

Rep. Jessica Vega Pederson
And Committee Members

February 1, 2016

HB 4036 and HB 4037 Additional Testimony

These bills should not be passed. This is a session that will be known for passing bills with long lasting impacts to the citizens of this state absent even a serious effort in most instances to quantify those impacts.

While I understand that it is not popular to oppose anything that has the title "green energy" or Global Warming", I hope you will read the attached. The first part of this document reflects my concerns. The second part is data with one of the documents which provide the information.

Elimination of cheap Coal generated electricity and replacement with high cost wind or solar generated electricity in combination with the increase to the renewable energy standard in and of itself will place a huge burden on the financial well being of the citizens of the state as well as take funds from other programs like education and public safety which most Oregonians prioritize above the changes required by this bill. You are, I am sure, aware of the costs associated with this bill. Purchase of high priced wind and solar energy, upgrades to transmission lines and infrastructure necessary to move the energy, purchase of back-up energy such as natural gas to provide some stability to the system, etc. This bill will add to those costs the value of renewable energy certificates that utilities may have to purchase. Oregon has already provided millions of dollars of subsidies and is living with the impacts of nearly two thirds of the existing wind developments which are selling their energy out of state. Oregonians have been and continue to be paying for these developments even though we currently produce significantly more energy than we use and 99.8% of the energy generated in Oregon is renewable.

Additional Impacts which will increase costs to Oregon Citizens:

Consumer owned utilities are currently formed to provide lower cost energy due to the avoidance of high costs of transmission and other expenses of large utilities. The requirement will require any community wishing to develop a consumer owned utility to meet the renewable energy standards of large utilities. This amounts to providing job and income security for large for profit electric companies. Requiring a small utility to meet the renewable energy requirements of larger utilities would add unreasonable costs to the user. These utilities do not have access to the renewable energy resources of larger utilities and typically utilize a large amount of hydro power which, while it is renewable, is not allowed to meet the renewable energy standard.

This bill transfers additional costs to consumers by the inclusion of "all costs associated with the renewable energy portfolio standard". Many of these expenses will no doubt amount to staff time coordinating, identifying and purchasing energy, paperwork requirements, etc. which should be the responsibility of these for profit companies.

The increases in the percentage of intermittent utility sources also adds expenses which do not exist with the use of baseload energy sources. Costs such as energy storage, the increased transmission capacity and infrastructure upgrades that are required and which increase with the increases in the percentage of renewable energy entering the system all will be passed onto the consumers in the state.

The bill also moves the costs associated with increasing the use of electric vehicles and charging stations to the electricity consumers. Electric vehicles and charging stations are too expensive for the middle class or lower class Oregonians. These products are purchased by and used by more affluent citizens. This section moves these costs to the poor and those without the financial advantages of those receiving the benefits. It also appears that a company such as Idaho Power could recover the costs for vehicle charging stations placed in Idaho as it refers to the service area which is primarily Idaho even though some of the customers are in Oregon.

An additional cost increase will be the costs of developing and purchasing equipment for Community Solar Projects. The electric consumers will have to pay for this equipment which will be owned by an electric company or the owner of the community solar project. Those benefitting will be small in numbers, but poor citizens will be assuming the costs of these developments.

Following information is from the references given.

Oregon ranks 39 in terms of the limited amount of CO2 emissions which we now create which is 0.68% of the total for the United States. All states with a smaller amount of emissions have less population than Oregon, and 12 states with more emissions have more CO2 emissions.

https://en.wikipedia.org/wiki/List_of_U.S._states_by_carbon_dioxide_emissions

The five states with lower CO2 emissions than Oregon have significantly higher average costs of energy.

http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_6_a

According to the National Renewable Resource Data Center, Oregon ranks 25 in terms of Solar Power Potential due to the sun impacts. That means that the money spent in support of development of Solar developments will not produce the desired amount of energy output.

<http://www.neonegov/statshtml/20l.htm>

Oregon is already assuming a greater share of responsibility for development of renewable energy due to the large number of wind developments already located in the state.

Oregon has current wind developments in operation totaling 3152 (MW) capacity with an additional 4053 (MW) proposed. These figures are from 2011 so some of the proposed developments have been approved or are operational.

https://en.wikipedia.org/wiki/List_of_power_stations_in_Oregon

According to information provided in the Developer's application for the Golden Hills Development, a 400 megawatt development in Sherman County, the currently existing wind developments are killing between .9 and 2.9 birds per MW per year. Note that this figure includes both threatened and species of concern such as Golden Eagles, migratory birds, and Oregon listed species. The wind developments are allowed to kill 2.5 bats per MW per year as the acceptable Threshold prior to concern. The majority of the bats killed are migratory species, 5 species of which are being considered for listing as Threatened or Endangered species.

Following land impacts are taken from information obtained from the American Wind Energy Association.

It provides a land use requirement per Megawatt of energy produced from wind and solar. The figures are based upon the use of a 90 percent production rate when in fact, the output is closer to 25%, or in a particularly good location, up to 30% of rated capacity. Given that, the land use areas indicated are at least 1/3 of the actual amount needed to produce a given amount of wind energy. A conservative estimate of the land needed to produce 1,800 megawatts of power would be 324,000 acres (407 square miles)

<http://www.sunpowercorp.com/>

Consider the land impacts to Oregon for the proposed increase in the renewable energy requirements to 50% when the impacts to the wildlife habitat needed to support the public interest in wildlife of the state on three current wind developments are as follows:

The total habitat required to be protected due to the impacts of Golden Hills Wind Development on wildlife habitat is 10.71 acres. The 399 MW Saddle Butte Wind Development just approved is being required to protect 26 acres of habitat due to its impacts on wildlife habitat. The required habitat protection for the 399 (MW) Klondike Wind Development is 30 acres.

Add to that the fact that nearly three fourths of the wind energy being produced in Oregon is being sold to other states. We are now in the position of having to devote hundreds of thousands of acres of land to developing additional wind and solar energy production as we receive no credit for most of the existing developments in spite of already being subjected to the impacts to our state from the existing developments sending energy out of state.

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