

January 12, 2023

Steve Bonnell Director, Strategic and Regional Assessments Impact Assessment Agency of Canada <u>stephen.bonnell@iaac-aeic.gc.ca</u>

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.