

HB 2021 testimony

1. Climate change is real. We need to deal with the issue. I have spent over 30 years working on the Bear Creek Greenway foundation to help build a greenway path that connects communities in the Rogue Valley without the need for motorized vehicles. My undergraduate degree is in engineering. However, for the reasons stated below, I oppose HB 2021.
2. Solar and wind are elegant providers of electricity. However, neither is reliable. Both are intermittent sources of electricity. Solar panels, on average, provide rated energy about 30% of the time, depending on location, etc. Solar does not work at all at night, it works poorly early in the morning or late afternoon. It works at very low capacity when clouds cover the sun. Therefore, there must be backup sources of electricity to make up the lack or reduced supply of electricity when an intermittent solar source is not working at rated capacity. Wind turbines only work when the wind blows and are very dependent on wind velocity.
3. Since both are intermittent, the problem of grid reliability becomes much greater as the percentage of electricity from solar and wind increases. It is one thing when 10% of the electricity sources are not available; it is quite another when 50% or more of such intermittent sources are not available. How does one make up the difference? This becomes even more troublesome when these sources are not available during a cold winter storm or during a high heat weather event.
4. Many people have proposed that battery backup is the solution, but the massive amount of battery storage that would be needed would be extremely expensive, and may not even be available in the quantities needed.
5. Please consult with some unbiased engineers about these issues since an unreliable power grid would not only cause significant negative economic consequences, but will end up killing people. A lack of a reliable grid became painfully evident in Texas when more than 60 people died from lack of electricity. As California shuts down its nuclear plant and several of its natural gas plants, it will face more situations, as it already has, of inadequate power during heat waves when people are still running their air conditioners after the sun goes down.

Lee A Mills
541-944-7357
La7mills@gmail.com