



AUC

Alberta Utilities Commission

Forty Mile Granlea Wind GP Inc.

Forty Mile Solar Power Project

July 21, 2022



Alberta Utilities Commission

Decision 27258-D01-2022

Forty Mile Granlea Wind GP Inc.

Forty Mile Solar Power Project

Proceeding 27258

Applications 27258-A001 and 27258-A003

July 21, 2022

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1 Decision summary

1. In this decision, the Alberta Utilities Commission approves applications from Forty Mile Granlea Wind GP Inc. (Suncor), a wholly owned subsidiary of Suncor Energy Inc., to construct, own and operate a 220-megawatt (MW) solar power plant, designated as the Forty Mile Solar Power Project (the project), located within the county of Forty Mile No. 8 and to alter and operate the approved Granlea 1024S Substation.

2 Applications

2. Suncor filed applications with the Commission for approval to construct and operate the power plant, and connect it to the previously approved Granlea 1024S Substation. Suncor also applied to alter the substation which would include expansion of the fenceline, addition of a second control building, addition of two 240/34.5-kilovolt (kV), 90/120/150-megavolt ampere transformers, and the addition of four 240-kV circuit breakers and nine 34.5-kV circuit breakers.

3. The project area is located on 1,573 acres of privately owned agricultural lands, co-located with the Suncor Forty Mile Wind Power Project,¹ approximately 25 kilometres southeast of the town of Bow Island, as shown on the map in Figure 1.

4. The project is sited in the following areas:

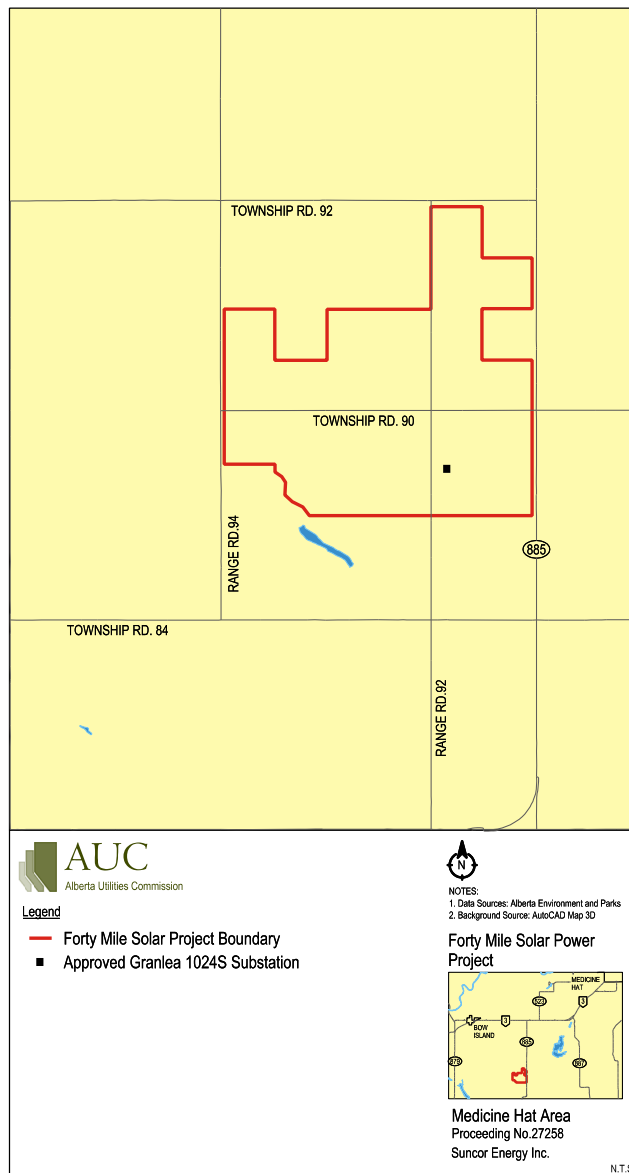
Quarter	Section	Township	Range	Meridian
SE	33	8	9	W4M
SW	2	9	9	W4M
SW	4	9	9	W4M
NE	33	8	9	W4M
SE	2	9	9	W4M
NW	11	9	9	W4M
NW	33	8	9	W4M
NE	3	9	9	W4M
SE	11	9	9	W4M
NE	35	8	9	W4M
NW	3	9	9	W4M
SW	11	9	9	W4M
NW	35	8	9	W4M
SE	3	9	9	W4M

¹ Power Plant Approval 26873-D02-2021, Proceeding 26873, Application 26873-A001, October 8, 2021.

NE	34	9	9	W4M
SE	35	8	9	W4M
SW	3	9	9	W4M
NW	34	9	9	W4M
SW	35	8	9	W4M
NW	4	9	9	W4M
SE	34	9	9	W4M
NW	2	9	9	W4M
SE	4	9	9	W4M
SW	34	9	9	W4M

5. The Granlea 1024S Substation is located in the southwest quarter of Section 35, Township 8, Range 9, west of the Fourth Meridian.

Figure 1. Proposed Forty Mile Solar Power Project location



6. Suncor's applications included:
- a. A participant involvement summary, which details consultation with stakeholders within 800 metres of the project and notification to stakeholders within 2,000 metres of the project.²
 - b. An environmental evaluation, environmental protection plan, and renewable energy operations conservation and reclamation plan for the project completed by Hemmera Envirochem Inc., which assessed potential effects of the project on the environment and outlined mitigation measures for Suncor to incorporate into its construction plan and operations.³
 - c. The Alberta Environment and Parks Fish and Wildlife Stewardship (AEP-FWS) renewable energy referral report for the project.⁴
 - d. Email correspondence confirming that a federal impact assessment is not required for the project.⁵
 - e. Email correspondence confirming that a provincial impact assessment is not required for the project.⁶
 - f. A solar glare impact assessment completed by WSP Canada Inc., which predicted that glare from the project is not likely to have the potential to create hazardous glare conditions for nearby dwellings or transportation routes.⁷
 - g. A noise impact assessment completed by RWDI, which predicted that cumulative noise levels will comply with Rule 012: *Noise Control*.⁸
 - h. *Historical Resource Act* approval with no conditions, dated July 16, 2021.⁹
 - i. A letter of non-objection from NAV CANADA.¹⁰
 - j. A Transport Canada aeronautical assessment form for obstacle notice and assessment, which indicates that no obstacle protection is required.¹¹
 - k. A site-specific emergency response plan for the construction and operation of the project.¹²

² Exhibit 27258-X0010, Attachment 8 Participant Involvement Program Summary.

³ Exhibit 27258-X0025, Attachment 9 Environmental Evaluation.

⁴ Exhibit 27258-X0016, Attachment 14 Renewable Energy Referral Report.

⁵ Exhibit 27258-X0011, Attachment 10 Federal Environmental Impact Assessment Exemption.

⁶ Exhibit 27258-X0012, Attachment 11 Provincial Environmental Impact Assessment Exemption.

⁷ Exhibit 27258-X0009, Attachment 7 Solar Glare Assessment.

⁸ Exhibit 27258-X0013, Attachment 12 Noise Impact Assessment.

⁹ Exhibit 27258-X0017, Attachment 15 Historical Resources Act Approval.

¹⁰ Exhibit 27258-X0014, Attachment 13A NAV CANADA Non-Objection Letter.

¹¹ Exhibit 27258-X0015 Attachment 13B Transport Canada Approval.

¹² Exhibit 27258-X0026, Attachment 6 Emergency Response Plan.

7. Suncor expects to start construction by March 2023 with an in-service date of November 2023. Suncor requested a construction completion date of December 31, 2026, to anticipate any future delays related to the COVID-19 pandemic or equipment deliveries.
8. The Commission issued a notice of applications in accordance with Section 7 of Rule 001: *Rules of Practice*. No submissions were received.
9. Notice was issued to the following Indigenous groups: Blood Tribe, Piikani Nation, Siksika Nation, Stoney (Bears paw) Band, Stoney (Chiniki) Band, Stoney (Wesley) Band, Tsuut'ina Nation and Métis Nation of Alberta, Region 3.
10. On May 9, 2022, a letter from the Métis Nation of Alberta, Region 3 (MNA) was received by Commission staff, regarding concerns with the project. Staff responded, stating that if the MNA felt that its members may be affected by the application, then they could register to participate through the eFiling System and fill out the statement of intent to participate (SIP) form for Indigenous groups – this included a link to information on how to participate. A letter was sent to the MNA on June 14, 2022, to determine whether the community intended to file a SIP.¹³ No submissions were received.

3 Discussion and findings

11. 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.
12. The Commission has reviewed the applications 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.
13. The Commission finds that Suncor's participant involvement program satisfies the requirements of Rule 007 and the objectives of consultation. Suncor distributed project-specific information packages to stakeholders within 2,000 metres of the project and conducted personal consultations with stakeholders within 800 metres of the project. Concerns were raised regarding weed management and farmland reduction. Suncor stated that surveys for weeds will be conducted during construction and it will commit to action being taken to mitigate the spread of weeds. Suncor stated that the project location included consideration of environmental studies, wetland studies, topography assessments, and consultation with stakeholders; and explained that farmland will still be available. Suncor confirmed there are no remaining outstanding concerns.
14. The power plant would be located within the approved Suncor Forty Mile Wind Power Plant boundary and would connect to the Granlea 1024S Substation, which is connected to the Alberta Interconnected Electric System via the approved Transmission Line 964AL owned by AltaLink Management Ltd.¹⁴ Suncor and AltaLink confirmed that there are no changes to the transmission system as a part of the solar power plant, therefore there are no changes to be made to the connection order. The Alberta Electric System Operator confirmed that the solar power

¹³ Exhibit 27258-X0046, AUC letter - Notice of applications.

¹⁴ Connection Order 24120-D05-2019, Proceeding 24120, Application 24120-A004, June 27, 2019.

plant will connect to the Granlea 1024S Substation through its behind the fence connection process.

15. The Commission has reviewed the noise impact assessment for the project, which includes the proposed transformer additions to the Granlea 1024S Substation. It is noted that predicted noise contribution from the project is less than the baseline facility contribution and less than the nighttime ambient sound level of 35 A-weighted decibels (dBA) at all receptors. As such, the project would not be a major noise contributor at any receptors and would comply with Rule 012.

16. The Commission has reviewed the solar glare assessment for the project. The solar glare assessment identified 20 nearby residences, Highway 885 and five local roads as receptors. The assessment confirmed that there are no aerodromes within four kilometres of the project boundary. The solar glare assessment indicated that the project would use solar panels with “lightly textured glass with an anti-reflective coating.” In summary, the glare assessment concluded that the project is not likely to create hazardous glare conditions for nearby dwellings or transportation routes.

17. The Commission accepts the findings of the solar glare assessment and imposes the following conditions of approval:

- a. Suncor shall use anti-reflective coating on the project solar panels.
- b. Suncor shall file a report with the Commission detailing any complaints or concerns it receives or is made aware of regarding solar glare from the project during its first year of operation, as well as its response to the complaints or concerns. Suncor shall file this report no later than 13 months after the project becomes operational.

18. The overall AEP-FWS risk ranking to wildlife and wildlife habitat is ranked as low. Risk to breeding birds and risk to wildlife features was also considered to be low. However, three concerns were identified and assessed as moderate risks to wildlife and wildlife habitat as a result of the project:

- AEP-FWS identified that the project’s fencing layout may result in impeded wildlife movement, wildlife entrapment, or increased collision risk and AEP-FWS encouraged Suncor to continue consultation with the county regarding the installation of Texas gates, reduced speed limits, and warning signs.
- A concern was raised due to the high number of migrating birds that were identified near a water body at a survey point located approximately 600 metres south of the project boundary; however, because the project itself is sited on previously disturbed (cultivated) land and the percentage of species at risk was relatively low, AEP-FWS assessed the mortality risk as moderate. Suncor has committed to additional mitigation if mortality is found to be high during post-construction monitoring.
- The project was designed to be outside the 500-metre buffer for sensitive snake hibernacula; however, since then AEP-FWS updated the sensitive snake range boundary and now the project is within the buffer. AEP-FWS is satisfied with Suncor’s commitments proposed in the snake protection plan and recommends that its proposed mitigations are adhered to during construction and operations of the project.

19. AEP-FWS's renewable energy referral report concluded that the project would have an overall low risk to wildlife and wildlife habitat. The environmental evaluation report likewise concluded that the significance of residual environmental effects of the project is expected to be negligible to low. The Commission expects that Suncor will diligently adhere to and implement applicable regulatory requirements and all of the mitigations proposed in the proceeding documents. With the addition of the condition stipulated below, the Commission is satisfied that the residual environmental effects of the project are limited and can be reasonably mitigated.

20. Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants* requires approval holders to submit to AEP-FWS and the Commission annual post-construction monitoring survey reports. Therefore, the Commission imposes the following condition of approval:

- c. Suncor shall submit an annual post-construction monitoring survey report to Alberta Environment and Parks (AEP) and the Commission no later than January 31 of the year following the mortality monitoring period, and on or before the same date every subsequent year for which AEP requires surveys pursuant to subsection 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants* and Section 4.0 of AEP's *Post-Construction Survey Protocols for Wind and Solar Energy Projects*.

21. The Commission acknowledges that an environmental protection plan for the Granlea 1024S Substation was approved by the Commission in Proceeding 23030 and that Suncor used the same environmental protection plan for the proposed expansion of the Granlea 1024S Substation in the current proceeding. The fenceline of the Granlea 1024S Substation would expand by 60 metres to the west. The Commission finds that the substation alteration is not likely to result in significant adverse effects to the environment because of the small increase to the substation footprint and the substation is located within the fenced area of the Forty Mile Solar Power Project.

22. The Commission notes that Suncor has not finalized its selection of equipment for the project, including solar modules, inverters and transformers. Consequently, the Commission imposes the following condition of approval:

- d. Once Suncor has finalized its equipment selection and project layout, it must file a final project update to the Commission to confirm that the project has stayed within the final project update specified allowances for solar power plants. The final project update must be filed at least 90 days prior to the start of construction.

23. Based on the foregoing, the Commission considers the applications to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

4 Decision

24. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves Application 27258-A003 and grants Forty Mile Granlea Wind GP Inc., the approval set out in Appendix 1 – Power Plant Approval 27258-D02-2022 to construct and operate the Forty Mile Solar Power Project.

25. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 27258-A001 and grants Forty Mile Granlea Wind GP Inc., the approval set out in Appendix 2– Substation Permit and Licence 27258-D03-2022 to alter and operate the Granlea 1024S Substation.

26. The appendices will be distributed separately.

Dated on July 21, 2022.

Alberta Utilities Commission

(original signed by)

Neil Jamieson
Commission Member

Appendix A – Summary of Commission conditions of approval

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 directions and 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 are conditions of Decision 27258-D01-2022 that require subsequent filings with the Commission and will be included as conditions of Power Plant Approval 27258-D02-2022:

- c. Suncor shall submit an annual post-construction monitoring survey report to Alberta Environment and Parks (AEP) and the Commission no later than January 31 of the year following the mortality monitoring period, and on or before the same date every subsequent year for which AEP requires surveys pursuant to subsection 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants* and Section 4.0 of AEP's *Post-Construction Survey Protocols for Wind and Solar Energy Projects*.
- d. Once Suncor has finalized its equipment selection and project layout, it must file a final project update to the Commission to confirm that the project has stayed within the final project update specified allowances for solar power plants. The final project update must be filed at least 90 days prior to the start of construction.

The following are conditions of Decision 27258-D01-2022 that do not or may require a subsequent filing with the Commission and will be included as conditions of Power Plant Approval 27258-D02-2022:

- a. Suncor shall use anti-reflective coating on the project solar panels.
- b. Suncor shall file a report with the Commission detailing any complaints or concerns it receives or is made aware of regarding solar glare from the project during its first year of operation, as well as its response to the complaints or concerns. Suncor shall file this report no later than 13 months after the project becomes operational.