, they went back to look for these planes and were not able to find them, so they went back and looked deep into the ice and found them under 250 feet of ice. One of those planes has been dug out of the 250 feet of ice is now flying and named Glacier Girl. In the 1980's and early 1990's there was talk that we were going into an ice age, well, it did not happen. You know the little bit of rise in CO<sub>2</sub> is not going to kill you either. Do ever think about every time you open your soda pop and let out the CO<sub>2</sub> that you are heating up the planet? Most likely, not. Are we going stop the use of soda pop to help lower the CO<sub>2</sub>? Most likely, not.
- 9) What we need to do is plant more evergreen trees for removal of the CO<sub>2</sub> that we put on this earth year-round. Why don't give rebates for these trees planted? How about paying the people in the amazon *not* to take down their trees, much like the government pays farmers not to plant those crops? Or even better yet, pay our farmer to plants trees on that land.
- 10) If you want to stop Global Warming you could do things like putting out the wild fires, or better yet, put people back in the towers to watch for fires, maintaining the roads so they get to the fires and cutting down the under brush and trimming the trees up 20' off the ground. Getting the National Guard and the Air force prepared in the fire season to fly wing tip to wing

tip, like they did during world war II, to put fire retardant on the fire with such force the fire goes out.

- 11) As for Global Warming, my company has a patent to make energy from building heat but projected for this energy is 25 cents a kw. You could put one in every building and take the wasted heat and make energy. I am not worried about Global Warming if every building and house had one these, you would be worried about Global Cooling. Also, others have patents that will do the same thing. You could take heat out of the oceans the same way and cool the oceans if you wanted.
- 12) We have tried to install Geothermal units in our lakes to remove heat for heating the homes near our lakes and the Washington State Ecology said they would tie the permit up for 20 years so the state doesn't want to reduce Global Warming or they would promote what is said in 19.27A, as said in 19.27A.210 in notes 1 through 5.
- 13) Every time you turn around something is killing us, even the sun will kill you if you get to much of it. I wonder if the sun was turned off for a week or two what you may then think about the natural gas that heats most of our homes. Or when it is -20° below and the electrical grid is taxed to the max and they are rolling brown outs so the whole system doesn't go down when it's -20° below in Spokane and you don't have enough heat your home. We need more than one way to power our state now and for the next 100 years or so. There's all this talk about Global warming but on September 29th it is supposed to snow in Spokane. I have lived here for 61 years and never have seen snow in September most of the time the first snowfall is around October 31, it's a month early.
- 14) We are dependent on the hydropower generated from the dams. If we don't have enough snowfall that melts and supplies water to our rivers, it's harder to generate enough power for our needs. We've had several droughts in the past and it was a godsent to have other forms of fossil fuel to supply us with power.
- 15) The CO2/ Green movement stirs up people to do things they would not normally do. It always baffles me how people think we can change all these things that are happening and how they think we are so powerful, when in reality, one hurricane can wipe out the entire east coast. The oceans cover over two-thirds of the earth and at the bottom of these oceans, more CO2 is generated than we could ever come close to do. But, yet, we are the problem. We are just a one drop in a bucket of water when it comes to the effect of what we do to this earth.

Thanks for taking the time to read this, hopefully some of this will sink in.

Edwin "Larry" Andrews II



# Study: Wind turbines threaten bats

*The Spokesman-Review 9-23-19 Page 2*

OSU-Cascades says  
NW bat being affected

Associated Press

BEND, Ore. – A Pacific Northwest bat that migrates south for the winter faces a serious threat from wind turbines, according to a study by the by Oregon State University-Cascades.

The study concludes that the hoary bat faces an uncertain future because its numbers have declined by 2% per year, the Bend Bulletin reports.

Collisions with propellers on wind farms kill bats, said Tom Rodhouse, one of the authors, an ecologist with the National Park Service and a courtesy faculty member at OSU-Cascades.

Another cause is barotrauma, which occurs when bats fly through low pressure zones created by the spinning blades of a wind turbine. The sudden change in pressure causes their lungs to expand faster than the bats can exhale, resulting in burst vessels that fill their tiny lungs with blood, Rodhouse



U.S. FOREST SERVICE

**Hoary bats are being negatively impacted by wind turbines, according to a university study.**

said.

“This and direct collisions with the turbines has resulted in millions of bat deaths over the last two decades,” said Rodhouse.

Oregon and Washington have 3,600 wind turbines that generating capacity of 6,300 megawatts. Most wind farms are clustered near the Columbia River Gorge. Others are near Ellensburg and Walla Walla in Washington and Baker City in Oregon.

While migrating, hoary bats fly into danger zones because their sophisticated sonar capabilities do not detect

the pressure drops, Rodhouse said.

Barotrauma has similarities to decompression sickness experienced by divers. Lungs of birds are more rigid, with strong capillaries, making them less vulnerable to the pressure changes near wind turbines.

White-nose syndrome, a disease that has killed bats elsewhere, is not affecting the hoary bat, Rodhouse said.

Hoary bats are named after their white-tipped fur coats, which look frosty. They hunt at night and feed on pests that eat crops. The animals are slow to reproduce in the Pacific Northwest, with females producing just one to three pups per year, Rodhouse said.

Cris Hein of the U.S. Department of Energy’s National Renewable Energy Laboratory said there are ways to combat the problem.

Technology to protect the bats includes ultrasonic deterrents that may prevent bats from approaching the wind turbines. Another option is to turn off turbines in late summer and fall when bats are migrating.

The study was published in Ecology and Evolution.

## California utility cuts power to 21,000 customers amid fire danger

By Olga R. Rodriguez  
ASSOCIATED PRESS

*Spokesman Review 9/24/19 pg 2*

SAN FRANCISCO – California’s largest utility began cutting power to 21,000 northern customers Monday evening as fall brings back dangerous weather conditions and the company tries to head off wildfires sparked by electrical equipment.

The utility began shutting down power in Butte, Nevada and Yuba in the Sierra Nevada foothills.

The power will remain off until conditions are safer, and PG&E warned that it might expand the precautionary outages today to Sonoma, Napa and Lake counties if gusty winds and hot, dry weather continue.

Butte County is where a

wildfire blamed on PG&E transmission lines killed 86 people last year and virtually leveled the town of Paradise.

Meanwhile, Southern California Edison warned it might shut off power to 41,000 customers due to forecasts calling for gusty Santa Ana winds.

The cuts could affect Los Angeles, Riverside, San Bernardino and Riverside counties.

Strong winds, low humidity and warm temperatures were forecast in the region through Wednesday, and authorities issued an extreme fire danger warning for some areas.

Wind gusts could reach 50 mph in the northern Sierra and foothills, and between 30 to 40 mph in the

Sacramento Valley and near the Pacific coast, said Eric Kurth, a forecaster with the National Weather Service.

“Humidity levels are dropping, and winds are picking up,” Kurth said. “The main threat is overnight when the winds pick up in the mountains and foothills.”

Some of the most destructive blazes in the state in the past two years were started by PG&E power lines. Winds can knock down live wires and power poles or drive trees and other vegetation into contact with them.

An investigation by Cal Fire said transmission lines owned and operated by the utility started the fire that wiped out nearly 15,000 homes.