EXH. CPC-7C DOCKETS UE-240004/UG-240005 2024 PSE GENERAL RATE CASE WITNESS: COLIN P. CROWLEY

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

Docket UE-240004 Docket UG-240005

SIXTH EXHIBIT (CONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF

COLIN P. CROWLEY

ON BEHALF OF PUGET SOUND ENERGY

REDACTED VERSION

FEBRUARY 15, 2024

Vantage Wind PPA

EMC Informational March 30, 2023



Anthony O'Rourke
Commercial Acquisitions Manager, Resource Acquisition

SHADED INFORMATION IS DESIGNATED AS CONFIDENTIAL PER WAC 480-07-160

Anticipated Recommendation

Based on due diligence performed to date and pending finalization of contract negotiations, Resource Acquisition anticipates a request that the EMC authorize PSE to seek board approval to execute the following contract:



Project Overview and Key Commercial Terms

PROJECT PROFILE

Seller: Vantage Wind Energy LLC (Invenergy

Renewables)

Resource Type: Wind

Nameplate Capacity: 90 MW Location: Ellensburg (Kittitas), WA

Development Status: Project operational since 2010. Permitted with site control under long term leases.

- 60 GE 1.5 SLE turbines (GE WindBOOST installed in 2023, PowerUp in 2014, Vortex generators on 13 turbines in 2013).

CONTRACTING STATUS

- PPA negotiations in progress, 2nd turn of PPA under review by Invenergy.
- Contract execution targeted for April/May.
- Key outstanding contractual items:

-

PRICE AND PRODUCT

Transaction Type: 15-year PPA

Product: As-generated wind + environmental attributes

Offtake Term Start: 10/05/2025

 Current offtake agreement with PG&E rolls off 10/4/2025.

Price:

Expected Annual Output:

ENERGY DELIVERY

POI: Wind Ridge (PSEI)

POD: Mid-C (BPA at MIDCREMOTE)

- Delivery to Mid-C on long-term firm PSEI transmission rights + Grant PUD transfer agreement.
- Use PSE-held transmission rights on BPA from Mid-C to deliver to PSE system.



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Wild Horse

Counterparty Profile

- INVENERGY privately-held developer, builder, owner and operator of renewable energy projects.
- 130 contracted, constructed and operational projects totaling 30GW developed to date.
 - 17GW wind
 - 6GW solar
 - 1GW storage
 - 6GW thermal
- Quebec Public Pension Fund (CDPQ) owns 53.4%.
 Blackstone Group acquired minority stake for \$3 billion in 2022.
- Vantage Wind Energy LLC a subsidiary of Invenergy Renewables LLC, which will provide credit support to project.
- Invenergy Services
 - 12,659 MW of assets under management, 5.5 GW wind generation projects.
 - 15 years of operational experience.
 - Recognized with the American Wind Energy Association (AWEA) Excellence in Operations Award in 2019.
 - On-site, full-time O&M teams at each wind facility.



Invenergy Wind Portfolio





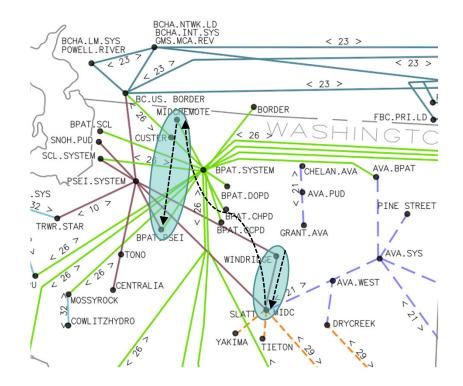
Energy Delivery – Long Term Firm Transmission in Place

Interconnection

- Point of Interconnection (POI): PSE's Wind Ridge Substation (connecting through Poison Spring, similar to Wild Horse)
- LGIA executed in 2009 with PSEI.

Transmission

- Vantage holds long-term firm transmission rights on PSEI for pointto-point (PTP) service from POI Wind Ridge to the Wanapum switchyard.
- Vantage also has a transfer service agreement with Grant PUD to enable delivery of the output across Wanapum to BPA's 230 kV Vantage substation, a MIDCREMOTE scheduling point.
 - Both Vantage's PSEI transmission rights and transfer agreement with Grant PUD will be assigned / novated to PSE merchant.
- From MIDCREMOTE, the project will flow to PSE's system (BPAT.PSEI) on PSE's existing Mid-C transmission rights on BPA's main network made available to bidders in the RFP.





CETA Contribution

- The Vantage Wind project will generate approximately GWh/year of clean energy.
- As an existing WA facility, has no new land/community impact while bringing new clean power to PSE's customers.
- Avoids the need to secure additional transmission by bringing existing long-term rights on PSEI and using PSE-held transmission rights from Mid-C.

CETA need (MWh)	2025	2026	2027	2028	2029	2030
CETA Interim Target	63%	67%	65%	70%	75%	80%
Adjusted Load (23 EPR)	20,765	20,968	21,094	21,328	21,418	21,603
CETA Load Adjustments*	1,143	1,258	1,399	1,550	1,697	1,816
CETA Retail Load	19,622	19,710	19,694	19,778	19,721	19,787
CETA Interim Target	12,409	13,197	12,758	13,912	14,709	15,910
Existing CETA Resources	10,527	9,857	9,343	9,198	9,138	9,175
CETA Surplus/(Need) before New Resources	(1,881)	(3,341)	(3,415)	(4,714)	(5,571)	(6,735)

^{*} Existing PURPA, Green Direct, 23 EPR EE, CEIP Distributed Solar



6 | March 30, 2023 EMC Informational: Vantage Wind PPA

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Key Risks and Benefits

Key Risks	Mitigation
Competition: Project likely participating in other resource solicitations	Fast-track negotiation and aim to execute in April/May
Useful life: Operational performance towards end of life may decline. Effect of potential repowering on energy output.	Contractual availability guarantees and associated liquidated damages. Timing of planned outages to accommodate Seller requirements and PSE service obligations

Key Benefits

- · Low development risk: facility is operational.
- Low energy delivery risk: LTF transmission with rollover rights in place, to be assigned/transferred to PSE-merchant.
- Term-start in early Oct 2025 allows partial year CETA energy contribution to 2025 CEIP targets.
- Established counterparty with strong operating expertise.

Impact on Power Costs

• million annual PPA payments are ~10% lower than alternative market, and with incremental transmission costs represent a less than .5% increase on total power costs.

2025	2026	2027	2028	2029	2030
	2025	2025 2026	2025 2026 2027	2025 2026 2027 2028	2025 2026 2027 2028 2029

^{*} PSEI TX + balancing cost at OATT rate + Grant PUD Transfer Agreement Annual Payment



7 | March 30, 2023 EMC Informational: Vantage Wind PPA

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Anticipated Recommendation

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Board Decision – Recommend Authorization to Execute

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Recommendation

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