RE: Comments of Haymaker Wind, LLC

Docket No. UE-180271 - Puget Sound Energy 2018 Request For Proposal for All Generation Resources

May 25, 2018

Haymaker Wind LLC (Haymaker), developer of the Haymaker Ranch Wind Energy Project (Haymaker Project), offers these comments in response to Puget Sound Energy's Draft 2018
Resource Request for Proposals.

Introduction

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Haymaker has carefully reviewed Puget Sound Energy's (PSE) 2017 Integrated Resource Han (TRP) and subsequent 2018 Draft Resource Request for Proposals (RFP) and looks forward to submitting a proposal for consideration when finalized. The proposed Haymaker Project is a new wind energy project located on a large ranch, owned and operated by a single landowner in central Montana. The wind farm is sited in an area with world-class high-quality wind resources confirmed by data collected from three met towers on the site since 2014. The project has been designed to be flexible regarding size, with the potential capacity up to 500 MW. The project owners completed a Regulatory and Environmental Constraints Analysis which found no fatal flaws or roadblocks for project development. Haymaker initiated additional critical path environmental studies in 2018, all of which relate to characterizing risk to species protected by the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. Based on current development milestones, the Haymaker Project is capable of reaching commercial operations in 2021 and can qualify for federal tax benefits through 2023.

Haymaker believes Montana wind, or a combination of Montana resources, can provide low-cost benefits to PSE's system and customers. The project is located near the twin 500 kV Colstrip Transmission System (CTS) and the Gordon Butte Pumped Storage Hydro Project (Gordon Butte). Gordon Butte is a 400 MW, closed-loop pumped hydro storage project with 3,400 MWh of storage capability and a planned interconnection to the twin 500 kV Colstrip transmission system near Martinsdale, Montana. These projects provide PSE with an opportunity to combine resources, shape and schedule energy to cover soon to be retired coal-fired generation with clean energy and capacity from Montana.

Benefits of Montana's Haymaker Wind to PSE

Montana wind is winter-peaking and daytime-peaking, which correlates well with the Pacific Northwest winter-peaking utility loads. Moreover, Montana wind has higher capacity factors and a complementary profile to most of the nighttime-peaking wind projects located in Washington, Oregon, Idaho, and California. Montana wind is counter-seasonal to the current Bonneville Power

Administration (BPA) system wind generation and Pacific Northwest hydroelectric generation which tends to see a surplus of power in the spring.¹ These factors make Montana wind more valuable on a per MWh basis than many competing projects in the region, as demonstrated by Portland General Electric (PGE) during the 2016 IRP process. PGE determined that adding Montana wind to their portfolio yields cost and integration benefits by improving thermal fleet utilization, reducing oversupply and diversifying their renewable generation profile.²

Despite clear benefits, uncertainty about transmission availability has traditionally been a constraint for the development of new wind in Montana to serve Pacific Northwest load. However, PSE has the unique chance to utilize existing transmission capacity from Montana by replacing Colstrip coal-fired generation with Montana wind resources. The Colstrip transmission system should continue to provide reliable and cost-effective access to Montana resources for the benefit of the Pacific Northwest region for which it was constructed. The combination of a closed-loop pumped hydro storage project (Gordon Butte PSH) and Montana wind (Haymaker Project) delivered to PSE with existing PSE transmission rights will appeal to customers in the Pacific Northwest demanding a more sustainable energy products to replace fossil fuel generation.

Tax Benefits for Replacing Montana Coal with Montana Wind

The sunsetting federal Renewable Electricity Production Tax Credit (PTC) allows 100% capture of the value of the PTC for projects that begin construction in 2016, 80% capture for beginning construction in 2017, 60% for construction in 2018, and 40% for 2019. To qualify for the PTC, a developer may either begin continuous construction of a significant nature on a project or reach the PTC safe harbor by spending at least 5% of the total capital cost of a project and subsequently making continuous efforts to complete the project. Under either case, the Internal Revenue Service (IRS) determined that; should a project become operational within four years from the start of construction, the project will be considered to have satisfied the test for continuous construction and will thus avoid additional scrutiny by the IRS to determine whether or not the project was actually continuously constructed.³

By acting now, PSE still has time to take advantage of expiring PTC for wind produced in Montana. These tax credits have benefitted customers by providing low-cost, clean, renewable energy for years, but are phasing out and will no longer be available after 2023. Based on the "four-year rule" described above, qualified projects procured soon and operational by the end of 2021 would qualify for the credit at 80 percent of full value. Eligible projects operational by 2022 receive 60 percent of the total value and 40 percent by 2023. Given the ultimate fate of coal-fired

¹ "New Study Confirms Unique Features of Montana Wind in Providing Solutions for Pacific Northwest Power Market," PR Newswire, https://www.prnewswire.com/news-releases/new-study-confirms-unique-features-of-montana-wind-in-providing-solutions-for-pacific-northwest-power-market-119756664.html, (April 13, 2011)

² Portland General Electric, "2016 Integrated Resource Plan Roundtable #16-2," <u>PGE2016IntegratedResource Plan</u> Roundtable #16-2May162017, (May 16, 2016)

³ "Renewable Electricity Production Tax Credit (PTC)," Energy.Gov, https://www.energy.gov/savings/renewable-electricity-production-tax-credit-ptc, (May 24, 2018)

generation in the United States and around the world, PSE should consider taking advantage of this financial benefit for additional replacement wind resources sooner, rather than later. The Haymaker Project will qualify for some level of the PTC through 2023 and is capable of being operational by 2021, providing PSE with options for achieving maximum tax benefits.

Economies of Scale

"The IRP is best understood as a forecast of resource additions that appear to be cost-effective given what we know today about the future [emphasis added]." In the PSE 2017 IRP, PSE bet on Units 3 & 4 of the Colstrip plant being the most cost-effective resource to meet PSE's needs into the future. In many parts of the country, keeping existing coal plants open is proving more expensive than building new renewable resources. The trend towards retiring coal-fired generation facilities is accelerating. The expectation that Colstrip Units 3 & 4 will continue to be economical to operate for the foreseeable future, despite the absence of environmental regulation necessitating closure, seems unrealistic. Unfortunately, because PSE did not include the retirement of Units 3 & 4 of the coal-fired Colstrip plant in the IRP analysis, PSE's ability to fairly evaluate large-scale opportunities in Montana that may offer a lower-cost renewable replacement for coal generation is limited in the Draft 2018 RFP.

As noted above, the Haymaker Project is located in Wheatland County, Montana on a single landowner ranch. Wheatland and Meagher Counties in Montana are home to some of the best quality wind resource in the United States. The Haymaker Project is designed to be flexible in size and has the potential up to 500 MW of capacity. Haymaker will submit an appropriately sized proposal for PSE's 2018 RFP but is disappointed PSE will not be evaluating the grander opportunity Montana resources have to offer. The Haymaker Project combined with other prospective projects in these two Montana counties can produce wind power on a scale that could replace most of the generation at the Colstrip coal-fired plant. These future resources are located in proximity to the existing twin 500 kV Colstrip transmission system, making collection and interconnection of wind resources cost-effective. Further, transmission from Montana to PSE is possible and less expensive using PSE existing transmission rights.

Additionally, the Haymaker Project's location near the Gordon Butte PSH creates an attractive combination of resources, easily collected, shaped, scheduled and interconnected to existing transmission facilities as a firm, dispatchable product. Gordon Butte provides flexible storage capability and a planned interconnection substation on the Colstrip twin 500 kV transmission system. Gordon Butte will employ the latest ternary pump/turbine technology to provide fast-ramping flexible capacity ideally suited for integrating intermittent renewable resources into the Pacific Northwest transmission grid. Gordon Butte coupled with Montana's robust wind

⁴ Puget Sound Energy, 2017 PSE Integrated Resource Plan (November 2017): 1-1

⁵ Silvio Marcacci, "Utilities Closed Dozens Of Coal Plants In 2017. Here Are The 6 Most Important," http://www.forbes.com, (December 18, 2017).

resources provides a reliable, cost-competitive, and carbon-free solution for replacing the capacity and energy from the retirement of coal -fired generation at Colstrip.