

LETTER DECISION

File OF-Fac-Gas-N081-2017-31 01 31 July 2018

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Dear Sirs:

NOVA Gas Transmission Ltd. (NGTL)
Application for construction and operation of the Northwest Mainline Loop (2018 Boundary Lake North Section) (Project) under section 58 of the *National Energy Board Act* (NEB Act) Hearing Order GHW-001-2018
Letter Decision and Order XG-N081-021-2018 (Order)

Based on the totality of the evidence on the Board's record for this matter, and for the reasons outlined below, the Board has determined that it is in the public interest to approve NGTL's Application to construct and operate the Project, pursuant to section 58 of the NEB Act.

1.0 Project Overview and the National Energy Board Process

1.1 Application and Project Overview

On 15 December 2017, NGTL applied to the National Energy Board (Board or NEB) pursuant to section 58 of the NEB Act, for authorization to construct and operate the Project, which includes 23 kilometres (km) of new pipeline within Clear Hills County, Alberta (Application).

The proposed Project will allow NGTL to transport sweet natural gas from a tie-in connection adjacent to the Owl Lake South Meter Station to the existing Hidden Lake Compressor Station. The Project will parallel existing disturbance for the entirety of the route. Once constructed, all new above-ground facilities will be located within a fenced area.

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Telephone/Téléphone: 1-800-899-1265 Facsimile/Télécopieur: 1-877-288-8803 The Project will be located between NE 20-94-12 W6M and NE 29-96-11 W6M, approximately 140 km northwest of Manning, Alberta, within Treaty 8 territory. The Project will be located entirely on Provincial Crown land and will require approximately 62 hectares (ha) of new permanent land rights and approximately 24 ha of temporary work space for construction.

In the Application, NGTL requested an exemption from paragraph 30(1)(a) and section 31 of the NEB Act, as well as an exemption from the requirements of paragraph 30(1)(b) and subsection 47(1) the NEB Act to obtain leave to open.

1.2 The NEB Process

On 5 January 2018, the Board issued notification letters to Indigenous peoples¹ potentially affected by the Project. The letter sought comments or concerns about the Project or views about how the Project may impact Indigenous peoples, the use of their traditional territory and any potential or established Treaty or Indigenous rights². In response, the Board received three letters on 12 January (dated 9 January), 19 January (dated 18 January), and 19 January 2018 from Tallcree First Nation (TCFN), Doig River First Nation (DRFN), and Dene Tha' First Nation (DTFN), respectively, in which each community outlined concerns they have with the Application.

On 31 January 2018, NGTL replied to the letters from TCFN, DRFN, and DTFN. The Board received an additional letter from DRFN on 13 February 2018 (dated 8 February), in response to NGTL reply comments. On 21 February 2018, NGTL replied to this additional letter from DRFN. NGTL filed further Indigenous engagement updates on 2 March and 11 June 2018.

On 4 May 2018, the Board issued its completeness determination, which established a written hearing process and set a 15 month time limit for the Board to complete its assessment and issue a decision. The Board simultaneously issued Hearing Order GHW-001-2018 (Hearing Order) for the Project, which set out the remaining process steps for the Board's review of the Application, including an opportunity for parties to ask Information Requests of NGTL, provide written submissions, and obtain participant funding.

Together with the Hearing Order, the Board released a series of proposed draft conditions to allow parties to assess how their concerns with the Project may be addressed. Parties were also invited to provide comments to the Board on the draft conditions, within their written submissions.

The Board subsequently received four applications to participate from: DTFN; DRFN; TCFN; and Environment and Climate Change Canada (ECCC). In the Hearing Order, the Board had granted predetermined Intervenor status to DTFN, DRFN and TCFN based on the letters of

¹ "Indigenous" or "Indigenous peoples" has the meaning assigned by the definition *aboriginal peoples of Canada*, in subsection 35(2) of the *Constitution Act*, 1982.

² "Indigenous rights" has the meaning assigned by the definition *aboriginal rights* in subsection 35(1) of the *Constitution Act*, 1982.

comment they had filed, provided they confirmed their interest through submission of an Application to Participate form. ECCC was also granted Intervenor status.

The Board's Participant Funding Program (PFP) is administered independently of the Board's hearing process. On 4 May 2018, the PFP announced a simplified funding process to assist Intervenors in their participation in the hearing. Eligible groups were pre-approved for up to \$40,000, and individuals for up to \$6,000. Three groups requested funding. DTFN, DRFN, and TCFN were each awarded \$40,000 for a maximum total of \$120,000 in funding offered.

2.0 Assessment of the Application

2.1 Indigenous Matters

NGTL initially identified eight Indigenous communities and began to engage with them in August 2017. Based on input received from the Board, Driftpile First Nation, Nose Creek Community and Tallcree First Nation were added to the list of potentially affected Indigenous communities. NGTL stated that it commenced engagement activities with these additional groups on 29 November 2017. Accordingly, NGTL engaged with the following eleven Indigenous communities identified as being potentially affected by the Project: Beaver First Nation, Dene Tha' First Nation, Doig River First Nation, Driftpile First Nation, Duncan's First Nation, Horse Lake First Nation, Métis Nation of Alberta, Métis Nation of Alberta Region 6, Nose Creek Community, Paddle Prairie Métis Settlement, and Tallcree First Nation.

NGTL stated that during NGTL's initial engagement activities it provided potentially affected Indigenous peoples with a Project notification package which included a detailed description of the Project and information on the ways in which to provide comments and concerns to the Board. The package also included brochures prepared by TransCanada regarding its engagement and safety programs, and by the NEB regarding non-hearing processes. Please see the table below for a summary of additional engagement activities as outlined in the Application. NGTL stated that at the time of the Application filing, it had not received a response from Paddle Prairie Métis Settlement, Driftpile First Nation or TCFN. As such, engagement activities with these three peoples were not included in its summary.

Summary of Initial Engagement Activities by NGTL with Indigenous Peoples (September to November 2017)

Beaver First Nation	• Site visits conducted 9 to 13 November 2017.	
Dene Tha' First Nation	Site visits conducted 20 to 24 November 2017.	
Doig River First Nation	Meeting held 22 September 2017.	
	GTL provided env	vironmental field study results, as requested.
	e visits conducted	d 24 to 28 October 2017.
Duncan's First Nation	Site visits conducted 24 to 27 September 2017.	
	Results of Traditional Land and Resource Use Information	
	view received.	
	GTL provided add	litional information as requested.

Horse Lake First Nation	• Site visits conducted 3 to 6 October 2017.	
Métis Nation of Alberta	NGTL emailed Métis Nation of Alberta to inquire whether any	
	questions or concerns about the Project.	
	NGTL provided Project shapefiles, as requested.	
Métis Nation of Alberta	• Site visits conducted 6 to 9 November 2017.	
Region 6		
Nose Creek Community	Nose Creek Community emailed NGTL – stated it will review the	
	package and advise if any concerns.	

In its Application, NGTL committed to continue to engage with Indigenous peoples throughout the regulatory process until the completion of Project construction. NGTL stated that during the operational phase of the Project, it will continue to engage Indigenous peoples through TransCanada's Public Awareness Program.

2.1.1. The Board's Process and Participation by Indigenous peoples

The Board's hearing process was designed to obtain as much relevant evidence as possible on Indigenous concerns regarding the Project, the potential impacts on Indigenous interests (as noted in the Board's List of Issues, Appendix III to GHW-001-2018), as well as possible mitigation measures to minimize adverse impacts on Indigenous interests. The Board was provided with and considered information about concerns related to the Project, and the measures that would be required to address those concerns, as brought forward through consultation undertaken by NGTL and through the participation of potentially affected Indigenous peoples.

Indigenous peoples concerned with potential Project-related impacts on their interests, including rights, had opportunities to present their views directly to the Board through preliminary comments following early notification, as well as through a written process outlined in the Hearing Order. While the Board required NGTL to implement a consultation program and undertake an assessment of the Project's potential effects, including its environmental and socio-economic effects, the Board also took steps to facilitate the direct participation of these groups in its assessment process as outlined in Section 1.2: *The NEB Process*. Complete information about the hearing process and process steps, as well as the assistance offered by the Board's Process Advisors are outlined in Hearing Order GHW-001-2018.

The Board adopted the processes described above to ensure that its decisions with respect to the Application were consistent with section 35 of the *Constitution Act*, 1982 and with the requirements of procedural fairness. The Board determined that the hearing process was appropriate, given the scope of the Project, the nature of the concerns raised, the importance of constitutionally protected Indigenous rights and the Board's obligation to make a decision as to whether the Project is in the Canadian public interest.

In *Clyde River (Hamlet) v. Petroleum Geo-Services Inc.*, 2017 SCC 40, and *Chippewas of the Thames First Nation v. Enbridge Pipelines Inc.*, 2017 SCC 41, the Supreme Court of Canada confirmed, among other things, that the Crown could rely on a regulatory assessment process to fulfill its duty to consult where the agency has the requisite statutory powers to do so. The Board

was found to generally possess the requisite authorities, in light of its technical expertise, its broad procedural powers to implement consultation and its broad remedial powers to impose and enforce conditions.

Evidence of Dene Tha' First Nation

On 19 January 2018, in response to the Board's notification letter for the Project, DTFN filed a letter of comment to provide the Board with information on some of their identified traditional practices and uses within the proposed Project area. On 6 June 2018, DTFN sent NGTL information requests and on 29 June 2018, DTFN provided final written evidence which included their *Traditional Knowledge Report of Dene Tha' First Nation* (TK Report).

DTFN stated that the Project is located in a part of their Territory used by their members for hunting, fishing, gathering and trapping, as well as other traditional uses. DTFN explained that this area provides key habitat for species their members currently rely on as well as species that they can no longer rely on, but hope to again in the future, specifically Woodland / Boreal Caribou. DTFN notes that in fact the caribou's survival is threatened by anthropogenic disturbance and habitat loss.

DTFN stated that their ability to undertake traditional activities has been eroded over the last number of years as a result of various new developments including oil and gas development, logging, mining/aggregates, dams, and agriculture. DTFN also expressed concern over their cultural existence as Dene Tha' as a result of the cumulative effects of all these developments. DTFN explained the special importance of the small number of areas near their communities, like the Project area, where DTFN members prefer to assemble and harvest for their own families and for community members who are not able to do so themselves.

DTFN also submitted that the proposed Project is incompatible with the existing Provincial Protective Notation imposed by Alberta Environment and Parks (AEP), which DTFN understands to be in place to protect critical caribou habitat. DTFN stated that NGTL's response to their Information Request (IR) on the matter did not explain how the provincial protection is compatible with the new surface disturbances created by the Project.

DTFN provided a summary of traditional practice and cultural use location information in relation to the Project, and raised a number of concerns including that the information provided by DTFN to NGTL about their traditional practices and cultural use locations was not reflected in the Application, filed with the Board. DTFN also identified many signs of wildlife activity, including signs from species of importance to DTFN, such as caribou, lynx, wolf, deer, and bear.

In their TK Report, DTFN identified several potential sites of importance and traditional use areas within and around the proposed Project area, including: burial and historic traditional use areas in riparian areas; portage route at the location where the Project crosses the Chinchaga River; trading posts along the banks of the Chinchaga River; wagon and game trails (caribou, deer, moose); trapping, hunting and camping locations along the banks of the Chinchaga River

and along Chinchaga Forestry Road. DTFN confirmed that its people still use the Project area for traditional use and practices including opportunistic hunting, gathering and camping.

DTFN stated they had concerns about the lack of baseline data used by NGTL, arguing that in order to properly understand the potential impacts to the Chinchaga caribou herd, additional studies are required. DTFN also expressed concerns regarding the need to reduce "lines of sight" along existing adjacent right-of-ways, and new Project rights-of-way. DTFN proposed several mitigation measures, and including mounding the right-of-way (ROW), planting deciduous trees to provide line of sight cover, transplanting semi-mature trees.

It their TK Report, DTFN outlined several specific conditions, mitigation measures, and research studies that should be undertaken to address the need for sufficient baseline information and cumulative impact assessment from this Project and other previous NGTL projects in DTFN's traditional territory. The conditions and mitigations requested included, but were not limited to: ensuring that the removal of beavers in the vicinity of the pipeline is done correctly and at the right time of year by Dene Tha' hunters/trappers; ensuring that the width of the pipeline ROWs are reduced to the smallest footprint possible; avoiding the creation of new ROWs and spraying chemicals during ROW clearing and maintenance; ensuring that areas of high potential for Dene Tha' traditional use and areas that support critical habitat are investigated to the satisfaction of DTFN, and ensuring that DTFN buffers around high value conservation and cultural areas are avoided and respected.

DTFN also asked questions of NGTL about the economic opportunities related to employment, contracting and training matters, which will be made available to DTFN as a result of the proposed Project.

Reply from NGTL

NGTL stated that to identify potential effects on traditional land and resource use, it used Project-specific information provided by Indigenous peoples through traditional knowledge reports or traditional use studies, as well as through site visits and engagement between NGTL and Indigenous peoples. NGTL stated that its assessment considered potential Project effects on intangible values related to the use of land, such as resource harvesting, visual aesthetics, habitation sites, and cultural or spiritual sites or practices. NGTL stated that the information provided by DTFN field participants was considered in the Environment and Socio-Economic Assessment (ESA) and in the design of the mitigation measures and its preliminary Caribou Habitat Restoration and Offset Measures Plan (CHR&OMP³). NGTL confirmed that it received DTFN's interim TK Report on 5 December 2017, and that the interim TK Report was reviewed in the context of the ESA. In response to an IR from DTFN, NGTL committed to: consider additional information provided by DTFN, including with respect to traditional practices; use information provided in DTFN's TK Report; and continue to pursue communications and meetings to address Project-specific concerns.

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³ Additional information on the CHR&OMP and its contents is included in Section 2.3: Environmental Matters

NGTL stated that it had considered several aspects of traditional land use (TLU), including cultural use sites and areas. NGTL confirmed that to avoid or reduce the effects of the Project on the environment and on the use of lands and resources by Indigenous peoples, NGTLrouted the Project adjacent to other linear disturbances for the entire length of the Project, and planned to implement minimal disturbance practices as outlined in its caribou mitigation strategy (discussed in Section 2.3: *Environmental Matters*). NGTL outlined a series of mitigation measures that it would employ to minimize Project-related effects on TLU, including harvesting and hunting. NGTL also outlined several mitigation measures to reduce the potential effect on social and cultural well-being, including to provide Indigenous communities with the proposed Project schedule and maps a minimum of two weeks before construction and to restrict construction activities to the approved construction footprint.

In regard to the existing Provincial Protective Notation imposed by AEP on lands within the proposed ROW, NGTL confirmed that no specific concerns with land use restrictions were raised by AEP during their consultations. NGTL committed to abide by the provincial requirements, including provincially required approval conditions which NGTL confirmed are included in the Project-specific Environmental Protection Plan (EPP) and outlined in NGTL's response to NEB IR No. 1.5 and NEB IR No. 2.5.

In its written submission, dated 15 June 2018, NGTL commented on DTFN's specific condition and mitigation requests, outlining where many of its proposed mitigation measures were consistent with the requests made by DTFN, (as well as DRFN and TCFN). NGTL also provided an explanation as to why certain proposed mitigation requests may not be appropriate for this specific Project.

In response to DTFN's request to reduce the "lines of sight", NGTL indicated that line of sight blocking will occur as a secondary effect of other restoration measures. NGTL argued that the use of dog-legs would not be appropriate in this case, as the Project has been designed to minimize the overall disturbance within the Chinchaga range. NGTL indicated that the use of techniques such as dog-legs would increase the amount of new clearing required, and thus potentially have a greater impact on this sensitive habitat area.

With respect to economic opportunities, NGTL advised that it is committed to supporting local communities by providing contracting and employment opportunities to qualified Indigenous and local businesses, including DTFN. Further, NGTL stated that it is currently involved in discussions with DTFN regarding contracting opportunities on the Project. NGTL provided copies of its brochures with respect to employment opportunities, and how NGTL implements measures to enhance the opportunity for Indigenous peoples to participate in the Project.

Further details regarding NGTL's specific responses to proposed mitigation measures and conditions raised by all Intervenors relating to caribou and caribou habitat can be found below in Section 2.3: *Environmental Matters*.

Evidence of Doig River First Nation

On 18 January 2018 and 13 February 2018, respectively, DRFN submitted its concerns and comments with respect to the Project to the Board.

DRFN outlined a number of concerns including:

- the effectiveness of NGTL's proposed mitigation measures, and NGTL's willingness to consider and incorporate findings from DRFN's Traditional Use Study (TU Study) and suggested mitigation measures;
- the request for a Joint Management Committee between NGTL and DRFN not being acknowledged by NGTL;
- DRFN disagreed with NGTL's assertion that the Project's contribution to cumulative effects in the area would not be significant, specifically regarding caribou habitat, fish and fish habitat:
- watercourse crossings and NGTL's planned crossing methodology. DRFN further raised questions as to why horizontal directional drilling was not planned for the Chinchaga River crossing; and
- the effects of linear disturbances: DRFN requested line of sight mitigation measures, including visual screening and line of sight management strategies. DRFN further expressed concerns regarding changes to wildlife habitat, movement and mortality.

Reply from NGTL

NGTL advised that on 4 December 2017, DRFN provided NGTL with the technical summary for DRFN's TU Study and that on 18 December 2017, NGTL responded to DRFN, to address the concerns raised. NGTL confirmed that the Project mitigation plans, as outlined in the Application, were developed after having reviewed and considered DRFN's TU Study.

With respect to DRFN's concerns regarding caribou habitat and specific mitigation requests, NGTL outlined where many of its proposed mitigation measures were consistent with the requests DRFN made in their TU Study, such as revegetation offsets.

NGTL committed to incorporating several measures that were highlighted in DRFN's TU Study into its final CHR&OMP, including planting mounds, log piles and active replanting as mitigations to improve habitat connectivity, decrease predator movement and act as a visual screen. NGTL also committed to vegetation protection including minimal surface disturbance techniques, and noted that the habitat restoration outlined in the preliminary CHR&OMP will help minimize impacts on lichen in the area. NGTL further responded to DRFN's questions and concerns regarding the determination of predicted residual effects by providing the definitions used and an explanation of the ESA methodology.

In response to DRFN's concerns about watercourse crossing plans and methods, NGTL confirmed that the Project Contractor will develop a detailed site-specific watercourse crossing

plan and submit the plan to NGTL for approval prior to initiating any crossings. NGTL also noted that it discussed its proposed crossing methodology with AEP on 8 and 9 November 2017 and that AEP agreed with NGTL's decision on watercourse crossing methodology.

To address DRFN's concerns regarding tree removal during bird nesting season, NGTL confirmed that it has scheduled Project clearance and construction activities to fall outside of the restricted activity period for migratory birds.

With respect to DRFN's request for access to trees cut during construction and maintenance, NGTL noted that it is currently in discussions with the Forest Management holder in the area, as they hold the right of first refusal. Following the Timber Salvage Plan, NGTL will identify potential options for the timber, which may include rollback and access control to restore caribou habitat, as well as to end users, such as Indigenous peoples.

NGTL committed to continue engaging with DRFN about the Project and to consider any additional information brought forward by DRFN.

Evidence of Tallcree First Nation

In their letter of comment received 12 January 2018, TCFN indicated that the Project may impact the TCFN, the use and occupancy of their traditional territory and any potential or established Treaty or Indigenous rights. TCFN noted that their current lack of capacity and the timelines for the provision of initial comments did not allow TCFN to conduct TLU and occupancy studies regarding the Project, or to provide the robust, detailed information necessary. TCFN requested additional time and funding to allow it to conduct further research and determine the full extent the Project's potential to impact their constitutionally protected Treaty and Indigenous rights.

After noting generally the "promise[s of] the Crown in Treaty 8 as including hunting, fishing, trapping, and gathering, as well as other valued social, cultural and spiritual activities", TCFN outlined a number of more specific concerns under the categories of 'Cultural and Spiritual Impact', 'Harvesting' and 'Historic'.

TCFN referenced its concerns regarding the impacts of land disturbance, noise, traffic and pollution from the Project on their spiritual connection to the land.

TCFN further noted its concerns regarding the Project's impact on wildlife within the Project footprint, as well as TCFN's ability to hunt and gather adjacent to the Project footprint.

Reply from NGTL

In response to TCFN's concerns regarding the impact of noise, traffic and pollution on TCFN's spiritual connection to the land, NGTL outlined the mitigation measures in place to avoid or reduce this impact. These measures include noise abatement equipment, reducing idling of equipment where possible, the use of multi-passenger vehicles where practical and implementation of a Project-specific Traffic Control Management Plan.

NGTL stated that it assessed the potential Project effects against the Board's Filing Manual requirements regarding resource harvesting, visual aesthetics and cultural or spiritual sites or practices.

Participation of Federal Crown

As part of its process, the Board notified Natural Resources Canada that the Board had received the Application for the Project, and that the Application may involve Indigenous matters. The Board also notified Crown-Indigenous Relations and Northern Affairs Canada (formerly Indigenous and Northern Affairs Canada) of the Project, in accordance with the *Federal Authorizations Consultation Protocol*. The Board noted that Guiding Principle No. 6 of the Government of Canada's *Updated Guidelines for Federal Officials to Fulfill the Duty to Consult (March 2011)* (Guidelines) states that the Government for Canada will use and rely on existing consultation mechanisms, processes and expertise, such as environmental assessment and regulatory approval processes. The Guidelines further state that agencies, boards, commissions and tribunals, including the Board, have a role to play in assisting the Crown in discharging, in whole or in part, the duty to consult.

Views of the Board

As noted above, as part of the Board's assessment process, the applicant is required to make all reasonable efforts to consult with potentially affected Indigenous peoples and to provide information about those consultations to the Board. This includes information on the nature of the interests potentially affected, the concerns that were raised and the manner and degree to which those concerns have been addressed.

The Board evaluates the sufficiency of an applicant's consultation process along with any other evidence of consultation it has on its record. The Board has considered all the evidence provided by NGTL and Indigenous peoples that participated in the Board's hearing process. The Board has reviewed NGTL's activities to engage Indigenous peoples and learn about their concerns and interests.

The Board has also considered how Indigenous peoples responded to opportunities for consultation and how NGTL addressed the concerns of potentially affected communities. In addition, the Board has considered how these inputs influenced NGTL's proposed design and operation of the Project.

Based on all of the relevant information before it, the Board is satisfied with the overall design and implementation of NGTL's Project-specific consultation activities to date. While the Board notes NGTL's commitment to continue consultation activities throughout

⁴ Between Her Majesty The Queen in right of Canada, as represented by the Minister of Indian Affairs and Northern Development AND The Dene Tha' First Nation, as represented by its Chief and Council digital reference: http://sidait-atris.aadnc-aandc.gc.ca/atris_online/Content/TreatiesAndAgreementsView.aspx

⁵ https://www.aadnc-aandc.gc.ca/eng/1100100014664/1100100014675

the lifecycle of the Project, it has imposed **Condition 5**, which requires NGTL to submit updated **Indigenous Consultation Logs** prior to and during construction.

In terms of specific impacts, the Board heard concerns from DTFN, DRFN and TCFN about the potential effects of the Project on caribou and other wildlife. The Board heard concerns regarding the lack of effective mitigation of Project impacts, in particular the importance of mitigating impacts on caribou habitat. The Board notes that its views regarding the proposed mitigation measures and to reduce impacts on caribou and other wildlife are outlined in Section 2.3: *Environment Matters*.

The Board notes the concerns raised by DTFN, DRFN and TCFN about the potential effects of the Project on TLU. The Board also examined the concerns raised by DTFN regarding how use of the lands in their Traditional Territory were considered, as well as how their community and traditional knowledge had been incorporated into the Application and subsequent updates. The Board notes NGTL's commitment to completing any outstanding TLU investigations, and to receiving and considering any additional information that may be brought forward by Indigenous peoples regarding their use of the land and resources in the Project area. The Board is of the view that the Project-specific effects are not likely to be significant, nevertheless, the Board expects NGTL to consider any additional traditional use information it receives through ongoing engagement with impacted Indigenous peoples regarding their use of the land and resources in the Project area.

The Board has imposed **Condition 4**, which requires NGTL to file, **for approval**, **Outstanding Traditional Use Studies/Traditional Knowledge Reports** for the Project and a description of how information from TLUs would be considered and addressed by NGTL including how they will be incorporated into the updated Project-specific EPP.

The Board further acknowledges the concerns raised by DTFN, DRFN and TCFN regarding the potential effects of the Project on each of these peoples' ability to hunt, fish and trap in the Project area, as well as on cultural, heritage or TLU sites. The Board also heard concerns regarding harvesting of medicinal plants, food and traditional plants. The Board has assessed the mitigation measures identified by NGTL to address these concerns, related to routing, construction scheduling, as well as vegetation, wildlife, and heritage and cultural resources. The Board is of the view that the proposed measures are appropriate and will sufficiently mitigate the potential impacts.

The Board has reviewed the contingency plans submitted by NGTL as part of their EPP in light of the concerns raised regarding cultural, heritage or TLU sites and finds the plans to be acceptable. The Board has also imposed **Condition 6**, requiring NGTL to file, at least 14 days prior to commencing construction, an updated **Environmental Protection Plan**, which is to indicate how results of TU Studies and TK reports were considered and incorporated into the EPP. The Board is of the view that NGTL's outlined mitigation measures, in combination with the above noted conditions will adequately address the potential impacts to cultural, heritage and TLU sites.

The Board reminds NGTL of its commitment to continued information sharing with potentially affected Indigenous peoples. The Board further reminds NGTL of its commitment to adhere to the Heritage Resource Discovery Contingency Plan and TLU Sites Discovery Contingency Plan, and directs NGTL to engage with Indigenous peoples on these issues, as requested.

2.2 Consultation and Land Matters

The Project is located entirely on Provincial Crown land approximately 140 km northwest of Manning, Alberta in Clear Hills County. The Project will parallel existing disturbances and ROWs including NGTL's existing Northwest Mainline pipeline for 100% of the route. NGTL also noted that it will use shared workspaces by overlapping with existing adjacent disturbances.

NGTL stated that the Project will require the acquisition of approximately 62 ha of new permanent land rights. It will also require approximately 24 ha of temporary work space. As the Project will be located entirely on Crown land in a remote area accessible only by forest service and industry roads, existing Crown dispositions will be used for a temporary camp and laydown yard. NGTL confirmed that there were no permanent residences within 1.5 km of the Project, although there is a permanent camp approximately 350 metres (m) west of the proposed pipeline at 4-29-96-11 W6M serving a nearby gas plant.

NGTL stated that it had consulted all potentially affected municipalities, provincial and federal government departments. In the Application, NGTL stated that it has consulted with AEP, and has discussed the mitigation and offset options for managing the Project's potential effects on caribou. NGTL has also provided Project information to ECCC. At the time of filing, NGTL stated that no issues or concerns had been raised been raised by any of these government bodies.

The Board provided additional opportunities for participation in response to the concerns raised by Indigenous peoples. No landowners or third parties raised concerns or were active participants in the Board's hearing process.

NGTL committed to obtaining Crown approval from AEP for the ROW, valve sites and temporary work space as required. NGTL also indicated that where the pipeline is contiguous with existing linear facilities, and where Crown consent has been obtained, NGTL would make use of existing disturbed areas to reduce overall linear disturbance.

Views of the Board

The Board has assessed NGTL's proposed route and is of the view that the proposed route is appropriate. The Board notes NGTL's route selection parallels existing disturbances for 100% of the route, and notes NGTL's efforts to utilize previously disturbed lands to accommodate temporary work space.

The Board is satisfied that NGTL has addressed the guidance and consultation requirements outlined in the Board's Filing Manual as well as the guidance provided in its Online Application System.

The Board notes NGTL's commitment to acquiring any lands needed pursuant to sections 86 and 87 of the NEB Act. The Board notes that NGTL has committed to working with any Crown rights holders who may have concerns to address or mitigate their concerns.

The Board notes the opportunities for participation during the hearing process, and is satisfied that anyone potentially affected by the Project had the opportunity to voice their concerns. The Board is further of the view that the design and implementation of consultation activities were appropriate for the scale and scope of the Project.

The Board notes NGTL's commitment to ongoing engagement and expects NGTL to continue its engagement with affected parties throughout the lifecycle of the Project.

2.3 Environment Matters

The Project includes approximately 23 km of new pipeline and in-line inspection facilities, requiring approximately 62 ha of new permanent land rights and 24 ha of temporary work space. It is located entirely on Provincial Crown land in Clear Hills County, Alberta within the Chinchaga caribou range. ECCC has prepared the *Recovery Strategy for the Woodland Caribou* (Rangifer tarandus caribou), *Boreal Population, in Canada* (Recovery Strategy (Boreal Caribou))⁶ that applies within this range.

Evidence of NGTL

General

NGTL prepared an ESA for the Project in accordance with the NEB Filing Manual and summarized all potential effects, proposed mitigation and predicted residual effects in its Interactions Table which was filed with the Application. NGTL identified routine design and scheduling measures, as well as standard mitigation for most of the potential adverse environmental effects identified for the Project. In addition, NGTL stated that Project construction will be supervised and reviewed by qualified Construction and Environmental Inspectors to ensure compliance with all applicable legislation, codes and standards, and conditions of approval. NGTL also committed to implement post-construction and reclamation monitoring programs.

Caribou

NGTL noted that pipeline routing is one of the most important tools to minimize the potential impacts on caribou. NGTL is of the view that the amount of undisturbed land required for the Project has been significantly reduced due to its decision to parallel existing disturbances for

⁶ The Recovery Strategy (Boreal Caribou) can be found at: https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/rs_caribou_boreal_caribou_0912_e1.pdf

100% of the pipeline route and to use shared workspace by overlapping existing adjacent disturbances.

NGTL stated that in order to minimize work occurring within critical timing periods for caribou, clearing and construction of the Project is scheduled to begin as soon as regulatory approvals are received, pre-construction compliance has been completed, and frozen ground conditions allow. Construction activities will be sequenced to include activities with the highest level of disturbance to caribou prior to 15 February. Clean-up and reclamation will also be conducted outside of the 15 February to 15 July sensitive timing window for caribou.

NGTL predicted that the total area of disturbance from the Project footprint including the ROW, temporary workspace and any log deck locations would result in 75.81 ha prior to restoration and 22.37 ha after restoration. NGTL stated that the final construction footprint widths for the Project will be confirmed in the final CHR&OMP, which will be submitted to the Board after construction is complete and prior to implementation of restoration and offset measures.

NGTL stated that indirect disturbance is calculated by applying 500 m buffers to all anthropogenic disturbances, including the Project remaining direct disturbance, and subtracting any areas accounted for by existing disturbances. Based on this, NGTL is of the view that there will be no remaining indirect disturbance from the Project.

NGTL prepared and filed with its Application, a preliminary CHR&OMP which outlines NGTL's plan to restore and offset the Project's residual effects on caribou habitat predicted to remain after mitigation.

NGTL is of the view that provided the planned mitigation for caribou are implemented, the Project will not have a significant effect on woodland caribou. In NGTL's view, even though there is a pre-existing significant cumulative effect that was realized prior to construction and operation of the Project, the Project will have an inconsequential contribution to the cumulative habitat loss or alteration for woodland caribou.

Evidence of Environment and Climate Change Canada

In response to the Board's notification pursuant to subsection 79(1) of the *Species at Risk Act* (SARA), dated 10 April 2018, ECCC filed a letter on 8 May 2018 indicating the Boreal Caribou Chinchaga range are listed as Threatened on Schedule 1 of the SARA.

In its written submissions ECCC noted that the Recovery Strategy (Boreal Caribou) identifies 65% undisturbed habitat in a range as the disturbance management threshold, which provides a measurable probability (60%) for a local population to be self-sustaining. ECCC stated that the Chinchaga herd has been declining since monitoring began in 2002 and the 5-year report for boreal caribou specifically, has assessed the population size to be less than 100 animals. ECCC submitted that under the Recovery Strategy (Boreal Caribou), achieving a stable population trend and recovering the population to a minimum of 100 animals will be necessary to mitigate the extirpation of the herd. ECCC is of the view that in order to reduce the risk of adverse effects to

caribou more generally, the Project should not, after considering mitigation measures, including offsets or compensation:

- compromise the ability of a range to be restored to 65% undistributed habitat;
- reduce connectivity within the range;
- increase predator and/or alternate prey access to undisturbed areas; or
- remove, or alter biophysical attributes necessary for boreal caribou.

ECCC noted that NGTL has made an effort to minimize habitat removal to the extent possible and stated that while it accepts NGTL's estimate of disturbance, it does not agree that the ratio of offsets being proposed is sufficient to mitigate the Project's effects on caribou.

ECCC is of the view that given the pre-existing cumulative effects on critical habitat and Recovery Strategy (Boreal Caribou), all existing habitat in this range is generally considered critical habitat and thus necessary for caribou recovery. ECCC stated it is also of the view that existing cumulative effects on the survival and recovery of this local population are adverse, high in magnitude and high in geographic extent.

As a result, ECCC is of the view that the proposed offset/compensation also needs to consider: the total habitat disturbance which accounts for the time lag not just the "residual" disturbance; the uncertainty of its success; and the status of the population that has fewer than 100 individuals remaining.

Based on the considerations noted, ECCC recommended that the final CHR&OMP clearly demonstrate that restoration is feasible and that it include a follow-up program. ECCC also recommended that habitat restoration be, in part, functional prior to or at the time the activity is undertaken and that the restoration be located within the range affected by the Project and in place for at least as long as the adverse impacts from the activity exist, preferably in perpetuity.

ECCC requested the opportunity to review and comment on the final CHR&OMP and any follow-up and monitoring plans or reports.

Evidence of Dene Tha' First Nation

DTFN expressed their concerns that caribou will no longer be seen in the group's Traditional Territory and stressed the importance of caribou recovery and caribou protection.

DTFN, provided their view that no new disturbances should be allowed in the Chinchaga range until at least the minimum of 65% undisturbed habitat recommended in the Recovery Strategy (Boreal Caribou) has been achieved.

DTFN is of the view that the ESA, on which the preliminary CHR&OMP depends, does not provide sufficient baseline information to assess the adequacy of mitigation or offsetting required to address the potential impacts of the Project to the Chinchaga herd. DTFN is of the view that the NEB cannot therefore approve the Project with any confidence in the ability of the preliminary CHR&OMP to address the potential impacts.

Evidence of Doig River First Nation

DRFN raised concerns regarding, among other things, the impact of the Project on caribou habitat and NGTL's determination that the Project will have an inconsequential contribution to cumulative habitat loss. DRFN requested that all high-quality caribou habitat, as documented in DRFN's TU Study, be compensated nearby. DRFN further stated that active revegetation/recovery should be implemented for all impacts to vegetation, especially wetlands and high-value caribou habitat.

Reply of NGTL

NGTL is of the view that the mitigation proposed for the Project is consistent with ECCC's submission that the Project should not (after considering mitigation measures, including offsets or compensation); compromise the ability of a range to be restored to 65% undisturbed habitat; reduce connectivity within a range; increase predator access to undisturbed areas; or remove or alter biophysical attributes necessary for boreal caribou.

Responding to ECCC, NGTL indicated that although revegetation of the Project footprint to preconstruction conditions has a time lag, restoration measures can be effective in mitigating Project effects on caribou prior to 40 years. NGTL noted that regenerating vegetation on the ROW will also function as line of sight breaks over time and can be accelerated through the use of minimum disturbance construction techniques. In addition, NGTL stated that it also employs several multipliers in the calculation of the Project offset values to account for risks associated with time lags and uncertainty of the effectiveness or achievability of each restoration measure.

NGTL is of the view that the preliminary CHR&OMP demonstrates that restoration is feasible. NGTL also noted that its offset monitoring program will be detailed in the *Caribou Habitat Restoration and Offset Measures Monitoring Program* and involves long-term monitoring to evaluate the success of habitat restoration measures.

In reply to ECCC's recommendation that other habitat restoration methods be implemented in a timely manner to reduce adverse effects on caribou, NGTL indicated that it plans to implement restoration and offset measures directly for habitat as soon as feasible. NGTL also indicated that the preliminary CHR&OMP is focused on direct habitat restoration and offset measures in accordance with recent NEB direction.

NGTL stated that offset measures will be planned on a site-specific basis and located based on area suitability, ecological relevance, and logistical constraints for implementation. NGTL noted that since there are a limited number of offset opportunities available in provincial parks or other protected areas, and after consultation with AEP, the preference is that existing NGTL ROWs within caribou range be the primary target for habitat offsets. NGTL indicated that it is assessing all its existing NGTL rights-of-way within the Chinchaga range for potential offset locations. These ROWs represent areas where NGTL has operational control and can ensure protection of offset measures. Through ongoing consultation with AEP, NGTL is confident that offset planning will align with anticipated provincial range plans.

NGTL is of the view that its method for offset valuation is a defensible approach that has been accepted by the NEB for other NGTL projects. NGTL noted that the offset valuation method developed by it includes the use of several multipliers to account for delivery, spatial and temporal risks specific to the proposed offset habitat and restoration measures, as well as an inherent effect multiplier. NGTL stated that there is no basis for the 4:1 offset ratio suggested by ECCC and that instead the measures in the preliminary CHR&OMP should again be preferred by the Board.

NGTL committed to continue to engage with ECCC as it develops the final CHR&OMP. NGTL also committed to provide filings regarding caribou concurrently to ECCC when filed with the NEB.

NGTL committed to reclaiming and actively revegetating its Project construction footprint, and implementing offsets in other locations in the Chinchaga range, relating to the mitigation requests raised by both DTFN and DRFN. In alignment with the vegetation mitigation request by DRFN, NGTL has also committed to vegetation protection to minimize the impacts on lichen. NGTL also accepted DTFN's suggestion in TK Report and will plant deciduous trees along the ROW.

Regarding DTFN's concerns regarding line of sight and wildlife habitat, movement and mortality, NGTL outlined its proposed mitigation to reduce these impacts. Specifically, NGTL committed to access control, mounding, rollback and active revegetation on areas disturbed by the Project, as well as areas where the Project parallels its existing ROWs. NGTL notes that it has committed to several measures include planting mounds, shrub and grass regrowth, log piles and active replanting as mitigations to improve habitat connectivity, decrease predator movement and act as a visual screen.

NGTL noted that mitigation measures developed for the Project were developed using baseline information collected from biophysical studies collected consistent with industry standards and adapted from provincial protocols, as well as in consideration of available traditional knowledge and in accordance with industry best practices. NGTL stated that its mitigation and management plans for the Project also include monitoring and adaptive management processes to address uncertainty and increase the probability of the mitigations' effectiveness. NGTL will implement adaptive management by supplementing offset measures or taking other remedial action, where warranted, to achieve the identified mitigation targets and goals, and ultimately, the objective of its monitoring plan using quantifiable performance indicators.

NGTL committed to ongoing engagement with DTFN including with respect to finalizing the preliminary CHR&OMP, considering additional information from DTFN, and exploring opportunities for engagement on the planning and implementation of offset measures. NGTL also notes that its planned mitigation will be refined for site-specific implementation in accordance with the processes outlined in the Project-specific EPP and Preliminary CHR&OMP.

Views of the Board

The Board's Filing Manual provides guidance to proponents on what baseline information should be included in an ESA. The Filing Manual notes that the goal is to provide information with sufficient detail in order to: identify project-environment interactions; identify, predict and determine the significance of the effects of the Project; *and* formulate appropriate mitigation measures and monitoring programs.

In this case, the Board is of the view that the level and detail of baseline information provided by NGTL was sufficient and further was supported by an appropriate description of the methodology used and the rationale for that methodology. The Board is also of the view that the draft ESA provided by NGTL properly analyzes and characterizes the level of significance of potential adverse environmental effects as a result of the Project. Therefore, the Board is of the view that NGTL's ESA methodology is acceptable.

The Board has assessed the effects of the Project on the environment. In considering the evidence, the Board is of the view that the standard mitigation proposed and commitments made by NGTL will minimize the environmental effects of the Project. The Board notes the commitment of NGTL to conduct post-construction environmental monitoring. The Board is of the view that a robust post-construction environmental monitoring program is key to ensuring that potential adverse effects will be effectively mitigated and where issues are identified, adaptive management will be employed to address them. To be satisfied that post-construction environmental monitoring is thorough and effective, the Board has imposed **Condition 9** which sets out requirements for NGTL to implement a post-construction environmental monitoring program and submit **Post-Construction Environmental Monitoring Reports**.

Based on the information provided by NGTL in its Application and subsequent filings, and taking into account the mitigation proposed by NGTL and the conditions imposed by the Board, the Board has determined that residual effects of the Project on the environment are likely to be localized to the Project area and reversible in the medium term. *Caribou*

With respect to projects being proposed in caribou ranges, the Board has previously commented on the importance of protecting critical habitat. The Board expects proponents to preferentially avoid, and then minimize disturbance before, during and after construction. The Board is of the view that companies have a responsibility to restore affected habitat on the ROW as soon as possible and as much as possible, and that residual effects must be fully offset.

The Board acknowledges NGTL's routing of the pipeline along existing linear disturbances to avoid and minimize disturbance to caribou habitat. The Board has also considered NGTL's preliminary CHR&OMP, which was filed on the record.

The Board acknowledges DTFN's concern that NGTL's ESA, on which the CHR&OMP depends, does not provide sufficient baseline information to assess the adequacy of

mitigation or offsetting required to address the potential impacts on the Project to the Chinchaga herd. For the reasons outlined above, the Board is of the view that the baseline information provided is sufficient, and NGTL's ESA methodology is acceptable. The Board notes that NGTL's mitigation and management plans for the Project also include monitoring and adaptive management processes to manage uncertainty and increase the probability of effective mitigation.

The Board is of the view that the CHR&OMP as filed and as amended during this proceeding identified goals and measureable objectives, restoration implementation plans, offset selection and implantation plans and schedules that are appropriate for a preliminary CHR&OMP. In order to verify the appropriateness of the restoration implemented and since an assessment of the remaining residual impacts after restoration is essential to determine the offset required, the Board imposes Condition 10 and Condition 11 requiring NGTL to file, for approval, a Caribou Habitat Restoration Implementation Report and Status Update and a Caribou Habitat Offset Measures Implementation Report, respectively.

The Board acknowledges the concerns raised by ECCC and DTFN regarding the effectiveness of some of the mitigation proposed in the CHR&OMP. The Board notes that the preliminary CHR&OMP provided by NGTL included a literature review which discusses the findings of the effectiveness of mitigation in other related projects. Moreover, in order to ensure that assumptions made are correct, that restoration is effective and, if and where not effective, that adaptive management is implemented, the Board has imposed **Condition 12** requiring NGTL to develop a **Caribou Habitat Restoration and Offset Measures Monitoring Program** to monitor and verify the effectiveness of the caribou habitat restoration and offset measures implemented as part of the CHR&OMP. Finally, to assist its oversight of ongoing monitoring, the Board also imposes **Condition 13** which requires NGTL to file, for approval, **Caribou Monitoring Reports** with the Board.

The Board notes ECCC's recommendation for a habitat restoration ratio of 4:1 - as ECCC has previously recommended on other NEB pipeline project applications. The derivation of the proposed 4:1 ratio is not however explained or otherwise supported in the evidence. In contrast, NGTL has provided considerable details on how its multipliers were derived and how they account for a variety of mitigation- and habitat-related variables The Board notes that while ECCC has requested that the restoration ratio account for variables such as time lags and uncertainty, the recommended approach of prescribing a fixed 4:1 ratio does not allow for different time lag circumstances or varying levels of uncertainty. In contrast, NGTL's multipliers, as set out in its evidence, account for an inherent value, and provide different multipliers for the different delivery, temporal, and spatial risks encountered under different circumstances. This could potentially result in a ratio greater than 4:1, where and when the risks are greater.

The Board repeats concerns as outlined in its prior decisions⁷ with respect to the potential unintended consequences of prescribing a blanket 4:1 ratio. Namely, that that a blanket 4:1 ratio would remove any incentive to avoid new cut, or ensure that the offset measures selected would be effective, or account for the timing of implementation or proximity of offsets. Although it may be that a 4:1 approach may work for non-linear developments, the Board is of the view that for linear developments, such as the case before it, such an approach is inappropriate and would not account for practical circumstances on the ground, or otherwise promote effective and timely avoidance, mitigation and on-site restoration for caribou habitat, before offsetting.

The Board supports NGTL's plan to locate its offsets within the Chinchaga range, being the same range as that affected by the Project. The Board also notes the importance of placing offset measures in areas that provide long-term protection and the greatest likelihood of durable results. The Board reminds NGTL that habitat restoration measures implemented for an existing NEB-regulated project for which caribou conditions exist will **not** be considered as offsets for this Project. NGTL is also reminded that access control measures would need to be implemented and be effective across the full width of any and all other adjacent ROW dispositions for NGTL to count them as restoration or as offsets, as the case may be. The Board is satisfied that NGTL has committed to continue its discussions on offset location with AEP. The Board notes the commitments made by NGTL to consider caribou related information provided by DTFN during implementation of Project mitigation measures, and to continue to engage with ECCC on the final CHR&OMP and to provide filings regarding caribou concurrently to ECCC when filed with the Board. The Board directs NGTL to also provide filings regarding caribou concurrently to the DTFN and any other Indigenous communities that express an interest, when filed with the Board.

The Board notes DTFN's evidence that NGTL's baseline information did not include specific caribou observations made during DTFN's field work. On that point, the Board reminds the DTFN that it can file these specifics on the record if it so wishes (and confidentially, if needed). The Board would also remind NGTL to take such observations into consideration in the planning and implementation of relevant field measures.

Lastly, DTFN also expressed its view that no new disturbances should be allowed in the Chinchaga range. The Board notes that an overarching planning decision of this nature would amount to a higher level decision that rests with other government agencies and goes beyond a single project assessment.

In terms of its Project-specific assessment, the Board is of the view that with the imposed conditions, the Board's regulatory oversight of them and in light of NGTL's routing choices and the level of existing disturbances, the Project is not likely to result in any additional adverse impacts to caribou habitat within the Chinchaga range.

⁷ See for example Report of the National Energy Board: Nova Gas Transmission Ltd GH-002-2015: PDF page 159 of 208 (A77316)

2.4 Engineering Matters

The Board uses a risk-informed lifecycle approach to ensure that NEB-regulated facilities and activities are safe and secure from their initial construction through to their abandonment. In consideration of the safety and security of proposed facilities, the Board will assess whether the facilities are appropriately designed for the properties of the product being transported, the range of operating conditions, and the human and natural environment where the facilities would be located. Specific considerations include a company's approach to engineering design, integrity management, security, emergency preparedness, and health and safety.

When a company designs, constructs, or operates facilities, it must do so in accordance with the NEB Act and its regulations, including the *National Energy Board Onshore Pipeline Regulations* (OPR), its commitments made during a proceeding, and the terms and conditions the Board attaches to any approval. The company is responsible for ensuring that the design, specifications, programs, manuals, procedures, measures, and plans developed and implemented by the company are in accordance with the OPR, which includes by reference Canadian Standards Association (CSA) CAN/Z662-15 Oil and Gas Pipeline Systems Standard (CSA Z662-15).

2.4.1 Design and Construction

The Project consists of approximately 23 km of 914 mm (NPS 36) outside diameter pipeline, and includes facilities to accommodate in-line inspection and SCADA facilities for gas control monitoring. The Project will be designed to transport sweet natural gas at a maximum operating pressure of 8,450 kPa. The new pipeline loop will be a tie-in connection into the existing Northwest Mainline Loop (Boundary Lake Section), which was approved under Certificate GC-126.

Regarding the operation of the Project, NGTL stated that it will implement TransCanada Pipeline Limited's comprehensive Integrity Management Program to identify, monitor and mitigate potential integrity threats, using a comprehensive risk-based methodology.

NGTL proposes one crossing of the Chinchaga River at NE 7-96-11 W6M. NGTL identified an isolated open-cut as its preferred crossing method and a trenchless crossing technique as the contingency crossing method. NGTL further stated that the open-cut crossing would be expected to occur between December 2018 and February 2019 and would take less than two weeks to complete. By constructing the crossing in winter under frozen conditions, the Project will avoid the restricted activity period and high spring freshet water flows. NGTL stated that this will result in lower volumes of water requiring diversion and will reduce the downstream transport of sediment.

Evidence of Dene Tha' First Nation

DTFN expressed their concerns with respect to the impacts of the proposed open-cut technique to fish and fish habitat at the Chinchaga River crossing, given their members reliance on fish in this area. DTFN stated their preference for a less impactful method of crossing, such as a trenchless technique. DTFN requested that NGTL demonstrate that trenchless techniques for

crossing the Chinchaga River were considered, and that NGTL further provide rationale for not using such alternative techniques.

Reply of NGTL

NGTL provided its view that trenchless crossing techniques would necessitate a larger construction footprint. NGTL stated that it had chosen an isolated open-cut crossing for the Chinchaga River in order to reduce the Project footprint and the potential effects of the Project based on the marginal fisheries values in the area, and timing and duration of construction within the caribou range.

Views of the Board

The Board is satisfied that the general design of the Project is appropriate for the intended use. The Board is further satisfied that the Project would be designed, located, constructed, installed, and operated in accordance with the OPR and the CSA Z662-15. The Board has imposed **Condition 2** requiring NGTL to construct, install and operate the Project in accordance with the specifications, standards, and other information referred to in its Application, or as otherwise agreed to during questioning or in its related submissions.

The Board is satisfied with the approach NGTL has adopted for the planned and contingency crossings for the Project. The Board is of the view that open-cut can be an effective technique for the installation of pipelines in sensitive areas. The success of an open-cut installation for pipeline construction depends on proper design and planning, and adaptation to the actual conditions encountered during the execution of the crossing. The Board accepts NGTL's view that constructing an open-cut crossing in the winter under frozen conditions will minimize the Project footprint and, accordingly, represents an acceptable technique.

2.5 Economic Matters

In the Application, NGTL stated that the Project is required to be in service by April 2019 to meet the North Central Corridor (NCC) design flow requirements serving the aggregate market demands in northeast Alberta, which have been determined to exceed the capacity of the system in 2019. The NCC design flows are supported by existing Firm Transportation Delivery contract obligations in northeast Alberta.

NGTL identified the construction of a new compressor station near the Owl Creek South Meter Station as an alternative to increase the transportation capacity and address the identified capacity constraint. NGTL conducted an analysis of the two alternative facilities for short and long-term flow requirements to determine Cumulative Present Value Cost of Service values. The proposed facility was selected based on the lowest Cumulative Present Value Cost of Service.

Views of the Board

The Board notes that no party contested the economic feasibility of the Project or NGTL's ability to finance the Project. The Board recognizes the need for the applied-for facilities as described by NGTL. The Board has determined that the Project is economically feasible and has no concerns with NGTL's ability to finance the Project.

3.0 Conclusion

The Board has determined that it is in the public interest to approve NGTL's Application to construct and operate the Project, pursuant to section 58 of the NEB Act.

All of the above constitute the Board's reasons for decision for Order XG-N081-021-2018. The Board directs NGTL to serve a copy of these reasons on all interested parties.

R. R. George

S. Kelly

W. Jackhife

July 2018 Calgary, Alberta

Attachment