Date: October 19, 2018 Cliff No.: 105249

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR DECISION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Canadian Energy Strategy proposing Chair rotation in conjunction with Energy and Mines Ministers Conference (EMMC) hosting responsibilities

III BACKGROUND:

In July 2015, Premiers released the Canadian Energy Strategy (CES) meant to provide a common vision among provinces and territories (PTs) and enabling collaboration on energy related initiatives. In the first two years of CES implementation, Premiers' directed PTs to work across four working groups: energy efficiency; delivering energy to people; climate change and transition to a lower carbon economy; and technology and innovation.

In 2017, there was a shift away from working groups, and instead, jurisdictions collaborated through a single standing committee to pursue specific initiatives and respond to emerging issues. s.13

s.13

Working groups and technical spaces to advance shared energy priorities exist in other forums such as the EMMC and the Pan-Canadian Framework on Clean Growth and Climate Change (PCF). BC participates in all of the working groups to represent BC's energy and mining priorities as part of EMMC, and Executive also participate on the higher-level steering groups. The PCF outlines critical actions to grow the economy while reducing greenhouse gas emissions. The Province is working with the federal government to develop clean energy infrastructure to support provincial and federal emissions reductions, and participated in multiple working groups to develop the PCF.

IV DISCUSSION:

The current CES is co-chaired by a committee (New Brunswick, Alberta, Manitoba and Newfoundland and Labrador). The committee discussed associating the rotating chair of the CES with the PT that is responsible for hosting the EMMC, and New Brunswick, on behalf of the current committee, has approached BC to chair the CES as BC is the current host of EMMC.

Part of the responsibility of the CES chair would be to organize and facilitate meetings of ADMs that would determine the strategic direction of the CES over the next several months. Additionally, the chair would coordinate the annual PT Ministers' meeting based on the ADM discussions. The Minister would then be expected to chair and participate in the PT Ministers' meeting discussion either before or after EMMC.

BC is already engaged or leading on most initiatives under the CES through our own climate and energy objectives and other ongoing provincial work. As well, staff are actively involved and provide expertise in a number of intergovernmental forums such as the EMMC, and the PCF.

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V OPTIONS:

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| Approved | / Not | Approved |
|----------|-------|----------|
| ` / | | |

Date

Honourable Michelle Mungall, Minister

Ministry of Energy, Mines and Petroleum Resources

DRAFTED BY:

Jillian Zavediuk 250-952-0246 **APPROVED BY:**

Chris Fleming, DIR, SIAD $\sqrt{}$ Ryan Forman, ED, SIAD $\sqrt{}$ Simon Coley, ADM, SIAD $\sqrt{}$ Dave Nikolejsin, DM, EMPR $\sqrt{}$

Date: October 16, 2018 CLIFF: 105278

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable John Horgan, Premier of British Columbia

II ISSUE: Meeting with Tan Sri Wan Zulkiflee Wan Ariffin – President & Group Chief Executive Officer of PETRONAS

III BACKGROUND:

- PETRONAS, short for Petroliam Nasional Berhad (National Petroleum, Limited), is a Malaysian oil and gas company that was founded on August 17, 1974. The corporation is wholly owned by the Government of Malaysia, is vested with the entire oil and gas resources in Malaysia, and is entrusted with the responsibility of developing and adding value to these resources.
- The group is engaged in a wide spectrum of petroleum activities, including
 upstream exploration and production of oil and gas to downstream oil refining;
 marketing and distribution of petroleum products; trading; gas processing and
 liquefaction; gas transmission pipeline network operations; marketing of liquefied
 natural gas; petrochemical manufacturing and marketing; shipping; automotive
 engineering; and property investment.
- PETRONAS provides a substantial source of income for the Malaysian government, with half of the government's budget dependent on PETRONAS' dividend.
- PETRONAS completed two liquefaction projects in 2017, expanding its role as a supplier in the global LNG market.
- With many legacy fields in Malaysia facing decline over the next decade, PETRONAS has moved to maintain its feedstock base in order to ensure its position in the global LNG market.
- One of PETRONAS' primary objectives is to secure supply for the Malaysian market, given its role as the country's national oil company. Over time, Malaysia's gas supply-demand balance became increasingly complicated with demand centers in Peninsular Malaysia requiring more gas as legacy production areas within the country declined. This created a scenario where PETRONAS attempted to build up a strong LNG portfolio to supply its domestic customers.

LNG Canada

- In May 2018, Shell Canada Energy, on behalf of the joint venture participants in LNG Canada, announced that PETRONAS will take an equity position in LNG Canada pending regulatory approvals and subject to closing conditions. On July 23, the deal with PETRONAS was finalized and LNG Canada formally welcomed PETRONAS as their fifth Joint Venture Participant.
 - Ownership interest is now Shell 40 percent, PETRONAS 25 percent,
 PetroChina 15 percent, Diamond LNG Canada, an affiliate of Mitsubishi
 Corporation 15 percent, and KOGAS 5 percent.

 On October 1, 2018, LNG Canada announced that its joint venture participants had taken a Final Investment Decision (FID) to build the LNG Canada export facility.
 With this announcement the project moved immediately into the construction phase.

Progress Energy and North Montney Joint Venture

- Progress Energy is a wholly owned subsidiary of PETRONAS. Together with its
 North Montney Joint Venture partners, Japan Petroleum Exploration Company
 (JAPEX), PetroleumBRUNEI, IndianOil Corporation, and Sinopec-China Huadian,
 Progress is the largest natural gas reserves owner in Canada with approximately
 800,000 acres of largely contiguous mineral rights in the North Montney and over 52
 trillion cubic feet worth of reserves. Progress is the operator of the joint venture,
 which has more than 15,000 identified potential drilling locations.
- While a portion of Progress Energy's natural gas production will be directed towards LNG Canada, the company has plans to grow its natural gas production substantially to supply the North American market as well, and is seeking other opportunities to realize additional value from its gas resources.

IV DISCUSSION:

Natural Gas Development Framework

- As essential part of LNG Canada's final investment decision was the BC government's March 2018 fiscal framework. The framework aims to put natural gas development on a level playing field with other industries in BC and to support good jobs and revenues for the Province, and to ensure British Columbians benefit from natural gas development.
- The framework follows a review of competitiveness issues facing the LNG sector and a detailed financial analysis of the LNG Canada proposal. Government developed measures to help ensure British Columbians receive a good return for natural gas resources, while unlocking new investment in the sector.
- In light of LNG Canada's positive final investment decision, the government is working to put these measures in place.

1. PST/Operating performance payments

The BC government has exempted LNG Canada from the provincial sales tax on most elements of the construction of its initial facility. Separately, the province is working with LNG Canada to enter into an agreement with the Province whereby LNG Canada will pay annual operating performance payments \$.13,s.17 which are tied to the production and export of LNGs.13,s.17 s.13,s.17

2. Clean growth incentive program

The provincial government recognizes that energy-intensive trade-exposed industries, including the natural gas sector, face unfair competition when competing globally with jurisdictions that do not impose a price on carbon.

The government intends that LNG projects will be eligible to participate in the new clean growth incentive program, announced by the provincial government in Budget 2018. A benchmark for LNG production will be established as part of this program, s.13

3. Industrial electricity rates

The government has enabled LNG projects to receive electricity at the general industrial rate charged by BC Hydro. This is the same rate paid by other large industrial users in BC.

4. Removal of LNG income tax

Government intends to introduce legislation to repeal this tax. It is the government's intention that the natural-gas income-tax credit will be retained to encourage the use of BC's natural gas at LNG facilities.

V CONCLUSION:

- The Province understands the LNG industry's competitiveness and was pleased to bring forward its Natural Gas Development Framework that was an essential part to LNG Canada's positive FID.
- PETRONAS plays an integral role in BC's energy system, and as a Joint Venture Partner in LNG Canada will be a part of the largest private sector investment in Canadian history.
- The Ministry of Energy Mines and Petroleum Resources will continue to work closely with PETRONAS and the LNG Canada project as they move into the construction phase.

Appendix: Appendix A – Biography- Datuk Wan Zulkiflee Wan Ariffin Appendix B - Company Profile

| DRAFTED BY: | APPROVED BY: | |
|--------------------------|--------------------------|--------------|
| Mark Urwin, Director OGD | Geoff Turner, ED OGD | \checkmark |
| | Ines Piccinino, ADM OGD | \checkmark |
| | Dave Nikolejsin, DM EMPR | \checkmark |

Appendix A: Biography Datuk Wan Zulkiflee Wan Ariffin



DATUK WAN ZULKIFLEE WAN ARIFFIN

President & Group Chief Executive Officer

Datuk Wan Zulkiflee Wan Ariffin was appointed as the President & Group Chief Executive Officer on 1 April 2015. He began his career with PETRONAS in 1983.

Prior to his current appointment, he was the Group Chief Operating Officer and Executive Vice President & Chief Executive Officer of Downstream Business.

Datuk Wan Zulkiflee is the Chairman of the Board of PETRONAS Carigali Sdn Bhd, the Group's wholly owned exploration and production arm. He also serves as the Chairman of the National Trust Fund, Chairman of the East Coast Economic Region Development Council (ECERDC)'s Audit Committee, and is a member of the Board of Trustees of the Razak School of Government.



MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES
OIL AND GAS DIVISION

CORPORATE OVERVIEW

- PETRONAS is a Malaysian oil and gas company wholly owned by the Government of Malaysia, the corporation is vested with the entire oil and gas resources in Malaysia and is entrusted with the responsibility of developing and adding value to these resources.
- Since its incorporation, PETRONAS has grown to be an integrated oil and gas company with business interest in 35 countries.
- The company engaged is a wide spectrum of petroleum activities, including upstream exploration and production of oil and gas to downstream oil refining; marketing and distribution of petroleum products; trading; gas processing and liquefaction; gas transmission pipeline network operations; marketing of LNG; petrochemical manufacturing and marketing; shipping; automotive engineering; and property investment.

FINANCIAL OVERVIEW

Table 1: Select Financials (In Billions, USD)

| | 2017 | 2016 | 2015 |
|-------------------|-------|-------|-------|
| Income Statement | | | |
| Revenue | 55.1 | 47.1 | 57.7 |
| Gross Profit | 20.6 | 13.3 | 16.5 |
| Net Income | 11.2 | 5.4 | 4.9 |
| Balance Sheet | | | |
| Total Assets | 147.8 | 138.8 | 137.9 |
| Total Liabilities | 41.2 | 41.3 | 41.0 |
| Cashflow | | | |
| CAPEX | 11.0 | 11.6 | 15.1 |

LNG STRATEGY

 One of PETRONAS' primary objectives is to secure supply for the Malaysian market, given its role as the country's NOC. The country's gas supply-demand balance became increasingly complicated with demand centres in Peninsular Malaysia requiring more gas as legacy production areas in the country declined.

LNG STRAGEGY CONT'D

- PETRONAS completed two liquefaction projects in 2017, making it the third largest supplier in the global LNG market.
- However, the company is tasked with placing its growing supply of uncontracted cargoes, both from new projects and expiring contracts at legacy MLNG plants at a time when competitive LNG supply in the global market is expanding.
- As such, PETRONAS has moved to offer more flexible contract terms and for shorter durations in order to shore up offtakers and attempt to expand to new markets.
- Beyond Malaysia, PETRONAS expanded its portfolio internationally over the last fifteen years in order to ensure supply security for its offtake obligations, part of its initial strategy of aggressively building up its LNG portfolio.

LNG PROJECTS Liquefaction Facilities

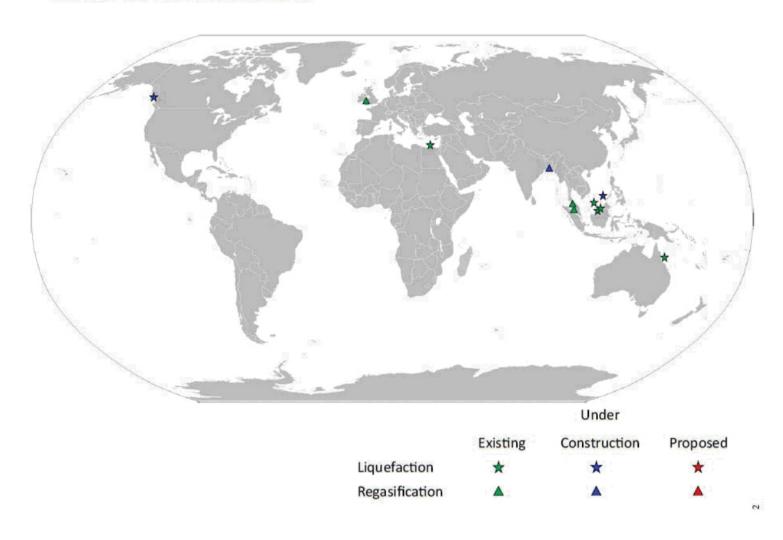
| | | Start | Equity | | |
|--------------------|------------|-------|------------------|--|--|
| Project | Country | Date | Stake | | |
| 0 | perational | | | | |
| MLNG Satu T1-3 | Malaysia | 1983 | 90% | | |
| MLNG Dua T1-3 | Malaysia | 1995 | 80% | | |
| MLNG Tiga T1-2 | Malaysia | 2003 | 60% | | |
| ELNG T1-2 | Egypt | 2005 | 36% T1 38% T2 | | |
| GLNG T1-2 | Australia | 2016 | 28% | | |
| MLNG T9 | Malaysia | 2017 | 70% | | |
| | | | | | |
| PFLNG Satu | Malaysia | 2017 | 100% | | |
| Under Construction | | | | | |
| PFLNG Dua | Malaysia | 2020 | 100% | | |
| LNG Canada | Canada | 2023 | 25% | | |

Regasification Facilities

| Drainet | Country | Start | Equity | |
|------------------|-------------|-------|--------|--|
| Project | Country | Date | Stake | |
| (| Operational | | | |
| Dragon | UK | 2009 | 50% | |
| Sungai Udang | Malaysia | 2013 | 100% | |
| RGT2 (Pengerang) | Malaysia | 2017 | 65% | |
| Proposed | | | | |
| Kutubdia LNG | Bangladesh | 2019 | 25% | |

Contact: Economics and Market Development Group, Oil and Gas Division

Global LNG Infrastructure



Date: October 10, 2018 CLIFF: 105303

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: David Suzuki Foundation Meeting: Methane Regulations

III BACKGROUND:

The David Suzuki Foundation (DSF) is a non-profit Environmental Non-Governmental Organization (ENGO) founded in Vancouver, British Columbia in 1990. DSF works with government agencies, businesses and individuals to conserve the environment by providing science-based education, advocacy and policy work, and acting for social change.

In April 2018, the Federal Government finalized methane regulations that aim to reduce methane emissions from new and existing sources in the upstream oil and gas sector by 40-45 percent below 2012 levels by 2025.

The Province is preparing BC regulations to reduce methane emissions by 45 percent and will pursue an equivalency agreement with the Federal Government, allowing our regulations to substitute for the federal regulations. The Ministry of Energy, Mines, and Petroleum Resources, Climate Action Secretariat (CAS), and the BC Oil and Gas Commission (OGC) in collaboration have:

- Developed a model to evaluate the potential emission reduction scenarios and impacts to the Province's oil and gas industry due to the proposed methane regulations.
- Established a Methane Emissions Research Collaborative –to identify knowledge gaps, and develop research projects to support regulatory development.
- Drafted a proposed regulatory framework considering BC industry specific conditions, best practices from other jurisdictions, cost-effectiveness, competitiveness and other fiscal, policy, legislative, and economic implications. Consultation on BC's proposed suite of methane regulations was held with industry and

ENGOs in two separate sessions on September 14, 2018. Feedback was requested by October 15th.

On October 10th DSF formally provided input to BC's proposed methane regulatory framework in a paper entitled *Regulatory Best Practices for Vented and Leaked Methane Emissions from Upstream Oil and Gas Operations*. The paper strongly cautions BC against following Alberta's model and recommends best practices from U.S. and Mexico (e.g. quarterly LDAR, zero emissions equipment, conserve gas instead of flaring, robust monitoring and reporting).

IV DISCUSSION:

BC methane regulations

Best practices from other jurisdictions were considered in the BC methane regulations development, as well as in BC's flaring and venting reduction guidelines. BC also considered Alberta's approach for purposes of harmonization but this had a limited impact on BC's proposed approach. BC's methane regulations are being designed to fit the Province's specific industry make-up as well as its unique legislative framework, and will be a more tailored and cost-effective approach to reducing methane when compared to the federal regulations. The draft regulations address the fugitive emissions and routine venting from equipment.

The draft BC approach is expected to reduce methane emissions by 10.9 Mt CO₂e over a ten year period at the cost of \$332 million - achieving deeper reductions at less cost than the alternative federal approach at 9.2 Mt CO₂e and \$487 million respectively. BC draft regulations provide better flexibility with lower overall costs to industry than do the federal regulations. The detailed comparisons between the BC regulations and the federal regulations can be found in the attachment.

ENGOs' concerns

ENGOs are supportive of the methane regulations; however, they indicated more stringent requirements are needed. DSF would like to see changes to:

- Quarterly leak detection and repair (LDAR): Requirements for LDAR are differentiated based on the BC well/battery sites conditions. BC's proposed three times per year, opposed to the four proposed by DSF, takes into account operational difficulties in the winter. The analysis shows that the LDAR requirements could attain similar emission reductions as the federal approach and justify the cost of those inspections.
- Venting limit: BC proposes a modified venting limit to account for the enforcement difficulty. Venting requirements for glycol dehydrators and surface casing vents are BC specific additional regulations where extra reductions could be obtained comparing with federal method.
- Recognize DSF study which showed higher methane emissions from natural gas sector in northeastern BC: The DSF study is an interesting field trial of a potential analysis technique. The Ministry is interested in future developments of the technique to understand its potential application. The Province is currently conducting field studies (collecting facility/equipment data counts, quantifying leak and vent emissions) to improve estimated methane emissions from the sector.

Timeline for BC methane regulations

- 2018/08: Early draft regulation
- 2018/10: Equivalency discussions initiated
- 2018/11: OGC Board meeting for regulation and guidelines
- 2019/06: Equivalency negotiations. Final regulation approved
- 2020/01: Methane regulation implementation

V CONCLUSION:

The Province has considered best practices from other jurisdictions and will continue to work collaboratively with Federal Government, industry, ENGOs, and other stakeholders to develop cost-effective regulations that will ensure emission reduction targets are met and an agreement is reached between BC and the Federal Government for equivalency of methane regulations.

Attachment:

1) Comparison of BC draft methane regulations and federal regulations

| DRAFTED BY: | APPROVED BY: | |
|--------------------------|---------------------------------|--------------|
| Yaomin Jin | Michelle Schwabe, Director, RAI | ✓ |
| Senior Policy Specialist | Richard Grieve, ED, RAI | \checkmark |
| | Ines Piccinino, ADM, OGD | \checkmark |
| | Dave Nikolejsin, DM, EMPR | \checkmark |

Comparison between BC draft regulations and ECCC regulation

| Emission source | Regulations | Requirements | Date of implementation | Rationale |
|--------------------|-------------|--|------------------------|--|
| Venting | BC | New Facilities: Limit to 3,000 m ³ of vented per month from all tankage combined at new facilities | 2022/01 | Venting from tankage very small (<1%) Site venting limits are difficult to administer and enforce |
| | | Existing Facilities: Limit to 9,000 m ³ vented per month from all tankage combined at existing facilities | 2023/01 | |
| | ECCC | Limit to 1,250 m ³ of hydrocarbon gas per month (not source specific but lists exempted sources) | 2023/01 | |
| Pneumatic devices | BC | New Facilities: Controllers at new facilities must not vent natural gas | 2021/01 | • Recognizes that venting from pneumatic devices is a large source of methane emissions in B.C. |
| | | Existing Facilities: Retrofit to low-bleed Compressor stations at 3 MW or greater of compression and gas processing plants (as defined in DPR) must not vent natural gas | 2022/01 | Limits on venting at new facilities are more cost effective than at existing facilities Limits on venting at larger facilities are more cost effective than at smaller facilities and larger facilities are more likely to have access to electricity and instrument air |
| | ECCC | Retrofit to low-bleed | 2023/01 | · |
| Pneumatic pumps | BC | New Facilities: Pneumatic pumps at new facilities must not vent (operate > 750 hrs per year) Existing Facilities: No change | 2021/01 | Limits on venting at new facilities are more cost effective than at existing facilities Pneumatic pump operation is usually seasonal and there is high uncertainty in the emissions values Emissions from existing pumps will be addressed through other government programs |
| | ECCC | Control for methanol pumps (>20 L pumped per day on average over a month) | 2023/01 | |

| Emission source | Regulations | Requirements | Date of implementation | Rationale |
|--------------------------|-------------|---|------------------------|---|
| Centrifugal compressor | BC | New Installations: Limit to < 3.4 m ³ /hr | 2021/01 | Limits on venting for new facilities are more cost effective than at existing facilities |
| | | Existing Installations: Limit to < 10.2 m ³ /hr | 2022/01 | Similar to draft D60 |
| | ECCC | New Installations: Limit to < 8.4 m ³ /hr | 2023/01 | |
| | | Existing Installations: Limit to < 20.4 m ³ /hr Limit to < 40.8 m ³ /hr (> 5 MW) | | |
| Reciprocating compressor | BC | New Installations: Control units with more than 4 throws | 2021/01 | Limits on venting for new facilities are more cost effective than at existing facilities |
| | | All Installations: Fleet average < 0.83 m ³ /hr/throw No compressor venting over 5 m ³ /hr/throw | 2022/01 | Similar to draft D60 |
| | ECCC | New Installations: Limit to < 0.06 m ³ /hr/throw | 2023/01 | |
| | | Existing Installations: Limit to < 1.38 m ³ /hr/throw | | |
| LDAR | BC | OGI/Method 21 3 x per year for gas plants, compressor stations and multiwell batteries 1 x per year for single-well batteries, custom treating facilities and injection/disposal facilities (other facilities except for wellsite facilities) 1 x per year for tight/shale wells Alternative approach Allowed for in proposed regulation Other facilities: screening 1 x per year | 2020 | Recognizes that fugitive leaks are a large source of methane emissions Fixed and personal monitors are designed to detect high volume leaks only Risk-based approach Coverage provided for all types of facilities Good housekeeping – focus should not only be on very large leaks |
| | ECCC | OGI/Method 21 3 x per year at batteries, compressor stations, gas plants 3 x per year at non single well sites Alternative approach Possible | 2020 | |

| Emission | Regulations | Requirements | Date of | Rationale |
|----------------|-------------|---|----------------|--|
| source | | | implementation | |
| Glycol | BC | New Installations: | 2022 | Co-benefit of benzene reductions |
| dehydrators | | Methane emissions not to exceed 68 kg/day/dehydrator | | Similar to draft D60 |
| | | Existing Installations: | 2023 | |
| | | Methane emissions not to exceed 136 kg/day/dehydrator | | |
| Surface casing | BC | Limit to 100 m ³ /day | 2020 | Safety and environmental hazard prevention |
| venting flow | | | | Number of wells affected is expected to be small |
| | | | | (approximately 15) |
| | | | | SCVF repair is a cost-effective emissions |
| | | | | reduction option for wells with the highest SCVF |
| | | | | flow rates |

Date: October 10, 2018 Cliff No.: 105315

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR DECISION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and

Petroleum Resources

II ISSUE: Renewal of Borealis Geopower's Geothermal Permit #63299

III BACKGROUND:

Section 5 of the *Geothermal Resources Act* (GRA) specifies that geothermal permits expire yearly, but may be renewed through application to a maximum of seven times. Any further renewals must be approved in writing by the Minister under Section 5(9).

Geothermal permit #63299 is 5,174 hectares in the Canoe Reach area near Valemount, BC, and was awarded to Borealis Geopower (Borealis) through a competitive auction in October 2010. Borealis has maintained this permit by applying annually for renewal, paying the required rent and fees, meeting exploration work commitments, and submitting exploration work reports. However, Borealis has failed within the eight years to satisfy the requirement of drilling a geothermal well capable of production to convert the permit to a lease. Therefore, continued renewal of the permit may only be granted through Section 5(9) of the GRA for a period of less than one year. Borealis has requested, in a letter dated September 26, 2018, that renewal of their geothermal permit #63299 for one year less a day be considered by the Minister through this mechanism. If the permit is not renewed at this time, it will expire on October 27, 2018.

IV DISCUSSION:

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Page 17

Withheld pursuant to/removed as

s.21;s.13;s.17

VI RECOMMENDATION:

Option 1. If approved, a renewal letter will be prepared for the Minister's signature.

APPROVED / NOT APPROVED

Honourable Michelle Mungall Minister of Energy, Mines

and Petroleum Resources

October 25, 2018

DRAFTED BY:

Warren Walsh, P.Geo. 778-698-7175

APPROVED BY:

Amy Sopinka, A/ED, EAED ✓ Les MacLaren, ADM, EAED ✓ Dave Nikolejsin, DM ✓

Date: October 11, 2018 Cliff No.:105316

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and

Petroleum Resources

II ISSUE: The Honourable Bronwyn Eyre, Saskatchewan Minister of Energy and Resources,

has requested a phone conversation with Minister Mungall to discuss federal

Bill C-69

III BACKGROUND:

In June 2016, the federal Minister of Environment and Climate Change Canada appointed a panel to review environmental assessment (EA) and regulatory processes conducted by the Canadian Environmental Assessment Agency (CEAA), the National Energy Board (NEB) and the Canadian Nuclear Safety Commission. An independent panel was also appointed by the Minister of Natural Resources Canada to review the NEB more broadly, and standing Parliamentary committees were tasked with reviewing the *Fisheries Act* and the *Navigation Protection Act*.

On June 29, 2017, in response to the various reviews and engagement, the Government of Canada released a discussion paper outlining the changes being considered for Canada's EA and regulatory processes. On February 8, 2018, the federal government released its legislative reform package, Bill C-69, including a proposed *Canadian Energy Regulator Act* (CERA), replacing the NEB and the proposed *Impact Assessment Act* (IAA), replacing the *Canadian Environmental Assessment Act* (also CEAA).

In June 2018, the bill passed the House of Commons and passed a first Senate reading. The bill is currently undergoing a second Senate reading and is anticipated to be passed by the end of 2018. The Government of Canada will be releasing a discussion paper in the fall of 2018 to seek input on proposed regulatory policies to the support the proposed CERA and IAA. BC has been working collaboratively on the regulatory review process with the federal government and will continue to work constructively together.

IV DISCUSSION:

At the Energy, Mines and Ministers' Conference (EMMC) August 12-14, 2018, the Saskatchewan Minister of Energy and Resources, Bronwyn Eyre and Ontario Minister of Energy, Northern Development and Mines, Greg Rockford, did not support the EMMC Ministers communiqué. Specifically, on regulatory process, the communiqué called for "federal and provincial governments to ensure an effective regulatory review process that enhances economic competitiveness and maintains a sustainable environment". Both Ministers felt the communique did not reflect their provinces economic challenges on energy and the mining sectors, and the

federal governments proposed Bill C-69 and the federal implementation of a carbon tax would continue to impede economic competitiveness.

Following EMMC, Saskatchewan and Ontario released a joint public statement which stated that the bill contradicts several of Canada's long-term economic goals and that the changes in the proposed IAA would result in a more complex, costly and time-consuming process, while creating uncertainty that could ultimately erode Canada's economic competitiveness. Saskatchewan is most likely concerned about their energy sector which has stated the pre-assessment process, which will be used to consult with the public and Indigenous communities before the formal EA process, will extend the length of an EA. Saskatchewan Premier Scott Moe has publicly denounced the bill as being problematic for the energy industry and believes the bill allows the federal environmental assessment into areas of provincial jurisdiction. Premier Moe has stated they will have more to say once regulations come out. Saskatchewan is most likely touching base with provinces, including BC, to see where other provinces stand on the issue of Bill C-69.

The new federal EA structure proposes several key features that will enable continued integration with BC's EA process, reducing duplication and affording opportunities for more effective engagement of Indigenous and non-Indigenous communities. The principle of one project, one assessment has been endorsed and the concept of substitution with provincial EAs will be retained by the Impact Assessment Agency (IAA, formerly CEAA). One project, one assessment is simply the idea that a provincial process could substitute for a federal EA process if the review satisfies federal requirements. Although there is still the need for a federal decision on the assessment at the end of a substituted process, it can simplify the EA processes overall for proponents if BC carries out a substituted process.

The proposed changes either align with approaches already undertaken in EAs in BC, such as considering health and socio-economic conditions in addition to environmental concerns, or are being considered as part of the Province's commitment to revitalize the EA process, such allowing for the use of traditional knowledge in EA processes.

IV KEY MESSAGES:

- BC appreciates Honourable Bronwyn Eyre's position regarding Bill C-69.
- BC has been a leader in EA reviews and carbon tax and does not have the same outstanding issues with bill C-69 that some other provinces may hold.
- BC has had success with the principle of one project, one assessment and the concept of substitution with provincial EAs.
- BC will continue to work with the federal government to collaborate on the regulatory review process and looks forward to continuing to work constructively together.

ATTACHMENT:

• Attachment 1. Biography of the Honourable Bronwyn Eyre, Saskatchewan Minister of Energy and Resources

DRAFTED BY:

Jillian Zavediuk 778-698-3980

APPROVED BY:

Chris Fleming, Dir, SIAD Ryan Forman, ED, SIAD Simon Coley, ADM, SIAD Dave Nikolejsin, DM

Date: August 2, 2018 Cliff No.: 105324 Previous Cliff: 104945

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES BRIEFING NOTE FOR INFORMATION

- I PREPARED FOR: Honourable John Horgan, Premier of British Columbia
- II ISSUE: Premier's Meeting with the Canadian Association of Petroleum Producers' Executive Policy Group (CAPP-EPG

III BACKGROUND:

The Canadian Association of Petroleum Producers (CAPP) represents more than 90 producer members in the upstream oil and natural gas industry. CAPP's purpose is to "enable the responsible growth of our industry and advocate for economic competitiveness and safe, environmentally and socially responsible performance." CAPP's member companies produce about 80 percent of Canada's natural gas and crude oil. CAPP's associate members provide a wide range of services that support the upstream crude oil and natural gas industry.

CAPP's Executive Policy Group for British Columbia (CAPP-EPG) is an executive team comprised of Vice Presidents and CEOs with operations in the Province (see current membership in Appendix 1). CAPP-EPG works on a variety of environmental and regulatory policy matters affecting the upstream industry in the Province. CAPP-EPG meets monthly in Calgary, and government and BC Oil and Gas Commission (BCOGC) staff are frequently invited to provide presentations on emerging topics.

CAPP-EPG meets annually with the Deputy Ministers from all the Natural Resource agencies, the BCOGC's Commissioner, and the Deputy Minister of Finance (collectively, "DMs") to discuss ongoing and upcoming government policies and their impact on overall industry competitiveness.

CAPP considers these meetings key for a proactive relationship with BC and has recognized on multiple occasions that this engagement is unique to our Province, allowing for positive, comprehensive dialogue, better understanding of government priorities/connections, and opportunities for collaboration.

The last CAPP-EPG/DMs meeting was held in Victoria on November 23, 2017, and covered topics ranging from carbon policy, upstream electrification incentives, LNG opportunities and royalties, to environmental assessment revitalization, species at risk legislation and professional reliance, among others.

IV DISCUSSION:

The 2018 CAPP-EPG/DMs meeting is scheduled for October 19, from 12:00 pm to 5:00 pm at the Victoria Conference Centre. The agenda is included as Appendix 2.

The Premier accepted to meet with some key representatives from CAPP (see Appendix 3 for bios) ahead of the DMs meeting.

It is expected CAPP will highlight the cumulative impact of government initiatives, policies and regulations on industry, the challenging natural gas price environment, and the need to preserve competitiveness in an increasingly complex North American market. The final investment decision by LNG Canada will be mentioned on the positive developments side, and it is expected there will be recognition to the Natural Gas Development Framework released by the Province in March 2018 to support it.

Appendix 4 includes a diagram developed by CAPP showing how the association perceives government initiatives impact their business. CAPP refers to this diagram as "the spider diagram". Most of those topics will be discussed during the CAPP-EPG/DMs meeting in detail.

The Province appreciates the efforts CAPP has made to provide feedback and support to the range of initiatives that are currently underway. The Province will continue to consult with CAPP on the development of policies and regulation and looks forward to continued opportunities for collaboration to advance mutual goals.

V KEY MESSAGES:

CAPP representatives are expected to discuss the cumulative impact of government initiatives, policies and regulations in a context of challenging economic conditions for the sector.

Government recognizes the importance of the oil and gas industry to BC's economy – a point reinforced by the attendance of a large group of Deputy Minister's for the afternoon's meeting.

Government also recognizes the importance of ensuring that activity taking place on the land base is carried out in a safe, responsible and appropriate manner and has made a strong commitment to genuine reconciliation with the province's indigenous peoples.

These outcomes and commitments do not need to be mutually exclusive with the continued success of the provinces oil and gas industry – indeed done correctly they will provide a stronger foundation for the long term success of the industry.

While the review and planning processes currently underway may involve tight timelines and some uncertainty for industry, they address important issues and ultimately will provide clarity for businesses investing in the province.

The CAPP-EPG/DMs meeting agenda was designed jointly to address the most strategic topics in detail.

APPROVED BY:

Ines Piccinino, ADM, Oil and Gas Division $\sqrt{}$ Dave Nikolejsin, DM $\sqrt{}$

Appendix 1

CAPP-EPG Membership

- Anderson, Terry, Senior Vice President and Chief Operating Officer, ARC Resources
 Ltd.
- Stadnyk, Myron, President and Chief Executive Officer, ARC Resources Ltd.
- Clapperton, Bill, VP, Regulatory, Stakeholder and Environmental Affairs, Canadian Natural Resources Limited
- Phillips, Donna, Executive Vice President, Corporate Development, Canbriam Energy Inc.
- Morrison, Geoff, Manager British Columbia, CAPP
- Brad Herald, VP Western Canada Operations, CAPP
- Bateyko, Darwin, Group Lead, Environment and Regulatory, Cenovus Energy Inc.
- Maier, Rod, Vice President, Policy, Government and Public Affairs, Chevron Canada Resources
- Hass, Darryl, Vice President, Health, Safety & Sustainable Development, ConocoPhillips Canada Resources Corp.
- Simpson, Mike, Sr. Advisor, Government and Public Policy, Devon Canada Corporation
- Dunn, Richard, VP, Government Relations, Encana Corporation
- Lye, David, Vice President, External Affairs, Encana Corporation
- Bateman, Jason, Canadian Assets Manager, Enerplus Corporation
- Brown, Dick, President & CEO, Ferus Inc.
- Pinhey, Scott, Opportunity Manager, Imperial Oil, Imperial Oil Resources Limited
- Bak, Robert, Manager, Subsurface Development B.C. Montney, Murphy Oil Company Ltd.
- Donnelly, Patrick, Director, External Engagement & Legal Counsel, Painted Pony Energy Ltd.
- Lawrence, Dennis, VP, Production & Facilities, Progress Energy Canada Ltd.

Appendix 2

Agenda for CAPP-EPG/DMs October 19th Meeting

BC DEPUTY MINISTERS/CANADIAN ASSOCIATION OF PETROLEUM PRODUCERS (CAPP) MEETING

OCTOBER 19^{TH} , 2018 - NOON TO 5:00 PM

SAANICH ROOM - VICTORIA CONFERENCE CENTRE

VICTORIA, BC

AGENDA

- A. Welcome from Dave Nikolejsin (Deputy Minister, Ministry of Energy, Mines and Petroleum Resources) and Myron Stadnyk (Chair of the BC Executive Policy Group, CAPP)
- **B.** Introductions
- C. Government presentation:
 - 1. Resource development within Clean Growth Future LEAD AGENCY: MEMPR/ENV&CC
- D. CAPP presentation: Setting the Stage
- E. Economic Value (Benefit/Cost) & Competitiveness
 - Natural Gas Development Framework implementation, Market Access-status and next steps

LEAD AGENCY: MEMPR

- 2. Royalty Programs Future of Infrastructure Programs
 LEAD AGENCY: MEMPR
- 3. Carbon Tax, Industry Clean Growth Incentive program, Offsets and new GHG targets LEAD AGENCY: ENV & CC (Climate Action), MEMPR
- 4. Liability Management LEAD AGENCY: OGC

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5. Upstream Electrification

LEAD AGENCY: MEMPR, BC Hydro

6. Reference Question and proposed regulation

LEAD AGENCY: ENV & CC, OGC

F. Indigenous Reconciliation and Cumulative Effects

 Resource development within framework of implementing UNDRIP and Draft 10 Principles

LEAD AGENCY: MIRR/Jessica W

8. EMPR's work: UNDRIP and Draft 10 Principles

LEAD: MEMPR

9. Environmental Assessment Revitalization

LEAD: EAO

10. Cumulative Effects Management Framework

LEAD: FLNRO

11. NEBC Regional Strategic Environmental Assessment (RSEA)

LEAD: FNLRO, MEMPR

12. BRFN Interim Measures

LEAD: MEMPR, OGC

G. Public Confidence, Quality of Life and Responsible Regulator

13. Review of the Agricultural Land Reserve & ALC

LEAD AGENCY: AGRI

14. Farmington, Stakeholder Advisory Committee

LEAD AGENCY: OGC, MEMPR

15. Hydraulic fracturing scientific review panel - update

LEAD AGENCY: MEMPR

16. Professional Reliance

LEAD AGENCY: ENV & CC

17. Land Use Plans

LEAD AGENCY: FLNRORD

18. Emergency Management Act (Spill preparedness) – Regulations Phase 1 & 2 LEAD AGENCY: ENV & CC, OGC

H. Environmental Protection Items

- 19. Boreal Caribou and new 'restoration' fund LEAD AGENCY: ENV/FLNRORD
- 20. Methane Emissions from Oil and Gas Regulations and Equivalency LEAD AGENCY: MEMPR / ENV & CC (Climate Action) / OGC
- 21. Wildlife Management, Habitat Conservation and BC species at risk legislation LEAD AGENCY: ENV & CC

Appendix 3

CAPP Representatives Meeting with Honourable John Horgan, Premier

Tim MacMillan

On September 30, 2014 Mr. Tim McMillan resigned from Saskatchewan politics after seven years of service to take the position of President of CAPP, effective October 1, 2014 – a position he has held since that date. Before resignation Mr. McMillan served in a number of other portfolios, including Minister Responsible for Energy and Resources.

Tim grew up on his family farm, 20 miles east of Lloydminster, where the McMillan family homesteaded more than 100 years ago.

Tim attended the University of Victoria where he received a degree in Economics. After his schooling, Tim travelled and worked abroad extensively. His travels have taken him from hiking to the Mount Everest Base Camp to diving on the Great Barrier Reef in Australia.

Tim is also a Microsoft Certified Systems Engineer and spent a year contracting as an IT professional in London, England. He then returned to his family farm to establish a business and raise his family. Prior to his election in 2007, Tim operated an oilfield service company. Tim was re-elected by his constituents in the 2011 provincial election.

Before his resignation, Tim was the Minister Responsible for Rural and Remote Health.

He and his wife Ali, have two daughters, Reilly and Gracie.

Brad Herald

Brad Herald is the Vice President, Western Canada Operations for the Canadian Association of Petroleum Producers.

- Prior to assuming this position, Brad was the Director of Western Canada Operations.
 Brad also held the positions of Manager of Alberta, Saskatchewan, British Columbia and Health & Safety for the Canadian Association of Petroleum Producers.
- Brad serves as the Chairman of the Alberta Orphan Well Association.

He has a degree in business administration from Saint Francis Xavier University in Nova Scotia.

Prior to coming to Alberta, Brad was the owner of a successful small business in Nova Scotia.

Myron M. Stadnyk

CEO, President & Director, ARC Resources Ltd.

Mr. Myron M. Stadnyk, B.Sc., P.Eng., has been an Independent Director of PrairieSky Royalty Ltd. since June 18, 2018. Mr. Stadnyk has been the Chief Executive Officer

and President of ARC Resources Ltd. since January 1, 2013 and February 1, 2009 respectively and served as its Chief Operating Officer since February 1, 2009 until January 1, 2013. Mr. Stadnyk served as Senior Vice President of ARC Energy Trust (formerly, ARC Resources Ltd) until February 2009 and Vice President of Operations and Land. He is responsible for all of ARC's operational activities.

Mr. Stadnyk has 18 years experience in all aspects of oil and gas production operations. Prior to joining ARC Resources Ltd. in 1997, Mr. Stadnyk worked with a major oil and gas company in both domestic and international operations and oil and gas facility design and construction. He has been a Non Independent Director of ARC Resources Ltd. since January 01, 2013.

Mr. Stadnyk has a B.Sc degree in Mechanical Engineering from University of Saskatchewan and is a graduate of the Harvard Business School Advanced Management program. He is a member of the Association of Professional Engineers, Geologists and Geophysicists in Alberta and the Association of Professional Engineers and Geoscientists in Saskatchewan. He is the Chair of the British Columbia Executive Policy Group. He serves as a Governor for the Canadian Association of Petroleum Producers Board of Governors. Mr. Stadnyk is also a member of the Board of Directors for STARS (Shock Trauma Air Rescue Society) Ambulance and the University of Saskatchewan Engineering Advancement Trust.

Patrick R. Ward, P. Geol.

President and Chief Executive Officer Painted Pony Energy www.paintedpony.ca

Mr. Ward, P. Geol, who has more than 31 years of experience in the oil and natural gas industry, graduated from the University of Calgary in 1978 with an Honors Degree in Geology.

Mr. Ward was Vice-President, Exploration of Innova Exploration from May 2004 to May 2006. Mr. Ward co-founded Chowade Energy Ltd. in 2003 which was merged into Innova Exploration in 2004. From 1999 to 2003 Mr. Ward was Manager, Geology & Geophysics with the NCE Resources Group and Petrofund Energy Trust, where he was a key member of the Petrofund Management team.

Mr. Ward was Vice President and Chief Operating Officer at Rockport Energy Corp. from 1998 to 1999 and from 1981 to 1997 he worked for Total Petroleum Canada, which became Rigel Oil & Gas where he was Exploration Manager for the last 7 years. Mr. Ward is a member of APEGA and AAPG, as well as a Governor of the Canadian Association of Petroleum Producers

Paul Myers

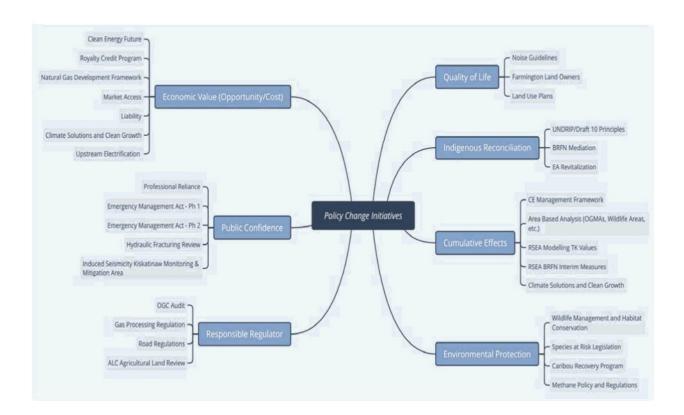
President & Chief Executive Officer, Director Cambriam Energy www.canbriam.com

Paul Myers is Canbriam's President and Chief Executive Officer and is also a member of the Board of Directors. He is a 26 year veteran of the oil and gas industry with experience in North America, Europe, and West Africa. Paul's primary focus has been in the Gulf of Mexico and the Western Canadian Sedimentary Basin.

Prior to the formation of Canbriam, Paul was President and Chief Executive Officer of Esprit Energy Trust, where he was instrumental in an operational turn-around and divestiture to Pengrowth Energy Trust in October 2006. Prior to Esprit, Paul was accountable for building a Gulf of Mexico deepwater position for PanCanadian (EnCana). Before moving to Calgary in 2000, Paul was the Vice President, Exploration for Statoil Exploration US in Houston, TX. Paul also spent 10 years in various roles with Amoco Production Company in New Orleans, LA and Houston, TX.

Paul holds a Bachelor of Science degree in Geophysics from Lehigh University, a Master of Science degree in Geology (Geophysics emphasis) from the University of Kansas, and a Master of Business Administration degree from the University of Calgary.

Appendix 4 CAPP's "Spider Diagram" on BC Government Initiatives



Cliff No. 105334 Date: October 12, 2018

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Meeting with Ratnesh Bedi, President of Pacific Oil and Gas, and Byng Giraud, Country Manager and Vice President Corporate Affairs, Woodfibre LNG Limited, regarding the Woodfibre LNG (WLNG) project

III BACKGROUND:

WLNG last met with the Minister in November of 2017 and has requested a meeting with the Minister to provide recent project updates.

WLNG is proposing a 2.1 million tonnes per annum facility that will utilize electrically driven liquefied natural gas (LNG) trains situated on privately-owned land near Squamish, BC. In November 2016, WLNG announced its project received board approval to proceed.

The WLNG Project is owned and operated by Woodfibre LNG Limited, a privately held Canadian company headquartered in Vancouver. The company is a subsidiary of Pacific Oil and Gas Limited, which is part of the Singapore-based Royal Golden Eagle group of companies.

WLNG has received environmental approvals from the BC Environmental Assessment Office (BCEAO), Canadian Environmental Assessment Agency (CEAA) and a Squamish Nation Environmental Assessment Agreement. WLNG has submitted its facilities permit to the BC Oil and Gas Commission in August 2018 with an expected decision in January 2019 and is actively working with both Fortis BC and BC Hydro on project milestones.

On August 8, 2018, the proponent announced that it had awarded a pre-construction contract to Sukwi7 Contracting Ltd., a Squamish First Nation owned company, to complete the decommissioning work of the former pulp and paper site.

WLNG is currently in negotiations with Houston based KBR Inc.for the projects engineering, procurement and construction (EPC) contract. A construction decision is expected to come once the EPC contract is signed, with construction taking two to three years.

On September 30, 2018 WLNG announced it has entered into a Heads of Agreement with China National Offshore Oil Corporation (CNOOC) for offtake. s.17,s.21 s.17,s.21

IV DISCUSSION:

In addition to providing a project update, representatives from WLNG will likely wish to discuss import duties on floating storage and a recently emerging issues resulting from a BCEAO compliance and enforcement review of the onsite decommissioning work.

Import Duties on Floating Storage Unit

Potential duties could be levied against Woodfibre LNG for their floating storage facility. Two years ago (July 2015), the Canadian Border Services Agency issued a decision to levy a 25 percent import tariff of the Douglas Channel LNG floating facility that had been proposed by AltaGas. s.13

s.13 WLNG

has submitted a case briefing on September 26, 2018 and is awaiting a decision.

BCEAO Compliance and Enforcement

On September 25, 2018, the BCEAO and CEAA conducted a site visit to determine if the proponents decommissioning work was "project construction activity" or "ongoing maintenance or upgrade to an existing facility" as defined in the Environmental Assessment Certificate (EAC).

s.13

V KEY MESSAGES:

- The Ministry will continue to engage with the federal government to see that rulings related to import duties have a minimum impact on LNG proponents and that the recently announced provincial fiscal framework is implemented.
- Ministry staff remain committed to working with the proponent on project and regulatory issues.
- The Minister may wish to inquire about WLNG Heads of Agreement with CNOOC and other offtake commitments.

s.13

DRAFTED BY:

APPROVED BY:

Suzanne Manahan Executive Lead Suzanne Manahan, Executive Lead $\sqrt{}$ Dave Nikolejsin, DM $\sqrt{}$

Appendix 2: Biography Ratnesh Bedi and Byng Giraud



MR. RATNESH BEDI – President Pacific Oil and Gas

Mr. Bedi has been the President of Pacific Oil and Gas (PO&G) since 2011. His key area of focus is PO&G's new venture to develop and construct an LNG liquefaction plant in British Columbia. On behalf of PO&G and the investor, Mr. Bedi manages financing and oversees the ongoing work for the project to ensure that the engineering team and local

staff have the necessary support to secure permits, appoint world class EPC contractors, build and commission the facilities while continuing to work and engage with First Nations and the community. Mr. Bedi also leads the oil and gas exploration and exploitation initiatives, growth and operations in the Indonesia's business in this current role.

Prior to his appointment in PO&G, Mr. Bedi was Chief Financial Officer of Asia Pacific Resources International Limited (APRIL), a world-leading pulp and paper manufacturer, from 2007 until 2010.

Mr. Bedi was previously with KPMG Indonesia as Manager of Corporate Recovery and Restructuring Division and Deloitte Advisory as Executive Director in corporate and financial advisory services. Mr. Bedi graduated with a BComm from New Delhi, India and is an associate member of the Institute of Chartered Accountants of India.



MR. BYNG GIRAUD – Country Manager and Vice President Corporate Affairs, Woodfibre LNG Limited

Mr. Giraud joined Woodfibre LNG Limited in April 2013 as the company's first North American employee. As Country Manager, Mr. Giraud is the senior representative of the company and responsible for the day-to-day

operations of Woodfibre LNG Limited. He is also currently Chairman of Ridley Terminals Inc. a Canadian government owned bulk export terminal in Prince Rupert, BC, a member of the board of the Vimy Ridge Foundation and a member of the Board of Governors of the BC Business Council. Most recently he was asked to sit on the BC Assembly of First Nations-BC Business Council "Champion's Table", a body dedicated to breaking new ground in economic reconciliation.

Mr. Giraud has been involved in innovative efforts at First Nations economic reconciliation, including the first agreements between operating mines and First Nations in BC, and the innovative Squamish Nation Environmental Assessment process.

Prior to joining Woodfibre LNG Limited, Mr. Giraud was in an executive role in Corporate Affairs for a Canadian copper/gold mining company. In the past, Mr. Giraud has served as a Vice President with both the Association for Mineral Exploration BC and the Mining Association of BC. Before that, Mr. Giraud worked with some of Canada's top public affairs agencies. He has also served on the board of directors of Geoscience BC, Canada Place Corporation, Initiatives Prince George, and a number of other organizations.

In 2012, Mr. Giraud received the Queen Elizabeth II Diamond Jubilee Medal for volunteerism.

Mr. Giraud holds a MSc. Econ. from the University of Wales at Aberystwyth and an MBA from the University of Cambridge (Jesus College).

Away from the office, Mr. Giraud volunteers as a Scouts Canada leader. On the weekends, he collects bruises playing old boys rugby.

Date: October 19, 2018 Cliff No.: 105352

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES (EMPR)

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable John Horgan, Premier of British Columbia

II ISSUE: Meeting request from Clean Energy Association of BC (CEBC) to discuss their white paper on electrification of British Columbia (BC)

III BACKGROUND:

On October 16, 2018, CEBC¹ released a white paper entitled "Electrification of British Columbia: Assessing the Economic and Environmental Benefits of Extensive Electrification in BC." Jae Mather, the Executive Director of CEBC, wishes to meet with the Premier to explain the white paper's findings.

The stated goal of the white paper is to inform the development of the Province's Clean Growth Strategy². The white paper compiles and analyzes research into the greenhouse gas (GHG) reductions that are possible through the electrification of key sectors of BC's economy to meet the Province's carbon emission reduction targets. It estimates potential emissions reduction opportunities through electrification of the natural gas and transportation sectors, as well as the built environment. The white paper argues that BC's greatest potential for GHG emission reductions is through extensive electrification of the production and distribution of liquefied natural gas (LNG)³.

The white paper draws on analysis done by several engineering consulting firms on emissions associated with the "upstream" and "downstream" natural gas sectors to argue that "as leading economies decarbonize, the future viability of BC's natural gas and LNG sectors will hinge on linking their production to the province's clean power." The white paper summarizes analysis done by the University of Victoria's Institute for Integrated Energy Systems to identify the GHG and load implications of transportation electrification; as well as a Kerr Wood Leidal study for the Climate Action Secretariat that identifies the GHG and load implications of electrifying space and water heating in the built environment.

IV DISCUSSION:

¹ CEBC is a membership organization that represents clean energy companies in the Province, as well as the suppliers, contractors and service providers to BC's clean energy sector.

² BC is working on a clean growth strategy to integrate the Province's goals for climate action, clean energy and sustainable economic growth. The strategy will be released in the fall of 2018.

³ The CEBC white paper asserts that electrification of the upstream, distribution, and downstream LNG sectors could reduce the total emissions of conventional LNG process by as much as 65 percent and reduce the emissions of the LNG Canada project by 59 percent.

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Withheld pursuant to/removed as

DRAFTED BY:

Nancy Norris, Policy Analyst 778-698-8859

APPROVED BY:

Paul Wieringa, Exec. Dir, EPB ✓ Les MacLaren, ADM, EAED ✓ Dave Nikolejsin, DM ✓

Page 41 to/à Page 42

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Date: October 24, 2018 Cliff: 105412

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines And Petroleum Resources

II ISSUE: Meeting request from the Secwepeme Nation to discuss impacts of BC Hydro infrastructure and operations within their traditional territory

III BACKGROUND:

BC Hydro (BCH) has extensive generation, transmission and distribution facilities within the Secwepemc Nation Territory (92 substations, 126 transmission lines (4,700 km), 12 generation stations, and 14 dams). In addition, BCH has a number of future and recently completed capital projects in the region including Mica Units 5 and 6, Revelstoke Unit 6, the Kamloops Substation, as well as water license renewals and Water Use Plan reviews.

On May 31, 2017, BCH and 11 of the 17 Secwepemc First Nations signed a Relationship Protocol Agreement (Protocol). The Protocol represents a start towards a new relationship based on mutual respect, trust, recognition and engagement. It is envisioned that the Protocol will put the parties on a path towards reconciliation, where the parties respect each other's perspectives and work collaboratively on issues of concern.

The purpose of the Protocol is to:

- 1. establish a common vision and objectives to guide a reconciliation framework;
- 2. understand and explore opportunities to reconcile historical impacts related to BCH facilities, infrastructure and operations in Secwepemc territory;
- 3. jointly improve engagement and review of existing BCH projects and activities in Secwepeme territory including economic opportunities;
- jointly improve engagement and review of future and proposed BCH projects and activities in Secwepeme territory, including environmental impacts and economic impacts; and
- undertake strategic initiatives to deepen the relationship and advance reconciliation between the parties.

The Protocol creates the opportunity, from a current and forward-looking basis, to seek to understand impacts related to hydroelectric facilities and explore ways to mitigate these impacts. The Protocol also makes provision for both parties to agree and approve on annual work plans and budgets.

BCH Executive met with leadership from the 11 Secwepemc communities on May 14, 2018. At this meeting the fiscal year 2019 (FY19) protocol budget (\$412,520) was approved to support the work contemplated under the Protocol. The FY19 work plan includes several different collaborative work-streams including the following items:

- communications and community engagement;
- referrals;
- procurement and economic development;
- infrastructure impacts identification and resolution; and
- employment and training.

Work has been proceeding to advance actions under each of these work-streams.

At the May 14 meeting, the Secwepemc also expressed an interest in initiating joint discussions to explore revenue sharing, equity ownership, a territory-wide cultural heritage and impacts study, and compensation for impacts to their territory. The Secwepemc leaders have expressed the view that BCH needs a mandate from the Province to negotiate broader compensation for past infringements.

The Secwepemc have also raised issues related to past infringements in discussions respecting major projects in their territory, specifically the Revelstoke 6 Project where the Environmental Assessment Office determined there were no significant effects attributable to the project. BCH committed to continuing the discussions with Secwepemc communities through the tables established by the Protocol and also committed \$200,000 in additional capacity funding to the Columbia-based Secwepemc communities to support discussions focused on the development of measures that were not addressed through the environmental assessment process. BCH has also committed \$545,000 in capacity funding to support the initial development of cultural and heritage assessment platforms and data collection.

IV DISCUSSION:

At this time, the joint BCH-Secwepemc work-stream to advance infrastructure impacts identification and resolution is in the early stages of developing a terms of reference. The scope is currently limited to identifying and mitigating ongoing impacts, but is not a forum to address historical grievances or revenue sharing.

The Ministry of Indigenous Relations and Reconciliation and the Secwepemc are in the process of developing a Letter of Understanding that would lead to the negotiation of a Comprehensive Reconciliation Agreement. These discussions are broad and include developing a new fiscal relationship as partners in the regional economy.

Current government policy does not contemplate sharing of BCH revenues in order to maintain electricity rates low and make life affordable for British Columbia citizens.

BCH has previously entered into agreements with First Nations to address and compensate for historical grievances. In the mid-1990s, BCH established a mandate with the Province (now lapsed) to correct permit deficiencies and resolve grievances related to BCH's existing facilities and operations and undertook a multi-decade negotiation processes with Tsay Keh Dene and Kwadacha First Nations in relation to the Williston Reservoir, and with St'át'imc in relation to the Bridge River system. Three settlement agreements (also known as grievance agreements) resulted.

In October 2008, Kwadacha First Nation ratified a final agreement with BCH and the Province that addresses historic damages from the creation and operation of the W.A.C. Bennett Dam and Williston Reservoir, and builds opportunities for community economic and cultural development for future generations.

In July 2009, Tsay Keh Dene First Nation voted to accept a final agreement with the Province and BCH over the development of the Williston Reservoir and W.A.C. Bennett Dam. The ratification vote triggered settlement of the litigation against BCH and the Province for the creation and operation of the dam and reservoir over 40 years ago.

In April 2011, the St'át'imc voted to accept a settlement agreement with the Province and BCH that provides mitigation, compensation and an ongoing long-term relationship to address their grievances related to the construction and operation of existing BCH facilities.

In return for these significant settlement agreements, BCH received strong certainty provisions with respect to future claims.

The Province is in the final stages of negotiating a Reconciliation Agreement with the Cheslatta Nation that includes financial compensation, and other measures to provide legal redress for the displacement of the Cheslatta from the creation of the Nechako reservoir. Currently, the Ministry of Indigenous Relations and Reconciliation (MIRR), the Ministry of Energy, Mines and Petroleum Resources, the Ministry of Forests, Lands, Natural Resource Operations, and Rural Development, and the Ktunaxa Nation are negotiating a reconciliation Memorandum of Understanding, within which historical grievances related to hydrosystem impacts play a significant part. A historical grievance working group between provincial agencies and the Ktunaxa has been in place since 2013.

The Secwepemc, Ktunaxa and Syilx/Okanagan Nations have collectively also raised the issue of historical impacts resulting from the Columbia River Treaty (CRT) with federal and provincial CRT officials. These discussions are ongoing, and may result in redress to their grievances to some extent.

More First Nations are approaching provincial agencies with requests to engage in discussions regarding historical grievances, not only resulting from hydroelectric development, but also caused by mining and oil and gas projects. MIRR is in the process of developing policy advice to ministries on a coordinated response to avoid the proliferation of one-off negotiations.

V CONCLUSION:

- The Minister should meet with Secwepemc leadership and hear what they have to say on these matters.
- The Minister should encourage the Secwepeme to pursue their discussions with BCH through the tables established by the Protocol, and explore opportunities to reconcile historical impacts related to BCH facilities, infrastructure and operations in Secwepeme territory.

- The Minister should also encourage the Secwepemc to advance their engagement with the Province towards a Comprehensive Recognition and Reconciliation Agreement that would address a broad spectrum of Secwepemc interests; as well as with Canada and BC under the Columbia River Treaty Negotiation Framework Agreement to be finalized in the near future.
- The Minister may suggest that she will be monitoring the progress of those discussions.

PREPARED BY:

Kathy Eichenberger, ED 250-953-3368

REVIEWED BY:

Les MacLaren, ADM $\sqrt{}$ Dave Nikolejsin DM $\sqrt{}$

Appendix 1: Secwepemc Member Communities; July 25, 2018 Meeting Request

Appendix 1 SECWEPEMC MEMBER COMMUNITIES

| | Communities |
|--|---|
| Shuswap Nation Tribal Council | Simpew Tk'emlups te Secwepeme Skeetchestn Adams Lake Splatsin Neskonlith Bonaparte Shuswap Whispering Pines |
| Northern Secwepemc te Qelmucw (NStQ) | The Tsq'escen' (Canim Lake) Stswecem'c/Xgat'tem (Canoe and Dog Creek) Xat'sūll (Soda & Deep Creek) T'exelc (Williams Lake a.k.a. Sugar Cane) |
| Independent | Esketemc High Bar Ts'k'waylax (Pavilion) signatory to Statime Agreement Little Shuswap |

Date: October 25, 2018 Cliff No.: 105414

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR DECISION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

- **II ISSUE:** The Ministry is seeking approval to:
 - 1. enter into a "Trusted Partner" relationship with the Natural Gas Innovation Fund (NGIF).
 - 2. join a collaborative with the NGIF, Natural Resources Canada (NRCan), Emissions Reduction Alberta (ERA), and industry representatives to advance cleantech innovation and greenhouse gas reductions in the natural gas energy system.
 - 3. participate as a Trusted Partner in a NGIF funding call announcement planned for November 2018 and seek clean tech solutions in the development and production of natural gas resources.

III BACKGROUND:

The NGIF was created by the Canadian Gas Association to support the funding of cleantech innovation in the natural gas value chain. It seeks to fill a technology development gap and invest in innovative solutions to current and emerging challenges facing Canada's natural gas energy system.

The NGIF currently has six natural gas utilities as members, including FortisBC Energy Inc. and Pacific Northern Gas Ltd in British Columbia (BC).

In October 2018, NGIF staff approached the Ministry to advise that it planned to make three major announcements in November and that it was urgently seeking the Ministry's participation in a proposed collaboration. The event, taking place in Calgary, Alberta, will announce:

- seven natural gas producers, including Shell Canada and Chevron Canada Ltd., will be joining the NGIF;
- a \$3 million funding call directed at natural gas producers, small and medium enterprises, and technology development start-ups to advance cleantech innovation;
 and
- a federal, provincial, and industry collaboration on greenhouse gas emission reductions. NGIF, together with NRCan and ERA will collaborate on the funding call with each partner under the Trusted Partner relationship.

IV DISCUSSION:

A Trusted Partner relationship with NGIF will enable the Ministry to leverage NGIF funding to advance demonstrations of cleantech innovation in the development and production of natural gas in BC.

The NGIF is opening a \$3 million call for funding applications, and intends to make up to \$1 million in non-dilutive funding available per project, representing as much as 25 percent of a project's eligible expenses. The NGIF approvals of projects under the call are expected in June 2019, with Contribution Agreements seeing funding flow to successful applicants later in 2019.

The NGIF has already agreed to collaborate on this call with NRCan and ERA. NRCan and ERA will consider co-funding successful NGIF applicants that have projects which deliver significant greenhouse gas reductions and are located in Canada and Alberta, respectively.

Establishing a Trusted Partner relationship with NGIF and joining collaboratively with NRCan and ERA would further position BC as a leader in the responsible, economical production and use of natural gas, and as a more competitive global leader in cleantech innovation across the natural gas value chain.

Under the collaboration with NGIF, the Ministry would consider co-funding successful NGIF applicants that have projects in BC and which deliver significant greenhouse gas reductions. The NGIF and the Ministry would also seek to leverage NRCan funding in support of projects in the province.

The Ministry's contribution to the funding call, proposed at \$1 million, could be accommodated either through the Innovative Clean Energy (ICE) Fund spending plan to be submitted for approval as part of Budget 2019; or, should it be advanced earlier, as part of a planned Treasury Board submission to address the Premier's direction to reinvigorate the ICE Fund.

The Trusted Partner opportunity also has potential linkages to the government's clean growth strategy and to its Liquid Natural Gas (LNG) Framework (i.e., with respect to the Ministry's Clean Infrastructure Royalty Credit Program).

V OPTIONS:

Option 1: Approve the Trusted Partner relationship with NGIF; join the collaboration with NGIF and its existing partners and industry members in a collaboration to advance cleantech innovation in the natural gas energy system, and participate in the NGIF Funding Call announcement planned for November 2018. Work with Treasury Board staff to seek ICE Fund spending approval of \$1 million in 2019/20 in support of the collaboration. (Recommended)

Pros:

- Establishes a new Trusted Partner relationship with NGIF.
- The proposed increased spending approval of \$1 million in 2019/20 will be leveraged at a minimum 2:1 in NGIF, and private sector funding, in addition federal funding, is anticipated.
- Provides an opportunity for a new partnership with the federal NRCan.
- Demonstrates provincial leadership to support clean tech innovation in the natural gas energy system to reduce greenhouse gas emissions.
- Supports the government's Clean Growth Strategy and emission reduction actions under the LNG Framework.

Cons:

- Requires additional ICE Fund expenditure of \$1 million in 2019/20.
- Lowers the expected 2019/20 ICE Fund starting account balance to \$2.5 million.

Option 2: Do not approve the Trusted Partner relationship with NGIF and associated collaborative actions.

Pros:

- Avoids the need for \$1 million in additional spending from the ICE Fund.
- Avoids the establishment of a Trusted Partner relationship with NGIF.
- Maintains the expected 2019/20 ICE Fund starting account balance to \$3.530 million.

Cons:

- Forgoes an opportunity to partner with NGIF to advance clean tech innovation in the natural gas energy system in BC.
- Forgoes an opportunity to leverage collaboration with natural gas industry companies to advance innovative solutions for greenhouse gas emissions in the sector in BC.
- Forgoes an opportunity to leverage collaboration with the federal government in support of clean growth in the province.

VI RECOMMENDATION:

Option 1: Approve the Trusted Partner relationship with NGIF, join the collaboration with NGIF and its existing partners and industry members in a collaboration to advance cleantech innovation in the natural gas energy system, and participate in the NGIF Funding Call announcement planned for November 2018. Work with Treasury Board staff to seek ICE Fund spending approval of \$1 million in 2019/20 in support of the collaboration.

| APPROVED NOT APPROVED | | |
|---|------|--|
| Honourable Michelle Mungall Minister of Energy, Mines and Petroleum Resources | Date | |

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