## Dear UTC Commissioners:

## Subject: COMMENT ON UE-160918: WIND FARM REPOWERING

*PSE 2017 IRP* evaluates a proposal to replace the current 12-year-old, 157 MW Hopkins Ridge Wind Farm with new marginally more efficient wind machines at a price tag of \$40 million. The stated objective is to harvest tax incentives and bonus Renewable Energy Credits. Repowering Wild Horse (273 MW, completed in 2006 and expanded in 2009) is also shown as an option (page 6-81) at a cost of \$42 million.

On page 6-47, PSE indicates that they use a book life for wind machines of 25 years. According to the American Wind Energy Association, "Wind turbines have long life cycles, lasting several decades. Some turbines from the first wind farms built in California nearly 35 years ago still operate today." And according to EDF, a major wind energy vendor in the UK, "A wind turbine typically lasts around 20-25 years." However, they go on to note that "the very first of the mass-produced turbines, the Vestas 30kW machine, has been in operation since 1980 and has operated steadily throughout its lifetime, without the need for any major components to be replaced."

Proposals to tear down wind machines that have reached only half of their expected economic life, so that tax incentives designed to expand the nation's carbon-free generating capacity can be siphoned into corporate coffers without significantly expanding carbon-free generation is deeply offensive, even if these proposals are not included in PSE's near-term Action Plan. *PSE 2017 IRP* is unresponsive to the requirements under WAC 480-100-238 (2) (b) to give consideration to "public policies regarding resource preference adopted by Washington state" and to "the cost of risks associated with environmental effects including emissions of carbon dioxide." Giving adequate consideration to these requirements would propel PSE to propose a rapid build-out of new wind farms along with the transmission infrastructure and storage necessary to enable those generating resources to meet capacity needs as fossil-fuel generation is phased out.

We are in a climate crisis. We are in a race against time to build-out our capacity for carbon-free energy production, so that we can slash emissions and prevent climate disruption from progressing beyond human control. Any discussion of repowering existing wind farms should be deferred until carbon emissions from electrical generation in Washington have been brought to zero or maintenance costs make their continued operation prohibitive. PSE deserves a strong rebuke from the UTC for entertaining such options.

<sup>&</sup>lt;sup>1</sup> PSE 2017 IRP, page 4-6.

<sup>&</sup>lt;sup>2</sup> Hannah Hunt, Into the Wind: the AWEA blog, February 23, 2017. Accessed 1/27/18 here: <a href="http://www.aweablog.org/happens-wind-turbine-end-life/">http://www.aweablog.org/happens-wind-turbine-end-life/</a>.

<sup>&</sup>lt;sup>3</sup> EDF Renewables, FAQ. Accessed 1/27/18 here: <a href="http://www.edf-er.com/AboutWindEnergy/FAQ.aspx">http://www.edf-er.com/AboutWindEnergy/FAQ.aspx</a>.

<sup>&</sup>lt;sup>4</sup> Washington Administrative Code 480-100-238 (2) (b). Available here: http://apps.leg.wa.gov/WAC/default.aspx?cite=480-100-238.

## Respectfully submitted,

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