RE: Lanfine North Wind Power Project and Lanfine South Wind Power Project

Dear neighbour:

Thank you for your ongoing interest in the Lanfine North Wind Power Project and in the Lanfine South Wind Power Project. In September 2017, we hosted our second community open house, and in November 2017, we provided Project updates, including updates on the layout and turbine information.

Accompanying this letter are three documents with further information about the Projects and BowArk and Pattern’s public involvement:

- Project Maps showing the infrastructure and reduced Project boundaries for Lanfine North and Lanfine South, updated turbine locations and infrastructure, and updated shadow flicker and noise impacts for Turbine Option B. The Project Map also identifies Lanfine North Turbines and Lanfine South Turbines;
- visual simulations of the Project layouts, with 81 turbines reflecting the updated turbine locations for Turbine Option B; and
- the Alberta Utilities Commission Brochure, Public involvement in a proposed utility development.

Project Updates:

We have selected the turbine type (Vestas 3.6 MW) from the two options presented at our September 2017 open house and November 2017 newsletter. This was previously called Option B. The Vestas 3.6 MW has a hub height of 105 metres and a rotor diameter of 136 metres. Lanfine North Wind Power Project will use 42 turbines with a total Project size of 151.2 MW. Lanfine South Wind Power Project will use 39 turbines for a total Project size of 140.4 MW.

We have also made minor modifications to the wind farm layout. Based on your feedback, we have modified we moved two turbines, turbine 49 and turbine 50, in the Lanfine North Wind Power Project by 570 metres to the east and 625 metres to the south, respectively. We adjusted the collector system (turbine 49 and 50) and access road (turbine 49, 50 and 71) placement in the Lanfine South Wind Power Project. Both Lanfine North and Lanfine South comply with the AUC Rule 012 requirements for noise. We updated the visual simulations to show the changes in turbine locations. Additional visual simulations from new locations near the Project are underway and will be available on our website at www.bowark.com.

As a result of the changes, we have identified corresponding shadow flicker impacts on the maps. Shadow flicker analysis can be completed as the “worst case” which assumes cloudless skies during...
all daylight hours or “adjusted case” which accounts for cloud cover. Neither of these adjust for orientation of the windows of the house and is considered a “greenhouse” assumption. The orientation of residential windows, trees and structures near the residence have not been incorporated. The shadow flicker results use the same methodology as the results that we provided in November 2017 with the adjusted case. We’ve also identified houses that are expected to have zero shadow flicker from the Project.

In late 2017, we received the results of the Alberta Electric System Operator’s Renewable Electricity Program. Although we were not successful, we continue to move forward with our Phase 2 AUC Application in preparation for future rounds of the Renewable Electricity Program and other opportunities. Accordingly, we have modified our Project schedule (see Updated Project schedules).

Table 1: Updated Project schedules

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Former November 2017 Schedule</th>
<th>Updated September 2018 Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submission to the Alberta Utilities Commission for Phase 2 Buildable Areas Application</td>
<td>Fall 2017</td>
<td>Q4 2018</td>
</tr>
<tr>
<td>Alberta Utilities Commission approval anticipated</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Final Project engineering complete</td>
<td>Fall 2018</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Site mobilization Lanfine North</td>
<td>Winter 2019</td>
<td>Spring 2020</td>
</tr>
<tr>
<td>Commercial operations Lanfine North</td>
<td>2019</td>
<td>Fall 2020</td>
</tr>
<tr>
<td>Site mobilization Lanfine South</td>
<td>Winter 2020</td>
<td>Spring 2020</td>
</tr>
<tr>
<td>Commercial operations Lanfine South</td>
<td>2020</td>
<td>Winter 2020</td>
</tr>
</tbody>
</table>

We continue to engage with the community, landowners, and local government, and I look forward to continuing the dialogue during the Projects’ development phases. If you have any questions or if you want more information, please contact us toll-free at 1-844-421-2028 or at lanfinewind@bowark.com. Or please visit our website at www.bowark.com.

Kind regards,

Keith Knudsen
Project Manager
BowArk Energy Ltd.
403-585-6761
kknudsen@bowark.com
Lanfine North and Lanfine South Wind Power Projects

Proposed Project Map
Vestas

Proposed Turbine Location
Proposed Underground Collector Line
Proposed Road
Proposed Laydown Area
Proposed Batch Plant
Proposed Collector Right-of-Way (Underground or Above Ground)
Proposed Substation
Potential O&M Yard and Building Location

Major Highway
Minor Highway
Road
City, Town or Village
Airstrip or Aerodrome
Municipal District and County Boundary
Waterbody

Notes and Data Sources:
Project Land provided by BowArk. Buildable Area derived by WSP. Turbine layout and proposed infrastructure provided by WSP. Proposed locations, roads, Aboriginals, and municipal boundaries from Alberta Environment, Alberta Existing transmission lines and substations derived by WSP. Legend sound level contours based on Version 3.5.9 SAE table with outer diameter of 130 m and hub height of 100 m using 1/4 octave bands. Sound level contours and third-party sound sources provided by RMBC. Airstrips and aerodromes derived by WSP.

Scale: 1:120,000 when printed at 11" × 17"

Legend
- Project Land
- Buildable Area
- Proposed Permanent Meteorological Tower
- Residence
- Existing ATCO Substation
- Existing Transmission Line (240 kV)
- Existing Transmission Line (138 kV)
- Proposed Turbine Location
- Proposed Underground Collector Line
- Proposed Road
- Proposed Laydown Area
- Proposed Batch Plant
- Proposed Collector Right-of-Way (Underground or Above Ground)
- Proposed Substation
- Potential O&M Yard and Building Location
- Major Highway
- Minor Highway
- Road
- City, Town or Village
- Airstrip or Aerodrome
- Municipal District and County Boundary
- Waterbody

Date: 15 Aug 2019
Version: 7
Prepared by: WSP Canada Inc.
Author: S. Estreuk
Reviewed: A. Lawn
Approved: R. Iwashita

Wind Power Projects
Range Road 60
Lanfine North and Lanfine South

Special Areas
M.D. of Acadia No. 34

Township Road 274
RGE 2 W4M
RGE 3 W4M
RGE 4 W4M
RGE 5 W4M
RGE 6 W4M

Notes and Data Sources:
Project Land provided by BowArk. Buildable Area derived by WSP. Turbine layout and proposed infrastructure provided by WSP. Proposed locations, roads, Aboriginals, and municipal boundaries from Alberta Environment, Alberta Existing transmission lines and substations derived by WSP. Sound level contours based on Version 3.5.9 SAE table with outer diameter of 130 m and hub height of 100 m using 1/4 octave bands. Sound level contours and third-party sound sources provided by RMBC. Airstrips and aerodromes derived by WSP.

Scale: 1:120,000 when printed at 11" × 17"
Legend:

- Photo Location and Field of View
- Project Land
- North Proposed Turbine Location
- South Proposed Turbine Location
- Residence
- Major Highway
- Minor Highway
- Road

Notes:

Photographs taken with Nikon D60 DSLR camera and 35 mm lens. Panoramic view compiled from four individual photographs. Photomontage simulated using 13.5 MW turbine with rotor diameter of 136 m and hub height of 105 m using 81 turbine locations (L07 provided by BowArk 16 Feb 2018).

Data Sources:


Prepared By: WSP Canada Inc.

Author: J. McRae
Reviewed: A. Louro
Approved: R. Istchenko

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Datum: NAD 83
Projection: UTM Zone 12N
Scale: N.T.S.
Date: 2018-09-19
Version: 2

Title:

Project:

Lanfine North and Lanfine South Wind Power Projects

Scale 1:50,000

Date: 2018-09-19

Version: 2

Legend:

- Photo Location and Field of View
- Project Land
- North Proposed Turbine Location
- South Proposed Turbine Location
- Residence
- Major Highway
- Minor Highway
- Road

Notes:

Photographs taken with Nikon D60 DSLR camera and 35 mm lens. Panoramic view compiled from four individual photographs. Photomontage simulated using 13.5 MW turbine with rotor diameter of 136 m and hub height of 105 m using 81 turbine locations (L07 provided by BowArk 16 Feb 2018).

Data Sources:


Prepared By: WSP Canada Inc.

Author: J. McRae
Reviewed: A. Louro
Approved: R. Istchenko

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Notes:
Photographs taken with Nikon D60 DSLR camera and 15 mm lens. Panoramic view compiled from five individual photographs. Photomontage simulated using selected 3.6 MW turbines with rotor diameter of 136 m and hub height of 105 m using 81 turbine locations (Layout L07 provided by BowArk 16 Feb 2018).

Data Sources:

Prepared By: WSP Canada Inc.
Author: J. McRae
Reviewed: A. Louro
Approved: R. Istchenko

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Datum: NAD 83
Projection: UTM Zone 12N
Scale: N.T.S.
Date: 2018-09-19
Version: 2

Title: Photomontage: Highway 570
Project: Lanfine North and Lanfine South Wind Power Projects

Legend:
- Photo Location and Field of View
- North Proposed Turbine Location
- South Proposed Turbine Location

- Project Limit
- Residence
- Major Highway
- Minor Highway
- Road
Notes:
Photographs taken with Nikon D60 DSLR camera and 35 mm lens. Panoramic view composed from four individual photographs. Photomontages simulated using a Vestas 3.6 MW turbine with rotor diameter of 136 m and hub height of 105 m using 81 turbine locations (Layout L07 provided by BowArk 16 Feb 2018).

Data Sources:

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