Chair Holvey, Vice-Chairs Elmer and Sosa:

After researching the implications of HB 4080, I am encouraging all members of the House Committee on Business and Labor to vote 'no' on the illogical legislation.

Oregon's 2022 Biennial Energy Report states on page 11 that Oregonians consumed 53.7 million megawatt-hours (MWh) of electricity in 2020 from both in-state and out-of-state sources, which equates to 73,511.3 MW of production over a one year period (53,700,000 MWh/ 730.5 hours per year).

The resource mix was comprised of hydro (38.9%), coal (26.5%), natural gas (21.5%), land-based wind (7.0%), nuclear (3.5%), and other forms incl. solar, biomass, and geothermal, etc. (2.6%).

It is understood that the projected output of Oregon's offshore wind farms (both call areas) will be ~14 gigawatts (14,000 MW), requiring dozens of specialized vessels manned with expert technicians.

4. *Description of Call Areas*

Two Call Areas are included in this notice. From north to south, they are the Coos Bay Call Area and the Brookings Call Area, which total about 1,159,298 acres (1,811 square miles) located offshore south-central and southern Oregon, respectively. The estimated offshore wind capacity of both Call Areas is about 14 gigawatts, assuming a power density of approximately 0.012 megawatts per acre (3 megawatts per square kilometer). The Call Areas are described geographically in this section. A map of the Call Areas and associated geographic information system (GIS) files can be found at *https://www.boem.gov/Oregon*.

Realizing a maximum production of just 19 percent of Oregon's average annual needs (14,000 MW / 73,511.3 MW), how much will this conceptual project actually cost Oregonians while accounting for total capital outlays and the ongoing cost of operations and maintenance for this seasonal energy source?

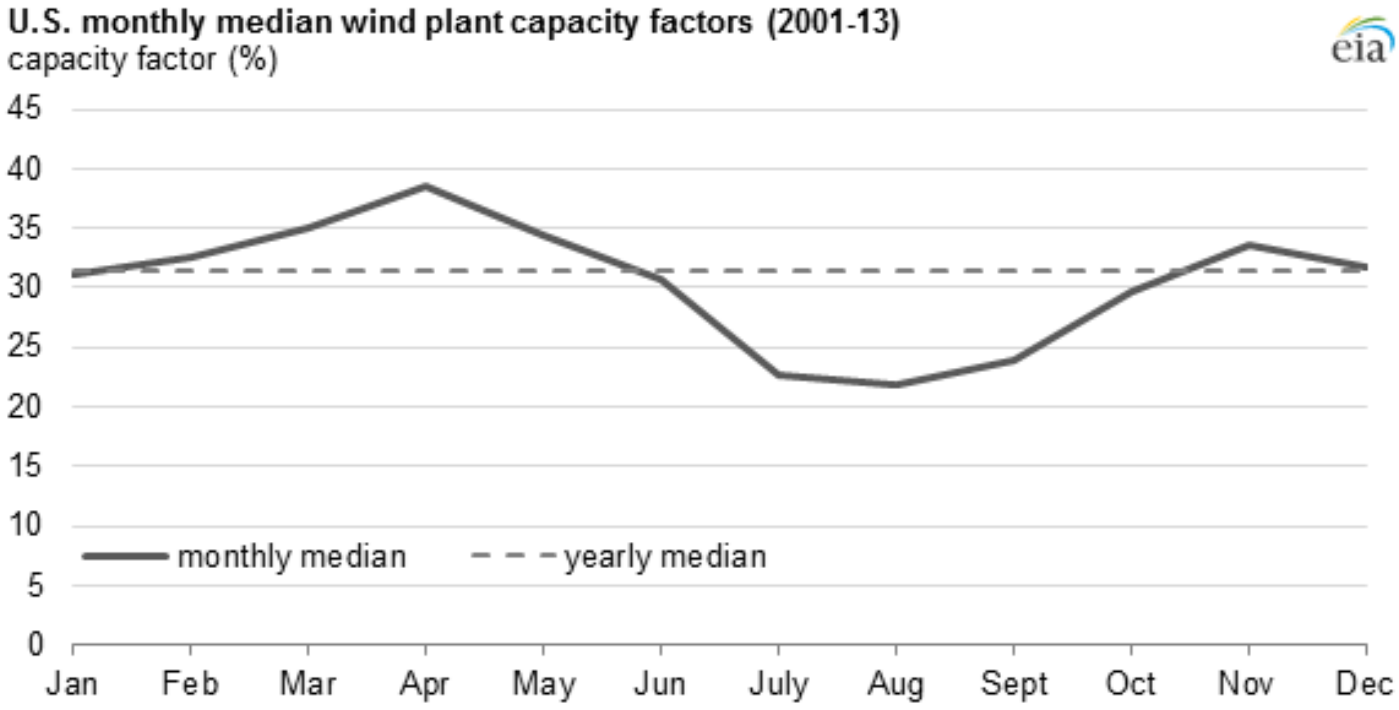
Wind-energy prototypes have required disassembly for repairs and/or completely scrapped (recycled) after just 5 years of use. So, how is it possible to have an accurate environmental risk assessment or accurate production-output estimates of these wind farms when long-term studies on floating wind farms are seriously lacking, if they exist at all?

It is understood that 18 wind turbines and foundations will be located beyond 13.8 miles (12 nautical miles), utilizing 6,800 miles of additional subsea cable; however, impacts to habitat will be felt. For example, "gray whale migratory routes are most dense within 6.9 miles from shore, Southern Resident killer whale habitat occurs 11.5 miles from shore along the Oregon coastline to 656 feet (200 meters) water depths, and humpback whales are generally concentrated in water depths up to 328 feet (100 meters)…" (Dept. of Interior's Call for Information and Nominations – Commercial Leasing for Wind Energy Development on the Outer Continental Shelf (OCS) Offshore Oregon, p. 10 of 38)

Land-based wind turbines have a typical lifespan of up to 20 years with routine maintenance every 6 months (U.S. EPA), yet the Pacific Ocean is historically one of the most powerfully destructive oceans on the planet. When considering the inevitable

breakdowns, failures, and fluid leaks that will occur within its lifespan, there is a high probability of environmental damage requiring a high degree of maintenance; furthermore, failures and leaks will be significant if 'viable' turbines are able to withstand the salty environment for any period.

Produced outputs are seasonal due to unpredictable wind speeds and thermal effects on energy lost during transfers over long distances; wind plant performance tends to be highest during Spring months and lowest during mid- to late-Summer months, when grid loads peak due to high air conditioning demands and other electrical-cooling system burdens. (EIA.gov)



The math on this proposed wind-power legislation does not come close to adding up to a positive ROI, so please represent all Oregonians by prudently voting 'no' on HB 4080 in this committee so it will never reach the floor. Thank you.