

Power Plant and Energy Storage Facility Approval 29712-D02-2025

Appendix 1 to Decision 29712-D01-2025	October 27, 2025
Stettler Solar Inc. Stettler Solar and Storage Project	Proceeding 29712 Applications 29712-A001 and 29712-A002

Stettler Solar Inc., by applications 29712-A001 and 29712-A002, registered on December 12, 2024, applied to the Alberta Utilities Commission for approval to construct and operate a 25-megawatt (MW) solar power plant and a 9.6-MW/33-megawatt-hour (MWh) energy storage facility,¹ designated as the Stettler Solar and Storage Project, in the County of Stettler No. 6.

Under sections 11, 13.01(1) and 19 of the *Hydro and Electric Energy Act*, the Commission approved applications 29712-A001 and 29712-A002 in Decision 29712-D01-2025,² and granted an approval to Stettler 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 Section 20, Township 38, Range 19, west of the Fourth Meridian, as further described in the applications.
2. The power plant shall consist of approximately 71,700 bifacial 560-watt modules on a single-axis tracking system, seven SMA Sunny Central MVPS 4600-S2-US inverter/transformer units, with a total capacity of 25 MW, an underground collector system and as further described in the applications.
3. The energy storage facility shall consist of 12 SunGrow ST2752UX storage units and three SunGrow storage SC4000UD-MV inverters and as further described in the applications.
4. The approval is subject to the following conditions, which have been described in Decision 29712-D01-2025:
 - a. Stettler Solar Inc. shall submit an annual post-construction monitoring survey report to Alberta Environment and Protected Areas (AEPA) no later than January 31 of the year following the mortality monitoring period and submit the annual post-construction monitoring survey report and AEPA’s post-construction monitoring response letter to the Commission within one month of its issuance to Stettler Solar Inc. These reports and

¹ Initially, the energy storage facility was designed to have a total discharging capability of 16 MW and storage capacity of 55 MWh. As part of project refinements, Stettler Solar Inc. reduced the energy storage facility to have a total discharging capability of 9.6 MW and storage capacity of 33 MWh.

² Decision 29712-D01-2025: Stettler Solar Inc. – Stettler Solar and Storage Project and Interconnection, Proceeding 29712, Applications 29712-A001 to 29712-A003, October 27, 2025.

response letters shall be subsequently filed with the same time constraints every subsequent year for which AEPA requires surveys pursuant to Section 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*.

- b. Stettler Solar Inc. shall promptly respond to any concerns or complaints from the County of Stettler No. 6 or drivers on county roads about visual impacts from the project. Through the development permit process, Stettler Solar Inc. shall work with the County to develop a practical visual screening plan, considering other factors or impacts related to the project, such as impacts to energy capacity, fire risk, additional vegetation management, weed and erosion control, and agricultural activities at the site. Stettler Solar Inc. shall implement the visual screening plan developed with the County.
- c. Stettler Solar Inc. shall, at the time it submits the final project update, determine the minimum resting angle at which predicted yellow glare from the project would be eliminated within the 15-degree field of view for local roads and include this information in the final project update. Stettler Solar Inc. shall configure the project solar panels to use a resting angle greater than or equal to the minimum resting angle required to eliminate glare within the 15-degree field of view for local roads.
- d. Stettler Solar Inc. shall promptly address any complaints or concerns regarding glare from the project. Stettler Solar Inc. shall file a report with the Commission detailing any glare complaints/concerns during the first year of project operation, as well as Stettler Solar Inc.'s response to the complaints/concerns. In particular, the report shall specify if mitigation measures have been implemented in response to the complaint/concern. Stettler Solar Inc. shall file this report no later than 13 months after the project becomes operational.
- e. Once Stettler 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: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines*. The final project update must be filed at least 90 days prior to the start of construction.
- f. Stettler Solar Inc. shall use lithium iron phosphate batteries for the energy storage facility. If an alternate battery chemistry is selected, the final project update submitted by Stettler Solar Inc. shall include specifications such as the cell combustion phase duration and peak temperature, along with confirmation the alternate chemistry possesses better thermal stability than lithium iron phosphate. Stettler Solar Inc. cannot proceed with construction of the energy storage facility until it receives written approval from the Commission.
- g. Stettler Solar Inc. shall install a remote monitoring and detection system that can be programmed to automatically notify emergency response providers, including the local fire station, immediately upon activation.
- h. Stettler Solar Inc. 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 enhancement, process changes and safety standards as they are developed.

- i. Before the project commences operation, Stettler Solar Inc. shall include roadblocks as a mitigation option and develop and outline emergency notification protocols within the project-specific emergency response plan. In particular, Stettler Solar Inc. shall consult with the local fire departments and subject matter experts about the need for roadblocks and automatic shelter-in-place notification for nearby residents and implement these if instructed to do so by the local fire departments.
 - j. When requested by local fire departments, Stettler Solar Inc. shall provide on-site training to local emergency responders.
 - k. Stettler 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 raised by the County of Stettler No. 6 and local fire departments, and other interested stakeholders such as local landowners. All consultation and decisions related to the emergency response plan must take into account the latest recommendations from the manufacturer's emergency response guide. The updated plans must be provided to the County of Stettler No. 6 and local fire departments.
 - l. Stettler 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 Stettler Solar Inc.'s registration with respect to the Stettler Solar and Storage Project.
 - m. During detailed engineering and design, Stettler Solar Inc., wherever practical, shall orient inverter-transformer stations with the side emitting less noise towards the nearest receptor(s).
 - n. As part of the final project update, Stettler Solar Inc. shall submit an updated noise impact assessment that incorporates the most up-to-date manufacturer data, including source directivity data, for the inverter-transformer stations. In particular, Stettler Solar Inc. shall confirm the inverter-transformer stations have been oriented to minimize noise levels at receptors or provide an explanation for why such orientation is not practical.
 - o. Stettler Solar Inc. shall conduct a post-construction comprehensive sound level (CSL) survey, including an evaluation of low-frequency noise, at receptors R1, R4, and one of either R17 or R18. 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, Stettler Solar Inc. shall file a report with the Commission presenting measurements and summarizing the results of the post-construction CSL survey.
5. Unless otherwise authorized by the Commission, construction of the power plant and energy storage facility shall be completed by September 30, 2028.

6. Stettler Solar Inc. shall notify the Commission within 30 days of completing the power plant and energy storage facility.
7. Stettler 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 application 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 of 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)

Renée Marx
Panel Chair