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Project Update – Willow Ridge Wind Project

This letter has been sent to provide you with an update about the Willow Ridge Wind Project (the Project), proposed by SPWC Development GP Inc. (SPWC). SPWC proposes to construct a wind-powered electricity generation and battery energy storage facility, located approximately 7.2 km south of Fort Macleod in the Municipal District of Willow Creek, Alberta.

In response to comments received during the ongoing Alberta Utility Commission (AUC) regulatory review process (i.e., AUC Proceeding 27837), as well as changes in technology since the original AUC application was submitted, SPWC is proposing several changes to the Project design and layout. The proposed Project design and layout revisions led to changes of several Project details, including:

- A change in the wind turbine model (used for design basis) to the Nordex N163-6.X;
- The reduction in overall generation capacity from 204.6 MW to 196 MW;
- The removal of 3 turbines (i.e., Turbines T30 and T32 from vicinity of airstrip and T35);
- The relocation of 3 turbines from the vicinity of the airstrip (i.e., Turbines T21, T25 and T28);
- An adjustment of 9 turbine pad locations;
- A change in Battery Energy Storage System (BESS) storage units and inverters (Sungrow ST5015UX PowerTitan 2.0 storage system and Sungrow MVS5140 inverter stations);
- An increased BESS capacity from 25 MW (50 MWh) to 50 MW (100 MWh); and
- Associated amendments to access roads and collection line routes resulting in reduced land usage throughout the Project Area.

Table 1: Summary of Proposed Project Changes			
	Current Design	Amended Design	Proposed Change
Wind Power Plant			
# of Turbines	31 Turbines (SG 6.6-170)	28 Turbines (N163 6.X)	Decrease (3 Turbines)
Generation Capacity	204.6 MW	196 MW	Decrease (8.6 MW)
Turbine Hub Height	115 m	116.9 m	Increase (1.9 m)
Blade Length	85.0 m	81.5 m	Decrease (3.5 m)
Maximum Turbine Height (Blade Tip)	200 m	198.4 m	Decrease (1.6 m)
Battery Energy Storage System			
Approx. Number of BESS Containers	~20 BESS Containers (PowerTitan 1.0)	~24 BESS Containers (PowerTitan 2.0)	Increase (4 Containers)
Number of Inverters	10 Stations (Sungrow SC2500UD)	12 Stations (Sungrow MVS5140)	Increase (2 Stations)
Storage Capacity	25 MW (50 MWh)	50 MW (100 MWh)	50 MW Increase
Project Footprint			
Construction	85.90 ha	88.50 ha	Increase (2.6 ha)
Operation	40.55 ha	33.67 ha	Decrease (6.88 ha)

Why Are These Changes Being Proposed?

SPWC has revised the turbine layout to address public comments about the potential interaction with aviation flight paths associated with using the Fort MacLeod (Alcock) Airstrip (CFM8). Some turbines have been removed and others relocated to maximize the use of the wind energy resource in the Project Area.

Additionally, the previous turbine model used for the design basis of the Project is no longer commercially available. Although a final selected turbine model has yet to be determined, SPWC has proposed an alternative, commercially available model of wind turbine generator (i.e., Nordex N163-6.X-7MW) to be used for the basis of Project design and regulatory permitting. The Nordex N163-6.X-7MW has similar dimensions and slightly higher generation capacity. Pending approval from the AUC, and completion of equipment procurement, SPWC will confirm the selected turbine model in a “Final Project Update”, to be submitted to the AUC, at least 90 days before construction.

Finally, advancements in BESS technology have allowed SPWC to increase the storage capacity of the Project BESS with no increase in predicted cumulative sound levels. The increased storage capacity will further contribute to Alberta’s energy resiliency for the future.

Project maps depicting changes in the Project layout and revised results from predictive noise and shadow flicker modelling are presented in **Attachment 1**. A FAQ document provides more information on the proposed changes to the Project and can be found in **Attachment 2**. A brochure outlining the AUC’s application review process and how to participate has also been included under **Attachment 3**.

Changes to the Project Schedule

Given the extended time needed to undertake the AUC regulatory approval process, as well as delays associated with the Alberta *Renewables Inquiry and Related Pause on Approvals*, SPWC has re-evaluated the probable timeline for construction and operation of the Project. Subject to the potential time needed to complete AUC and municipal regulatory review processes, SPWC anticipates that construction of the Project could start as early as mid-2025. The proposed timing of additional Project milestones is described in **Table 2**.

Table 2: Proposed Project Schedule *Note: This schedule is subject to change*	
Project Construction	Mid-2025
Start of Commercial Operations/In-Service Date	Late 2026
Operation	2026-2051 25 years with the potential for extension of the Project life through the replacement or updating of key equipment, as required – subject to regulatory approval.

I Have Questions about the Project... Who Can I Speak With?

The Project website can be accessed for additional information and to provide questions or concerns directly to SPWC: www.willowridgewindproject.com

SPWC will be completing door-to-door canvassing of residences located within 800 m of the Project on **June 14 and 15, 2024**. If you would like to book a specific time to meet with members of the Project team, please contact us by email or phone (see below) no later than **June 21, 2024**.

If you have questions associated with the changes to the Project or the information provided in the attachments, please contact the Project team:

- By Phone: (403) 215-8885 ext. 4322
- By Email: WillowRidgeWind@algonquinpower.com

Sincerely,

SPWC Development GP Inc.

Attachment 1: Project Maps

Attachment 2: Project Update Frequently Asked Questions

Attachment 3: AUC Application Review Process Brochure