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Testimony for SB 477 Coal to Clean Energy

Hearing the state employees and industry lobbyists speak for about 2 ½ hours in the Committee on the Environment and Natural Resources public hearing yesterday, March 25, I noted that major important facts and issues were not addressed, and industry lobbyists did not represent the truth that I have for the last 57 years observed first-hand and/or heard or read from experts since the 1920s on PNW electricity and energy production, distribution, security, and management.

The way to have reliable, safe, accessible electrical and clean energy for everyone throughout Oregon, and therefore to best support our economy and environmental and public health, is to have the four D's:

1. Diverse and reDundant energy source and development/production
2. Decentralized energy production, distribution, and management
3. Democratized energy management
4. Direct accountability by utilities and decision-makers for consequences of private energy development, distribution, management, and finance.

Please vote Yes on SB 477 and do all you can to support it passing out of committee and passing the Senate and House to become law because SB 477, while far from desired and needed, is an important step in the right direction towards the electricity provided by large private utility companies becoming safe, reliable, accessible, and clean to benefit our Oregon and regional economy and environment and public health via energy production diversity and redundancy, decentralization of power plants and increased jobs/construction, democratized management, and direct accountability. We must have flexibility in using different mixes of energy sources that are best for the location, customers, time, and circumstances, so we must begin immediately in taking our money out of failing and lose-lose King C.O.N.G. (coal, oil, nukes, and gas) that send money out of state while we pay the clean-up, and instead invest in win-win local jobs, safety, environmental and public health, and new industries for sustainable energy that can survive and thrive in our changing physical, financial, and political climate.

Coal, LNG/methane gas, oil, propane, and nuclear power plants do not meet the criteria and Pacificorp in particular has for decades continued to fail to provide safe, reliable, accessible electrical power or adequate diversity/redundancy, decentralization, democratization, and direct accountability. Nor do these energy sources meet the criteria for more benefit than risk to ratepayers/customers, taxpayers, or anyone living downwind/downstream, and affected by global climate change. They certainly are not clean and are not sustainable or economical for Oregonians with their expensive market volatility, explosive fire risk, toxicity, public clean-up costs, loss to our regional economy, worker and public injuries and deaths, strikes, and environmental damage. Over time, coal, LNG/gas, oil, propane, and nuclear power will be more costly, more dangerous, more risky, less reliable, more harmful, and more resisted, and the fossil fuels will simply no longer be worth mining/drilling/fracking/developing.

Major centralized power plants and long-distance high tension transmission lines are inefficient and costly and they are vulnerable to increased wildfires, rail corridor oil/coal/propane/LNG train fires and explosions, wind and storm damage, earthquakes, vandalism, terrorism, and corporate extortion or bankruptcy. In California and the east coast, major electric utilities used preplanned brown-outs and black-outs to terrorize, impoverish, endanger, extort, and manipulate customers, taxpayers/voters, and public servants to absolve from criminal prosecution and fines the utilities self-named too big to fail. Yet worldwide throughout history, small, locally controlled electric public and private utilities using local power production for local distribution, have not put customers and taxpayers and local governments at such big risk. The lobbyist from Pacificorp argued in effect that the big bully was too big for state legislators to do their job protecting the state and Oregonians, planning state economic security, and holding corporations accountable to benefit Oregonians, as he probably also argues to the other states. We can help keep Oregon safe from corporate bullies to the degree we have our own economies of scale, scaling back utility companies from giving away our energy and payments

to other states and forcing us to pay for their costly mistakes. We can develop more power locally and reliably with many more small power plants and on-site energy production that is free from foreign or corporate domination.

For decades engineers and management within Pacific Power and Light/Pacificorp and PGE have known that coal does not provide a worthwhile return on their investment and will only get worse, hence they have tried to have taxpayers and customers absolve them of accountability. Coal, gas, oil, and propane are not worth the utility companies' risk or customers' or taxpayers' and neighbors' risk of fires, explosions, toxic pollution, disabilities/deaths, terrorism security costs, lawsuits, investor disinvestment and loss of stock value, etc.

The public relations term "natural gas" refers to highly explosive and toxic methane gas that is a worse greenhouse gas than carbon dioxide, and with the explosive, toxic, and atmosphere-heating gases released with fracking more harmful to the people, wildlife and livestock, groundwater, crops and environment, weather, economy, and local government of the area, and via global climate change, to all humans. Liquid natural gas/LNG/methane (especially fracked), propane, and oil (especially Bakken crude and Canadian shale oil) rail, pipeline, truck, or barge/ship transport and storage endanger humans, animals, ecosystems, industries/economies, and our local governments. Methane/LNG/n gas is not clean, green, safe, reliable, or economical, and does not meet the criteria for public benefit.

Methane gas is 72 to 105 times worse in causing greenhouse warming and global climate change than carbon dioxide, according to which model and time period used. Research summaries are listed separately. Oregonians and state and local governments cannot afford the loss of jobs, safe drinking water and secure land, housing, schools, and hospitals, and loss of local industries that would be caused by increased global climate change worsened by more methane gas in our atmosphere from fracking, transport, processing, burning, etc. Methane harms our ozone layer and is explosive.

We will no longer be able to rely so much on hydro electrical production since it will not be reliable, secure, or economical with the inevitable worsening global climate change that has already reduced snowfall, snow pack, useable rainfall, and direction of water flow. Excessive logging, especially clearcutting, means electricity from dams won't be as reliable or available, and the Oregon Forestry Practices Act prevents communities and local and state governments from being reimbursed for their costs, ruined economies, injuries, lost lives. Trees won't "comb the clouds" causing healthy precipitation on which our region has relied; trees won't soften the fall and ease the absorption of water into the soil; trees won't suck up the excess water and so prevent landslides; logged tree roots will lose vitality and disintegrate so won't prevent massive landslides. These will clog and change waterways away from dams or ruin dams, or at the least, increase dam hydro plants costs to make them ineffective/inefficient, cost-prohibitive, too risky, and unreliable.

However, since the late 1800s Klamath Falls has enjoyed safe, reliable, sustainable geothermal energy and can do far more with a few major power macro plants and with more micro plants.

Portland is allowing clean turbines for generating electricity from within the pipes for clean water flowing downhill. Elsewhere electricity is generated with the circulating of water up with solar and mechanical energy for night time and then flowing downhill during the day. The same can be done with sewage treatment plants, increasing electricity production for local use and increasing the biological health and purification of the sludge and water.

In Scappoose, Oregon Ingenuity Innovations has been applying technology that Tesla developed in the 1800s using free electricity without fossil fuels, solar, wind, hydro, etc.

Small, building-specific humanure to gas conversion already heat homes and stoves in India. Small solar panels and photovoltaic windows and skins on vehicles and buildings already reduce load and peak demands, and can add to the power grid. Dairy and feed lot manure capture can prevent water pollution and increase electricity production for on-site milking, refrigerating, homogenizing, air heating and cooling, monitoring, etc.