

## Testimony of Bruce Speight, Environment Washington Executive Director at UTC hearing on Puget Sound Energy 2017 Rate Case, 31 August 2017

Chairman Danner and members of the Utilities and Transportation Commission, thank you for the opportunity to comment today. My name is Bruce Speight and I am the Executive Director of Environment Washington, a state-wide, membership-based environmental advocacy organization.

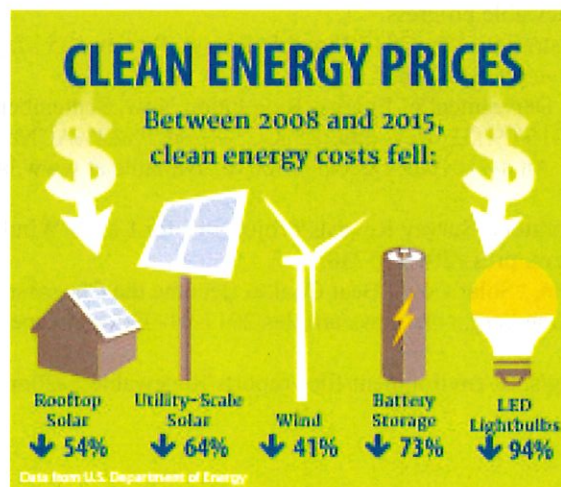
I am here on behalf of our members, supporters and activists across the state to urge you to require Puget Sound Energy (PSE) to accelerate the depreciation date for Colstrip Units 3 & 4 to 2025.

Virtually every day, there are new developments that increase our ability to produce more renewable energy, apply renewable energy more widely and flexibly to meet a wide range of energy needs, and reduce our overall energy use – developments that enable us to envision an economy powered entirely with clean, renewable energy.

Our country produces nearly eight times as much renewable electricity from the sun and the wind as in 2007,<sup>i</sup> and in March 2017, for the first time ever, wind and solar produced 10 percent of America's electricity.<sup>ii</sup> At the same time, the average American uses 10 percent less energy than a decade ago, due in great part to improvements in energy efficiency.<sup>iii</sup>

The last decade has proven that clean energy technology can power our homes, businesses and industry – and leaves Washington State and our country poised to dramatically accelerate its shift away from fossil fuels. With renewable energy prices falling and new energy-saving technologies coming on line every day, we should work to obtain 100 percent of our energy from clean, renewable sources.

Nearly every segment of the clean energy market is seeing rapid price declines. A Department of Energy survey of clean energy prices found that, from 2008 to 2015, the cost of land-based wind energy fell by 41 percent; the cost of distributed solar photovoltaics (PV) capacity by 54 percent; the cost of utility-scale PV by 64 percent; the cost of batteries by 73 percent; and the cost of LED bulbs by 94 percent.<sup>iv</sup> Today, after years of price declines, the unsubsidized costs of utility-scale wind and solar energy have fallen to levels that are “cost-competitive with conventional generation technologies under some scenarios,” according to Lazard's most recent levelized cost of energy survey.<sup>v</sup>



Experts predict that renewable energy prices will continue to fall. A recent survey of wind energy experts by the National Renewable Energy Laboratory found that the global price of wind power is expected to fall 24-30 percent by 2030 and 35-41 percent by 2050.<sup>vi</sup> Bloomberg New Energy Finance predicts that “[b]y 2025,

solar may be cheaper than using coal on average globally,” even when the costs imposed by coal use on public health and the environment are excluded.<sup>vii</sup>

A recent Environment Washington Research and Policy Center report found that since 2007, Washington State has seen a 17,588 percent increase in the amount of electricity it gets from the sun and a 330 percent increase in wind energy production.<sup>viii</sup>

Every day, we see more evidence that an economy powered by renewable energy is within our reach. The progress we’ve made in the last decade on renewable energy, and technologies like battery storage and electric cars, should give Washingtonians the confidence that we can take clean energy to the next level and completely replace fossil fuels with clean, renewable energy.

Repowering our economy with clean, renewable energy is a key strategy in phasing out carbon pollution by 2050 – a necessary step to prevent the worst impacts of global warming. Transitioning to clean, renewable energy will also improve our health by preventing hazardous air pollution, and increase our safety by protecting us from the hazards of extracting, transporting and processing dangerous fuels. Bottomline, 100 percent renewable energy is abundant and increasingly affordable.

Taking steps now to replace fossil fuels with clean, renewable energy is essential for the future of our planet and your leadership in making it happen is critical. Again, we urge you to require Puget Sound Energy (PSE) to accelerate the depreciation date for Colstrip Units 3 & 4 to 2025 – to get off coal, along with any other fossil fuel-based source of energy, and replace this energy source with clean, renewable energy.

Thank you for the opportunity to comment.

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<sup>i</sup> U.S. Energy Information Administration, May 2017 Monthly Energy Review, 25 May 2017, available at [www.eia.gov/totalenergy/data/monthly/archive/00351705.pdf](http://www.eia.gov/totalenergy/data/monthly/archive/00351705.pdf).

<sup>ii</sup> Eight-fold growth: U.S. Energy Information Administration, May 2017 Monthly Energy Review, 25 May 2017, available at [www.eia.gov/totalenergy/data/monthly/archive/00351705.pdf](http://www.eia.gov/totalenergy/data/monthly/archive/00351705.pdf); 10 percent in March: U.S. Energy Information Administration, Wind And Solar In March Accounted For 10% of U.S. Electricity Generation For First Time, 14 June 2017, available at [www.eia.gov/todayinenergy/detail.php?id=31632](http://www.eia.gov/todayinenergy/detail.php?id=31632). Because of seasonal wind patterns, spring months tend to have greater country-wide renewable electricity production than other months – nevertheless, the 10 percent mark indicates rapid renewable progress.

<sup>iii</sup> U.S. Energy Information Administration, May 2017 Monthly Energy Review, 25 May 2017, available at [www.eia.gov/totalenergy/data/monthly/archive/00351705.pdf](http://www.eia.gov/totalenergy/data/monthly/archive/00351705.pdf)

<sup>iv</sup> Paul Donohoo-Vallett et al., U.S. Department of Energy, Revolution Now, September 2016, available at [www.energy.gov/sites/prod/files/2016/09/f33/Revolutiona%CC%82%E2%82%ACNow%202016%20Report\\_2.pdf](http://www.energy.gov/sites/prod/files/2016/09/f33/Revolutiona%CC%82%E2%82%ACNow%202016%20Report_2.pdf).

<sup>v</sup> Lazard, Levelized Cost of Energy Analysis 10.0, December 2016, available at [www.lazard.com/media/438038/levelized-cost-of-energy-v100.pdf](http://www.lazard.com/media/438038/levelized-cost-of-energy-v100.pdf).

<sup>vi</sup> National Renewable Energy Laboratory, Survey Reveals Projections for Lower Wind Energy Costs, 13 September 2016, available at [www.nrel.gov/news/press/2016/37738](http://www.nrel.gov/news/press/2016/37738).

<sup>vii</sup> Jess Shackleman and Chris Martin, “Solar Could Beat Coal to Become the Cheapest Power on Earth,” Bloomberg, 2 January 2017, available at [www.bloomberg.com/news/articles/2017-01-03/for-cheapest-power-onearth-look-skyward-as-coal-falls-to-solar](http://www.bloomberg.com/news/articles/2017-01-03/for-cheapest-power-onearth-look-skyward-as-coal-falls-to-solar).

<sup>viii</sup> <http://environmentwashington.org/sites/environment/files/reports/Renewables%20on%20the%20Rise%20Web%20ersion.pdf>