



Shell Canada Limited

Scotford Industrial System Designation Amendment

April 5, 2023

Alberta Utilities Commission

Decision 27826-D01-2023

Shell Canada Limited

Scotford Industrial System Designation Amendment

Proceeding 27826

Application 27826-A001

April 5, 2023

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

1 Decision summary

1. In this decision, the Alberta Utilities Commission approves an application from Shell Canada Limited to amend the Scotford industrial system designation order to include the Scotford Solar Power Project and add SR Scotford Inc. as a holder of the order.

2 Background and application

2. Shell, Air Liquide Canada Inc. (ALC), Heartland Generation Ltd. (Heartland) and ATCO Energy Solutions Ltd. (ATCO) hold Order 26894-D03-2021¹ that designates the electric facilities at the Scotford Industrial Complex as an industrial system, located in the Fort Saskatchewan area.

3. Shell filed an application to amend the industrial system designation to include SR Scotford Inc.'s 58-megawatt (MW) solar power plant, known as the Scotford Solar Power Project, and to add SR Scotford Inc. as a holder of the order. Construction and operation of the solar power plant was approved in Decision 27314-D01-2022² on September 1, 2022. SR Scotford is a wholly owned subsidiary of Silicon Ranch Corporation, of which Shell plc is the largest shareholder. Scotford Solar Power Project would supply low-carbon intensity electricity to the Scotford refinery.

4. The solar power plant will be located adjacent to the Scotford Industrial Complex on approximately 245 acres of privately owned industrial land, within the northwest quarter of Section 5, northeast quarter of Section 6, southeast quarter of Section 7 and west half of Section 8 in Township 56, Range 21, west of the Fourth Meridian, as shown in Figure 1.

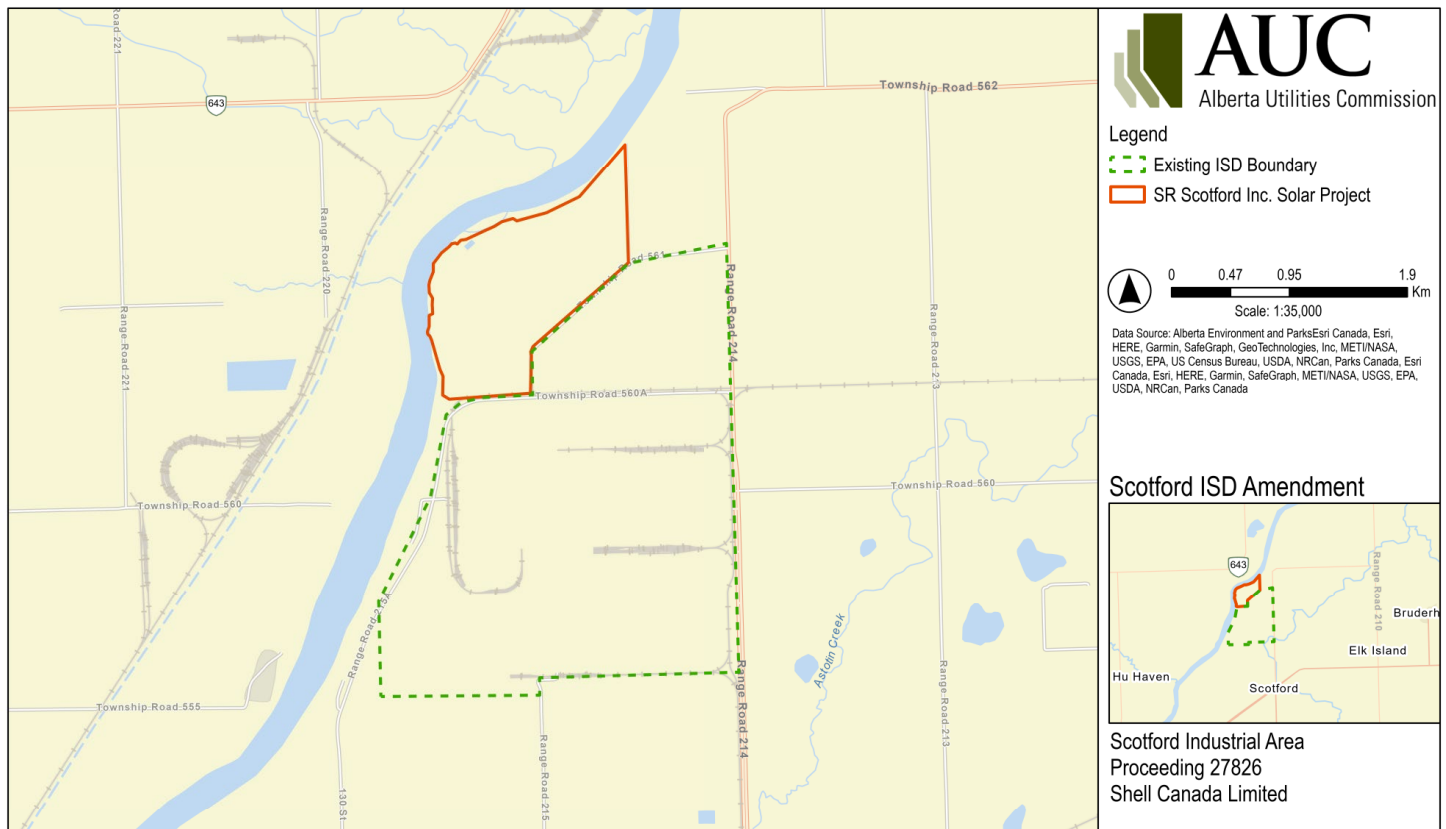
5. The solar power plant is proposed to connect to the Scotford Industrial Complex through two 25-kilovolt distribution lines. Shell stated that the solar power plant would connect to the existing Scotford 409S Substation and would supply approximately 20 per cent of the Scotford refinery's annual electricity needs. FortisAlberta Inc. provided a letter of non-objection to Shell indicating it has no issues with the application.³

¹ Industrial System Designation Order 26894-D03-2021, Proceeding 26894, Application 26494-A001, October 19, 2021.

² Decision 27314-D01-2022: SR Scotford Inc. - Scotford Solar Power Project, Proceeding 27314, Application 27314-A001, September 1, 2022.

³ Exhibit 27826-X0008, ISD7 – FortisAlberta Non-Objection, May 17, 2022.

Figure 1. Scotford Solar Power Project location



6. The Commission issued a notice of application and received one statement of intent to participate from the Alberta Electric System Operator (AESO). In its submission, the AESO provided comments on the industrial system designation (ISD) application in addition to highlighting that a transmission duplication avoidance tariff (DAT) addressed through Rider A3 of the ISO tariff is present at Scotford. With respect to the ISD application, the AESO expressed concern that carbon reduction objectives could be used to establish a precedent for the more lenient issuance of ISDs, leading to inappropriate bypass of the Alberta Interconnected Electric System (AIES) and the development of independent electric systems for the purpose of cost avoidance. However, the AESO stated that it did not intend to further participate in the proceeding.⁴ In addition, no objections or concerns were received from any interested parties.

7. In response to an information request, Shell submitted that this proceeding is not the appropriate avenue for a review of its tariff.

8. Shell submitted that inclusion of the solar power plant within the ISD was necessary to bring the Scotford Industrial Complex into compliance with the *Clean Fuel Regulations*,⁵ which require liquid fossil fuel providers to gradually reduce the carbon intensity of the fuels they produce and sell for use in Canada. Under the *Clean Fuel Regulations*, the carbon intensity of a fuel is a measure of the greenhouse gas emissions produced from the extraction, refining,

⁴ Exhibit 27826-X0013, LT AUC re AESO SIP, December 16, 2022.

⁵ *Clean Fuel Regulations*, SOR/2022-140, enacted under the *Canadian Environmental Protection Act*, 1999, S.C. 1999, c.33.

distribution and use of the fuel. Certain actions that reduce the carbon intensity of these processes, such as using on-site renewable electricity to refine a fuel, are considered to lower the carbon intensity of the fuel for the purpose of the *Clean Fuel Regulations*. Shell explained that there are a number of mechanisms within the *Clean Fuel Regulations* that it considered pursuing to comply with the regulations, but that each compliance mechanism is capital intensive and requires years of planning to engineer, approve and develop. Shell stated that renewable electricity, connected behind the meter, was assessed as being the only method currently available to lower the carbon intensity of the electrical power consumed at the Scotford refinery within reasonable timelines. Shell also stated that if the AUC were to deny this application, this would remove a compliance pathway for Shell that was identified in the *Clean Fuel Regulations*, which creates a barrier to fulfilling regulatory obligations for Shell and other obligated parties under the *Clean Fuel Regulations* and the *Canadian Environmental Protection Act*. Shell stated that the Scotford Solar Power Project alone, for the compliance period beginning in 2023 and ending in 2030, will not meet the full obligation required to satisfy Shell's *Clean Fuel Regulations* requirements, therefore additional compliance credit generation mechanisms will have to be pursued.

9. Environmental objectives are not included in the criteria identified in Section 4 of the *Hydro and Electric Energy Act*, and have therefore not factored into the Commission's determination on this application. Although the Commission generally considers the use of technologies to reduce the carbon intensity of industrial processes to be a positive development, the Commission must nevertheless decide whether the Scotford industrial system continues to meet the requirements for designation as an industrial system with the inclusion of the solar power plant.

3 Would the Scotford industrial system continue to meet the requirements for designated industrial systems with the inclusion of the solar power plant?

10. For the following reasons, the Commission finds that approving the application to amend the Scotford industrial system designation is in the public interest and that the industrial system continues to meet the principles and criteria of Section 4 of the *Hydro and Electric Energy Act*.

11. The Scotford industrial complex has been designated under Section 4 of the *Hydro and Electric Energy Act* as an industrial system since 1999. As the Commission has previously stated, in assessing an amendment to an industrial system designation, the Commission considers that the principles and criteria set out in Section 4 would have been assessed when the designation was initially applied for. As such, it is not necessary for the Commission to make findings on the applicability of principles and criteria to aspects of the industrial system that were originally considered in the initial industrial system designation application and that are not materially altered by the proposed amendment.

12. The Commission has focused its consideration on whether the industrial system continues to meet, or substantially meet, the principles and criteria of Section 4, with the inclusion of the solar power plant.

13. The Commission accepts that the primary intent of the application is to achieve compliance with the *Clean Fuel Regulations* and that the amendment is therefore not an attempt to avoid costs associated with the electrical system or bypass the AIES. Shell confirmed that the

Scotford Industrial Complex will maintain its existing connection to the AIES with no change to the existing demand transmission service (DTS) or supply transmission service (STS) contracts. The addition of the solar power plant would not change the industrial system's status as a net importer of electricity.⁶

14. The Commission has previously approved an amendment to the Scotford Industrial Complex to include a 4.6-MW power plant which, in the Commission's view, constituted a minor alteration to the industrial system.⁷ In that proceeding, the Commission found that although the power plant would not be highly integrated with the industrial operations, it represented a minor piece of a much broader industrial system that is comprised of a number of large, integrated processes.

15. The Commission similarly recognizes that the solar power plant that is the subject of the current ISD amendment application would not be highly integrated with the industrial operations that it serves, as required by Section 4(3)(a) of the *Hydro and Electric Energy Act*. However, the Commission continues to view the larger industrial system as a complex facility comprising a number of large integrated industrial processes. The Scotford Industrial Complex processes feedstock and produces primary products, and relies on highly co-ordinated operation and management of its constituent components. The only change to the ownership of the industrial system arising from the amendment application would be the addition of SR Scotford Inc. as an additional holder of the Scotford ISD order.

16. With respect to the integration of the solar power plant, the Commission accepts that the solar power plant would be a dedicated source of electricity for the industrial complex, limited to only serving load at the refinery, with no excess electricity exported to the AIES.⁸ Further, the addition of the solar power plant would facilitate the refinery's ongoing operation by enabling it to comply with mandatory regulations.

17. In light of the above, the Commission is satisfied that the solar power plant is substantially integrated into the industrial system. The Commission finds that the criteria of Section 4(3) of the *Hydro and Electric Energy Act* are substantially met. The Commission is also satisfied that inclusion of the solar power plant within the industrial system will result in a significant and sustained increase in the production and consumption of electric energy by the industrial operation, by providing a source of on-site, low carbon-intensity electricity. The Commission therefore grants the amendment application pursuant to Section 4(5) of the *Hydro and Electric Energy Act*.

18. In accordance with the requirements of Section 23 of the *Hydro and Electric Energy Act*, SR Scotford Inc. is registered under the *Business Corporations Act*. Based upon the information provided, SR Scotford Inc. has demonstrated that it is eligible to be one of the holders of the industrial system designation in its name along with Shell Canada Limited, Air Liquide Canada Inc., Heartland Generation Ltd. and ATCO Energy Solutions Ltd.

19. The Commission recognizes the AESO's submission that, if the ISD amendment were approved, a review of Rider A3 would be required to assess whether the terms of the duplication

⁶ Exhibit 27826-X0003, Proceeding 27826, November 30, 2022.

⁷ Decision 26423-D01-2021, Shell Canada Limited - Scotford Solar Power Plant and Industrial System Designation Amendment, Proceeding 26423, Applications 26423-A001 and 26423-A002, June 1, 2021.

⁸ Exhibit 27826-X0017, Shell Response to AUC IRs 2023FEB02-001 to 007 (10 Feb 2023).

avoidance tariff should be varied as a result of the inclusion of the solar power plant within the ISD. The AESO did not elaborate on these concerns or indicate how the charges and terms of Rider A3 might be varied. The Commission has not conducted a review of Rider A3 in the current proceeding, but approves the ISD amendment and makes no finding with respect to any potential AESO amendment application regarding Rider A3.

4 Decision

20. The Commission approves the industrial system designation amendment application and grants to Shell Canada Limited, Air Liquide Canada Inc., Heartland Generation Ltd., ATCO Energy Solutions Ltd. and SR Scotford Inc. the approval set out in Appendix 1 – Industrial System Designation Order 27826-D02-2023, under Section 4 of the *Hydro and Electric Energy Act* and sections 2(1)(d) and 117 of the *Electric Utilities Act*.

21. The appendix will be distributed separately.

Dated on April 5, 2023.

Alberta Utilities Commission

(original signed by)

Carolyn Dahl Rees
Chair

(original signed by)

Douglas A. Larder, KC
Vice-Chair