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The statement I am about to make is one that I suspect most of the people in this room will agree with: As a state, nation, and world, we have energy and environmental issues, and these challenges should be solved using real science. What exactly is real science? Speaking as one who has taught science classes for fourteen years I can tell you first what real science is not. Real science is not a collection of theorems. Rather, it is a process, the crux of which is called the Scientific Method. The Scientific Method begins with a hypothesis – for example, wind energy is safe for humans; animals; the environment; etc. What should then follow is a thorough assessment based on objective, comprehensive, empirical, independent, peerreviewed research. The fact is, this process has not been even remotely undertaken for wind energy.

How many of you are aware that last year there were thirty-eight registered Big Wind or energy lobbyists working our legislators out in Pierre last session? Due to aggressive lobbyists pushing forth the agenda of often multi-national conglomerates, you and I have been fed pseudoscience from the beginning. These technical, economic, environmental, health, and other studies should have been performed before the very first industrial wind park was ever built. The onus of responsibility should be upon those promoting the theory. Instead, we repeatedly find ourselves in the position of proving something is unreliable or unsafe just to protect ourselves. This is completely backward and upside down!

Is it unreasonable to ask for real scientific proof that there is a net benefit to taxpayers and rate payers? Is it unreasonable to ask for real studies on environmental effects? And a better question is, are we being unreasonable to ask for real scientific proof that a 590-foot wind turbine located 1,000 feet from a residence is safe and will not substantially impair the health, safety or welfare of the inhabitants? Or, do we assert that it is okay to resort to pseudo-science and computer modeling as long as our state, the "hosting" community, and several landowners get a little extra money? And when a few well-done studies are brought forth that prove a detrimental effect on, for example breeding grassland bird distributions, or breeding duck densities - two studies relied upon by USFWS - is it okay to ignore them?

We need real science in South Dakota There are currently no state noise regulations. There is no set-back standard other than the 1,000 feet previously promoted on your website. As attested to by the PUC Staff's witness, David Lawrence, the jury is still out regarding property devaluation in South Dakota. We have no state regulation regarding shadow flicker. Commissioner Nelson, on Tuesday you acknowledged the fact that there are no state regulations regarding safe ground-to-blade distances. And Commissioner Fiegen affirmed that

we do have outdated wind laws. Both Commissioners Nelson and Hanson voiced concerns regarding current county set-back distances. We are all certainly anxious for some real science!

Commissioners, you have approved the Crocker Wind Farm and Dakota Range I & II projects with full knowledge that their "studies" (such as they are) are lacking, with some not even having been completed. You must know this only emboldens wind developers. And so here we are again. I beg you: Don't make your decision on Prevailing Wind Park until the industry comes back with some <u>real</u> science. Don't require the citizenry to prove it shouldn't be permitted. And don't throw this back on our legislators. You are vested with the authority to deny this permit if the applicant fails to meet their burden of proof. Please. Require real science, true and complete.