

January 12, 2023

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Subject: Input on Request for a Regional Assessment in the Southwestern Alberta Foothills

Thank you for meeting with Natural Resources Canada (NRCan) on December 13, 2022. In this letter we are responding to the questions from the presentation the Impact Assessment Agency of Canada (IAAC) provided at that meeting to support your analysis of the request for a Regional Assessment in the Southwestern Alberta Foothills.

NRCan is committed to improving the quality of life of Canadians by ensuring the country's abundant natural resources are developed sustainably, competitively, and inclusively. Through its broad mandate, NRCan has diverse areas of expertise that could support Regional Assessments conducted by IAAC including geoscience, forestry, and earth observation.

Attached is an annex with NRCan's response to questions from the "Regional Assessment Request: Southwestern Alberta Foothills, NRCan Briefing" deck. In general, this annex provides additional information that could inform your recommendation to the Minister of Environment and Climate Change on whether to conduct a Regional Assessment in the Southwestern Alberta Foothills.

If you have any questions, please do not hesitate to contact me at <u>Peter.Unger@nrcan-rncan.gc.ca</u>.

Sincerely,

<Original signed by>

Peter Unger A/Director, Impact Assessment Division Office of the Chief Scientist

Enclosure: Annex 1 – NRCan's Input on Request for a Regional Assessment in the Southwestern Alberta Foothills

Annex 1 – NRCan's Input on Request for a Regional Assessment in the Southwestern Alberta Foothills

Questions taken from and numbered according to Slides 9-10 – Analysis Considerations from "Regional Assessment Request: Southwestern Alberta Foothills, NRCan Briefing" deck.

1. Whether and how the RA would inform future federal impact assessment decisions – including if large-scale development, including potential designated projects under the IAA, are expected in the next 5-10 years in the region.

NRCan is aware of several mining and energy projects that are expected in the next 5-10 years in the Southwestern Alberta Foothills Region, including the NOVA Gas Transmission Ltd. (NGTL) West Path Delivery 2023 Project that prompted this request for a regional assessment. Table 1a and 1b provides information on these projects as identified in S&P Global, NRCan's Critical Minerals Map, NRCan's Map 900A-Principal Mineral Areas, Producing Mines and Oil and Gas Fields in Canada and NRCan's Major Projects Inventory Map.

West Path Delivery Program

TC Energy is constructing four separate natural gas pipeline projects to incrementally expand its Foothills and NGTL systems in southwest Alberta and southern BC as part of its \$1.2 billion West Path Delivery Program. These projects include:

- Foothills Zone 8 West Path Delivery 2022 Project
- NGTL West Path Delivery 2022 Project
- Foothills Zone 8 West Path Delivery 2023 Project
- NGTL West Path Delivery 2023 Project

According to TC Energy, these projects are necessary to supply growing demand in southwest Alberta, southern BC, and downstream North American markets for natural gas produced in Western Canada. The program is underpinned by approximately 258 million cubic feet per day of new firm service contracts with terms that exceed 30 years. This brings TC Energy's investment in sanctioned expansions of NGTL and Foothills infrastructure in Alberta and British Columbia to \$10 billion.

NGTL West Path Delivery 2023 Project: Economic Comments

On May 24, 2022, the Commission of the Canada Energy Regulator (the Commission) released its recommendation report to approve the NGTL West Path Delivery 2023 project (the Project). The Project was approved by the Governor in Council in November 2022 with 34 binding conditions.

In recommending approval of the Project, the Commission found that Project would likely create economic benefits and opportunities for local communities, Indigenous peoples, governments, customers, as well as NGTL's employees and contractors. The Commission also found that the net socio-economic benefits related to the construction phase of the Project, through both direct and indirect employment, procurement, and contracting opportunities, would likely benefit local communities as well as workers from elsewhere in Alberta and other parts of Canada.

The Project is expected to benefit Canada's economy by providing access to export markets for Canadian natural gas and giving producers the ability to compete for downstream market share — providing employment opportunities for local and Indigenous people, communities, and

businesses, and securing revenues for various levels of government. The Project will serve key export markets in the United States Pacific Census Region, including Washington, Oregon, and California. Demand for natural gas in these states is underpinned by long term contracts as they transition to cleaner forms of energy and away from coal.

NGTL expects the Project will increase Alberta's gross domestic product (GDP) by approximately \$80 million during construction, with the total economic impact on Alberta expected to be \$181 million in GDP and \$117 million in labour income. Direct and indirect employment is expected to be 1,161 full-time jobs during construction. Project development and construction is estimated to generate tax revenues of about \$4.2 million federally and \$6.2 million provincially.

In its Project application, NGTL stated it would seek to maximize opportunities for Indigenous businesses and individuals to benefit from the construction contracts and jobs that would be required for the Project. NGTL stated that based on its experience with past projects, Indigenous businesses generally represent 8 to 12% of the total construction contract values for projects in Alberta, and Indigenous peoples typically make up approximately 8 to 10% of the total construction workforce.

Major Projects Inventory

For additional exploration into project-related data, NRCan maintains the Major Projects Inventory. The inventory details major natural resource projects and expansions that are currently under construction or for which construction is planned for the next 10 years. These data are broken down by industry, and so forecasted development can be analyzed for given industries that are present in the region. The most recent report describing major projects planned and under construction from 2022 to 2032 can be found here:

https://www.nrcan.gc.ca/science-and-data/data-and-analysis/major-projects-inventory/22218

The major projects can be viewed on Open Maps here: <u>https://search.open.canada.ca/openmap/f5f2db55-31e4-42fb-8c73-23e1c44de9b2</u>

| Project Name | Owner | Primary Commodity | Development Stage | Activity Status | Latitude (degrees) | Longitude (degrees) | |
|-----------------------|---|----------------------|-------------------------|------------------------|-----------------------|------------------------|--|
| Source: S&P Globa | | connounty | Stuge | | (ucgrees) | (465,663) | |
| | Alberta | | | | | | |
| Elan | Atrium Coal Limited | Coal | Prefeas/Scoping | Temporarily On Hold | 49.940100 | -114.445170 | |
| Chinook Properties | Montem Resources Limited | Coal | Feasibility Complete | Active | 49.847590 | -114.525840 | |
| Grassy Mountain | Riversdale Resources Limited | Coal | Construction Planned | Active | 49.682300 | -114.419740 | |
| Burmis Magnetite | | Iron Ore | Reserves Development | Inactive | 49.665300 | -114.327920 | |
| British Columbia | | | | | | | |
| Elco | Teck Resources Limited (75%), Devon Energy Corporation (25%) | Coal | Reserves Development | Active | 50.3666670 | -114.9166700 | |

Table 1a. Large scale developments expected in the next 5-10 years in the region

| Project Name | Owner | Primary Commodity | Development Stage | Activity Status | Latitude (degrees) | Longitude (degrees) | |
|--|---|----------------------|-------------------------|-----------------------------------|-----------------------|------------------------|--|
| Bingay Main | Vitol | Coal | Feasibility | Inactive | 50.201000 | -114.975000 | |
| Fording River | Teck Resources Limited | Coal | Operating | Active | 50.191670 | -114.853060 | |
| Teck Resources Greenhills Limited (80%), POSCO Holdings Inc. (20%) | | Coal | Operating | Active | 50.111140 | -114.871110 | |
| Line Creek | Teck Resources Limited | Coal | Operating | Active | 49.937780 | -114.774720 | |
| Crown Mountain | Bathurst Resources Limited (50%), Jameson Resources Limited (50%) | Coal | Feasibility Complete | Active | 49.783209 | -114.728246 | |
| Elkview | Teck Resources Limited (95%), Nippon Steel Corporation (2.5%), POSCO Holdings Inc. (2.5%) | Coal | Operating | Active | 49.757850 | -114.820110 | |
| Martin Wheeler | Teck Resources Limited | Coal | Feasibility Complete | On Hold Awaiting Higher Prices | 49.602500 | -114.865280 | |
| Michel Creek | Coalmont Pty Ltd (65%), Pacific Road Capital Management Pty Limited (35%) | Coal | Prefeas/Scoping | Inactive | 49.560000 | -114.727000 | |
| Coal Mountain | Teck Resources Limited | Coal | Closed | Care and Maintenance | 49.501670 | -114.660830 | |
| Crowsnest | Grm Resources Pte. Ltd. | Coal | Prefeas/Scoping | Inactive | 49.450000 | -114.980000 | |
| Lillyburt | Conuma Coal Resources Limited (50%), Wasabi Energy Limited (50%) | Coal | Prefeas/Scoping | Inactive | 49.366700 | -114.636000 | |
| Lodgepole | Province of British Columbia | Coal | Preproduction | Inactive | 49.324560 | -114.736820 | |
| Elko | Advance Metals Limited | Coal | Prefeas/Scoping | Temporarily On Hold | 49.319980 | -114.851100 | |
| Sage Creek | Province of British Columbia | Coal | Reserves Development | Inactive | 49.087090 | -114.562040 | |
| Bull River | Braveheart Resources | Copper | Prefeas/Scoping | Active | 49.504000 | -115.388000 | |
| Sullivan | Teck Resources | Zinc | Closed | Rehabilitation | 49.712300 | -115.994580 | |
| Vine | PJX Resources Inc. | Lead | Reserves Development | Active | 49.400000 | -115.819720 | |
| Canam | | Copper | Reserves Development | Inactive | 49.038580 | -116.001680 | |
| Source: Natural Resources Canada Critical Minerals Interactive Map - https://atlas.gc.ca/critical-minerals/en/ | | | | | | | |
| Alberta | | | | | | | |
| Baymag | Baymag Inc. | Magnesium Oxide | Plant | Active | 51.060022 | -115.210061 | |
| Clearwater (Alberta) | E3 Lithium | | | | | | |

| Project Name | Owner | Primary Commodity | Development Stage | Activity Status | Latitude (degrees) | Longitude (degrees) | | |
|--|------------------|----------------------|----------------------|----------------------------------|-----------------------|------------------------|--|--|
| | British Columbia | | | | | | | |
| Driftwood Creek | MGX Minerals | Magnesium | Advanced Project | On Hold/Suspended | 50.904 | -116.575 | | |
| Mount Brussilof | | | | | | | | |
| Source: Natural Resources Canada Map 900A data - https://www.nrcan.gc.ca/science-data/science-research/earth-sciences/earth- sciences-resources/earth-sciences-federal-programs/map-900a/8790 | | | | | | | | |
| Alberta | | | | | | | | |
| Exshaw (Gap) | Graymont Inc. | Limestone | Operating | Active Processing Plant | 51.069153 | -115.135047 | | |
| Exshaw | Lafarge Canada | Cement | Operating | Active Processing Plant | 51.059442 | -115.171606 | | |
| British Columbia | | | | | | | | |
| Baldy Ridge Extension Project (Elkview property) | Teck Coal Ltd. | Coal | Prefeas/Scoping | Active - extension to Elkview | 49.7258959 | -114.884334 | | |

Table 1b. Large scale developments expected in the next 5-10 years in the region

| Project Name | Owner | Location | Primary Commodity | Development Stage | | | |
|--|--|---|----------------------|-----------------------|--|--|--|
| Source: Natural Resources Canada's Major Projects Inventory Map - https://search.open.canada.ca/openmap/f5f2db55-31e4-42fb-8c73- 23e1c44de9b2 | | | | | | | |
| Wild Rose' Wind Farm (Phase 2) | Capstone Infrastructure Corporation | Cypress County (S of Irvine), Alberta | Energy | Planned | | | |
| Travers Solar Project | Greengate Power Corporation | Regional Municipality of Wood Buffalo, Alberta | Energy | Under construction | | | |
| Cypress Wind Power Project | EDF Renewables Canada | Medicine Hat, Alberta | Energy | Under construction | | | |
| Stirling Wind Power Project | Potentia Renewables Inc. | Lethbridge, Alberta | Energy | Planned | | | |
| Buffalo Atlee Wind Farm 1 -4 | Capstone Infrastructure Corporation | Brooks, Alberta | Energy | Under construction | | | |
| Jenner Wind Power Phases 1, 2 and 3 | Potentia Renewables Inc. | Brooks, Alberta | Energy | Under construction | | | |
| Three solar farms | Canadian Solar | Hays, Tilley, and Jenner, Alberta | Energy | Under construction | | | |
| Vulcan Solar Project | EDF Renewables Canada | Vulcan County, Alberta | Energy | Planned | | | |
| Forty Mile Wind Power Project (Maleb Phase & Granlea Phase) | Suncor Energy Inc. | Bow Island, Alberta | Energy | Under Construction | | | |
| Barlow Solar Park | Barlow Solar Park DP Energy Ca | | Energy | Under Construction | | | |
| Sharp Hills wind farm | Sharp Hills wind farm EDP Renewables | | Energy | Planned | | | |
| Rattlesnake Ridge Wind Project | Berkshire Hathaway Energy Canada | Forty Mile County No. 8, Alberta | Energy | Under Construction | | | |

| Project Name | Owner | Location | Primary Commodity | Development Stage |
|--|---------------------------------|--|----------------------|-----------------------|
| Wheatland Wind Project | Potentia Renewables Inc. | Wheatland County, Alberta | Energy | Under Construction |
| Aldersyde Bioenergy Facility | Highwood Organics Processing | Foothills No. 31, Alberta | Energy | Under Construction |
| Chappice Lake Solar Storage Project | Elemental Energy | Cypress County, Alberta | Energy | Planned |
| Deerfoot Solar Project | ATCO | Calgary, Alberta | Energy | Planned |
| Saamis Solar Farm | DP Energy | Medicine Hat, Alberta | Energy | Planned |
| Wheatcrest Solar Project | BluEarth Renewables | Taber, M.D., Alberta | Energy | Planned |
| Chapel Rock to Pincher Creek Area Transmission Development | Altalink | M.D. of Pincher Creek No. 9, Alberta | Energy | Planned |
| Landfill Fly Ash Beneficiation Project | Lafarge Canada Inc. | Bighorn No. 8, Alberta | Energy | Planned |
| NGTL West Path Delivery NOVA Gas Transmission 2022 Project Ltd. | | Sundre and Coleman, Alberta | Energy | Planned |
| NGTL West Path Delivery 2023 | NOVA Gas Transmission Ltd. | Turner Valley, High River, and Pincher Creek, Alberta | Energy | Planned |
| Aries | Ram River Coal | 87.7 km WSW of Rocky Mountain House, Alberta | Coal | Planned |
| Trans Mountain Pipeline Expansion (TMX) | Trans Mountain Corporation | Edmonton, Alberta to Burnaby, British Columbia | Energy | Planned |
| Edson Mainline Expansion Project | NOVA Gas Transmission Ltd. | Clearwater County/Yellowhead County, Alberta | Energy | Under Construction |
| NGTL 2022 Expansion (North Corridor and Edson Mainline) | NOVA Gas Transmission Ltd. | Edson, Alberta | Energy | Under Construction |

5. Whether there is the potential for impacts, including cumulative impacts, to the rights of Indigenous people in the region.

Previously, NRCan has led Crown consultations on projects in Southern Alberta. Cumulative effects and cumulative impacts to rights have been raised by Indigenous groups on the Trans Mountain Expansion Project (TMX), 2021 NGTL System Expansion Project (NGTL 2021), NGTL Edson and NGTL North Corridor projects. NRCan implemented accommodation measures to respond to impacts of cumulative effects associated with the TMX project. Of note is the Terrestrial Cumulative Effects Initiative (TCEI), which was offered to Indigenous groups on the 2019 TMX Crown consultation list and was extended to groups on the NGTL 2021 Crown consultation list, described in more detail in response to question 7.

Cumulative effects and impacts to rights were raised during the Commission's hearing and through Crown consultations on the NGTL West Path Delivery 2023 Project; NRCan defers to

the Report of the Commission of the CER and the CER Crown consultation team and its Crown Consultation and Accommodation Report for more information.

6. Whether there has been considerable public interest related to development or cumulative effects in the region.

Based on previous experience, cumulative effects and potential cumulative impacts are raised as an issue by Indigenous groups for most natural resource projects that NRCan has been involved in, or reviewed information for.

7. Whether an existing or planned initiative would adequately address the issues raised in the request.

Eight accommodation measures were put forward to address the concerns of potentially impacted Indigenous groups by the TMX.

The 2019 TMX Crown consultation list overlaps with the Crown consultation lists for the NGTL 2021 and NGTL West Path Delivery 2023 Project. As a result, over 20 NGTL Indigenous groups received funding through TMX Accommodation Measures.

NRCan is involved in the funding delivery for three of the TMX accommodation measures: Phase I of the TCEI, Phase I of the Aquatic Habitat Restoration Fund (AHRF), and the Terrestrial Studies Initiative (TSI).

- TCEI aims to provide funding for capacity building and Indigenous-led cumulative effects projects in mainland freshwater and terrestrial environments. TCEI is open to Indigenous groups on the 2019 TMX Crown consultation list and was extended to groups on the NGTL 2021 Crown consultation list. The funding envelope for TCEI is \$65.5 million. TCEI is co-led by NRCan, Environment Climate Change Canada (ECCC) and Fisheries and Oceans Canada (DFO).
- AHRF supports Indigenous groups' participation in the development of the fund and restoration of fish and fish habitat in watersheds along the TMX corridor that may be impacted by the cumulative effects of development. AHRF is open to Indigenous groups on the 2019 TMX Crown consultation list. The funding envelope for AHRF is \$75 million. NRCan delivers AHRF Phase I capacity funding on behalf of DFO.
- TSI supports Indigenous-led studies to further understand TMX's potential impacts, including on traditional land use, and inform cumulative effects work. TSI is open to Indigenous groups on the 2019 TMX Crown consultation list. More than \$14 million has been delivered to Indigenous communities to date.