



## **Concord Vulcan GP2 Ltd.**

### **Vulcan Solar Project Battery Energy Storage System Addition**

**June 24, 2022**

**Alberta Utilities Commission**

Decision 27215-D01-2022

Concord Vulcan GP2 Ltd.

Vulcan Solar Project Battery Energy Storage System Addition

Proceeding 27215

Application 27215-A001

June 24, 2022

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## **Contents**

<b>1</b>	<b>Decision summary</b> .....	<b>1</b>
<b>2</b>	<b>Application</b> .....	<b>1</b>
<b>3</b>	<b>Findings</b> .....	<b>2</b>
<b>4</b>	<b>Decision</b> .....	<b>4</b>
	<b>Appendix A – Summary of Commission conditions of approval in the decision</b> .....	<b>5</b>

## **1 Decision summary**

1. In this decision, the Alberta Utilities Commission (Commission) approves an application from Concord Vulcan GP2 Ltd. (Concord) to add a battery energy storage system to the Vulcan Solar Project.

## **2 Application**

2. Concord currently holds Approval 27079-D02-2022<sup>1</sup> to construct and operate the 22-megawatt Vulcan Solar Project, located on private land near the town of Vulcan. Concord stated that construction for the Vulcan Solar Project began in April 2021 and is expected to be completed in May 2022.

3. Concord requested to add a 21-megawatt, 42-megawatt-hour battery energy storage system (BESS) within the existing fenceline of the Vulcan Solar Project. The BESS would allow for two hours of storage and would charge primarily from on-site solar production and discharge to the 25-kilovolt FortisAlberta Inc. distribution network, while also having the ability to charge from the distribution network.

4. Concord's application included:

- Correspondence from Alberta Environment and Parks, which reviewed the project update and confirmed that there is no change in risk to wildlife or wildlife habitat as outlined in the current renewable energy referral report.
- A noise impact assessment conducted by RWDI Air Inc., which predicted that the project would comply with applicable permissible sound levels at all receptors, and that it meets the requirements of Rule 012: *Noise Control*.
- A site-specific emergency response plan, which is currently in development and would be finalized at least 30 days prior to commencement of construction of the BESS.
- A participant involvement program in which Concord notified stakeholders within two kilometres of the project boundary, as well as Vulcan County.

5. Concord expects construction of the BESS to begin in September 2022 with the in-service date being April 30, 2023.

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<sup>1</sup> Power Plant Approval 27079-D02-2022, Proceeding 27079, Application 27079-A001, January 14, 2022.

6. The Commission issued a notice of application and no submissions were received in response to the notice.

### 3 Findings

7. For the reasons outlined below, the Commission finds that approval of the project is in the public interest having regard to the social, economic, and other effects of the project, including its effect on the environment.

8. The Commission has reviewed the application and has determined that the information requirements specified in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* have been met.

9. The Commission is satisfied that the project is not likely to adversely effect the environment. Concord noted that the environmental protection plan completed for the Vulcan Solar Project remains valid and that no additional mitigation or monitoring is required as a result of the BESS addition. The Commission also acknowledges the correspondence from Alberta Environment and Parks confirming that no amendment to the referral report is required.

10. The Commission finds that the project's noise impact assessment meets the requirements of Rule 012. The noise impact assessment demonstrates that the project will comply with applicable permissible sound levels at all receptors.

11. Concord committed to provide a copy of the project-specific emergency response plan to the Commission prior to construction. Concord added that the emergency response plan would be reviewed annually and adjusted or updated if necessary. The Commission therefore imposes the following condition of approval:

- a. Concord shall submit a copy of the project-specific emergency response plan to the Commission and to the director of protective services/regional fire chief for Vulcan County at least 30 days prior to starting construction of the BESS.

12. Concord also discussed emergency response planning with the director of protective services/regional fire chief for Vulcan County, who oversees all fire services within the county. Concord committed to providing on-site training for the Vulcan Fire Department following commissioning. The Commission agrees with this approach and considers it important that local first responders are provided appropriate training when it comes to battery fire-related emergencies. As such, the Commission imposes the following conditions of approval:

- b. Concord, and any subsequent operator, shall continually update and improve the site-specific emergency response plan, the corporate emergency response plan and associated emergency response program and advise the local fire departments, including but not limited to incorporating all mitigation measures required from discussions with the local fire departments and input from interested stakeholders and local residents.
- c. Concord shall provide on-site training for the Vulcan Fire Department following commissioning of the project.

13. Concord described a number of site-specific risks for the project, including fire due to thermal runaway events. The Commission understands that Concord, to minimize these risks, accounted for applicable fire standards when selecting the batteries for the project. The Commission is also aware of Concord's plan to remotely monitor all the BESS enclosures by means of a supervisory control and data acquisition (SCADA) system providing 24/7/365 real-time remote monitoring, as well as security cameras on site. The Commission also imposes the following condition of approval:

- d. Concord, and any subsequent operator, shall implement any ongoing upgrades to improve the safety of the project, including but not limited to firmware and software enhancements, monitoring capability enhancement, process changes and safety standards as they are developed.

14. In response to a Commission information request, Concord explained that it did not complete toxicity plume modelling in the event of a thermal runaway event. However, there are no residences within 800 metres of the project. As such, the Commission considers it unlikely for the plume to adversely impact nearby residents in the event of a fire. The Commission therefore accepts Concord's explanation for why toxicity plume modelling is not required for the project.

15. With these steps in place, the Commission is satisfied with Concord's current and planned emergency response measures related to the BESS.

16. The Commission finds that the participant involvement program for the project meets the requirements of Rule 007. In response to a Commission information request, Concord confirmed that it had not reached out to stakeholders for personal consultation regarding the application. Rule 007 recommends that battery applications over 10 megawatts include notification of stakeholders within 800 metres and personal consultation for stakeholders within 400 metres of a project.

17. Given that no one has raised a concern about the project, there are no residences located within 800 metres of the project, and that the BESS addition will be located within the existing power plant fence line, the Commission does not consider it necessary for Concord to conduct further consultation for the project. The Commission finds that Concord's participant involvement program has satisfied the requirements of Rule 007.

18. For the above reasons, the Commission considers the application to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

#### 4 Decision

19. Pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 27215-A001 and grants Concord Vulcan GP2 Ltd. the approval set out in Appendix 1 – Power Plant Approval 27215-D02-2022 to alter and operate the Vulcan Solar Project.

20. The appendix will be distributed separately.

Dated on June 24, 2022.

#### Alberta Utilities Commission

*(original signed by)*

Neil Jamieson  
Panel Chair

*(original signed by)*

John McCarthy  
Acting Commission Member

## Appendix A – Summary of Commission conditions of approval in the decision

This section is intended to provide a summary of all conditions of approval specified in the decision for the convenience of readers. Conditions that require subsequent filings with the Commission will be tracked as directions in the AUC's eFiling System. In the event of any difference between the conditions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

The following is a condition of Decision 27215-D01-2022 that requires a subsequent filing with the Commission and will be included as a condition of Power Plant Approval 27215-D02-2022:

- Concord shall submit a copy of the project-specific emergency response plan to the Commission and to the director of protective services/regional fire chief for Vulcan County at least 30 days prior to starting construction of the BESS.

The following are conditions of Decision 27215-D01-2022 that do not require a subsequent filing with the Commission:

- Concord, and any subsequent operator, shall continually update and improve the site-specific emergency response plan, the corporate emergency response plan and associated emergency response program and advise the local fire departments, including but not limited to incorporating all mitigation measures required from discussions with the local fire departments and input from interested stakeholders and local residents.
- Concord shall provide on-site training for the Vulcan Fire Department following commissioning of the project.
- Concord, and any subsequent operator, shall implement any ongoing upgrades to improve the safety of the project, including but not limited to firmware and software enhancements, monitoring capability enhancement, process changes and safety standards as they are developed.