REGULATORY LAW CHAMBERS

ENERGY REGULATORY REPORT

Regulatory Law Chambers *is a Calgary-based boutique law firm dedicated to excellence in energy regulatory matters. We have expertise in oil and gas, electricity, including renewable energies and commercial matters, tolls and tariff, compliance and environmental related matters. We frequently represent clients in proceedings before the Alberta Energy Regulator ("AER"), the Alberta Utilities Commission ("AUC"), the National Energy Board ("NEB"), all levels of the Courts, and in energy related arbitrations and mediations.* ***Our advice is practical and strategic. Our advocacy is effective.***

This monthly report summarizes matters under the jurisdiction of the AER, the AUC and the NEB and proceedings resulting from AER, AUC and NEB decisions. For further information, please contact Rosa Twyman at Rosa.Twyman@RLChambers.ca or John Gormley at John.Gormley@RLChambers.ca.

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FEDERAL COURT OF APPEAL

Bigstone Cree Nation v. Nova Gas Transmission Ltd., 2018 FCA 89
Application for Judicial Review – Aboriginal Consultation and Accommodation – Application Dismissed

In this decision, the Federal Court of Appeal ("FCA") considered an application by Bigstone Cree Nation ("Bigstone") for judicial review of Order in Council P.C. No. 2016-962 (the "Order") made by the Governor in Council (the "GIC") dated October 28, 2016. The Order directed the NEB to issue an environmental assessment decision statement concerning the 2017 Nova Gas Transmission Ltd. ("NGTL") System Expansion Project in northern Alberta (the "Project"), and to issue the Certificate of Public Convenience and Necessity GC-126 (the "CPCN") authorizing the construction and operation of the Project.

For the reasons summarized below, the FCA dismissed Bigstone's application, finding that the Crown had adequately fulfilled its duty to consult and accommodate Bigstone.

NEB Report

Pursuant to section 52(1) of the *National Energy Board Act* (the "*NEB Act*"), the NEB issued *NEB Report* G*H-002-2015* regarding NGTL's application for the Project (the "NEB Report"). The NEB Report recommended that the CPCN be issued, subject to conditions.

Since NGTL's proposed pipeline sections collectively exceeded 40 kilometres, the Project was a "designated project" and required an environmental assessment ("EA") under section 2(1) of the *Canadian Environmental Assessment Act* ("*CEAA*").

The FCA noted the following from the NEB Report:

- The NEB found that the Project was required by the public convenience and necessity under section 52(1) of the *NEB Act*.
- The NEB considered the criteria set out in section 52(2) of the *NEB Ac*t and, regarding the EA, sections 5 and 19 of the *CEAA*.
- The NEB imposed 36 conditions (the "Conditions") that it considered necessary or desirable in the public interest, should the GIC direct the NEB to issue the CPCN.
- The NEB found that with the Conditions, the implementation of NGTL's environmental protection procedures and mitigation measures, the Project was not likely to cause significant adverse environmental effects.

GIC Decision to Issue CPCN

The FCA found that the Crown, through the Government of Canada's Major Projects Management Office ("MPMO"), consulted Aboriginal groups on the NEB Report to understand the impacts of the Project and how any outstanding impact could be accommodated. In the Crown Consultation and Accommodation Report ("CCAR"), the MPMO described the consultation process undertaken by the Crown with Aboriginal groups. The CCAR explained the Crown's findings regarding the potential impact of the Crown's conduct on Aboriginal rights protected under section 35(1) of the *Constitution Act, 1982* ("Section 35 Rights"). The CCAR also outlined accommodation measures proposed to address the potential impact on Aboriginal rights. It concluded that the Conditions proposed by the NEB were responsive to, and appropriately accommodated, the concerns raised by Aboriginal groups, including Bigstone.

On October 28, 2016, the GIC issued the Order directing, the NEB to issue the CPCN to NGTL for the Project, subject to the Conditions. It also decided, pursuant to section 31(1)(a)(i) of the *CEAA*, that the Project was not likely to cause significant adverse environmental effects.

That GIC decision was the subject of this judicial review application.

Alleged Grounds of Review

Bigstone requested orders declaring that:

(a) Canada breached its constitutional and common law obligations to consult and accommodate Bigstone;

(b) the Crown improperly delegated its duty to assess the Project's effects on the environment and on Bigstone's rights protected under subsection 35(1) of the *Constitution Act, 1982* ("Section 35 Rights");

(c) the GIC erred in law in issuing the Order as it:

(i) did not comply with the *NEB Act*; and

(ii) was otherwise unreasonable for failing to provide reasons or sufficient reasons, and for failing to publish the Order in the Canada Gazette.

Bigstone submitted that, based on the above alleged grounds, the Order was unenforceable, invalid and unlawful and/or without legal effect. Bigstone requested that the FCA quash the Order and the CPCN.

Standard of Review

Determinations pertaining to the existence, content and scope of the duty to consult, as well as to the seriousness of the Aboriginal or treaty claims and the impact of the infringement, are reviewed on a standard of correctness to the extent that they can be isolated from issues of fact.

The FCA explained, however, that adequacy of consultation and accommodation is reviewed on a standard of reasonableness, as it is a mixed question of fact and law. A reviewing court will focus on the process itself, rather than the substantive outcome of the consultation and accommodation. "Perfect satisfaction is not required"; the duty to consult will be satisfied if the government made reasonable efforts to inform and consult (citing *Haida*).

The Existence, Content and Scope of the Duty to Consult

The FCA found that the Crown had a duty to consult with Bigstone and other indigenous groups impacted by the Project.

The FCA explained that the Crown's duty is grounded in the honour of the Crown. The duty arises when the Crown has actual or constructive knowledge of the potential existence of Section 35 Rights and contemplates conduct that might adversely affect those rights (*Haida* at para 35; *Gitxaala Nation v. Canada,* 2016 FCA 187 ("*Gitxaala*") at paras 171-172). The GIC, when considering a pipeline project that may impact Aboriginal rights, must ensure that the duty to consult has been fulfilled before it directs the NEB to issue a CPCN.

The Crown acknowledged that it had a duty to consult Bigstone. The Crown assessed that the potential impact of the Project on the rights and interests of Bigstone would be "moderate to high." On that basis, the Crown assessed the extent of its duty as being on the "high end of the consultation spectrum."

The FCA explained that deep consultation required the opportunity for Bigstone to make submissions, formal participation in the decision-making process, and the provision of written reasons to show that Aboriginal concerns were considered and how they were factored into the decision (citing *Gitxaala* at para 174).

Sufficiency and Adequacy of Consultation and Accommodation

The FCA went on to assess arguments going to the sufficiency and adequacy of the consultation, on a reasonableness standard.

Alleged Lack of Funding

Bigstone argued that lack of funding prevented meaningful consultations. The FCA found that this argument was without merit. The FCA noted that:

- Bigstone was awarded the maximum amount of $8,500 in funding to participate in post-hearing consultations; and
- this was on top of the $27,000 provided to Bigstone by the NEB in participant funding and of the approximately $225,000 provided by NGTL to fund Bigstone's engagement in the Project.

The FCA confirmed that the Crown is under no obligation to provide funding. At best, it would be but one factor to determine if the consultations were meaningful. In this case, the FCA found that Bigstone failed to show how purported lack of funding impacted its participation.

GIC Reliance on the NEB Process

The FCA held that the GIC was entitled to rely on the NEB process to fulfill, at least in part, its duty to consult.

The Crown can delegate the procedural aspects of the consultation to the NEB and rely on the regulatory process to either partially or completely fulfil this duty. However, the Crown must take further measures to meet its duty where the regulatory process does not achieve adequate consultation or accommodation (*Clyde River (Hamlet) v. Petroleum Geo-Services Inc.*, 2017 SCC 40 ("*Clyde River*") at para 22).

In this case, the FCA found:

- Canada notified Bigstone early in the process that it intended to rely on the NEB process in partial fulfillment of its duty to consult.
- Canada made it clear that it would rely, to the extent possible, on the NEB process to discharge any duty to consult for the Project.
- It was reasonable for the Crown to rely on that process to consult with Bigstone and other affected Aboriginal groups.
- The NEB process was structured to encourage significant and meaningful Aboriginal

> consultation. Bigstone was provided with ample information about the Project, was provided with participant funding to assist in its involvement in the Crown consultations, and was substantially involved in the hearing process.

The FCA concluded that the NEB seriously considered Bigstone's rights and concerns, as was also apparent from the numerous accommodation measures imposed on NGTL through the Conditions of the approval.

An "Exchange of Information" Rather Than Meaningful Consultation

Bigstone argued that the consultations that took place after the release of the NEB Report were not meaningful because the meetings were an exchange of information only, did not respond to Bigstone's concerns, and did not provide a platform to engage in real discussions on unresolved issues.

The FCA found that Bigstone had not provided any particulars to support those allegations and that the record did not bear them out.

Adequacy of Reasons

Deep consultation requires written explanations capable of showing that the Aboriginal group's concerns were duly considered and sufficient to reveal the impact those concerns had on the GIC's decision (citing *Haida* at para 44; *Gitxaala* at para 314).

In this case, the FCA found that this requirement was clearly met. The GIC was entitled to rely on the NEB Report and the CCAR as an adequate basis for its decision.

The FCA further found that the GIC gave adequate reasons, in light of the NEB Report and the extensive reasons of the Crown (through the MPMO), on which the GIC expressly relied in the Order. The FCA confirmed that consultation could not translate into a duty to agree, as this would amount to a veto power.

Crown Accommodation of Bigstone's Concerns

The FCA found that Canada had a duty not only to consult but also to accommodate in order to substantially address Bigstone's legitimate concerns. Responsiveness is a key requirement of both consultation and accommodation (citing *Taku River* at para 25). In some cases, meaningful consultation may require the Crown to change its proposed course of action to address Aboriginal concerns and avoid irreparable harm or minimize the effects of infringement.

The FCA noted that Bigstone's main concerns appeared to be with the Project's potential impact on Caribou and Caribou habitat. Bigstone expressed concerns with NGTL's preliminary Caribou Habitat Restoration and Offset Measures Plan for the Project, and the cumulative effects on Caribou.

The FCA found that:

(a) the NEB Report addressed these issues at length and came up with seven Conditions (Conditions # 6, 7, 18, 31-34) in regard to habitat restoration, offset measures, monitoring, reporting and cumulative impacts, in addition to NGTL's own commitments to implementing best practice mitigation measures; and

(b) the Crown also specifically endorsed in the CCAR the seven Conditions proposed by the NEB to mitigate the direct impact on Caribou and Caribou habitat and directed the NEB to issue the CPCN subject to those Conditions.

Conclusion

The FCA dismissed the judicial review application with costs.

ALBERTA COURT OF APPEAL

Percy v. Value Creation Inc., 2018 ABCA 189
Permission to Appeal Application – Application to Strike

In this decision, the Alberta Court of Appeal ("ABCA") considered an application by Value Creation Inc. ("VCI") (the applicant/respondents in the underlying appeal) to strike an amendment to the original permission to appeal application by Mr. and Mrs. Percy of an AER decision dated December 7, 2017 (the "Original AER Decision"). The Percys (the respondent/appellants in the underlying appeal) amended their permission to appeal application to add a January 29, 2018 AER decision confirming the Original AER Decision (the "January 29 Decision").

For the reasons summarized below, the ABCA dismissed the application to strike.

Ground for Application

VCI applied to strike out the Percys' amendment to the original permission to appeal application on two alleged grounds:

(a) separate appeals are required for separate orders, and applications for permission to appeal two separate orders cannot be combined together in one application; and

(b) even though the original application was amended within the time limit, the 30 day period for filing an appeal from the January 29 Decision has now run, without an application for permission to appeal being filed.

Separate Appeals for Separate Orders

The ABCA held that there was no absolute rule that a separate application for permission to appeal must be brought for every order. Where one proposed appeal is about a substantive decision, and the other proposed appeal is about an order refusing to reconsider the first decision, there is no practical reason to insist on two appeals. The ABCA found that there was accordingly nothing inappropriate about the form of the amended application filed by the respondents.

Section 45(6) of the *Responsible Energy Development Act* ("*REDA*") provides that appeals to the Court of Appeal "shall proceed in accordance with the practice and procedure of the Court of Appeal". While the Rules of Court anticipate a separate appeal for every order or judgment, the ABCA noted that Rule 14.9 recognizes that there are some situations where it is more efficient to combine appeals together. One of these situations is where "the appeal is of a decision that varies, confirms, explains, or provides for the enforcement of a previous decision, and the previous decision is also being appealed."

Limitation Period

VCI's second argument was that the time to appeal the January 29 Decision had now run, and if it could strike out the amendment to the original application, then no application had been brought within the 30-day time limit.

The ABCA found that since the application to strike was unsuccessful, this argument did not arise.

Conclusion and Costs

The ABCA noted that applications for permission to appeal are brought before single judges of the Court and can be set down and heard without delay. It would generally be inefficient and inappropriate to bring interlocutory applications to strike out parts of other interlocutory applications. The ABCA found that the arguments that the applicant (VCI) made in the context of the application to strike should have been made before the judge who heard the application for permission to appeal. If the applicant's arguments had any merit, presumably that would have resulted in the application for permission to appeal being dismissed.

The FCA found that in the circumstances, the application was unnecessary and the respondents were entitled to assessed costs of the application.

ALBERTA ENERGY REGULATOR

Value Creation Inc. – Applications to Amend the Heartland Upgrader Project Approvals (2018 ABAER 003)

Bitumen Processing Plant – Amendment Application – Application Approved

In this decision, the AER considered Value Creation Inc.'s ("VCI") application under the *Oil Sands Conservation Act* ("*OSCA*") and the *Environmental Protection and Enhancement Act* ("*EPEA*") to amend its existing AER approvals for the Heartland Upgrader Project, a three-phase oil sands processing plant (i.e., bitumen upgrader) (the "Project"). The Project would be located 15 kilometres (km) northeast of Fort Saskatchewan, Alberta.

For the reasons summarized below, the AER approved VCI's amendment applications, subject to conditions, based on finding that the proposed amendments would support the efficient, safe, orderly and environmentally responsible development of Alberta's energy resources.

Background

The Project was initiated by BA Energy Inc. ("BA") in 2004. The Project applications were approved by the Alberta Energy and Utilities Board (EUB; predecessor to the AER) and Alberta Environment in 2005.

Following the amalgamation of BA with VCI, in March 2015, the AER approved the transfer of the original approvals from BA to VCI.

In June 2016, VCI applied under the *OSCA* and the *EPEA* to amend the Project. Those are the applications that are the subject of this decision.

Amendment Application

VCI's proposed amendments included the following:

(a) changing the Project design to produce ultralow sulphur diesel, hydrotreated naphtha, and premium synthetic crude oil;

(b) removing one of the three phases of the Project and adding a Clean Oil Refining unit to each of the remaining two phases;

(c) reducing the Project's processing capacity from 41,400 cubic metres per stream day (m^3/sd; 260,400 barrels per stream day (bbl/sd)) to 29,948 m^3/sd (188,373 bbl/sd) of diluted bitumen; and

(d) changing the name of the Project from the Heartland Upgrader Project to the Heartland Processing Plant.

Legislative Scheme

The AER set out the following legal framework applicable to its decision on the amendment application:

- The AER's mandate is to provide for the efficient, safe, orderly, and environmentally responsible development of energy resources in Alberta (section 2(1) of the *Responsible Energy Development Act* ("*REDA*")).
- The *REDA General Regulation* lists the following factors that the panel must consider:
  - the social and economic effects of the energy resource activity;
  - the effects of the energy resource activity on the environment; and
  - the impacts on a landowner as a result of the use of the land on which the energy resource activity is or will be located.
- The decision must be consistent with the purpose and provisions of the *OSCA* as set out in section 3, which includes the following:
  - to ensure orderly, efficient and economic development in the public interest of the oil sands resources of Alberta; and
  - to ensure the observance, in the public interest, of safe and efficient practices in the exploration for and the recovery, storing, processing and transporting of oil sands, discard, crude bitumen, derivatives of crude bitumen and oil sands products.
- The decision must be consistent with *EPEA* requirements, which include ensuring that an amended project meets *Alberta Ambient Air Quality Objectives and Guidelines* ("*AAAQO*"). Project sulphur recovery must meet *Interim Directive ID 2001-03: Sulphur Recovery Guidelines for the Province of Alberta (EUB 2001)* ("*Interim Directive ID 2001-03*"), and nitrogen dioxide emissions must meet requirements set out in the federal *Multi-Sector Air Pollutants Regulations* (SOR/2016-151).
- The decision must be consistent with requirements of AER Directive 023: *Guidelines Respecting an*

Application for a Commercial Crude Bitumen Recovery and Upgrading Project ("*Directive 023*") and Directive 038: *Noise Control* ("*Directive 038*").

Potential Environmental Effects

The AER addressed potential environmental impacts from the Project on air quality, nitrogen emissions, sulphur emissions and groundwater. The threshold levels for nitrogen dioxide and sulphur dioxide are set in the *AAAQO*.

The AER found that:

(a) VCI committing to achieve compliance with the newly enacted federal *Multi-Sector Air Pollutants Regulations* would adequately control emissions of nitrogen dioxide;

(b) VCI's proposed sulphur recovery measures, together with the condition imposed by the AER on recovery levels, would adequately address impacts of sulphur production; and

(c) the applications would not adversely affect water resources, and local and regional surface and groundwater would be adequately protected since the applications proposed no changes to water use or treatment.

With respect to nitrogen dioxide, the AER found that:

(a) burning natural gas in the Project's boilers and heaters would produce nitrogen dioxide, which is the contaminant of most concern in the region under the *Capital Region Framework*, as it can cause negative respiratory impacts and affect vegetation cover;

(b) the proposed amendments would result in less nitrogen dioxide emitted than would have been emitted for the Project as approved in 2015; and

(c) air quality modelling indicated nitrogen dioxide levels below air quality objectives and a small decrease in the regional nitrogen dioxide levels (a 0.3 percent decrease).

With respect to sulphur, the AER found that changes to the refining process would increase the amount of sulphur removed from the raw bitumen (therefore increasing sulphur dioxide emissions).

VCI's proposed sulphur recovery level of 98.7 percent would comply with AER requirements under *Interim Directive 2001-3*. However, the AER noted its concern about air quality predictions that the amendments would increase regional sulphur dioxide emission by 5.3 percent. This would result in sulphur dioxide emissions in excess of the regional limits in an area already facing concerns about cumulative effects on air quality.

The AER noted that it required other refineries in the region to achieve higher sulphur recovery levels than required by *Interim Directive 2001-03* and that VCI confirmed that it would meet the 99.3 percent recovery level if required by the AER. The AER, therefore, imposed the following condition:

> VCI shall use a design sulphur recovery criteria of 99.3 per cent and meet a minimum sulphur recovery of 99.0 per cent on a calendar quarter-year basis for all phases of this project.

Potential Economic Effects

The AER found that the amendments would contribute positively to the economies of Alberta and Strathcona County, based on the following:

(a) the Project's capital cost would increase by $1 billion, to a total of $3 billion;

(b) about 70 percent of capital expenditures would be within Alberta, 75 percent of which would be in the project region; and

(c) given the current pipeline constraints for Alberta resources, the Project amendments would potentially produce more refined products, diversify resource marketing and help with the continued development of Alberta's oil sands resources.

Potential Social Effects

The AER found that VCI's workforce, accommodation, traffic and transportation plans for the applications were reasonable and would minimize the risk of adverse social impacts.

Impacts on Landowners

Section 15 of the *REDA* directs the panel to consider, among other things, "… any factor prescribed by the regulations, including the interest of the landowners." In this case, the AER considered how amending an existing approved project affected the interests of Mr. and Mrs. Percy (the "Percys").

The AER reiterated that the scope of the hearing was limited to the impacts of the amendment application and that this decision focused on the impacts of the proposed amendments to the existing approvals. Specifically, with respect to landowner impacts, the AER addressed:

- emergency planning and response;
- traffic impacts; and
- impacts on the Percys' property.

Emergency Planning and Response

The AER found that AER Directive 071: *Emergency Preparedness and Response Requirements for the Petroleum Industry* ("*Directive 071*") did not apply to upgrader projects. The AER accepted VCI's voluntary commitment to use *Directive 071* for guidance when preparing its site-specific emergency response plan ("SSERP").

The AER found that VCI's commitment to developing an SSERP compliant with *Directive 071*, to be submitted to the AER for approval before construction and updated before operations, would adequately address the Percys' safety and evacuation concerns.

The Percys expressed concern about their safety and about the Project's emergency response, including the following:

- the Percys' options in an emergency were very limited;
- the Percys had few neighbours left to help evacuate their livestock; and
- railway and road crossings could be blocked in an emergency.

The AER found that the Percys did not present evidence that directly linked their safety concerns to the changes proposed by the amendment applications. Rather, in the AER's view, the Percys' concerns related more broadly to the Project's construction and operation. The AER noted that the Percys appeared to have a northern route that would lead them out of the Project area in the event of an emergency at the VCI project site.

Based on the above, the AER imposed the following condition of approval:

> VCI shall provide a site specific emergency response plan (SSERP) to the AER and the Percys that has been deemed technically complete in accordance with Directive 071: Emergency Preparedness and Response Requirements for the Petroleum Industry prior to construction. VCI shall also update the SSERP and submit it to the AER for approval and to the Percys for information prior to commencement of operations. The SSERP shall use a modified Emergency Planning Zone that includes the Percys' residence and property.

Impacts on Property Value

Section 15 of the *REDA* and section 3 of the *REDA General Regulation* require that the AER consider the impacts on a landowner as a result of the use of the land on which the energy resource activity is or will be located.

The AER found that:

(a) there was inadequate evidence that the current amendment applications directly caused the Percys' property to devalue and to change from rural residential to industrial;

(b) the steady industrialization of Alberta's Industrial Heartland since 2001 had affected the value of the Percys' residence and property; and

(c) any loss in value arising from the Percys property's highest and best use changing from rural residential to industrial is a result of longstanding and cumulative factors, not a result of the amendment applications.

Public Interest

Regarding the public interest, the AER considered the balance between the effects on landowners and the broader interests of Albertans in the responsible development of provincial hydrocarbon resources.

The AER found that the amendments to the currently approved project were in the public interest. The applications, together with the approval conditions, reflected orderly and efficient development by balancing the potential effects on area residents with broader public benefits.

The AER found that:

(a) the Project was consistent with broad Government of Alberta policy direction;

(b) the Project would provide significant provincial revenues and employment; and

(c) the Project would contribute to enhancing the value of Alberta's oil sands resources and will contribute to debottlenecking pipeline transportation capacity.

Conclusion

Considering the anticipated effects of the proposed amendments on the environment, economics, social factors and area landowners, the AER determined that implementation of the proposed amendments, with the

conditions imposed by the AER, were consistent with responsible development of Alberta's oil sands resources and would mitigate any direct impacts of the proposed amendments.

The AER, therefore, approved VCI's amendment applications, subject to the conditions noted above.

Canadian Natural Upgrading Limited – Application for Muskeg River Mine Tailings Management Plan (AER Decision 20180523A)

Tailings Management Plan – Ready-to-Reclaim Criteria – Fluid Tailings Profiles – Water-capping Technology

In this decision, the AER considered Canadian Natural Upgrading Limited's ("CNUL") application pursuant to section 13 of the *Oil Sands Conservation Act* ("*OSCA*") for approval of its tailings management plan ("TMP") for the Muskeg River Mine ("MRM").

The application sought approval for the TMP to 2115, which was 57 years beyond the MRM's end of mine life.

For the reasons summarized below, the AER approved CNUL's application, subject to terms and conditions (the "Approval Conditions").

Regulatory Scheme

Tailings are a by-product of the process used to extract bitumen from mined oil sands and consist of water, silt, sand, clay and residual bitumen.

The AER regulates tailings from oil sands mining operations to ensure that the tailings are managed in an efficient, safe, orderly and environmentally responsible manner over their entire life cycle.

The AER applies a risk-based approach to regulating, where higher-risk activities receive the greatest regulatory oversight. Given the nature and scale of fluid tailings generated by oil sands mine operations and the ongoing research and development of tailings treatment technology, fluid tailings management is one of Alberta's higher-risk industrial activities.

The Government of Alberta regulates tailings under the *Lower Athabasca Region: Tailings Management Framework for Mineable Athabasca Oil Sands* ("*TMF*"). The AER noted that following regarding the *TMF*:

- The *TMF's* objective is to minimize fluid tailings accumulation by ensuring that fluid tailings are treated and reclaimed progressively during the life of a project, and all fluid tailings associated with a project are ready-to-reclaim ("RTR") within 10 years of the end of mine life.
- The *TMF* establishes four outcomes: land use must be returned to Albertans, sustainable ecosystem, liability is minimized to Albertans, and environmental effects are managed.
- As part of the implementation of the *TMF*, the AER released Directive 085: *Fluid Tailings Management for Oil Sands Mining Projects* ("*Directive 085*"), which sets out requirements for fluid TMPs, including both existing fluid tailings (i.e., legacy) and new fluid tailings.

Approval Until September 2021 and AER Directed Amendment Application

The AER found that:

(a) there was sufficient information to authorize CNUL to manage its fluid tailings and treated tailings deposits for the next few years based on the Approval Conditions;

(b) however, the AER was unable to assess whether CNUL would be able, over the medium and long-term, to manage its fluid tailings and treated tailings deposits to meet the TMF's objective and *Directive 085* requirements due to uncertainties and deficiencies in the application

The AER, therefore, included the Approval Conditions to address these uncertainties and deficiencies, including requiring an amendment application be submitted by September 30, 2021.

The Approval Conditions addressed the following:

- amendment application requirements;
- project-specific thresholds for both new and legacy fluid tailings;
- tailings treatment technology and deposit performance plans and updates over the short term in support of the medium- and long-term management of fluid tailings, including mitigation measures and research, monitoring, evaluation, and reporting;
- stakeholder and indigenous community engagement; and
- environmental effects and implications.

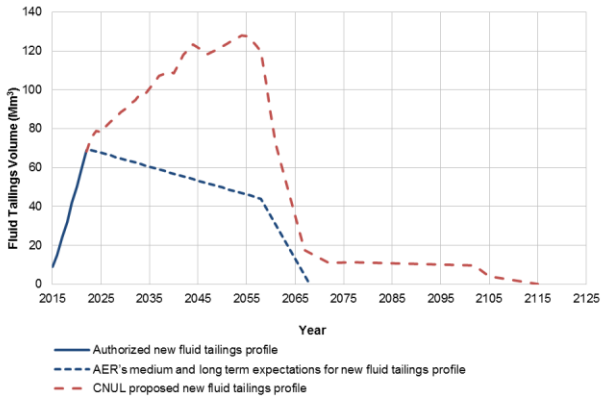
Fluid Tailings Profiles and Project-Specific Thresholds

The *TMF* defines new fluid tailings as fluid tailings that are produced after January 1, 2015. All new fluid tailings must be RTR within ten years of end of mine life.

New Fluid Tailings Profile

The AER found that CNUL's new fluid tailings profile met the *TMF* and *Directive 085* profile guidance only until December 31, 2022.

As a result, the AER did not authorize the end of mine life target. The solid blue line in the figure below depicts the authorized new fluid tailings profile that CNUL must achieve until December 31, 2022. The dotted blue line in the figure depicts the AER's medium- and long-term expectations for the new fluid tailings profile. The dotted red line in the figure depicts CNUL's proposed new fluid tailings profile.



Specifically, the AER found that CNUL's proposed new fluid tailings profile beyond 2022 did not meet the *TMF's* objective or the *TMF* and *Directive 085* profile guidance for the following reasons:

- The *TMF* and *Directive 085* expect that projects manage new fluid tailings for expected volumes produced during 3 to 10 years of full production. Based on this the AER found that CNUL's proposed fluid tailings profile resulted in peak accumulation of 127.8 million cubic metres (Mm^3), representing about 15 years of full production.

- CNUL proposed growth in tailings accumulation until 2054, a period of nearly 40 years to accumulate the peak volume.

- CNUL had not demonstrated that the fluid tailings treatment capacity was equal to or greater than the new fluid tailings production rate, as required by the *TMF* and *Directive 085*.

- The end of mine life target was greater than five years of fluid tailings production at MRM. The *TMF* and *Directive 085* require the end of mine life target to be the equivalent of five years or less of fluid tailings accumulation. Based on a production rate of about 8.5 Mm^3/year, CNUL's end of mine life target would be about 43 Mm^3 instead of the proposed 120 Mm^3.

- The proposed new fluid tailings profile did not demonstrate that all new fluid tailings generated at the MRM would be RTR within 10 years of MRM's end of mine life (2058).

- The *TMF* and *Directive 085* require profiles to be project specific. The AER found that CNUL's new fluid tailings profile included fluid tailings volumes generated from froth transferred to the MRM from the Jackpine Mine. Profiles are required to track project-specific fluid tailings volume, regardless of fluid or treated tailings storage and final placement locations.

To address the concerns, in the amendment application CNUL is required to provide a revised new fluid tailings profile that:

- is representative of MRM tailings only; and

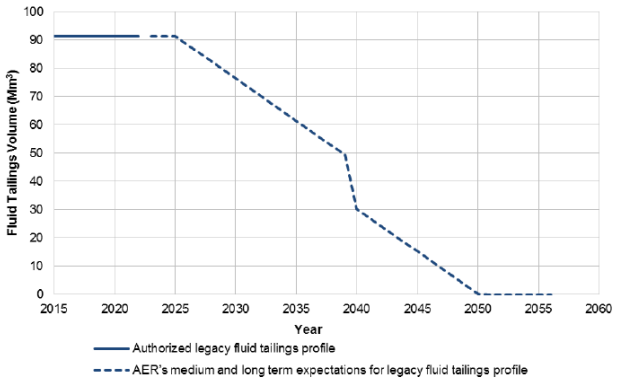
- includes an end of mine life target that is no greater than five years accumulation of fluid tailings production at MRM.

Legacy Fluid Tailing Profile

Legacy fluid tailings are fluid tailings that existed before January 1, 2015. All legacy fluid tailings must be RTR by end of mine life.

The AER found that CNUL's legacy fluid tailings profile met the *TMF's* objective because the existing volume of 91.4 Mm^3 would be treated and would achieve RTR status by 2050, eight years before the end of mine life. However, the AER found that given uncertainties regarding the available technology and the RTR criteria over the medium- to long-term, the revision of the new fluid tailings profile could impact the legacy fluid tailings profile. Consequently, the AER authorized CNUL's legacy fluid tailings profile only until December 31, 2022.

The solid line in the figure below depicts the authorized legacy fluid tailings profile that CNUL must achieve until December 31, 2022. The dotted line depicts CNUL's commitment to achieving RTR status for all legacy fluid tailings eight years before the end of mine life.



The AER said that it expects the legacy fluid tailings profile in the amendment application would meet or exceed this commitment.

Thresholds

The volume of accumulated fluid tailings is the primary indicator in the *TMF* used to manage and decrease liability and environmental risk resulting from the accumulation of fluid tailings. Triggers and a limit (collectively referred to as "thresholds") are set relative to the fluid tailings profiles. The thresholds ensure that fluid tailings are not accumulating beyond a volume or at a rate that precludes operators from meeting the *TMF's* objective. Various management actions are required when thresholds are exceeded.

Three project-specific thresholds are set based on an operator's fluid tailings profiles in accordance with the *TMF* and *Directive 085*:

(a) Profile deviation trigger:

(i) occurs when the volume of fluid tailings is growing 20 percent faster than that approved for the profile;

(ii) additional management action is required when the profile deviation trigger is exceeded;

(iii) is based on when the fluid tailings volume growth is 20 percent higher than that in the approved profile; and

(iv) allows a five-year rolling average to account for year-over-year variability. The profile deviation trigger applies to both legacy fluid tailings and new fluid tailings profiles;

(b) Total volume trigger:

(i) occurs when the volume of fluid tailings has exceeded its approved maximum accumulation and requires additional management action;

(ii) level is based on 100 percent of the greater of the maximum approved fluid tailings volume profile or the end of mine life target (volume of fluid tailings that can achieve RTR state within 10 years after end of mine life and is the equivalent of 5 years, or less, of fluid tailings volume accumulation); and

(iii) applies to the new fluid tailings profile.

(c) Total volume limit:

(i) under the *TMF* is the volume of fluid tailings above which it presents an unacceptable risk to the environment and potential long-term liability;

(ii) if exceeded will compromise the ability of an operator to have all of their fluid tailings in an acceptable management state (i.e., RTR) within ten years of the end of mine life. Therefore, the most severe management responses are initiated;

(iii) is based on 140 percent of the greater of the maximum approved fluid tailings volume profile or the end of mine life target; and

(iv) applies to the new fluid tailings profile.

To allow for year-over-year variability, the AER set the profile deviation trigger for CNUL as a five-year rolling average of the annual profile deviation, as provided under the *TMF* and *Directive 085*. The profile deviation trigger is applicable to both the new fluid tailings and legacy fluid tailings profiles.

The AER considered that its decision to authorize the new fluid tailings profile only until December 31, 2022, affected the approach to set the total volume trigger and total volume limit. The total volume trigger and limit are based on the greater of the maximum approved fluid tailings volume profile or end of mine life target. As there was no end of mine life target authorized, the AER set the total volume trigger at 69 Mm^3 and the total volume limit at 97 Mm^3.

These thresholds remain in effect beyond December 31, 2022. The thresholds may be revised depending on the AER's decision on the amendment application.

If any threshold is exceeded, CNUL is required to comply with the management response or action directed by the AER. If CNUL exceeds a threshold after December 31, 2022, *Directive 085* provides that "the AER makes the final decision of the fluid tailings volume to be placed in the fluid tailings inventory, any threshold exceedance, and the assigned management level."

Fluid Tailings Treatment Technology

Technology Selection

Directive 085 requires operators to justify that their selected technologies are the best available for the project. The AER noted that the MRM currently used a combination of composite tailings ("CT") and thickeners with a codeposition of thickened tailings with tailings solvent recovery unit ("TSRU") tailings, whole tailings, and coarse sand tailings to form North Pool Deposit ("NPD") Type deposits. CNUL would discontinue the use of CT by the end of 2018 upon completion of Cell 2.

The AER authorized CNUL to continue to use CT to complete Cell 2 and to use thickeners with a codeposition of the thickened tailings with TSRU tailings, whole tailings and coarse sand tailings to form NPD Type deposits.

CNUL was not authorized to use centrifuge treatment technologies, fluid tailings drying, or atmospheric fines drying ("AFD") at MRM. CNUL's TMP did not provide sufficient information for the AER to evaluate the use of these technologies at the MRM, and CNUL did not identify any volume of fluid tailings that will be treated using fluid tailings drying or AFD technologies.

The approval also prohibited placing any water, including industrial wastewater, above treated or untreated tailings for the purpose of creating a water-capped deposit as a closure landscape feature ("water-capped pit lake").

Because CNUL currently plans to use water-capped pit lakes, CNUL was also required to provide a feasible alternative tailings treatment technology and implementation plan in the amendment application.

The amendment application must:

(a) address the medium- and long-term uncertainties associated with the NPD Type deposit, including environmental risk, segregation, settlement, capping material availability, and deposit performance to support future reclamation activities and achieve stable targeted ecosites that meet the *TMF's* outcomes; and

(b) include a plan for additional fluid tailings treatment technology that ensures sufficient treatment capacity.

The AER also required CNUL to report annually on the progress of this ongoing tailings technology selection project.

Ready-to-Reclaim Criteria

Under the *TMF* and *Directive 085*, fluid tailings are considered RTR when they have been processed with an accepted technology, placed in their final landscape position, and meet RTR criteria.

RTR criteria are used to track the performance of a tailings deposit toward its ability to be reclaimed as predicted.

RTR criteria are intended to support the objective of reclaiming oil sands mining projects to self-sustaining locally common boreal forest ecosystems that are integrated with the surrounding area and consistent with the values and objectives identified in local, sub-regional and regional plans.

There are two sub-objectives that address different aspects of performance:

- Sub-objective 1: The deposit's physical properties are on a trajectory to support future stages of activity.
- Sub-objective 2: To minimize the effect the deposit has on the surrounding environment and ensure that it will not compromise the ability to reclaim to a locally common, diverse and self-sustaining ecosystem.

The *TMF* and *Directive 085* allow operators to develop RTR criteria that are suitable for their type of tailings, technology, deposit and future reclamation activities.

Under *Directive 085*, treated tailings that meet their applicable RTR criteria can be removed from the fluid tailings inventory because they are on a trajectory to meet long-term reclamation outcomes. In circumstances where RTR criteria are no longer met, or there is a deviation from the expected trajectory, CNUL must identify the volume not meeting the RTR criteria and the degree of nonperformance.

Measurement and Averaging

Each treated tailings deposit must be measured to determine if the RTR criteria have been achieved. *Directive 085* requires operators to submit a measurement system plan six months from the date of an approved TMP.

CNUL was required to develop a measurement system plan that included the following:

- definitions of parameters for fluid tailings and RTR criteria measurements;
- reference to standards and procedures used to measure fluid tailings and treated tailings and RTR criteria;
- an explanation of and justification for measurement procedures that are unique to CNUL and its plan;
- evidence that the plan will address the measurement outcomes as per section 5 of *Directive 085*;
- an explanation of how each of the deposit's RTR criteria will be measured using deposit sampling, calculated, and reported;
- a description of the tailings deposit sampling, measurement, and survey program; and
- justification of how measurement, sampling, and spacing intervals will:
    - show the variation of the tailings deposit properties;
    - verify that the tailings deposit is achieving RTR criteria; and
    - identify if any material in the tailings deposit is not achieving RTR criteria.

The AER did not accept CNUL's proposal to use the average solids content by weight of the entire deposit as an RTR criterion since averaging would not provide sufficient information:

(a) to identify variations in tailings characteristics across a deposit; or

(b) to assess risks and liabilities for underperforming treated tailings and the effect on a deposit's performance toward the targeted ecosites.

The AER found that the averaging process would obscure a meaningful understanding of the deposit volumes that have been treated unsuccessfully or were failing to improve as expected. The AER noted that a deposit might show excellent performance on average while a significant portion of the tailings deposit is underperforming and compromising the ability to reclaim.

The AER, therefore, required CNUL to measure the volume of treated tailings based on deposit sampling. The deposit sampling must be sufficient to identify variability within the entire deposit.

Sub-objective 1: Solids Content

CNUL indicated that solids content by weight was chosen as a sub-objective 1 RTR criteria measure:

- based on historical data;
- as solids content can be used to evaluate the progress of consolidation, the degree of saturation and the readiness for capping of a deposit; and
- given that increasing solids content can be correlated to strength gain in the deposit.

The AER found that solids content alone may not be sufficient to measure a deposit's performance or its ability to meet future stages of reclamation activity and meet the objectives of the *TMF*.

The AER, therefore, required CNUL, for each treated tailings deposit, to monitor and report annually, sands-to-fine ratio, effective stress, deposit consolidation, pore water pressure, clay types and percentage, and any other parameters considered relevant by the AER or CNUL.

The AER determined that, given the additional monitoring and reporting required, the use of the solids content by weight of a deposit was an acceptable sub-objective 1 RTR criteria measure until a decision was made on the amendment application.

The amendment application must include updated RTR criteria for all tailings.

Stakeholder and Indigenous Community Engagement

The *TMF* and *Directive 085* describe the importance of transparency, engagement and enhancing stakeholder and indigenous community understanding of fluid tailings management.

The AER noted that, as part of its original approval decision, the AER's predecessor commended the original applicant, Shell, for its proactive, inclusive and constructive engagement of genuine-interest stakeholders.

To ensure continued transparency, information sharing and involvement in tailings management, the AER required CNUL to engage stakeholders and indigenous communities on tailings management activities undertaken pursuant to the approval.

The AER also required CNUL to:

(a) hold an annual forum with stakeholders and indigenous communities regarding tailings management activities; and

(b) report to the AER annually on its engagement efforts.

Environmental Effects

The *TMF's* objective is to minimize fluid tailings accumulation, which may reduce environmental effects such as seepage, occurrences of wildlife contact with tailings ponds, and the tailings footprint.

For previously approved projects, a proposed TMP must:

- be consistent with the previously predicted environmental outcomes or identify any inconsistencies; and
- include mitigation measures and contingency plans, that would minimize the risk of environmental effects over the life of a project.

The AER found that CNUL's existing surface water and groundwater control measures would adequately manage the environmental effects during the mine's operating phase. CNUL must operate these measures in accordance with the terms and conditions in its *Environmental Protection and Enhancement Act* ("*EPEA")* approval.

No *EPEA* approval air emission limits were being amended as a result of the TMP.

There were no changes arising from the TMP that require changes to previously-assessed impacts to surface water and groundwater quality during the mine's operating phase.

Canadian Natural Upgrading Limited – Application for Jackpine Mine Tailings Management Plan (AER Decision 20180523B)

Tailings Management Plan – Ready-to-Reclaim Criteria – Fluid Tailings Profiles – Water-capping Technology

In this decision, the AER considered Canadian Natural Upgrading Limited's ("CNUL") application pursuant to section 13 of the *Oil Sands Conservation Act* ("*OSCA*") for approval of its tailings management plan ("TMP") for the Jackpine Mine ("JPM").

For the reasons summarized below, the AER approved CNUL's application, subject to terms and conditions (the "Approval Conditions") to address uncertainties and deficiencies, including requiring a new application be submitted by September 30, 2022.

The AER approved CNUL's TMP for the short term management of fluid tailings, finding that there was sufficient information in the application to demonstrate CNUL's ability to manage JPM tailings for the next few years.

However, the AER was unable to assess whether CNUL would be able, over the medium- and long-term, to manage its fluid tailings and treated tailings deposits to meet the *Lower Athabasca Region: Tailings Management Framework for Mineable Athabasca Oil Sands* ("*TMF*"). objective and *Directive 085: Fluid Tailings Management for Oil Sands Mining Projects* ("*Directive 085*") requirements due to uncertainties and deficiencies in the application, including the following:

(a) CNUL's TMP was inconsistent with existing approvals;

(b) CNUL's new and legacy fluid tailings profiles were not aligned with existing approvals, the *TMF*, or *Directive 085*;

(c) CNUL's proposed ready-to-reclaim ("RTR") criteria, RTR trajectory, and targeted ecosites have a degree of uncertainty over the medium- and long-term; and

(d) the AER had concerns with CNUL's proposed tailings treatment technology.

The AER required CNUL to submit an amendment application by September 30, 2022, addressing the uncertainties and deficiencies identified in the AER's decision report.

Original Jackpine Mine Approval

The JPM was approved by a joint Alberta Energy and Utilities Board ("EUB") and Government of Canada panel in 2004 ("Decision 2004-009"). The JPM started production in August 2010, and tailings placement began in the external tailings facility ("ETF"). An expansion to the JPM was approved by a joint panel established by the Energy Resources Conservation Board and the Government of Canada in 2013 (see: 2013 ABAER 011). The application for the expansion under *Environmental Protection and Enhancement Act* ("*EPEA*") was still under review at the time of this decision. In-pit tailings placement started in Fluid Cell ("FC") 1 in 2016.

Regulatory Scheme

Tailings are a by-product of the process used to extract bitumen from mined oil sands and consist of water, silt, sand, clay and residual bitumen.

The AER regulates tailings from oil sands mining operations to ensure that the tailings are managed in an efficient, safe, orderly and environmentally responsible manner over their entire life cycle.

The AER applies a risk-based approach to regulating, where higher-risk activities receive the greatest regulatory oversight. Given the nature and scale of fluid tailings

generated by oil sands mine operations and the ongoing research and development of tailings treatment technology, fluid tailings management is one of Alberta's higher-risk industrial activities.

The Government of Alberta regulates tailings under the *TMF*. The AER noted that following regarding the *TMF*:

- The *TMF's* objective is to minimize fluid tailings accumulation by ensuring that fluid tailings are treated and reclaimed progressively during the life of a project, and all fluid tailings associated with a project are ready-to-reclaim within 10 years of the end of mine life.

- The *TMF* establishes four outcomes: land use must be returned to Albertans, sustainable ecosystem, liability is minimized to Albertans, and environmental effects are managed.

- As part of the implementation of the TMF, the AER released *Directive 085*, which sets out requirements for fluid tailings TMPs, including both existing fluid tailings (i.e., legacy) and new fluid tailings.

TMP and Existing Approval Alignment – End of Mine Life and Tailings Solvent Recovery Unit Tailings

The AER found that aspects of the TMP were not aligned with existing approvals:

The AER found that the following information indicated in the TMP was inconsistent with what was proposed in the JPM expansion applications:

(a) the TMP indicated no planned bitumen production expansion, which extended the end of mine life date from 2052 to 2105; and

(b) JPM froth would continue to be transferred to the Muskeg River Mine ("MRM"), and tailings solvent recovery unit ("TSRU") tailings would continue to be managed at the MRM until JPM's end of mine life.

Fluid Tailings Profile

The AER found that the new and legacy fluid tailings profiles in CNUL's application were not aligned with existing approvals, the *TMF* or *Directive 085* over the medium- and long-term, based on the following:

- the proposed time to accumulate the peak volume was longer than the duration guided by the *TMF* and *Directive 085*, since the end of mine life target was greater than five years of fluid tailings production at JPM;

- the proposed profiles did not demonstrate that fluid tailings treatment capacity was equal to or greater than the new fluid tailings production rate;

- the proposed profiles were premised on an end of mine life of 2115, whereas the current authorized end of mine life was 2052; and

- the proposed profiles did not demonstrate that all legacy fluid tailings would be RTR by the JPM's end of mine life (2052) and that all new fluid tailings generated at the JPM would be RTR within ten years from JPM's end of mine life.

Given its finding that new and legacy fluid tailings profiles were aligned only for the short term, the AER approved CNUL's new and legacy fluid tailings profiles only until 2023. CNUL was required to submit new and legacy fluid tailings profiles in the amendment application.

The AER did not authorize CNUL's proposed end of mine life of 2115. The AER found that CNUL's application did not include sufficient information to support the change, such as an updated mine plan and life of mine closure plan.

Thresholds

The volume of accumulated fluid tailings is the primary indicator in the *TMF* used to manage and decrease liability and environmental risk resulting from the accumulation of fluid tailings. Triggers and a limit (collectively referred to as "thresholds") are set relative to the fluid tailings profiles. The thresholds ensure that fluid tailings are not accumulating beyond a volume or at a rate that precludes operators from meeting the *TMF's* objective. Various management actions are required when thresholds are exceeded.

Three project-specific thresholds are set based on an operator's fluid tailings profiles in accordance with the *TMF* and *Directive 085*:

(a) Profile deviation trigger:

(i) occurs when the volume of fluid tailings is growing 20 percent faster than that approved for the profile;

(ii) additional management action is required when the profile deviation trigger is exceeded;

(iii) is based on when the fluid tailings volume growth is 20 percent higher than that in the approved profile; and

(iv) allows a five-year rolling average to account for year-over-year variability. The profile deviation trigger applies to both legacy fluid tailings and new fluid tailings profiles.

(b) Total volume trigger:

(i) occurs when the volume of fluid tailings has exceeded its approved maximum accumulation and requires additional management action;

(ii) level is based on 100 percent of the greater of the maximum approved fluid tailings volume profile or the end of mine life target (volume of fluid tailings that can achieve RTR state within 10 years after end of mine life and is the equivalent of 5 years, or less, of fluid tailings volume accumulation); and

(iii) applies to the new fluid tailings profile.

(c) Total volume limit:

(i) under the *TMF* is the volume of fluid tailings above which presents an unacceptable risk to the environment and potential long-term liability;

(ii) up exceedance compromises the ability of an operator to have all of their fluid tailings in an acceptable management state (i.e., RTR) within ten years of the end of mine life. Therefore, the most severe management responses are initiated;

(iii) is based on 140 percent of the greater of the maximum approved fluid tailings volume profile or the end of mine life target; and

(iv) applies to the new fluid tailings profile.

The AER considered that its decision to authorize the new fluid tailings profile only until December 31, 2023, affected the approach to set the total volume trigger and total volume limit. The total volume trigger and limit are based on the greater of the maximum approved fluid tailings volume profile or end of mine life target. As there was no end of mine life target authorized, the AER set the total volume trigger at 26 million cubic metres (Mm^3) and the total volume limit at 36 Mm^3.

Ready-to-reclaim (RTR) Criteria

Due to the degree of uncertainty in CNUL's proposed RTR criteria, RTR trajectory and targeted ecosites over the medium- and long-term, the AER required CNUL to address the following deficiencies in the amendment application updated RTR criteria for each type of deposit in the amendment application.

For the mixed deposits formed by thickened tailings, whole tailings, and coarse sand tailings in the ETF (mixed deposits), the AER specified the following RTR criteria: 70 percent solids by weight, based on deposit sampling, within five years of tailings placement and groundwater monitoring in accordance with the *EPEA* approval.

CNUL cannot remove centrifuge tailings from the fluid tailings inventory until the revised RTR criteria are approved.

Treatment Technology Selection and Performance

CNUL uses thickeners and combines the thickened tailings with whole tailings and coarse sand tailings to form a mixed deposit. CNUL was also using four centrifuge units to treat tailings. The thickener operation began at the JPM start-up in 2010, with the placement of thickened tailings in the ETF's Dedicated Disposal Area (DDA) 1. Centrifuge tailings treatment technology was commissioned in 2014 with the placement of centrifuge tailings in DDA1.

The AER authorized CNUL to continue to:

- use thickeners and combine the thickened tailings with whole tailings and coarse sand tailings to form a mixed deposit, subject to the approval conditions; and
- operate its four centrifuge units, subject to the approval conditions.

The AER expressed concerns with CNUL's treatment technologies and the ability of the tailings deposits to support future reclamation activities, achieve stable targeted ecosites and meet the *TMF's* outcomes. Therefore, the AER required CNUL to address the following in the amendment application:

- assess the performance and limitations of tailings deposits containing mixed deposits, and monitor quarterly and report annually on the performance of the mixed deposits; and
- assess, describe, and propose the selected treatment technologies that ensure that the treatment capacity is equal to or greater than the production

rate of new fluid tailings and that all legacy fluid tailings would be RTR by JPM's end of mine life.

The AER did not authorize CNUL to use fluid tailings drying or atmospheric fines drying ("AFD"), based on its finding that CNUL's TMP did not provide sufficient information to evaluate the use of these technologies at the JPM.

With respect to water-capping technology, the AER noted that CNUL was not proposing to have any water-capped pit lakes at the JPM at this time. The AER noted that water-capping technology was subject to further assessment, research and future policy. Therefore, the approval prohibited water-capped pit lakes and requires CNUL to meet future policy on water-capped pit lakes.

Stakeholder and Indigenous Community Engagement

The *TMF* and *Directive 085* describe the importance of transparency, engagement, and enhancing stakeholder and indigenous community understanding of fluid tailings management.

The AER noted that, as part of its original approval decision, the AER's predecessor commended the original applicant, Shell, for its proactive, inclusive and constructive engagement of genuine-interest stakeholders.

To ensure continued transparency, information sharing and involvement in tailings management, the AER required CNUL to engage stakeholders and indigenous communities on tailings management activities undertaken pursuant to the approval.

The AER also required CNUL to:

(a) hold an annual forum with stakeholders and indigenous communities regarding tailings management activities; and

(b) report to the AER annually on its engagement efforts.

Environmental Effects

For approved projects, the proposed TMP should be consistent with the previously predicted environmental outcomes or identify any inconsistencies. The existing and proposed monitoring plans will confirm that environmental performance is achieved.

No *EPEA* approval air emission limits were being amended as a result of the TMP.

The AER found that there were no changes arising from the TMP that resulted in changes to previously-assessed impacts to surface water and groundwater quality during the mine's operating phase. The AER found that CNUL's existing surface water and groundwater control measures managed the environmental risks and effects during the mine's operating phase.

Requests for Review under Section 64 of the Responsible Energy Development Act by Mike Richard – Grizzly Resources Limited Private Surface Agreement
Request for Order to Comply – Private Surface Agreement – REDA Section 64 – Request Denied

In this decision, the AER considered Mr. Richard's requests under section 64 of the *Responsible Energy Development Act* ("*REDA*") for an order directing Grizzly Resources Limited ("Grizzly") to comply with the Private Surface Agreement dated October 9, 1997 and amended February 7, 2014 (the "PSA").

For the reasons summarized below, the AER decided not to exercise its discretion to issue an order to comply.

Decision

The AER noted that Mr. Richard's requests were based on concerns that Grizzly was not complying with its commitments regarding mud debris maintenance, dust control and speed awareness.

Mud Debris Maintenance

The AER found that Grizzly had adequately addressed Mr. Richard's concerns by cleaning up the excess mud and road debris and that Grizzly was in compliance with the mud debris maintenance condition. Therefore, the AER determined that an order to comply was not necessary.

Dust Control and Speed Awareness

The AER found that it appeared that Grizzly was complying with the dust control and speed awareness terms of the existing PSA and that an order to comply is not necessary or warranted.

The AER noted that clause 4 of Schedule A in the February 7, 2014, Amended Surface Lease Agreement simply stated that "dust control will be undertaken…" and does not specify how the dust control will be carried out.

Grizzly stated that it was undertaking dust control through reinforcing a 20 kilometre per hour speed limit on the segment of Range Road 75 near Mr. Richard's residence, as well as constructing a new access road north of Mr. Richard's residence that would reduce future truck traffic in the area.

The AER noted that its jurisdiction under section 64 of *REDA* allows it to issue an order directing Grizzly to

comply with the PSA. The AER cannot import new terms into a PSA.

The AER suggested that Mr. Richard and Grizzly may negotiate new terms or a new private agreement if they so choose.

Bulletin 2018-12: New Alberta Environment and Parks Groundwater Directive for Thermal In Situ Projects
AER Bulletin – New Alberta Environment and Parks Directive

On May 29, 2018, Alberta Environment and Parks ("AEP") issued the *Directive for the Assessment of Thermally-Mobilized Constituents in Groundwater for Thermal In Situ Operations.*

The AER explained that:

- The directive applies to all thermal in situ operations holding an approval under the *Environmental Protection and Enhancement Act* ("*EPEA*").

- For new projects, a project assessment must be submitted at the time of application. Following approval, a groundwater monitoring program proposal must be developed and submitted to the AER.

- Applicants who currently have thermal in situ applications filed with the AER should consult their AER *EPEA* contact by June 30, 2018, for direction on how to amend their applications.

- For existing projects, an updated groundwater monitoring report must be submitted to the AER at the frequency specified in the project's *EPEA* approval and outlined in the approval holder's groundwater monitoring program proposal.

- Projects that are currently suspended must fulfill the requirements of section 9.2 of the directive before resuming operations. An updated groundwater monitoring report must be submitted to the AER within the approval holder's next regularly scheduled reporting period.

For questions relating to section 1 of the directive, the AER suggests contacting AEP at AEP.WaterPolicy@gov.ab.ca. All other questions can be directed to the AER.

ALBERTA UTILITIES COMMISSION

Bulletin 2018-09 Consultation initiated for changes to AUC Rule 017, to reflect amendments to the Electric Utilities Act

AUC Bulletin – Stakeholder Consultation – Rule 017 Amendments – Bill 13: An Act to Secure Alberta's Electricity Future – Capacity Market

In this Bulletin, the AUC announced upcoming amendments to *Rule 017: Procedures and Process for Development of ISO Rules and Filing of ISO Rules with the Alberta Utilities Commission* ("*Rule 017*"). The AUC explained that *Rule 017* required significant changes as a result of *Bill 13, An Act to Secure Alberta's Electricity Future* ("*Bill 13*"), which was introduced in the Legislative Assembly of Alberta on April 19, 2018. If passed, the proposed legislation would result in amendments to the *Alberta Utilities Commission Act*, the *Electric Utilities Act*, the *Renewable Electricity Act* and the *Hydro and Electric Energy Act* to enable the implementation and operation of the capacity market. The amendments to the *Electric Utilities Act* would result in new obligations for the AUC, including amended rule-making power.

In anticipation of the passing of *Bill 13* and expected coming-in-to-force on August 1, 2018, the Commission issued this bulletin to begin consultation on *Rule 017*.

To initiate the discussion, the AUC prepared a revised draft *Rule 017*. The AUC is holding a formal stakeholder engagement process to consider the processes and information needed in *Rule 017* to reflect the amendments proposed in *Bill 13*. A document outlining the proposed consultation process for *Rule 017* and the draft rule may be found on the AUC website under Rule-related consultation: http://www.auc.ab.ca/regulatory_documents/Pages/ConsultationsRule017.aspx.

The proposed amendments to the *Electric Utilities Act* would change how independent system operator ("ISO") rules will be developed and approved:

(a) ISO rules would require Commission approval, with a specific process contemplated for the ISO rules considered essential to establish and operate the capacity market;

(b) the proposed amendments would change how the AESO may implement rules on an expedited basis;

(c) under Section 20.9 of the proposed amendments to the *Electric Utilities Act*, the Commission would be required to make rules that direct the AESO to consult with market participants, the Market Surveillance Administrator and other interested parties in developing ISO rules; and

(d) The Commission would also have the ability to make rules respecting the AESO's consultation process and the content of AESO applications for ISO rule approval.

The draft *Rule 017* addresses the approval processes described above for:

- ISO rules in the regular course;
- ISO rules that will initiate the capacity market and during the transition period; and
- ISO rules for which the ISO seeks expedited implementation.

The draft rule also addresses the following minimum application requirements:

- information required to file an application for approval of an ISO rule, both in the regular course and during the transition period; and
- information required to apply for expedited implementation of an ISO rule.

The first stakeholder consultation meeting was held in Calgary and Edmonton on May 31, 2018.

NATIONAL ENERGY BOARD

NOVA Gas Transmission Ltd. – North Montney Mainline Variance Application and Sunset Clause Extension Request (Reasons for Decision MH-031-2017)

Facility Variance Application – Sunset Clause Extension – Tolling Methodology

On May 23, 2018, the NEB issued its Reasons for Decision MH-031-2017 (the "Decision") regarding NOVA Gas Transmission Ltd.'s ("NGTL") application to extend the sunset clause and vary Condition 4 of Certificate GC-125 in respect of the North Montney Mainline ("NMML") project (the "Variance Application").

Approval of the Variance Facilities

The NEB found that there was a need for the facilities described in the Variance Application (the "NMML Facilities") and that the NMML Facilities were economically feasible.

In April 2015, the NEB recommended that the Governor in Council ("GIC") approve the original NMML Project. The GIC approved the project in June 2015 and directed the Board to issue Certificate GC-125 (the "Certificate"). The Certificate included Condition 4, which was one of the subjects of NGTL's Variance Application. The original NMML project was intended primarily for transporting gas for export from the proposed Pacific NorthWest Liquefied Natural Gas Project (the "PNW LNG Facility" or the "PNW LNG Project"). PNW subsequently decided not to proceed with the PNW LNG Facility.

Tolling Methodology

The Board found that approving NGTL's existing tolling methodology for the NMML Facilities over the long-term would not result in just and reasonable tolls, due to the lack of adherence to the cost causation principle and goal of economic efficiency.

NGTL did not seek to vary or amend the original Toll Order TG-002-2015, as amended, (the "Original Toll Order"). However, recognizing that the Board might conclude that there was no longer a need for two time periods and deferral account, NGTL requested that the Board find it appropriate for NGTL to apply the same tolling methodology to the NMML Facilities as used to calculate tolls for all other facilities on the NGTL system. The Board noted that NGTL filed evidence to attempt to demonstrate that changed circumstances had mitigated the Board's concerns regarding cost causation, cross-subsidization and risk.

Original Toll Order No Longer Appropriate

The Board found that the Original Toll Order was no longer appropriate for the NMML Facilities, given that the circumstances in the Variance Application had changed from those of the original NMML project. Namely, with the cancellation of the PNW LNG Facility, the development of the NMML Facilities would no longer be associated with liquefied natural gas development. Gas from the NMML Facilities would now all flow east to the existing NGTL system or into storage at Aitken Creek.

The Board found that it was no longer appropriate to use the Transition Period and Long-Term Phase as set out in the GH-001-2014 Report and Original Toll Order.

Provisional and Post-Provisional Tolling Periods

The Board ordered that for a provisional period of one year, starting from the date the Governor in Council approves the amendments to the original certificate (the "Provisional Period"), NGTL may apply its current toll methodology to the NMML Facilities. However, the Board ordered that the tolls charged on the NMML Facilities would be unconstrained tolls not subject to the FT-R toll ceiling (the "Provisional Tolling Methodology").

On the commencement of the Post-Provisional Phase (begins at the end of the Provisional Period), unless NGTL receives approval of a new tolling methodology, the Board ordered that NGTL shall calculate the tolls for services on the NMML Facilities using a stand-alone tolling methodology. The stand-alone toll would be derived from a separate NMML Facilities cost pool and would recover these costs from the NMML shippers. Accordingly, NMML shippers would need to pay a stacked toll, comprised of this NMML toll, as well as the FT-R toll at Saturn.

The Board allowed NGTL to apply for a new tolling methodology on the NMML Facilities within one year of the issuance of the Decision that addressed the concerns outlined in its "Comments Regarding Tolling for the Post-Provisional Tolling Phase," summarized further below.

Separate Cost Pools and Deferral Account

The Board ordered that NGTL maintain separate cost pools for the NMML Facilities and the existing NGTL system. The Board considered that separate cost pools would allow accountability for the costs related to the NMML Facilities to clearly rest with NGTL and the NMML Facilities' shippers. The NMML Facilities' cost pool would include establishing and maintaining separate accounting records for the NMML Facilities and, during the Provisional Period, holding in a deferral account any difference between North Montney cost of service ("COS") related to the NMML Facilities and incremental revenue from NMML-

related receipt contracts using the Provisional Tolling Methodology. The cost pool for the NMML Facilities shall be maintained for the life of the facilities, or until the Board directs otherwise.

The Board found that NGTL had not demonstrated that the NMML Facilities would result in any objectively identifiable and significant incremental delivery revenues. Accordingly, the NEB directed that no incremental delivery revenue may be allocated to the cost pool.

Integration and Nature of Service

The Board found that the NMML Facilities would be integrated with the existing NGTL system and would offer similar services as those offered on the existing NGTL system. However, the NEB found that integration and similarity of services were not sufficient alone to support the use of rolled-in tolling, as applied for by NGTL, over the long-term. The Board explained that it must also consider whether the tolling methodology adequately addressed cost causation.

The Board found that the degree of integration for the NMML Facilities was less than it would be for joint-use type facilities within a system's existing footprint, such as additional looping or a compressor station along existing pipeline right-of-way, which would be physically used by both new and existing system shippers. The Board noted that the NMML Facilities were in a distinct right-of-way beyond the terminus of the existing NGTL system, and would only be physically utilized by an identifiable set of shippers.

Cross-Subsidization

The Board found that applying the existing NGTL tolling methodology over the long-term for service on the NMML Facilities would result in excessive levels of cross-subsidization of the NMML Facilities by existing NGTL shippers. However, during the Provisional Period, with the FT-R ceiling removed, the Board found that the degree of cross-subsidization would not be excessive. For the Post-Provisional Period, the tolling methodology for the NMML Facilities must reflect greater adherence to the cost causation principle.

The Board noted NGTL's estimate that the FT-R revenue associated with the NMML Facilities over 20 years would be $3.19 billion, while the NMML Facilities COS over the same period was expected to be $2.88 billion. NGTL claimed that the difference was a "net benefit" to the existing NGTL system of $317 million, or an annual average of approximately $22 million.

However, the Board found that the $317 million figure did not account for the costs that would be incurred in transporting NMML shippers' gas on the existing NGTL system. Were one to subtract from the $317 million, the COS associated with transporting such gas on the existing NGTL system, the "net" would, in fact, be a negative amount of significant value. In the Board's view, such revenue would not be an adequate contribution toward the costs on the existing NGTL system caused by the NMML shippers.

The Board found that existing system shippers without contracts on the NMML Facilities only indirectly contribute to the need for, and use of, the facilities, by generating demand for maintaining declining system supply. Rolling in the costs of the NMML Facilities into a single NGTL system cost pool and allocating the costs equally to receipt and delivery shippers on the system did not reflect this reality. The Board found that in these circumstances, the tolls charged to shippers on the NMML Facilities must be sufficient to cover the costs NMML Facilities shippers cause on the existing NGTL system, as well as costs they cause on the NMML Facilities, less any portion of the NMML Facilities costs that are caused by, and rightfully attributable to, existing system shippers.

Economic Efficiency

The Board found that applying the existing NGTL tolling methodology to the NMML Facilities failed to provide proper price signals, thereby failing to both protect against over-investment and promote the efficient development and use of pipeline systems. Because users of the NMML Facilities would not be charged tolls commensurate with the costs they cause on the system, the Board found that, in this case, NGTL's tolling methodology was inconsistent with the goal of economic efficiency.

The Board found that applying NGTL's existing tolling methodology to the NMML Facilities would fail to hold the responsible parties accountable for the significant incremental costs to construct and operate those facilities. Applying the toll ceiling further contributed to the problematic price signals.

No Unjust Discrimination

The Board found that charging different tolls to Variance Facilities shippers would not result in unjust discrimination, based on the following:

(a) gas on the NMML would be transported over a different route than gas anywhere else on the NGTL system;

(b) gas from the Variance Facilities' receipt points would be transported on the NMML to the existing NGTL system at Saturn, and would not be commingled with other gas streams until it enters the existing NGTL system at Saturn; and

(c) it was possible to determine the exact route taken by the volumes while they are on the NMML.

Competition

As summarized above, the Board found that NGTL's proposed tolling of the NMML Facilities would not respect the user pay principle, and would result in improper price signals, due to the excessive level of cross-subsidization from existing NGTL system users. Accordingly, under rolled-in tolling and applying NGTL's current toll methodology, the NMML Facilities would have an unfair advantage in attracting gas from producers in the area who wish to access NIT. The NEB found that this advantage could cause undue harm to competitors.

The Board found, however, that the tolling methodology approved for the Provisional Period would have minimal impact on Westcoast's ability to compete. The NEB noted that NGTL may only use the Provisional Tolling Methodology for one year, less than the four year Transition Period approved in the GH-001-2014 Report. Further, if NGTL fails to file a toll application that is approved by the Board, then, at the end of the Provisional Period, the NMML Facilities would be subject to stand-alone tolling.

NEB Comments Regarding Tolling for the Post-Provisional Tolling Phase

NGTL has one year following the issuance of the Decision to re-apply to the Board with a new tolling methodology for the NMML Facilities before defaulting to stand-alone tolling. Such an application may be for tolling on the NMML Facilities alone, for tolling the NMML Facilities as part of a toll zone, or as part of an application for tolling on the entire NGTL system.

As with any tolling methodology subject to NEB jurisdiction, the Board noted that any Post-Provisional Tolling Methodology ("PPTM") developed by NGTL must result in tolls that are just, reasonable and not unduly discriminatory. The Board went on to provide some additional guidance to NGTL for the PPTM, based on the evidence provided in the Variance Application proceeding:

- The PPTM should reflect greater adherence to the cost causation principle, considering the extent incremental revenue covers the incremental COS of the new facilities as well as the extent that revenues make a meaningful financial contribution to the cost of using services on the existing NGTL system.
- The PPTM must make a proposal for the disposition of costs accumulated in the deferral account for the NMML Facilities.
- To send proper price signals and adhere to the principle of cost causation, the PPTM should account for: 1) the costs to use the existing NGTL system; and 2) the incremental costs caused by the construction and operation of the NMML Facilities, less the portion of the costs attributable to the existing system users' indirect use of, and need for, the NMML Facilities.
- While existing FT-D shippers benefit from and contribute to the need for continued sources of gas supply, the proportion of costs from the NMML Facilities allocated to existing system shippers' tolls should reflect the fact that existing system shippers only indirectly contribute to the need for, and the use of, the NMML Facilities. NGTL may address these concerns in the PPTM by:
  - developing a separate cost pool for the NMML Facilities, whereby the costs from the NMML Facilities are allocated to the NMML cost pool and the existing NGTL system cost pool in proportions reflecting the fact that NMML shippers are the main drivers of the costs of the NMML Facilities;
  - applying a toll surcharge to shippers on the NMML Facilities, in addition to the toll these shippers would pay under NGTL's existing toll methodology; and/or
  - creating a toll zone, including the NMML Facilities, which would result in an increased allocation of the costs caused by the NMML Facilities shippers to the FT-R tolls.
- As the FT-R shippers on the NMML Facilities and NGTL are largely the beneficiaries from the decisions that define the scope and costs of NMML Facilities, so should they bear the proportionate risk for these decisions. Accordingly, the PPTM should promote efficient use of existing NGTL infrastructure and discourage overbuilding.
- If NGTL applies with a PPTM as part of an application for tolling on the entire NGTL system, then the PPTM must account for the changed circumstances and evolution of the system since the Board first approved NGTL's rate design methodology in the RHW-1-2010. In the Board's view, demonstrating cost causation with the existing tolling methodology, particularly with the toll ceiling, is difficult in the case of major supply extensions, like the NMML Facilities.
- The Board suggested that NGTL evaluate and justify the appropriateness of any proposed ceiling and floor rates for its FT-R service, particularly with respect to the distance sensitivity of its tolling methodology. In

the Board's view, NGTL's tolling methodology is insufficiently distance sensitive to address a major supply extension like the NMML Facilities. Simply removing the toll ceiling is not sufficient to address the deficiencies identified in this Decision.

Need for the NMML Facilities

Based on its evaluation of the new facts and changed circumstances since the GH-001-2014 proceeding, the NEB found that there continued to be a need for the NMML Facilities.

Given its views on natural gas supply, markets and the existence of 20-year FT-R contracts, the NEB found that the NMML Facilities were expected to be used at a reasonable level over their economic life and that demand charges are likely to be paid. As a result, the NEB found that the NMML Facilities were economically feasible. Based on this finding and the new facts and changed circumstances, Condition 4 was no longer required.

Gas Supply

The NEB found that there was adequate supply to support the project, based on the following:

- North Montney gas production was currently cost competitive with other sources of production in the Western Canadian Sedimentary Basin ("WCSB") and North America;
- many shippers on the NMML Facilities have significant resources, have made large investments in developing their natural gas assets, and have substantial long-term growth and investment plans; and
- North Montney supply assessment had increased since the original NMML proceeding.

Markets

The NEB found that the absence of the PNW LNG Project demand did not diminish the need for NMML Facilities, based on the following:

- The significant North American market would be able to absorb the project volumes.
- In the short term, additional North Montney production would largely be used to help replace natural declines on the NGTL system and might displace other sources of gas production in the WCSB.
- In the long-term, as integrated North American markets continue to evolve, gas demand would be expected to continue to seek out low-cost sources of gas supply, which could result in expansions on the NGTL system to accommodate North Montney production growth, as well as increases to export capacity.

Firm Transportation Contracts

The NEB found that the 20-year terms and limits on primary and secondary terms for NMML FT-R contracts supported long-term use of the NMML Facilities.

Although the original NMML Application was underpinned by over 2 Bcf/d of FT-D contracts, the FT-R contracts on the Variance Facilities were no longer underpinned by any FT-D contracts. The NEB found that this was consistent with the NGTL Tariff, which does not require shippers to hold reciprocal receipt and demand contracts on the NGTL system.

The NEB suggested that shippers and NGTL continue to explore optimal system design processes as production in the Basin continues to evolve. Pipelines in the North Montney area do not have excess capacity available. It is not the responsibility of the NEB to protect producers in one area of the WCSB from competition from potentially lower cost sources of gas supply in other areas. As long as the tolls set on the NMML Facilities respect the cost causation principle and are set in a way that promotes proper price signals, producers in differing areas of the WCSB can compete on a level playing field.

Aboriginal Matters

Proponent Consultation

The NEB found that:

(a) NGTL had undertaken an appropriate level of consultation with potentially affected Aboriginal groups, considering that the Variance Application involved changes to the previously-assessed and approved NMML project related to commercial aspects, and did not require any additional land; and

(b) NGTL designed and implemented appropriate consultation activities with Aboriginal communities that met the requirements and expectations set out in the Board's Filing Manual, commensurate with the setting, nature and magnitude of the Variance Application.

Crown Consultation

The NEB found that:

(a) there had been adequate consultation and accommodation for the purpose of the Board's decision on the NMML Facilities, including the mandated consultation performed by NGTL and the consultation undertaken through the Board's project assessment process; and

(b) any potential adverse impacts as a result of the NMML Facilities on the interests, including rights, of affected Aboriginal groups are not likely to be significant and can be effectively addressed.

As a result of the above, the NEB found that the requirements of section 35 of the *Constitution Act, 1982* had been met, such that approval of the NMML Facilities was in keeping with the honour of the Crown.