



Testimony Provided To
Senate Utilities Committee
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In Opposition to Senate Bill 478

Chairman Thompson, Vice-Chairman Petersen, Ranking Member Francisco, and members of the committee,

This afternoon I appear before you on behalf of the Advanced Power Alliance and the forty-plus members of our organization which represent a diverse cross section of the world's leading energy companies, energy investors, energy consumers in the advanced power industry. Most of these organizations have business interests in Kansas via operating renewable energy projects or those under development, purchase power agreements, development headquarters or manufacturing facilities. Our member assets in Kansas span the state from the most densely populated to the least, from the fastest growing to those with the most rapid population decline. Since the first wind farm came online in 2001, the wind energy industry has invested more than \$14 billion private dollars in Kansas and created more than 20,000 direct and indirect jobs in both rural and urban Kansas with several billion dollars of new renewable energy projects in the pipeline. The State is home to the nation's first wind turbine technician certification program which has a 100% job placement rate. **The Advanced Power Alliance stands in opposition to SB 478.**

This week the Senate Utilities Committee had the opportunity to hear from ADLS companies with whom our developers already work. That hearing was constructive because it illuminated several of our concerns with the bill:

1. Lighting determinations are made *by* the Federal Aviation Administration (FAA) – not simply *technology approved by* the FAA, but the individual lighting schemes for each turbine on each wind energy development must be approved by the FAA.
2. SB 478 attempts to be deferential to the FAA in Section 1, but it specifically says that by July of this year any new wind development **must** install light-mitigation technology that has been approved by the FAA – that is not the same thing as the FAA approving the technology to be used on the specific wind development.
3. Many different factors enter into the FAA's lighting requirements for specific wind farms. A farm's proximity to a major airport, military training routes, or other flight paths may require it to have a stronger indication system. Project developers do not make this determination. The FAA makes the decisions for each turbine in each project. In this bill, that decision is now made by the local County Commissioners, without any consultation with the FAA.

4. Section 2(b) is retroactivity for all wind farms with technology installed by July 1, 2025. The penalty for noncompliance is shutting down the entire wind development which removes contractually bound power from the electric grid managed by Southwest Power Pool.
 - a. Like the power renewable energy projects provide - fixed-cost for the life of the contract - the costs for the project owner are fixed and cannot be adjusted to absorb newly created state mandates. There is also no consideration for what is clearly the most unprecedented supply chain disruption in a generation, perhaps a half century. This section is very problematic.

5. This legislation also inspires important questions. The bill defines “wind energy conversion systems” as electric generation facilities consisting of one or more wind turbines. It does not specify size. Any of the scores of private citizens that own and operate distributed generation wind turbines – even at the 50kw size – would be required to install light-mitigation technology.
In addition, “wind energy conversion systems” are not the only towers in Kansas that have FAA-mandated lighting systems. There are hundreds of transmission lines, cellular, radio and television towers in Kansas that have lighting systems. Even a small town’s water tower has lighting requirements per the FAA. The tallest tower in Kansas, the KWCH tower in Reno County, is 1,500 feet tall. The tallest free-standing structures in Kansas are the three stacks at Jeffrey Energy Center (600 feet). If this legislation is concerned with light pollution, why does this bill only apply to wind energy conversion systems?

Members of the committee, the APA doesn’t mind a discussion of the night skies, and the industry recognizes both the importance and distraction of the red blinking lights. The decision regarding red blinking lights and light detection systems rests solely with the Federal Aviation Administration. The FAA has approved two – perhaps three vendors’ light mitigation technologies. The industry fully anticipates that at some point in the near future, this technology will become ubiquitous. But even during the informational hearing on Monday it was evident that the companies, their technology and their supply chain could not handle broad implementation – yet. Certainly not behind as severe a mandate as SB 478. Developers do not make the decision on which technology, if any, is installed. The FAA makes that decision. Good companies – including those that you heard from Monday that we work with – are working hard to improve this technology and build the necessary infrastructure needed for widespread deployment. But until that time, we would recommend that these decisions be driven by availability, planning, and consultation with the FAA, and not state government mandates. Finally, if this committee wishes to have a true discussion of light pollution in rural areas, we encourage you to include all the parties that contribute, not just one industry.

We strongly encourage your consideration of the complicated matters at hand in SB 478.