

Power Plant Approval 22966-D02-2018

Appendix 1 to Decision 22966-D01-2018

August 30, 2018

BHEC-RES Alberta G.P. Inc.
398.475-MW Forty Mile Wind Power Project

Proceeding 22966
Application 22966-A001

BHEC-RES Alberta G.P. Inc. (RES) by Application 22966-A001, registered on September 22, 2017, applied to the Alberta Utilities Commission for approval to construct and operate a 398.475 megawatt (MW) wind power plant, designated as the Forty Mile Wind Power Project (power plant), located within the County of Forty Mile No. 8 approximately five kilometres east of Bow Island, Alberta.

Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approved the application in Decision 22966-D01-2018,¹ and granted an approval to RES to construct and operate the power plant, subject to the provisions of the *Hydro and Electric Energy Act* and the *Alberta Utilities Commission Act*, any regulations made under the acts, any orders made under the acts, the Commission rules made pursuant to the *Alberta Utilities Commission Act*, and the following terms and conditions:

1. The power plant shall be located as follows and as further described in the application:

Sections	Township	Range	Meridian
1 (NW), 4 (NE, SE, SW), 9 (NE, NW, SE), 11 (SE, SW), 12 (NW, SW), 14 (NE, NW, SE), 15 (NE, NW, SE), 22 (NE, NW, SE, SW), 23 (NE, NW, SE, SW), 26 (NW, SE, SW), 27 (NE, NW, SE, SW), 28 (NE, SE), 32 (NE, NW, SE), 33 (NE, NW, SE, SW), 34 (NE, NW, SE, SW), 35 (NE, NW)	9	10	W4M
5 (NE, NW), 7 (NE, NW, SW), 8 (NE, NW, SE), 15 (NW), 16 (NW, SW), 17 (NE, NW, SE), 18 (NW, SE, SW), 19 (NE, NW, SE, SW), 20 (NE, NW, SE, SW), 21 (NE, NW, SE, SW), 22 (SW), 26 (NE, NW, SW), 28 (NW, SW), 30 (SW), 32 (NE, SE), 33 (SE, SW),	10	9	W4M

¹ Decision 22966-D01-2018: BHEC-RES Alberta G.P. Inc. – Forty Mile Wind Power Project, Proceeding 22966, Application 22966-A001, August 30, 2018.

34 (SE, SW), 35 (SE, SW)			
1 (NE, NW, SE, SW), 2 (NE, NW, SE), 3 (NE, NW, SE), 4 (NE, NW, SE, SW), 5 (NE, NW, SW), 8 (SW), 11 (SE), 12 (SE, SW), 13 (NE, NW, SE), 14 (NE, NW, SW), 15 (NE, SE), 22 (NE, NW, SE, SW), 23 (NE, NW, SE), 24 (NW, SE, SW), 25 (NW, SE, SW), 26 (NE, SE), 27 (NE, SE), 34 (SE), 35 (SE, SW), 36 (NW, SW)	10	10	W4M
5 (NE, SE, SW), 6 (NE, SE), 8 (SE), 9 (SE, SW)	11	9	W4M
1 (NW, SE, SW), 2 (NE), 12 (SW)	11	10	W4M

2. The power plant shall consist of 115 Gamesa G132 wind turbines, each rated at 3.465 MW, with a total generating capability of 398.475 MW, and as further described in the application.
3. Each wind turbine structure shall be installed with its centres at the longitude and latitude coordinates specified in the application. If the structure has to be located more than 50 metres from the specified coordinates, RES must apply to the Commission for an amendment to this approval prior to construction.
4. The power plant shall also consist of a 34.5-kilovolt (kV) gathering system as described in the application. The gathering system is to be used solely for collecting the electrical energy generated by each turbine and transmitting that electric energy to the Forty Mile Wind Power Substation 516S.²
5. RES will abide by all of AEP WM’s requirements, recommendations, and directions outlined in AEP WM’s *Renewable Energy Referral Report* and any additional commitments made in its responses to information requests from AEP WM.
6. The siting, construction and operation of the project’s infrastructure will meet all of AEP WM’s recommended minimum setbacks from wetlands and watercourses for the project, unless AEP WM has agreed to one or more of the following: a reduced setback; alternative mitigation in the project’s *Renewable Energy Referral Report*; or approval under the *Water Act* for the project.
7. The siting, construction and operation of the project’s infrastructure will meet all of AEP WM’s recommended minimum setbacks for high disturbance level activities from wildlife species at risk habitat features, unless AEP WM has agreed to one or more of the following: (i) a reduced setback; or alternative mitigation in AEP WM’s *Renewable Energy Referral Report* for the project.

² Substation Permit and Licence 22966-D03-2018, Proceeding 22966, Application 22966-A001, August 30, 2018.

8. If any changes are made to any infrastructure associated with the project, the construction schedule, or the proposed wildlife mitigation measures, RES will submit these changes to AEP WM for its further review to ensure wildlife and wildlife habitat are protected.
9. RES shall abide by any requirements and commitments outlined in its final version of the EPP developed for the project. RES shall implement all mitigation measures identified in the EPP and monitor the effectiveness of its mitigation measures. If mitigation measures are unsuccessful, RES, in consultation with AEP WM, must develop and implement additional mitigation to minimize adverse effects on the environment.
10. RES will abide by any requirements and commitments outlined in its final version of the PCMM Plan developed for the project. In accordance with the PCMM Plan and AEP WM's requirements, RES will complete a minimum of three years of post construction wildlife monitoring and submit a report on the results annually to AEP WM. If further mitigation is required/recommended by AEP WM following its review of the post-construction wildlife monitoring surveys and reports, RES will complete additional post-construction wildlife monitoring surveys and reports to assess the efficacy of the additional mitigation, as directed by AEP WM.
11. RES will submit to the Commission annually a copy of the project's post-construction wildlife monitoring report along with any correspondence from AEP WM summarizing its views on the report.
12. Following completion of the post-construction wildlife monitoring program, RES will communicate to AEP WM the discovery of any carcasses of species at risk which might be observed near project infrastructure during operation or maintenance.
13. RES will complete amphibian surveys following AEP WM survey methodology prior to construction in situations where ground disturbance may occur within 100 metres of potential amphibian breeding pond habitat, including the northern leopard frog and western tiger salamander. This will include spring acoustic surveys, summer visual search shoreline surveys, and, where practicable, will include shoreline and netting surveys following major summer rainfall events for intermittent breeders such as the northern leopard frog and western tiger salamanders. RES will communicate the results of these amphibian surveys to AEP WM and implement any mitigation measures recommended by AEP WM.
14. RES will monitor (for potential breeding impacts, such as nest abandonment or disturbance, nesting success, reduction in nest productivity, and raptor mortality) all eight ferruginous hawk nests within the project area during construction and for at least the first three years of operation.
15. RES shall implement mitigation measures, in consultation with AEP WM, if (i) the results of the post-construction bat carcass monitoring program indicate that the estimated corrected rate of bat fatalities for the RES project exceeds an average of four fatalities per turbine per year; or if (ii) upon the direction of AEP WM, the estimated corrected rate of bat mortalities cumulatively in the local area, as defined by AEP WM, exceeds a threshold determined by AEP WM.

16. In addition to any representative turbines in the project area chosen for its post construction bat carcass surveys in consultation with AEP WM in accordance with the stratified random sample method, RES shall include any turbines that are located near potential roost sites, reservoirs and areas of foraging habitat which would have a higher risk of bat mortality. Turbines monitored under this requirement would not be counted towards the one third selected using the stratified random sample method.
17. RES will abide by any requirements, recommendations and directions provided by AEP WM, whether in the context of a working group or otherwise, including any additional monitoring and mitigation that AEP WM considers necessary to address cumulative effects occurring from two or more projects within the local area, as defined by AEP WM.
18. RES shall conduct post-construction comprehensive noise studies and an evaluation of low frequency noise at receptors 53, 73, and 32 under representative operating conditions, and in accordance with Rule 012. RES shall file all studies and reports relating to the post-construction noise survey and low frequency noise evaluation with the Commission within one year of connecting the project to the Alberta Interconnected Electric System. RES shall simultaneously provide Ms. Jenkins with the results of its post-construction noise survey and low frequency noise evaluation for her residence and provide written confirmation to the Commission when it has done so.
19. RES shall submit a construction progress report to the Commission in writing, once every six months, pursuant to Section 3 of the *Hydro and Electric Energy Regulation*. The first progress report shall be filed with the Commission six months from the date of issuance of this approval.
20. Unless otherwise authorized by the Commission, construction of the power plant shall be completed by December 1, 2020.
21. RES shall notify the Commission within 30 days of completing the power plant.
22. RES shall obtain Commission approval prior to making any substantive changes to the power plant or substantially varying the design or specifications of the power plant from what was stated in the application or what the Commission has approved.
23. RES will comply with current applicable reclamation standards at the time of decommissioning. If no legislative requirements pertaining to reclamation are in place at the time of decommissioning, RES will submit a reclamation plan to the Commission for approval.

24. This approval is not transferable unless approved by the Commission.

The Commission may cancel or suspend this approval, in whole or in part, in accordance with Section 41 of the *Hydro and Electric Energy Act*, or may review this approval, in whole or in part upon its own motion, or upon an application by an interested party, in accordance with Section 10 of the *Alberta Utilities Commission Act*.

Alberta Utilities Commission

(original signed by)

Anne Michaud
Vice-Chair