

Power Plant and Energy Storage Facility Approval 29258-D02-2026

Appendix 1 to Decision 29258-D01-2026	January 23, 2026
Red Willow Solar Inc. Red Willow Solar and Energy Storage Project	Proceeding 29258 Applications 29258-A001 and 29258-A002

Red Willow Solar Inc., by applications 29258-A001 and 29258-A002, registered on August 23, 2024, applied to the Alberta Utilities Commission for approval to construct and operate a 225-megawatt (MW) solar power plant and a 100-MW/200-megawatt-hour (MWh) energy storage facility, designated as the Red Willow Solar and Energy Storage Project, approximately 18 kilometres northeast of Stettler, in Stettler County.

Under sections 11, 13.01(1) and 19 of the *Hydro and Electric Energy Act*, the Commission approved applications 29258-A001 and 29258-A002 in Decision 29258-D01-2026,¹ and granted an approval to Red Willow Solar Inc. to construct and operate the power plant and energy storage facility, 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 and energy storage facility shall be located in the land locations indicated in the below table, and as further described in the applications:

Quarter	Section	Township	Range	Meridian
Northwest	12	40	18	4
Northeast	11	40	18	4
Northwest	11	40	18	4
Southeast	11	40	18	4
Southwest	11	40	18	4
Northeast	10	40	18	4
Southeast	10	40	18	4
Southwest	10	40	18	4
Northeast	3	40	18	4
Northwest	3	40	18	4
Southeast	3	40	18	4
Southwest	3	40	18	4

2. The power plant shall consist of 484,000 solar modules on fixed bifacial panels, attached to inverters and transformers, with a total generating capability of 225 MW as further described in the applications.

¹ Decision 29258-D01-2026: Red Willow Solar Inc. – Red Willow Solar and Energy Storage Project, Proceeding 29258, Applications 29258-A001 to 29258-A003, January 23, 2026.

3. The energy storage facility shall consist of lithium iron phosphate battery storage units, with a total discharging capability of 100 MW and a storage capacity of 200 MWh, and as further described in the applications.
4. The approval is subject to the following conditions, which have been described in Decision 29258-D01-2026:
 - a. Once Red Willow Solar Inc. has finalized its equipment selection for the power plant and energy storage facility, it must file a final project update with the Commission to confirm that the project has stayed within the final project update allowances for solar power plants and energy storage facilities specified in Rule 007: *Facility Applications*. Red Willow Solar must also provide an update on its development permit application status and discussions with Stettler County. The final project update must be filed at least 90 days prior to the start of construction.
 - b. Red Willow Solar Inc. shall select lithium iron phosphate batteries for the energy storage facility (ESF). If an alternate battery chemistry or vendor/manufacturer is selected, Red Willow Solar shall submit specifications such as the cell combustion phase duration and peak temperature to the Commission, along with confirmation that the alternate chemistry possesses better thermal stability than lithium iron phosphate, and an appropriate hazard mitigation analysis consistent with National Fire Protection Association (NFPA) 855. Red Willow Solar cannot proceed with construction of the ESF until it receives written approval from the Commission.
 - c. Red Willow Solar Inc. shall install a remote monitoring and fire detection system that can be programmed to automatically notify the monitoring operations centre who in turn will immediately notify local emergency responders. Excluding emergency situations, the project energy storage facility will not be operated without a functional monitoring system.
 - d. Red Willow Solar Inc., and any subsequent operator, shall implement ongoing upgrades to improve the safety of the project energy storage facility, including but not limited to firmware and software enhancements, monitoring capability enhancements, process changes and safety standards as they are developed.
 - e. Red Willow Solar Inc. shall install thermal imaging cameras at the energy storage facility site for continuous monitoring, and to the extent possible, shall integrate the cameras into its emergency response planning.
 - f. Red Willow Solar Inc. shall provide an updated project-specific emergency response plan to Stettler County and the Alberta Utilities Commission 90 days before commissioning.
 - g. Red Willow Solar Inc. shall continually, before and during construction and during operation, review and update the project-specific emergency response plan, and incorporate reasonable changes necessary to address concerns received from Stettler County and the local fire departments, and other interested stakeholders such as local landowners. All consultation and determination must consider the latest

- recommendations from the battery energy storage system manufacturer's emergency response guide. The updated plans are to be provided to Stettler County and the local fire departments.
- h. Before the project commences operation, Red Willow Solar Inc. shall consult with Stettler County and the local fire departments about the necessity for on-site water storage, traffic signs and road barricades. If it is determined that on-site water storage, traffic signs and road barricades are required for emergency response purposes, Red Willow Solar shall pre-stage and make available on-site water storage, traffic signs and road barricades in response to an emergency at locations identified by Stettler County and the local fire departments. All consultation and determination must consider the latest recommendations from the battery energy storage system manufacturer's emergency response guide.
 - i. Before the project commences operation, Red Willow Solar Inc. shall develop and outline emergency notification protocols within the project-specific emergency response plan. In particular, Red Willow Solar shall consult with Stettler County and the local fire departments about automatic shelter-in-place notifications for nearby residents and implement the notification as instructed by the municipal districts and the local fire departments. All consultation and determination must consider the latest recommendations from the battery energy storage system manufacturer's emergency response guide.
 - j. When requested by local fire departments, Red Willow Solar Inc. shall provide on-site training and emergency equipment as required.
 - k. Red Willow Solar Inc. will file with the Commission an annual agricultural report that documents the production realized from the agrivoltaics program no later than January 31 for the first 36 months of the agrivoltaics program. Red Willow Solar will provide copies of the report to the Stettler County for its information.
 - l. Red Willow Solar Inc. shall submit the weed control and vegetation management plan to the Commission 30 days prior to the commencement of construction. This plan shall be accompanied by a cover letter that documents any correspondence with the Stettler County and mitigations that were recommended but not included.
 - m. Red Willow Solar Inc. shall submit an annual post-construction monitoring survey report to Alberta Environment and Protected Areas no later than January 31 of the year following the mortality monitoring period and submit the post construction monitoring survey report and Alberta Environment and Protected Areas' post-construction monitoring response letter to the Commission no later than March 31 of the year following the mortality monitoring period. Following Bulletin 2025-17, a minimum of one year of annual post-construction monitoring is required for the Red Willow Solar project. Any additional reporting and response letters, if required by Alberta Environment and Protected Areas, shall be filed on or before the same date every subsequent year pursuant to Section 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*.

- n. Red Willow Solar Inc. must provide security to the Government of Alberta in accordance with the *Code of Practice for Solar and Wind Renewable Energy Operations* and otherwise comply with all conditions and terms of Red Willow Solar's registration with respect to the Red Willow Solar and Energy Storage Project.
- o. Before the project commences operations, Red Willow Solar Inc. shall implement the noise mitigation measures recommended in the project's most up-to-date noise impact assessment, or alternative mitigation measures that meet or exceed the acoustic specifications described in the most up-to-date noise impact assessment. On or before the date the project commences operations, Red Willow Solar shall file a letter with the Commission detailing the noise mitigation measures it has implemented.
- p. Red Willow Solar Inc. shall operate the fans for the battery units at the energy storage facility at no higher than 50 per cent of the maximum fan speed during the nighttime. Within one year after the project commences operations, Red Willow Solar shall file a letter with the Commission confirming that it has limited the fan speed for the battery units during the nighttime to 50 per cent of the maximum fan speed. The letter shall also detail how Red Willow Solar can accurately predict, monitor and control the fans' nighttime operation to ensure the fans for the battery units are operating no higher than 50 per cent of the maximum speed.
- q. During detailed engineering and design, Red Willow Solar Inc., wherever practical, shall orient each inverter-transformer station with the side emitting less noise towards the nearest receptor(s). In the noise impact assessment for the final project update, Red Willow Solar shall confirm which inverter-transformer stations have been oriented with the less noisy side towards nearby receptor(s), and if it is not practical to implement such orientation for some inverter-transformer stations, provide an explanation.
- r. Red Willow Solar Inc. shall conduct a post-construction comprehensive sound level (CSL) survey, including an evaluation of low-frequency noise, at receptors R1 and R10. The post-construction CSL survey must be conducted under representative conditions and in accordance with Rule 012: *Noise Control*. Within one year after the project commences operations, Red Willow Solar shall file a report with the Commission presenting measurements and summarizing the results of the post-construction CSL survey.
- s. Before the project commences operations, Red Willow Solar Inc. shall implement the mitigation measures recommended in the project's most up-to-date solar glare assessment. On or before the date the project commences operations, Red Willow Solar shall file a letter with the Commission detailing the glare mitigation measures it has implemented.
- t. Red Willow Solar Inc. shall promptly address any complaints or concerns regarding glare from the project. Red Willow Solar shall file a report with the Commission detailing any glare complaints/concerns during the first year of project operation, as well as Red Willow Solar's response to the complaints/concerns. In particular, the report shall specify if mitigation measures have been implemented in response to the

complaint/concern. Red Willow Solar shall file this report no later than 13 months after the project becomes operational.

5. Unless otherwise authorized by the Commission, construction of the power plant and energy storage facility shall be completed by July 1, 2032.
6. Red Willow Solar Inc. shall notify the Commission within 30 days of completing the power plant and energy storage facility.
7. Red Willow Solar Inc. shall obtain Commission approval prior to making any substantive changes to the power plant and energy storage facility or substantially varying the design or specifications of the power plant and energy storage facility from what was stated in the applications or what the Commission has approved.
8. 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*.

The Commission may, no later than 60 days from the date of this approval and without notice, correct typographical, spelling and calculation errors and other similar types of errors and post the corrected approval on its website.

Alberta Utilities Commission

(original signed by)

Matthew Oliver, CD
Panel Chair