From:	Jorgen Rasmussen
To:	UTC DL Records Center
Subject:	Avista Corporation's 2017 Integrated Resource Plan UE-161036
Date:	Tuesday, October 24, 2017 3:35:26 PM

## Commission's Records Center 10/24/17

Please record my Comment concerning UE-161036 please send me a note that this has been received.

Concerning the Avista Corporation's 2017 Integrated Resource Plan, I'm please with the report stating the <u>Colstrip</u> 3 and 4, used by Avista, will be phased out within the next decade, through different savings and natural gas peaker etc. However that been said their is noting "natural" about Natural gas, It produces plenty of CO2, 11.7lb per therm, and not to mention directly leaks of CH4 into the atmosphere is 25 times more green house pollutant than CO2. Leaks needs to get addressed. Burning stuff from deep under ground, even Natural Gas is not solving CO2 issues for our future generations.

With this comment, I like to point out to the energy Commission, that in five to ten years, at the time Avista is planning to invest in Natural Gas peaker's to reduce high peak loads, the Solar and Wind energy pricing including energy storage will be very competitive, with Natural Gas peaker investments. As a matter of fact this report from Minnesota, states, that as of today's date <u>"grid batteries are poised to become cheaper than natural gas plants"</u>. It is my recommendation, this need to be added or at least noted in the report so it can be considered when time comes to invest in Natural Gas peaker's. (I love to see the dry grass fields next to the Otis Orchards Natural Gas peaker covered with solar panels, that area has plenty of sun, plenty of grid connection and with solar panels covering the grass field the fire hazard will be greatly reduced during the dry summer month)

In addition, I like to state, even though I'm somewhat of an environmentalist downplaying burning stuff, fossil fuels are bad and need to go, however in reality, CH4 will continue to be the cleanse fossil fuel available, it only produce CO2 and H2O however we must keep it from leaking direly into the atmosphere. As a reference, for heating purpose it will emit about 1/2lb CO2 per KWh and about 1.0lb per KWh if used to produce electricity. Another fact to state, particular in this country, only two effective energy distributions exist, the electric grid and the Natural Gas lines. Those need to be kept up to date and at the highest standards. With that in mind, what does the future hold? in my mind this is for everybody to get exited about, "WE ARE GOING TO MARS" what does that have to do with energy? well, in order to return from Mars back to earth CH4 will have to be produced on Mars using nothing but solar energy, CO2 from the Mars atmosphere and H2O from the Ice cap of Mars. To me that is very exiting, in the next few years, the process will be perfected and made as efficient as possible. So why not implement the same process here on earth, We can load synthetic natural gas to gas reservoirs during the summer using available excessive solar energy = Gas Peaker replacements.

Hope I'm making sense

Thanks for your time

Regards

## Jorgen Rasmussen

16KW Solar System Solar Acres Farm Inland Northwest Sustainable Energy Group Pole setting for pole barn

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