# MINISTRY OF NATURAL GAS DEVELOPMENT AND MINISTER RESPONSIBLE FOR HOUSING LNG TASK FORCE ESTIMATES BRIEFING NOTE 2015/16

**ISSUE:** Woodfibre LNG

# **KEY MESSAGES:**

- Woodfibre LNG is proposing to build a liquefied natural gas facility and marine terminal on the former Western Forest Products pulp mill site near Squamish. At full build-out this facility would export upwards of 2.1 million tonnes of LNG per annum.
- In January 2015, the Squamish Council denied an application by FortisBC for test drilling in the Wildlife Management Area in the Squamish estuary.
  - While FortisBC indicated that it plans to work with Squamish Council to address Council's concerns regarding this application on March 10, 2015, they filed a petition with the BC Supreme Court to grant the permit or order council to hold a new hearing.
  - On April 7, 2015, Squamish Council passed a motion to allow FortisBC to reapply for a development permit to do pipeline route testing in the Squamish Estuary.
- The sale of Western Forest Products' former pulp mill site to Woodfibre LNG was finalized in February 2015 at a purchase price of \$21.8 million.
- Woodfibre LNG intends to be one of the cleanest facilities in the world and in May 2014 it committed to using electric power for its proposed liquefaction project.
- In September 2014, the Linde Group was awarded a contract to provide engineering, procurement and construction (EPC) for Woodfibre LNG.
- On January 12, 2015, the proposed Eagle Mountain Woodfibre Gas Pipeline Project that will support the Woodfibre LNG facility had its application for a provincial environmental assessment certificate accepted by the BC Environmental Assessment Office, officially commencing the 180-day review period.
- On January 13, 2015, the BC Environmental Assessment Office initiated the 180-day Application review process for the proposed Woodfibre LNG Project.
  - Due to the high level of interest the public comment period was extended from 45 days to 60 days on February 23, 2015.

Contact: Brian Hansen Estimate Note: 32N Page 1 of 2

Cell Phone: 250- 216-1806 Date: March 3, 2014

#### **BACKGROUND:**

- Woodfibre is a subsidiary the Pacific Oil & Gas Group based in Indonesia.
- The Woodfibre LNG project is located at an existing industrial site with a deep-water harbour, with existing connections to electric power supply and natural gas supply, and is advantageously located to ship LNG to international markets.
- A letter of intent was signed between the Government of British Columbia and Woodfibre LNG in May of 2014 in which the province committed to solidify fiscal policies by November 30, 2014.
- The project has been the subject of significant public interest:
  - The Environmental Assessment Office (EAO) received 1,299 comments during the pre-application public comment period in June/July 2014.
  - Over 100 people attended an EAO-led open house in Squamish on June 18, 2014.

# **Project Table**

Proponent	Pacific Oil and Gas
Location	Squamish area (former Woodfibre pulp mill site, 7 kilometres southwest of Squamish)
Proposed Size	2.1 MTPA
Export Licence	Approved - 25 years, with annual volume of 2.1 million tonnes of LNG
Environmental Assessment	In process
Pipeline	The Eagle Mountain - Woodfibre Gas Pipeline Project, an upgrade of pipeline, owned by FortisBC, from Coquitlam to the Woodfibre site
Estimated Investment	\$1.6 billion
Jobs	Construction: approximately 600 person-years of direct employment generation are anticipated during the construction phase
	Operations: anticipated to employ approximately 100 fulltime equivalent people directly as either facility or office staff
Latest Development	On February 9, 2015, finalized the sale for the site from Western Forest Products.

Contact: Brian Hansen
Cell Phone: 250- 216-1806
Date: March 3, 2014

Estimate Note: 32N Page 2 of 2

# MINISTRY OF NATURAL GAS DEVELOPMENT AND MINISTER RESPONSIBLE FOR HOUSING LNG TASK FORCE ESTIMATES BRIEFING NOTE 2014/15

**ISSUE:** Woodfibre LNG Project Status Update

# **KEY MESSAGES:**

- On March 4, 2013, Woodfibre Natural Gas Limited (Woodfibre) announced its intention to build a small-scale LNG facility on the Western Forest Products Inc.'s former pulp mill site near Squamish, British Columbia (BC).
- In November 2013, Woodfibre LNG filed a Project Description with the Canadian Environmental Assessment Agency and the B.C. Environmental Assessment Office (EAO) to initiate the environmental assessment process.
- The project will undergo a substituted environmental assessment (EA) process. Substitution allows the project to be reviewed through a single EA window the provincial one while each agency reaches its own independent decision.
- In December 2013, the project was issued an export license from the National Energy Board for 2.1 million tonnes per annum for 25 years.
- The Woodfibre project will use existing natural gas pipeline capacity from FortisBC and will connect to established infrastructure via the Eagle Mountain – Woodfibre Gas Pipeline Project.
- Woodfibre is currently assessing whether the project will incorporate gas turbines or electric motors for the refrigerant compressor drives.

#### BACKGROUND:

- Woodfibre is a subsidiary the Pacific Oil & Gas Group based in Indonesia.
- The Woodfibre LNG project is located at an existing industrial site with a deep-water harbour, with existing connections to electric power supply and natural gas supply, and is advantageously located to ship LNG to international markets.
- The estimated capital cost of the project is in excess of \$1.6 billion.
- Approximately 600 person-years of direct employment generation are anticipated during the construction phase and it is expected that 2,500 person-years of employment will be created during the operational phase of the project. This estimate is inclusive of project employees, contracted employment, indirect employment and induced employment.

Contact: Brian Hansen Estimate Note: 33J Page 1 of 2

Cell Phone: 250- 216-1806 Date: March 21, 2014

- The preferred configuration for the Woodfibre LNG gas pre-treatment, processing and LNG production facility will comprise a permanently moored Floating Liquefaction (FLNG) unit for receiving and processing natural gas into LNG.
- The alternative configuration will comprise a land-based modular unit for receiving and processing natural gas into LNG.
- Both the preferred and the alternative proposed configurations will use a Single Mixed Refrigerant (SMR) liquefaction process technology as a well-proven process available from multiple technology providers.
- The intent is to have two trains operating at 100% of their capacity to achieve the desired LNG production capacity of up to 2.1 million tonnes per annum.

Contact: Brian Hansen Estimate Note: 33J Cell Phone: 250- 216-1806

March 21, 2014

Date:

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# **Meeting: Pacific Oil and Gas**

Who: Pacific Oil and Gas

Where: tbc

When: Friday, April 1, 2016 - 11:00am

## **PARTICIPANTS:**

Ratnesh Bedi – President of Pacific Oil and Gas and CEO of Woodfibre

#### **KEY MESSAGES:**

- BC acknowledges Pacific Oil and Gas's further investment and strategic partnership with BC and the Woodfibre LNG Project initiative.
- Congratulate Woodfibre LNG on receiving their federal environmental assessment approval on March 18, 2016 and the recent agreement with KBR to a multi-phased contract for the Front-End Engineering and Design of their facility.
- We are pleased with discussions currently underway on the Woodfibre LNG economic model, and appreciate the level of disclosure, and believe we should get to a common understanding as our collaborative work continues.
- s.21
- s.21

#### **BACKGROUND:**

#### **Company Overview**

- Pacific Oil and Gas Limited is a part of the Singapore-based Royal Golden Eagle group of companies whose assets are said to exceed US\$15 billion and is owned by Sukanto Tanoto.
- Pacific Oil and Gas is an independent energy resources development company that develops, owns
  and operates projects throughout the entire energy supply chain. Its exploration and production
  activities are currently concentrated in Indonesia with other activities further down the value chain
  located in other parts of the world.

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- In China, Pacific Oil and Gas owns and operates an LNG receiving terminal as well as a combined cycle gas turbine power plant. In addition it is currently developing other gas-fired power plants in China.
- In Canada, Pacific Oil and Gas is proposing to build and operate the Woodfibre LNG facility.

# LNG interest in BC - Proposed Project: Woodfibre LNG

- The Project consists of an LNG export facility on the former Woodfibre Pulp and Paper Mill site, located in the District of Squamish, approximately 7 km west-southwest of Squamish. The Project would include up to two liquefaction trains, with a total capacity of 2.4 million tonnes of LNG per annum at full build out; floating storage and offloading unit (FSO), including mooring and marine terminal for carriers, consisting of two converted LNG carriers; condensate storage tank; seawater cooling system; wastewater treatment facilities; and flare systems.
- The proposed Project, including the FSO, is in the asserted traditional territory of Squamish Nation.
  The shipping route is in the asserted traditional territories of Squamish Nation, Tsleil-Waututh
  Nation, Musqueam Nation, Cowichan Tribes First Nation, Halalt First Nation, Lake Cowichan First
  Nation, Lyackson First Nation, Penelakut First Nation, and Stz'uminus First Nation. Members of
  Métis Nation BC also reside in the area.
- Natural gas would be supplied to the Project by the Eagle Mountain-Woodfibre Gas Pipeline Project, owned and operated by FortisBC Energy Vancouver Island Inc, which is currently undergoing a provincial EA concurrently with the proposed Project.
- The Project entered the provincial environmental assessment process on November 27, 2013. On
  February 19, 2014 the environmental assessment process was approved for a "substituted
  environmental assessment" under the Canadian Environmental Assessment Act. The substituted
  environmental assessment allows projects to be reviewed through a single process the provincial
  one while each agency reaches its own independent decision.
  - On October 26, 2015, the Province of British Columbia issued an Environmental Assessment Certificate for the Woodfibre LNG facility.
  - On March 18, 2016, the federal Minister of Environment and Climate Change announced that the Woodfibre LNG Project is not likely to cause significant adverse environmental effects and issued and Environmental Assessment Decision Statement.
- The Proponent estimates the Project will have an expected capital cost of \$1.4 to \$1.8 billion. Total construction costs are estimated at \$619 million, of which 55% is expected to be spent in BC.
- During operations it is estimated that \$540 million would be spent annually in BC.
- The Proponent and Squamish Nation entered into an agreement early in the EA that set out a separate process between the parties to discuss the potential effects of the Project on the asserted Squamish Nation Aboriginal Rights and Title. On October 14, 2015 Squamish Nation Council voted to approve an Environmental Assessment Agreement for the proposed Woodfibre LNG facility project.

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Attachment:

Appendix: Biography Ratnesh Bedi

Appendix I: Biography Ratnesh Bedi



RATNESH BEDI\_- President of Pacific Oil and Gas and CEO of Woodfibre

A Chartered Accountant from the Institute of Chartered Accountants of India, Ratnesh Bedi started his career in the construction and property sector in India and was the Deputy General Manager (Finance) with Punj Lloyd Ltd before he moved to Indonesia in 1998. He joined KPMG (Indonesia) and later assumed a Senior Manager role and went on to become the Executive Director Advisor in

Deloitte Advisory (Indonesia).

In 2003, Ratnesh joined Pacific Oil & Gas, one of the business groups in the RGE Group, as the Finance Director. His areas of expertise, with extensive exposure in restructuring and financing, particularly in the China and Indonesian markets, covers project development and financing, cash flow management and budgeting, and establishment of internal controls, systems and procedures. In 2007, he was assigned to APRIL, RGE Group's paper and pulp business group, as the Chief Financial Officer.

Mr. Bedi has been the President of Pacific Oil & Gas (PO & G) since 2011. The key focus for Ratnesh is PO & G's new venture to develop and construct an LNG liquefaction plant in Squamish near Vancouver, Canada. His role, on behalf of PO&G and the investor, is to oversee the work performed by the LNG project teams and to ensure the appropriate support is provided to them for securing necessary permits; appointing competent design and EPC contractors to design, build and commission the facilities; engaging with First Nations; establishing strong community relationships; networking with government authorities for statutory and commercial approvals; and securing necessary financing.

Ratnesh also leads the oil & gas exploration and exploitation initiatives, growth and operations in the Indonesia's business in this current role

# MINISTRY OF NATURAL GAS DEVELOPMENT

#### **BRIEFING NOTE FOR INFORMATION**

I PREPARED FOR: Honourable Christy Clark, Premier

I ISSUE: Meeting with Mr. Barry V. Perry, President of Fortis Inc. and Mr. Mike Mulcahy, President and Chief Executive Officer of FortisBC Inc. and FortisBC Energy Inc.

#### II BACKGROUND

# **Expansion of the Tilbury Facility**

- In 2014, FortisBC began an expansion of the Tilbury LNG facility; the company expects the expanded facility to be operational by late 2016.
- In August 2014, Hawaiian Electric signed a conditional deal with FortisBC to deliver
   0.8 million tonnes per annum of LNG for up to 15 years by 2019. The deal with Hawaiian Electric could trigger a further \$400 million expansion at Fortis's plant.
- FortisBC is proposing the construction of a new 230 kV power line connecting Tilbury to BC Hydro's Arnott substation in Delta that would serve the possible expansion.
- BC Ferries signed a 10-year contract with FortisBC in February 2015 to supply up to 300,000 gigajoules of LNG per year for three ferries currently under construction.
- In May 2015, WesPac Marine received an export license from the National Energy Board to
  export up to 3 million tonnes per annum of LNG. WesPac's proposed jetty will be a berthing
  site for carriers to receive LNG from FortisBC's Tilbury Plant.

# Woodfibre LNG and Eagle Mountain - Woodfibre Gas Pipeline (FortisBC)

- Woodfibre LNG Ltd. is proposing to construct a small-scale LNG processing and export facility near Squamish. The Project will use existing natural gas pipeline capacity and a new looped gas pipeline: FortisBC's Eagle Mountain – Woodfibre Gas Pipeline Project.
- On June 30, 2015, the Environmental Assessment Office suspended the application review
  period at day 169, for the proposed Pipeline Project. FortisBC requested the suspension in
  order to allow additional time to complete a review of Squamish Nation Council's conditions.
- On October 14, 2015, Squamish Nation Council voted to approve an Environmental Assessment Agreement for the proposed Woodfibre LNG Facility Project. The Agreement does not include the FortisBC's Eagle Mountain – Woodfibre Gas Pipeline Project.
- On October 26, 2015, the province issued Woodfibre LNG an environmental assessment certificate (EAC) with 25 conditions.

# Proposed Project: Mitsui and FortisBC (Confidential)

- FortisBC and Mitsui entered in a Memorandum of Understanding in June 2014 for a joint feasibility study of a new LNG project in the Lower Mainland for 3-5 million tonnes per annum of LNG.
- s.21
- The Ministry of Natural Gas Development has been informed that NextEra Energy, who owns
  Florida Power and Light and is in the process of acquiring Hawaii Electric, has expressed
  interest in partnering on the project.

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 The mid-scale LNG project would utilize capacity within the existing gas pipeline and an additional 10 km of new pipeline to fulfill the required amount of feedstock.

 The facility would be located on Tsawwassen First Nation land and would utilize the Delta Port owned by Port Metro Vancouver.

## III DISCUSSION:

# Woodfibre Gas Pipeline (FortisBC) Addenda

- On September 11, 2015, FortisBC submitted two Addenda to the Environmental Assessment
  Office to supplement its application for an EAC. The Addendum 2 and Addendum 3 include
  alternatives for its proposed pipeline route and compressor station location in response to
  comments received from the public, Aboriginal Groups and the working group.
- A public comment period on the two Addenda was open from September 24 to October 15, 2015 and an Open House was held on October 7, 2015 in Squamish. The public has requested an extension to the public comment period on the Addenda. The Environmental Assessment Office is not considering an extension.
- FortisBC has stated that they would like a decision by the end of 2015. The Environmental Assessment Office anticipates a referral in mid-November 2015.

# **Expansion of the Tilbury Facility**

- s.21
- FortisBC has stated it is committed to ensure expansion provides direct local benefits to Delta, other local communities and First Nations. They recently provided a \$75,000 grant to Aboriginal Skills 3G:BC for a new eight-week pre-apprenticeship training pilot program for First Nations, which includes training relevant to the LNG industry.
- The essential civil construction site services are being provided by the Tsawwassen First
  Nation Construction / Matcon Civil Joint Venture (TMJV) which have approximately 95 fulltime staff on the project. As well five engineering firms from different parts of British
  Columbia have over 40 professionals currently providing engineering-related services.

#### IV CONCLUSION:

- Community views on the Woodfibre LNG project remain very mixed which is also reflected by the fact that the Council is split between pro-development and anti-development factions.
- The Province intends to continue to work closely with residents, municipalities and proponents as we work towards building the nascent LNG industry in British Columbia.
- FortisBC had a large presence at this year's LNG in BC Conference. They were platinum sponsors, and provided funding travel for students to attend the GameChanger Youth Expo.
- Doug Stout, Vice President Market Development and External Relations, FortisBC, participated on a panel discussion: LNG Facilities – Drivers for Change.

Attachments: 1. Biographies for Barry V. Perry and Mike Mulcahy

2. Overview Eagle Mountain-Woodfibre Gas Pipeline Project and Tilbury Project

REVIEWED BY:

APPROVED BY:

Brian Hansen, ADM/

Ines Piccinino, A/DM ✓

# Attachment 1: Biographies for Barry Perry and Mike Mulcahy



Barry V. Perry

Mr. Perry is the President of Fortis Inc. Prior to this; he held the position of Vice President, Finance and Chief Financial Officer of Fortis Inc. since 2004 and preceding that, of Newfoundland Power Inc. He serves on the boards of several Fortis companies.



Michael Mulcahy

Mr. Mulcahy is the President and CEO of FortisBC Inc. and FortisBC Energy Inc. He began his career with the Fortis group of companies with Maritime Electric in 1993. Mr. Mulcahy sits on the board of the Canadian Electricity Association, the Executive Council of the Western Energy Institute and is Vice Chair of the Canadian Gas Association. He also sits on the Board of Directors for Fortis Alberta.

# Attachment 2: Eagle Mountain - Woodfibre Gas Pipeline Project

Natural gas will be distributed to the facility from Western Canadian market hubs through an expansion of the existing gas transmission system being completed by Fortis BC. Fortis BC's expansion project (called Eagle Mountain – Woodfibre Pipeline Expansion Project) includes the construction of a 52 km long natural gas pipeline loop of its existing facilities from the area north of the Coquitlam watershed in Metro Vancouver to the facility.

# Pipeline Summary Table

Project Name:	Eagle Mountain - Woodfibre Gas Pipeline Project
Location:	Coquitlam to Woodfibre facility
Partners:	FortisBC Energy (Vancouver Island (FEVI)
Project Status:	
Plant Type / Operation:	Looping project of current FEVI pipe
Distance:	Approximately 47 km
Diameter:	609.6 mm (24 inch)
Connections:	Connection to Spectra Energy's existing transmission pipeline
Related LNG Facility:	Woodfibre LNG
Capacity:	228 million standard cubic feet per day (MMscfd)
Compressors:	Installation of one new compressor station (Squamish) and additions to two existing compressor stations (Eagle Mountain and Port Mellon).
CAPEX Estimate:	\$520 million (of which 81% will be spent in Canada) over 3 year (2014-2017) period
OPEX Estimate:	\$154 million (2014 dollars) over 50 year period
Jobs Estimate:	During construction it is estimated that the project will generate 3,843 person years of full-time employment with 1,997 FTE in BC. This translates into roughly 600 jobs.
	During operations approximately 1,232 person years of FTE of which 1,001 will be generated in BC. This translates into roughly 20 positions.
Environmental	January 2015 submitted application for an Environmental
Assessment:	Assessment certificate with BC EAO.

# **Attachment 2: Tilbury LNG Project Overview**

Project Name:	Tilbury LNG
Location:	Delta
Project Co-ordinates:	49°8'30"N, 123°02'14"W
Partners:	FortisBC (Domestic) / WesPac Midstream LLC (Export)
Project Status:	Operational / Expansion
Plant Type / Operation:	Expansion
Development Concept:	
Output Capacity:	0.4 MTPA (Domestic) / 3 MTPA (Export)
Feedstock Gas:	WCSB
Related Pipeline:	Spectra Pipeline
Storage:	28,000 m <sup>3</sup>
CAPEX Estimate:	\$400 million
Jobs Estimate:	150 (construction)
	Wespac LNG: Approximately 131.5 person-years employment and estimated 19 FTE's during operations
FID Date:	n/a
Announced Start Date:	Currently Operating / Exports could commence as early as 2016
LNG Output Sales:	
Export Licence:	25 years license issued for 3 MTPA
Environmental	The volume for this project falls below the threshold required for ar
Assessment:	environmental assessment.

Date: October 16, 2014 Cliff No.: 86982

# MINISTRY OF NATURAL GAS DEVELOPMENT

#### BRIEFING NOTE FOR INFORMATION

I. PREPARED FOR: Honourable Rich Coleman, Minister of Natural Gas Development

II. ISSUE: Minister Coleman is meeting with Chief Gibby Jacob, Executive Operating Officer; Chief Ian Campbell, Cultural Ambassador and Negotiator; and Aaron Bruce, Ratcliff & Company, regarding difficulties the Squamish Nation is having with the Environmental Assessment Office with respect to the Woodfibre LNG project.

## III. BACKGROUND:

- The Squamish Nation has over 3,600 members, 60 percent of whom live on-reserves in Vancouver, North Vancouver, West Vancouver and Squamish. The Squamish Nation has a vibrant economy. The Squamish Nation's sources of revenue are taxation, leases and Squamish Nation-owned businesses, such as marinas, gas stations and a forestry company. The Squamish Nation is in the third stage of its treaty negotiation process.
- The Woodfibre LNG Project is a proposed small-scale liquefied natural gas (LNG)
  processing and export facility, located approximately seven kilometres southwest of
  Squamish, British Columbia. The Project would be located on an existing industrial site,
  the former Woodfibre pulp mill, which is well suited for conversion to a LNG facility.
  The Province has a duty to consult with the Squamish Nation on this project.
- The proposed Woodfibre LNG Project is a federally substituted project and the Province must meet consultation processes for both provincial and federal decisions

# IV. DISCUSSSION:

- Woodfibre LNG (Proponent) notified the Environmental Assessment Office (EAO) that
  they had signed an agreement with Squamish Nation to engage in an 'alternative process'
  to the Environmental Assessment (EA) process and that they would not be able to
  provide the information necessary for the EA process. This agreement is a result of the
  Squamish Nation not having confidence in the EA process.
- The goal of the alternative process is for the Squamish Nation to conduct the assessment
  with the Proponent directly and make a decision at the end of the process on whether to
  support the project, at which time they would notify EAO.
- In order to adjust, EAO developed an approach with the Canadian Environmental Assessment Agency (CEAA) and Justice and Attorney General's office to accommodate the agreement, minimize risks on the EA process (including the substitution aspects) and allow timelines to proceed as planned.
- EAO's approach would remove certain requirements for consultation with the Squamish Nation from the Proponent, while identifying and attaining the necessary information to meet provincial Crown Duty to Consult with First Nations and CEAA requirements.

Date: October 16, 2014 Cliff No.: 86982

- The Executive Director under the Environmental Assessment Act requires the following
  information in advance of the referral of the projects to the Ministers to support a
  decision with confidence that the Crown's duty to consult has been met;
  - O The potentially affected Aboriginal Interests raised by Squamish Nation during the environmental assessment and measures to avoid or mitigate such potential adverse effects and/or to otherwise manage the concerns of Squamish Nation, as appropriate.
- While EAO believes the approach to be as streamlined as possible to allow the Proponent and the Squamish Nation time to work within their process, the Squamish Nation and Proponent still have concerns.
- The Squamish Nation has agreed to participate on EAO's working group and will provide technical review comments directly to EAO; however, the Squamish Nation has stated that they will not engage in consultation with the Province regarding their Aboriginal Interests.
- The EAO will continue to attempt to consult the Squamish Nation directly to have a complete record of consultation, even though they do not expect the Squamish Nation to engage
- EAO has communicated to the Proponent in writing that the approach they have chosen
  to take by signing the agreement with the Squamish Nation, presents potential risks to the
  EA timelines and decisions (federal and provincial).
  - CEAA has expressed strong concerns about the risk to a federal decision if sufficient information is not provided
  - If Proponent does not get an agreement with the Squamish Nation at the end of the process to support an EA decision, there will likely be project delays
- Efforts to find a solution continue with the Proponent and the Squamish Nation. Currently, EA timelines are not affected by this issue.

# V. CONCLUSION - SUGGESTED RESPONSE:

- The Minister understands that EAO is continuing in efforts to work with the Squamish Nation and the Proponent to find an appropriate resolution and that EAO continues to meet timelines for the process.
- The Minister understands that the Associate Deputy Minister of EAO (Doug Caul) has spoken with Chief Jacobs about this issue and will make himself available for follow up discussions if necessary.

REV	EWED	BY:
Brian	Hansen,	ADM

APPROVED BY: Steve Carr, DM ✓

LNG in BC Conference — October 14-16, 2015

# **Meeting: FortisBC**

Who: FortisBC, to discuss the status of their major projects in British Columbia.

Where: Room 101

When: 1:45pm -2:15pm Thursday October 15, 2015

#### **PARTICIPANTS:**

1. Michael Mulcahy, Chief Executive Officer, FortisBC

# **KEY MESSAGES:**

- Thank Mr. Mulcahy and FortisBC for their platinum sponsorship, and for funding travel for students to attend the GameChanger Youth Expo at this year's LNG in BC Conference.
- Doug Stout, Vice President Market Development and External Relations, FortisBC, is participating on a panel discussion at the conference: LNG Facilities – Drivers for Change.
- The Province Intends to continue to work closely with proponents such as FortisBC, residents, and municipalities as we work towards building the nascent LNG industry in British Columbia.

#### **BACKGROUND:** LNG interest in BC

# **Expansion of the Tilbury Facility**

- The Tilbury LNG facility, located in Delta BC produces LNG for transport and industrial sectors in BC and a power utility in the Yukon.
- In 2014, FortisBC began an expansion of the Tilbury LNG facility; the company expects the
  expanded facility to be operational by late 2016.
- In August 2014, Hawaiian Electric signed a conditional deal with FortisBC to deliver by 2019
   0.8 million tonnes per annum of LNG for up to 15 years. The deal with Hawaiian Electric could trigger a further \$400 million expansion at Fortis's plant.
- BC Ferries signed a 10-year contract with FortisBC in February 2015 to supply LNG for three ferries currently under construction. Fortis BC will supply up to 300,000 gigajoules of LNG per year.
- In May 2015, WesPac Marine received an export license from the National Energy Board to export up to 3 million tonnes per annum of LNG. WesPac's proposed jetty will be a berthing site for carriers to receive LNG from FortisBC's Tilbury Plant for transport.
- s.21
- FortisBC has stated it is committed to ensure expansion provides direct local benefits to Delta, other local communities and First Nations. They recently provided a \$75,000 grant to Aboriginal Skills 3G:BC for a new eight-week pre-apprenticeship training pilot program for First Nations, which includes training relevant to the LNG industry.



- The Tilbury expansion with WesPac LNG could lead to about 150 jobs during construction and 19 full-time employees during operation.
- s.21

# Woodfibre LNG and Eagle Mountain - Woodfibre Gas Pipeline (FortisBC)

- Woodfibre LNG Ltd. is proposing to construct a small-scale LNG processing and export facility near Squamish. The Project will use existing natural gas pipeline capacity and a new looped gas pipeline: FortisBC's Eagle Mountain – Woodfibre Gas Pipeline Project.
- As of June 30, 2015, the EAO has suspended the application review period at day 169, for the proposed Eagle Mountain-Woodfibre Gas pipeline to Squamish. FortisBC had requested the suspension in order to allow additional time to complete a review of the Squamish Nation Council's conditions.
- On September 11, 2015, FortisBC submitted two Addenda to the EAO to supplement its
  application for an EAC. The Addendum 2 and Addendum 3 include alternatives for its
  proposed pipeline route and compressor station location in response to comments received
  from the public, Aboriginal Groups and the working group.
- A public comment period to provide comments on the two Addenda is open from September
   24 to October 15, 2015. An Open House will be held on October 7, 2015 in Squamish.
- FortisBC has stated to the EAO that they would like a decision by the end of 2015. The EAO
  has developed a workplan with the Proponent to address the challenges of the timeline,
  since additional consultation and analysis will be required prior to the referral.

## Proposed Project: Mitsui and FortisBC (Confidential)

- FortisBC and Mitsui entered into an MOU in June 2014 for the joint feasibility study of a new (3-5 MTPA) LNG project in the Lower Mainland.
- s.21
- The mid-scale LNG project would be to utilize capacity within the existing gas pipeline. To
  provide the facility with the required feedstock would require approximately 10 km of new
  pipeline.
- The facility would be located on Tsawwassen First Nation land and would utilize the Delta Port owned by PMV.

#### **Attachments:**

Appendix I Transmission Upgrade Projects

Appendix II Biography Mr. Michael Mulcahy, Chief Executive Officer



# Appendix I: Transmission Upgrade Projects

# Coastal Transmission System (CTS) Upgrades

- The CTS is the sole source of supply to the lower Mainland, serving Mission/Abbotsford and communities west, including the Metro the Vancouver distribution system as well as the Vancouver Island gas pipeline system.
- All of the upgrades will occur within utility corridors in Surrey and Coquitlam. These system
  improvements will increase reliability for customers during times of peak demand or when
  maintenance work is required.
- Throughout the remainder of 2015 and early 2016, FortisBC continues to plan and complete
  engineering studies, as well as consult with key stakeholders and First Nations on the required
  work.
- Construction is expected to start in the spring of 2017 and be completed by winter of 2017.
- Part of the CTS will be looped for the Woodfibre Gas Pipeline (FortisBC)

# Lower Mainland Intermediate Pressure System Upgrades

- The Lower Mainland Intermediate Pressure System Upgrades (LMIPSU) project involves two components:
  - Replacing approximately 20 kilometres of intermediate pressure gas line between Coquitlam Station located near the corner of Como Lake Road and Mariner Way, and a station at East Second Avenue and Woodland Drive in Vancouver. The line must be replaced because it is nearing the end of its useful life.
  - Replacing approximately 300 metres of intermediate pressure gas line in south Vancouver along East Kent Avenue to increase seismic stability.
- The project is currently being reviewed by the BC Utilities Commission (BCUC). A decision is expected in early October. If the project is approved, construction would start in spring 2018.
- Currently, the project team is proceeding with engineering studies.



# Attachment: Biography Mr. Michael Mulcahy, Chief Executive Officer



Mr. Michael A. Mulcahy has been Chief Executive Officer and President of FortisBC Energy Inc and FortisBC Inc since August 1, 2014. Mr. Mulcahy joined the Fortis group of companies in 1993. He began with Maritime Electric and has also held executive positions at Fortis Properties; Newfoundland Power and FortisBC. Most recently at FortisBC, he was Executive Vice President of Human Resources, Customer and Corporate Services. He is a former Chair of the Customer Council of the Canadian Electricity Association. Mr. Mulcahy has been an Executive Vice President of Human Resources at Terasen Inc., since November 2011. During his tenure at Fortis Properties, Mr. Mulcahy played a key role in the growth and expansion of the hospitality division in his role as Vice-President of Hospitality Services. Mr. Mulcahy holds a Bachelor of Commerce and is a Certified Human Resources Professional (CHRP).

## MINISTRY OF NATURAL GAS DEVELOPMENT

#### BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Christy Clark, Premier

I ISSUE: Meeting with Mr. Barry V. Perry, President of Fortis Inc. and Mr. Mike Mulcahy, President and Chief Executive Officer of FortisBC Inc. and FortisBC Energy Inc.

## II BACKGROUND

# **Expansion of the Tilbury Facility**

- In 2014, FortisBC began an expansion of the Tilbury LNG facility; the company expects the expanded facility to be operational by late 2016.
- In August 2014, Hawaiian Electric signed a conditional deal with FortisBC to deliver 0.8
  million tonnes per annum of LNG for up to 15 years by 2019. The deal with Hawaiian Electric
  could trigger a further \$400 million expansion at Fortis's plant.
- FortisBC is proposing the construction of a new 230 kV power line connecting Tilbury to BC Hydro's Arnott substation in Delta that would serve the possible expansion.
- BC Ferries signed a 10-year contract with FortisBC in February 2015 to supply up to 300,000 gigajoules of LNG per year for three ferries currently under construction.
- In May 2015, WesPac Marine received an export license from the National Energy Board to
  export up to 3 million tonnes per annum of LNG. WesPac's proposed jetty will be a berthing
  site for carriers to receive LNG from FortisBC's Tilbury Plant.

# Woodfibre LNG and Eagle Mountain - Woodfibre Gas Pipeline (FortisBC)

- Woodfibre LNG Ltd. is proposing to construct a small-scale LNG processing and export facility near Squamish. The Project will use existing natural gas pipeline capacity and a new looped gas pipeline: FortisBC's Eagle Mountain – Woodfibre Gas Pipeline Project.
- On June 30, 2015, the Environmental Assessment Office suspended the application review period at day 169, for the proposed Pipeline Project. FortisBC requested the suspension in order to allow additional time to complete a review of Squamish Nation Council's conditions.
- On October 14, 2015, Squamish Nation Council voted to approve an Environmental Assessment Agreement for the proposed Woodfibre LNG Facility Project. The Agreement does not include the FortisBC's Eagle Mountain – Woodfibre Gas Pipeline Project.
- On October 26, 2015, the province issued Woodfibre LNG an environmental assessment certificate (EAC) with 25 conditions.

# Proposed Project: Mitsui and FortisBC (Confidential)

 FortisBC and Mitsui entered in a Memorandum of Understanding in June 2014 for a joint feasibility study of a new LNG project in the Lower Mainland for 3-5 million tonnes per annum of LNG.

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 The mid-scale LNG project would utilize capacity within the existing gas pipeline and an additional 10 km of new pipeline to fulfill the required amount of feedstock.

 The facility would be located on Tsawwassen First Nation land and would utilize the Delta Port owned by Port Metro Vancouver.

## III DISCUSSION:

# Woodfibre Gas Pipeline (FortisBC) Addenda

- On September 11, 2015, FortisBC submitted two Addenda to the Environmental Assessment
  Office to supplement its application for an EAC. The Addendum 2 and Addendum 3 include
  alternatives for its proposed pipeline route and compressor station location in response to
  comments received from the public, Aboriginal Groups and the working group.
- A public comment period on the two Addenda was open from September 24 to
  October 15, 2015 and an Open House was held on October 7, 2015 in Squamish. The public
  has requested an extension to the public comment period on the Addenda. The Environmental
  Assessment Office is not considering an extension.
- FortisBC has stated that they would like a decision by the end of 2015. The Environmental Assessment Office anticipates a referral in mid-November 2015.

## **Expansion of the Tilbury Facility**

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- FortisBC has stated it is committed to ensure expansion provides direct local benefits to Delta, other local communities and First Nations. They recently provided a \$75,000 grant to Aboriginal Skills 3G:BC for a new eight-week pre-apprenticeship training pilot program for First Nations, which includes training relevant to the LNG industry.
- The essential civil construction site services are being provided by the Tsawwassen First Nation Construction / Matcon Civil Joint Venture (TMJV) which have approximately
   95 full-time staff on the project. As well five engineering firms from different parts of British Columbia have over 40 professionals currently providing engineering-related services.

#### IV CONCLUSION:

- Community views on the Woodfibre LNG project remain very mixed which is also reflected by the fact that the Council is split between pro-development and anti-development factions.
- The Province intends to continue to work closely with residents, municipalities and proponents
  as we work towards building the nascent LNG industry in British Columbia.
- FortisBC had a large presence at this year's LNG in BC Conference. They were platinum sponsors, and provided funding travel for students to attend the GameChanger Youth Expo.
- Doug Stout, Vice President Market Development and External Relations, FortisBC, participated on a panel discussion: LNG Facilities – Drivers for Change.

Attachments: 1. Biographies for Barry V. Perry and Mike Mulcahy

2. Overview Eagle Mountain-Woodfibre Gas Pipeline Project and Tilbury Project

**REVIEWED BY:** 

APPROVED BY:

Brian Hansen, ADM/

Ines Piccinino, A/DM ✓

# Attachment 1: Biographies for Barry Perry and Mike Mulcahy



Barry V. Perry
Mr. Perry is the President of Fortis Inc. Prior to this; he held the position of Vice
President, Finance and Chief Financial Officer of Fortis Inc. since 2004 and
preceding that, of Newfoundland Power Inc. He serves on the boards of several
Fortis companies.



Michael Mulcahy

Mr. Mulcahy is the President and CEO of FortisBC Inc. and FortisBC Energy Inc. He began his career with the Fortis group of companies with Maritime Electric in 1993. Mr. Mulcahy sits on the board of the Canadian Electricity Association, the Executive Council of the Western Energy Institute and is Vice Chair of the Canadian Gas Association. He also sits on the Board of Directors for Fortis Alberta.

# Attachment 2: Eagle Mountain - Woodfibre Gas Pipeline Project

Natural gas will be distributed to the facility from Western Canadian market hubs through an expansion of the existing gas transmission system being completed by Fortis BC. Fortis BC's expansion project (called Eagle Mountain – Woodfibre Pipeline Expansion Project) includes the construction of a 52 km long natural gas pipeline loop of its existing facilities from the area north of the Coquitlam watershed in Metro Vancouver to the facility.

# Pipeline Summary Table

Project Name:	Eagle Mountain - Woodfibre Gas Pipeline Project
Location:	Coquitlam to Woodfibre facility
Partners:	FortisBC Energy (Vancouver Island (FEVI)
Project Status:	
Plant Type / Operation:	Looping project of current FEVI pipe
Distance:	Approximately 47 km
Diameter:	609.6 mm (24 inch)
Connections:	Connection to Spectra Energy's existing transmission pipeline
Related LNG Facility:	Woodfibre LNG
Capacity:	228 million standard cubic feet per day (MMscfd)
Compressors:	Installation of one new compressor station (Squamish) and
•	additions to two existing compressor stations (Eagle Mountain and
	Port Mellon).
CAPEX Estimate:	\$520 million (of which 81% will be spent in Canada) over 3 year
	(2014-2017) period
OPEX Estimate:	\$154 million (2014 dollars) over 50 year period
Jobs Estimate:	During construction it is estimated that the project will generate
	3,843 person years of full-time employment with 1,997 FTE in BC
	This translates into roughly 600 jobs.
	During operations approximately 1,232 person years of FTE of
	which 1,001 will be generated in BC. This translates into roughly
	20 positions.
Environmental	January 2015 submitted application for an Environmental
Assessment:	Assessment certificate with BC EAO.

# **Attachment 2: Tilbury LNG Project Overview**

Project Name:	Tilbury LNG
Location:	Delta
Project Co-ordinates:	49°8'30"N, 123°02'14"W
Partners:	FortisBC (Domestic) / WesPac Midstream LLC (Export)
Project Status:	Operational / Expansion
Plant Type / Operation:	Expansion
Development Concept:	
Output Capacity:	0.4 MTPA (Domestic) / 3 MTPA (Export)
Feedstock Gas:	WCSB
Related Pipeline:	Spectra Pipeline
Storage:	28,000 m <sup>3</sup>
CAPEX Estimate:	\$400 million
Jobs Estimate:	150 (construction)
	Wespac LNG: Approximately 131.5 person-years employment and estimated 19 FTE's during operations
FID Date:	n/a
Announced Start Date:	Currently Operating / Exports could commence as early as 2016
LNG Output Sales:	
Export Licence:	25 years license issued for 3 MTPA
Environmental	The volume for this project falls below the threshold required for an
Assessment:	environmental assessment.
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Date: September 8, 2015 Cliff No.: 91580

## MINISTRY OF NATURAL GAS DEVELOPMENT

#### **BRIEFING NOTE FOR INFORMATION**

- I. PREPARED FOR: Honourable Rich Coleman, Minister of Natural Gas Development
- II. ISSUE: Referral to Minister Coleman for decision on the application for issuance of an Environmental Assessment Certificate (EAC) for the Woodfibre LNG Limited Export Terminal Project (the Project).

#### III. BACKGROUND:

- Woodfibre LNG Limited (Proponent), an operating entity wholly owned by Pacific Oil and Gas Limited, an energy company within the Royal Golden Eagle group of companies headquartered in Singapore, has completed the requirements for an environmental assessment of the Project. The application for an Environmental Assessment Certificate (EAC) was sent to the Minister of Environment and the Minister of Natural Gas Development on August 19, 2015.
- The Project consists of an LNG export facility on the former Woodfibre Pulp and Paper Mill site, located in the District of Squamish, approximately 7 km west-southwest of Squamish. The Project would include up to two liquefaction trains, with a total capacity of 2.4 million tonnes of LNG per annum at full build out; floating storage and offloading unit (FSO), including mooring and marine terminal for carriers, consisting of two converted LNG carriers; condensate storage tank; seawater cooling system; wastewater treatment facilities; and flare systems.
- The proposed Project, including the FSO, is in the asserted traditional territory of Squamish Nation. The shipping route is in the asserted traditional territories of Squamish Nation, Tsleil-Waututh Nation, Musqueam Nation, Cowichan Tribes First Nation, Halalt First Nation, Lake Cowichan First Nation, Lyackson First Nation, Penelakut First Nation, and Stz'uminus First Nation. Members of Métis Nation BC also reside in the area.
- Natural gas would be supplied to the Project by the Eagle Mountain-Woodfibre Gas
  Pipeline Project, owned and operated by FortisBC Energy Vancouver Island Inc, which
  is currently undergoing a provincial EA concurrently with the proposed Project.
- The Project entered the provincial environmental assessment process on November 27, 2013. On February 19, 2014 the environmental assessment process was approved for a "substituted environmental assessment" under the Canadian Environmental Assessment Act. The substituted environmental assessment allows projects to be reviewed through a single process – the provincial one – while each agency reaches its own independent decision.
- The Proponent estimates the Project will have an expected capital cost of \$1.4 to \$1.8 billion. Total construction costs are estimated at \$619 million, of which 55 percent is expected to be spent in BC.

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Date: September 8, 2015 Cliff No.: 91580

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- During operations it is estimated that \$540 million would be spent annually in BC.
- The Application Review stage of the EA process started on January 13, 2015, following a 30-day evaluation of the Application against the Application Information Requirements (AIR) by the Environmental Assessment Office (EAO) and the Working Group. The Working Group and public provided additional review and comment on the Application and supplementary material during the Application Review stage. During the EA, in consideration of the public interest and at the request of the Proponent, the EAO extended the public comment period from 45 to 60 days, to provide more time for the public to review the Application.
- The Proponent and Squamish Nation entered into an agreement early in the EA that set out a separate process between the parties to discuss the potential effects of the Project on the asserted Squamish Nation Aboriginal Rights and Title.
- On June 30, 2015, at the request of the Proponent, the 180-day time limit was suspended
  to allow the Proponent additional time to complete a review of Squamish Nation
  Council's conditions and to submit a report to the EAO. On August 10, 2015 after
  consulting with Squamish Nation and agreeing to meet the relevant conditions that
  applied to the Project, the EAO lifted the suspension and completed the EA of
  Woodfibre on August 19, 2015.

#### IV. DISCUSSION

- Concerns raised during the EA included potential harm to marine fish from the seawater cooling system water intake; marine water quality from the seawater cooling system; marine transport vessel activity in the project area; and shipping-related accidents and malfunctions.
- The EAO's assessment report examined 15 valued components. These are components of the natural and human environment that are considered by the Proponent, public, Aboriginal groups, scientists and other technical specialists, and government agencies involved in the assessment process to have scientific, ecological, economic, social, cultural, archaeological, historical or other importance.
- The EAO identified key mitigation measures for the valued components and reached conclusions on their residual effects, and determined none to be significant. To ensure the effects of the Project are sufficiently mitigated, the EAO proposes 25 other conditions.
- The EAO examined potential impacts of the proposed Project on asserted Aboriginal rights and title. Squamish Nation and Tsleil-Waututh Nation were consulted at a deeper level. The remaining Aboriginal groups listed above were consulted at a notification level. As part of the substituted EA process, EAO also consulted all the above Aboriginal groups on behalf of the federal government.

Date: September 8, 2015 Cliff No.: 91580

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**REVIEWED BY:** 

Brian Hansen, ADM √

APPROVED BY:

Steve Carr, DM ✓

Date: September 8, 2015 Date of previous note: N/A

#### MINISTRY OF NATURAL GAS DEVELOPMENT

## **BRIEFING NOTE FOR INFORMATION**

I PREPARED FOR: Honourable Rich Coleman, Minister

II ISSUE: UBCM 2015 meeting with the Bowen Island Municipality to discuss their concerns regarding Woodfibre LNG.

#### III BACKGROUND:

## Attending the meeting:

BC Representatives: Honourable Rich Coleman

Bowen Island Representatives: Alison Morse, Councillor; Gary Ander, Councillor; Kathy Lalonde, Councillor; Maureen Nicholson, Councillor; Melanie Mason, Councillor; Michael Kaile, Councillor; Murray Skeels, Mayor; Sue Ellen Fast, Councillor

# 2014 Meeting Issues/Discussion

N/A

# Follow-up from 2014 Meeting

N/A

# **Project Update**

- Woodfibre LNG (proponent) has completed the requirements for an environmental assessment of their project and sent the application for an Environmental Assessment Certificate (EAC) to the Minister of Environment and the Minister of Natural Gas Development on August 19, 2015.
- During provincial environmental assessment (EA) process, both the public and First Nations expressed concerns about the potential adverse environmental impacts caused by the proponent's project.
- The 60-day public comment period on the proponent's application was held from January 22 to March 23, 2015 and 1,743 public comment submissions were made. Public open houses were held in Squamish, West Vancouver and Bowen Island in January 2015. Approximately 443 people attended the open house events.
- On June 30, 2015, the 180-day time limit of the EA Application Review Stage
  was suspended to allow the proponent additional time to complete a review of
  Squamish Nation's conditions. Woodfibre LNG agreed to all of the Squamish
  Nation's conditions including measures to mitigate environmental concerns.

## **Concerns of Bowen Island Residents**

 During the 60-day public comment period Bowen Island Residents voiced their concerns regarding the Woodfibre LNG project and the potential for adverse impacts on their community. Key issues raised by Bowen Island residents included:

- 1) Ship Safety There were concerns about risk of an accidental LNG carrier collision resulting in a catastrophic event. Residents are of the opinion that Woodfibre LNG did not follow the Society of International Gas Tanker & Terminal Operators' (SIGTTO) guidelines regarding LNG port site selection.
- 2) Marine Life Concerns that the marine water intake and treated thermal discharges from the seawater cooling system would impact local populations of marine fish.
- 3) Air Quality Concerns about the emissions from the proposed Project and the potential harm to human health.
- 4) Marine Transportation Concerns about the negative impacts of wakes from the LNG carriers. Also concerns about the impact of LNG carriers to ferry schedules.

#### IV DISCUSSION:

Recommended responses to the key issues raised by Bowen Island residents:

# 1) Ship Safety

- Woodfibre LNG is an associate member of SIGTTOs and followed SIGTTO's
   Site Selection and Design for LNG Ports and Jetties (guidelines) when evaluating
   the site of the LNG port and jetty.
- For example, the narrowest portion of the shipping channel in Howe Sound is 1,440 metres, which is over five times larger than the 250 metres that SIGTTO recommends for the minimum channel width.
- LNG ships have safely delivered over 77,000 cargoes since the first shipment in 1964. There have not been any major accidents related to the LNG cargo.

# 2) Marine Life

- Woodfibre LNG agreed to the Squamish Nation's condition to study the seawater cooling system's effect on marine life. The proponent agreed to prove to the satisfaction of the Squamish Nation that the biological impacts on marine life are acceptable and have a lower overall impact than alternative technologies.
- The seawater cooling system will comply with applicable legislation and guidelines, including the BC Water Quality Criteria, the Canadian Environmental Quality Guidelines, and the Fisheries Act.

#### 3) Air Quality

- Woodfibre LNG conducted a Human Health Risk Assessment which concluded that there were no Project-related significant adverse effects to human health.
- Woodfibre LNG introduced mitigation measures to minimize Project-related effects to air quality including limiting the use of generators and reducing emission from mobile equipment.

## 4) Marine Transportation

 Industry experts Moffatt & Nichol conducted an assessment of potential wake effects and found that wakes generated from LNG carriers and escort tugs would be comparable to naturally occurring waves in Howe Sound. In a letter to the BC EAO, BC Ferries indicated that they do not have concerns
about the LNG carriers negatively impacting the safety of BC Ferry operations or
significantly delaying BC Ferry transit schedules.

# V CONCLUSION:

- The Bowen Island Municipality representatives have sought a meeting with Minister Coleman to discuss the Woodfibre project and will likely reiterate the key issues identified by Bowen Island residents during the public comment period of the provincial EA.
- The potential for adverse impacts to the Bowen Island community are addressed by the strong standards in the LNG shipping industry and the mitigation measures introduced by Woodfibre LNG.

#### PREPARED BY:

Stefan Colantonio Economic Analyst, LNG Task Force 250-361-6829

# REVIEWED BY:

Suzanne Manahan Executive Director, LNG Task Force 250-217-1567 Brian Hansen ADM, LNG Task Force 250-305-7223

# APPENDIX A: Woodfibre LNG Project Summary Table

Project Table

Proponent	Pacific Oil and Gas (100%)	
Location	Squamish	
Proposed Size	2.1 Million tonnes per annum (MTPA)	
Export Licence	25 year license issued for 2.1 MTPA (plus 15% variance)	
Environmental Assessment	In process (Application Review - Referred to Ministers on August 19, 2015)	
Pipeline	Eagle Mountain - Woodfibre Gas Pipeline Project	
Estimated Investment	\$1.4 and \$1.8 billion	
Jobs	Construction: 600 person-years of direct employment generation.	
	Operations: 100 fulltime equivalent people directly as either facility or office staff.	
Latest Development	The application for an Environmental Assessment	
	Certificate (EAC) was sent to the Minister of	
	Environment and the Minister of Natural Gas	
	Development on August 19, 2015.	

# APPENDIX B: Biographies



Murray Skeels Mayor

Murray was elected for his first term as Mayor in the 2014 Bowen Island General Local Government Election (election).



Gary Ander Councillor

Gary was elected for his first term as councilor in 2014. Prior to the 2014 election, Gary served on two Community Boards (Smooth Stones Foundation and the Bowen Island Community Chest) and two Civic Committees (the Advisory Planning Commission and the Community Grants Advisory Committee).



Sue Ellen Fast Councillor

Sue was elected to her first term as councillor in the 2014 election. She chaired the Official Community Plan (OCP) Steering Committee and served on two other groups – the Greenways Advisory Committee and the Sustainability Framework Working Group



Michael Kaile Councillor

Michael was elected for his first term as councillor in 2014.



Melanie Mason Councillor

Melanie was elected to her first term as councillor in the 2014 election.



Alison Morse Councillor

Alison has been a councillor since Bowen became a municipality and was reelected in the 2014. She has sat on several committees including the Finance Advisory Committee, the Human Resources Committee, and the Economic Development Committee.



Maureen Nicholson Councillor

Maureen was elected to her first term as councillor in the 2014 election. She was a member of the two committees – the National Park Community Advisory Committee, and the Solid Waste and Resource Management Advisory Committee.

Date: August 25, 2014 Cliff #: 86327

#### MINISTRY OF NATURAL GAS DEVELOPMENT

#### **BRIEFING NOTE FOR INFORMATION**

I PREPARED FOR: Honourable Christy Clark, Premier

II ISSUE: Meeting with Ratnesh Bedi, CEO of Woodfibre. Woodfibre would like to update the Premier on recent project development and on their plans to get to final investment decision (FID) in November.

#### III BACKGROUND/DISCUSSION:

- Ratnesh Bedi last met with Premier Clark during the Premier's visit to Singapore, where a
  Letter of Intent was signed between the Province and Woodfibre.
- Mr. Bedi was a panel speaker during the 2014 International LNG in BC Conference.
- Woodfibre may request that the Premier witness the signing of their financial agreements during the November 11, 2014 Asia-Pacific Economic Co-operation Economic Leaders' Meeting.

#### Project Overview:

- Situated close to Squamish, Woodfibre is located at an existing industrial site with a deep water harbour, with close proximity to electric grid power supply and natural gas supply.
   Woodfibre LNG recently announced a change from a barge liquefaction project to a land based liquefaction project, utilizing e-drives and power from the BC Hydro grid.
- Utilizing BC Hydro grid supply will mean that the Woodfibre LNG project will generate GHG marketable offset credits as a result of the project's emissions intensity being significantly below the GHG benchmark established for LNG projects in BC.
- The project will use existing natural gas pipeline capacity and a new looped gas pipeline from Fortis BC, the Eagle Mountain – Woodfibre Gas Pipeline Project.
- In November 2013, Woodfibre LNG filed a Project initiating the environmental assessment process and is currently in the pre-application phase.
- In December 2013 the project was issued an export license from the National Energy Board for 2.1 million tonnes per annum for 25 years.
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#### Recent Developments:

- ▼ s.21
- Work between BC Hydro and Woodfibre for an electricity supply agreement continues. At present, BC Hydro is awaiting a response from Woodfibre regarding their revised energy needs.

# Environmental Assessment Update:

- Between June 12 and July 27, 2014, public comments regarding the project were received.
   Public comments are captured twice during the environmental assessment process, first during the pre-application phase and again during the application phase.
  - During this period over 1,300 submissions were received well above what is normally received for a proposed project.
  - While the concerns raised varied, key themes were:
    - The estimated/projected impact on the tourism industry and property values.
    - The safety of the LNG industry, including safety during transportation (marine safety).
    - The impacts of an LNG facility and increased marine traffic on the marine environment.
    - Apprehension about natural gas, extraction methods (hydraulic fracturing) and the hydrocarbon (oil and gas) industry in general.
  - Two community based groups My Sea to Sky and Future of Howe Sound are opposed to the project.
- The concerns raised need to be addressed and neither the BC Environmental Assessment Office (BC EAO) EAO nor Woodfibre foresees the volume of submissions impeding the timelines associated with the process. It is anticipated that Woodfibre will submit its application for an Environmental Assessment certificate in the latter part of 2014.
- Woodfibre and FortisBC are planning public messaging to be based predominately in local newspapers to provide more information on LNG and the natural gas industry. This campaign is expected to begin in October.
- In collaboration with other ministries, the Ministry of Natural Gas Development intends to launch its own LNG literacy initiative in Q3/Q4 2014 to provide British Columbians with information on the LNG industry.

# Commitments of Government of BC:

- On May 7, 2014, Premier Clark and Woodfibre LNG Lead Director, Imelda Tanoto, signed a Letter of Intent to further the growth of liquefied natural gas in the Province.
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#### IV CONCLUSION:

- Along with other ministries, the MNGD continues to work closely with Woodfibre and appreciates the strong relationship that has been built.
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Attachments: Bio Ratnesh Bedi

REVIEWED BY: Brian Hansen, ADM ✓

APPROVED BY: Steve Carr, DM ✓

Page 2 of 3

#### Attachment



Ratnesh Bedi - CEO of Woodfibre

A Chartered Accountant from the Institute of Chartered Accountants of India, Ratnesh Bedi started his career in the construction and property sector in India and was the Deputy General Manager (Finance) with Punj Lloyd Ltd before he moved to Indonesia in 1998. He joined KPMG (Indonesia) and later assumed a Senior Manager role and went on to become the Executive Director Advisor in Deloitte Advisory (Indonesia).

In 2003, Ratnesh joined Pacific Oil & Gas, one of the business groups in the RGE Group, as the Finance Director. His areas of expertise, with extensive exposure in restructuring and financing, particularly in the China and Indonesian markets, covers project development and financing, cash flow management and budgeting, and establishment of internal controls, systems and procedures. In 2007, he was assigned to APRIL, RGE Group's paper and pulp business group, as the Chief Financial Officer.

Mr. Bedi has been the President of Pacific Oil & Gas (PO & G) since 2011. The key focus for Ratnesh is PO & G's new venture to develop and construct an LNG liquefaction plant in Squamish near Vancouver, Canada. His role, on behalf of PO&G and the investor, is to oversee the work performed by the LNG project teams and to ensure the appropriate support is provided to them for securing necessary permits; appointing competent design and EPC contractors to design, build and commission the facilities; engaging with First Nations; establishing strong community relationships; networking with government authorities for statutory and commercial approvals; and securing necessary financing.

Ratnesh also leads the oil & gas exploration and exploitation initiatives, growth and operations in the Indonesia's business in this current role

#### MINISTRY OF NATURAL GAS DEVELOPMENT

#### **BRIEFING NOTE FOR INFORMATION**

- I PREPARED FOR: Honourable Rich Coleman
- II ISSUE: Meeting with Doug Stout Vice President, Market Development and External Relations; Cynthia Des Brisay Vice President, Energy Supply and Resource Development; James Lota Energy Assessment and Development; and Jennifer Robertson Manager, Environmental from FortisBC on March 9, 2015. FortisBC will be briefing the Minister on situation between District of Squamish Council and FortisBC regarding the Eagle Mountain Woodfibre Gas Pipeline.

#### III BACKGROUND:

# Woodfibre LNG & Eagle Mountain - Woodfibre Gas Pipeline (Fortis)

- Woodfibre LNG Ltd. is proposing to construct a small-scale LNG processing and export facility on the former Western Forest Products pulp mill site, near Squamish. The waterfront industrial site is located entirely on private land and within the municipality of Squamish.
- The project will use existing natural gas pipeline capacity and a new looped gas pipeline from FortisBC, the Eagle Mountain – Woodfibre Gas Pipeline Project.
- FortisBC considered a number of factors when evaluating proposed pipeline routing and location of compressor stations. In determining the proposed route, FortisBC collaborated with experts from various fields (engineering, environment, construction planning and land) and took into consideration input from regulatory agencies, First Nations and the public.

#### **Environmental Assessment**

- Both the facility and its related pipeline have submitted their applications for an Environmental Assessment certificate. On January 12 and 13, 2015, the 180-day Application review period commenced for the Eagle Mountain – Woodfibre Gas Pipeline Project and Woodfibre LNG Project respectively.
- The project has been the subject of significant public interest. On February 23, 2015, the public comment period for both the pipeline and the facility was extended from 45 to 60 days.
- A number of local governments have raised concerns about the EA process and expected effects of the Woodfibre LNG project. Representatives from the District of Squamish, the Squamish-Lillooet Regional District, the Sunshine Coast Regional District and Islands Trust participate on the Advisory Working Group for Woodfibre LNG. The District of West Vancouver and the Municipality of the Village of Lions Bay were recently invited to participate on the working group.
- The EAO presented information on the EA process and opportunities for public engagement to the Squamish LNG Committee in mid-February, 2015. They also offered a site visit to the DoS Council.
- Tsleil-Waututh Nation is represented on the working group. Squamish Nation is participating
  in the environmental assessment at a technical level through the working group. Squamish

Nation is undertaking an independent process that engages directly with Woodfibre LNG Ltd. through the "Squamish Process".

### Squamish Council Denial of Test Drilling Application by FortisBC

- In January 2015, FortisBC applied to the Ministry of Forest, Lands and Natural Resource Operations (FLNRO) for authorization to drill boreholes in the 673 hectare Wildlife Management Area in the Squamish estuary. FortisBC is currently proposing a horizontal directional drill (HDD) crossing, which would substantially minimize impacts to the WMA and estuary.
- FLNRO approved three of the proposed boreholes, but not the fourth whose proposed site was too close to a BC red-listed ecological plant community.
- The purpose of this drilling is purely exploratory as construction would require both an EA certificate as well as a separate set of permits.
- FortisBC also required permits from Squamish Council for this drilling. The staff report
  recommended approval based on the fact that the proponent had met all conditions associated
  with the development permit area and provincial and federal requirements.
- However, on January 20, 2015, Council turned down the development permit application for FortisBC to undertake exploratory drilling in the Squamish estuary.

#### IV DISCUSSION:

- FortisBC is now contemplating legal action to challenge that decision (their current advice is that their case is very strong), but that process could take a lengthy amount of time to complete. The petition has been prepared and Fortis has indicated that their attempts to find a solution with the Council and staff have not been successful.
- FortisBC has indicated in confidence to EAO that they are exploring alternative crossing methods.
- Two tools are available to the Province to intervene in a local decision like this:
  - The Significant Projects Streamlining Act (SPSA) which is under the responsibility of the Ministry of Transportation and Infrastructure (MOTI)
  - o The second is section 874 of the Local Government Act, which gives the Community, Sport, and Cultural Development Minister the authority to override a local government zoning bylaw (or other types of land use bylaws) in situations where a bylaw that has been enacted by a local government "is contrary to the public interest".
- To date neither approach has been used by the Province. The Ministry of Community, Sport and Cultural Development is observing the decision by Council carefully and are in dialogue with other ministries and the local government administration.
- While the Province has tools to intervene in local affairs to deal with matters of public interest, it respects local autonomy and the rights of Councils to make decisions in light of community interests.
- Fortis has provided information confirming that the District of Squamish is moving to amend their Official Community Plan to ban any commercial activity in, under or through the estuary (see attached). Fortis has indicated that this would not only impact their Eagle Mountain

project but also inhibit their ability expand their services on Vancouver Island and the Sunshine Coast.

- The Province does not have the ability to intervene and refute Official Community Plan bylaws.
- Finally, Fortis has provided that that a pipe coating company (Shaw) is looking at siting
  operations on the old BC Rail lands in Squamish. This could potentially create 150 jobs in
  Squamish. Shaw is potentially a supplier to the Fortis' Eagle Mountain project as well as to
  other LNG projects. A negative outcome for Fortis could potentially have a negative outcome
  for this pipe coating company.

### V CONCLUSION:

- Community views on the Woodfibre LNG project remain very mixed which is also reflected by the fact that the Council is split between pro-development and anti-development factions.
- Further to this, there may be confusion on the part of Council as to what these permits actually
  allow. The exploratory drilling would assist in assessing the viability of installing a pipeline
  there, but the permit does not provide authorization for the actual construction of the pipeline.
- The Province intends to continue to work closely with residents, municipalities and proponents as we work towards building the nascent LNG industry in British Columbia.

Attachments: Bios Doug Stout and Cynthia Des Brisay; Map of proposed pipeline route through the District of Squamish
Fortis EGP Permits Power Point

**REVIEWED BY:** 

APPROVED BY:

Brian Hansen, ADM √

Steve Carr, DM V

### Attachment



### <u>Doug Stout – Vice President, Market Development and External</u> <u>Relations</u>

Mr. Stout joined the company in 2001 as Vice President, Gas Supply and Transmission. He has held senior roles with Belkorp Industries Inc. and Husky Energy Inc., and has served as Director for Sultran Ltd., Pacific Coast Terminals and Hillsborough Resources. He is Chair of the Canadian Natural Gas Vehicle Alliance and a Director of the Northwest Gas Association.



# <u>Cynthia Des Brisay – Vice President, Energy Supply & Resource Development</u>

Ms. Des Brisay has spent her entire career in the energy industry. Prior to joining FortisBC in 1999, she held engineering and commercial roles in the oil and gas industry and in independent power generation development in Canada and New Zealand. She currently serves on the Executive Committee and Board of Directors of the Northwest Gas Association.



Figure - Map of Proposed Pipeline Route through Squamish





## SE Asia Trip - May 2014

# **Meeting / Briefing Note:**

Who:

RGE (Royal Golden Eagle)

Attendees from RGE:

- Sukanto Tanoto, Chairman
- Ratnesh Bedi, President
- Imelda Tanoto, Investor
- Byng Giraud, VP, Corporate Affairs
- Goh Lin Piao, Head, Corporate Communications

Where:

Singapore

When:

Wednesday, May 7, 2014

### ISSUE/DISCUSSION:

- Discussion of B.C.'s progress to date on the LNG fiscal and policy framework.
- On March 4, 2013, Woodfibre Natural Gas Limited (Woodfibre), a subsidiary of RGE, announced its intention to build a small-scale LNG facility on a Western Forest Products Inc.'s former pulp mill site near Squamish.
- s.21

### **KEY MESSAGES:**

- Assure RGE that B.C .is committed to ensuring a cost-competitive, well-developed LNG sector that will provide LNG throughout Asia.
- s.21

- s.21 Work commenced April 23 between Fortis BC, BC Hydro, MEM and MNGD to consider how entities might have to be structured to provide some value to all of the proponents who would potentially connect to the Fortis system and whether special direction might be required with respect to the British Columbia Utilities Commission.
- Thank Ratnesh Bedi President Pacific Oil and Gas for agreeing to be a speaker at British Columbia's second international LNG in BC Conference in May 2014.

### **BACKGROUND:**

### **Company Overview**

- The RGE Group acts as a holding company for subsidiaries that are focused on resourcebased manufacturing.
  - Pulp and paper APRIL and Asia Symbol





### SE Asia Trip - May 2014

- o Agriculture Asian Agri and Apical
- Dissolving wood pulp & viscose stable fibre Sateri
- o Energy resource development Pacific Oil & Gas
- RGE was founded by Chairman Sukanto Tanoto in Medan, Indonesia and has grown internationally with operations now in Southeast Asia, China, India and Brazil.
- Pacific Oil & Gas a subsidiary of RGE is an independent energy resource development company established in Indonesia in 2003.
  - o Their upstream activities are focused around the island of Sumatra, Indonesia.
  - Their midstream and downstream operations include the development of LNG receiving terminals and large-scale Combination Cycle Gas Turbine (CCGT) power plants in China.
  - Premier Clark visited the Jiangsu Rudong LNG receiving terminal in November 2013.
  - Woodfibre Natural Gas Limited is a Canadian-incorporated company and a subsidiary of Pacific Oil & Gas Group.

#### Oil and Gas Activities in Canada

 Neither Pacific Oil & Gas nor their subsidiary Woodfibre Natural Gas Limited has upstream assets in Canada.

### LNG interests in B.C. - Proposed Project - Woodfibre LNG

- On March 4, 2013, Woodfibre announced its intention to build a small-scale LNG facility on a Western Forest Products Inc.'s former pulp mill site near Squamish
- In November 2013, Woodfibre LNG filed a Project Description with the Canadian Environmental Assessment Agency and the B.C. Environmental Assessment Office to initiate the environmental assessment process.
  - The project will undergo a substituted environmental assessment process.
     Substitution allows the project to be reviewed through a single environmental assessment process the provincial one while each agency reaches its own independent decision.
- In December 2013 the project was issued an export license from the National Energy Board for 2.1 million tonnes per annum for 25 years.
- The Woodfibre project will use existing natural gas pipeline capacity from Fortis BC and will connect to established infrastructure via the Eagle Mountain – Woodfibre Gas Pipeline Project.
- Woodfibre is currently assessing whether the project will incorporate gas turbines or electric motors for the refrigerant compressor drives.





### SE Asia Trip - May 2014

### Biography:

### Sukanto Tanoto, Founder and Chairman, RGE



Mr. Tanoto started his first business more than 40 years ago supplying spare parts to the oil and construction industries. An entrepreneur and visionary, Mr. Tanoto entered the plywood business in 1967. Following this success, he ventured into other resources-based industries such as oil palm, forestry, pulp and paper, and power generation.

Today, RGE is a global resources-based manufacturing group of companies with corporate offices in Singapore, Hong Kong, Jakarta, Beijing and Nanjing. The group's assets exceed US\$15 billion, a workforce of 50,000 people and

manufacturing operations in China, Indonesia and Brazil and sales offices worldwide. The business encompasses four key operational areas: pulp and paper (APRIL – Asia Pacific Resources International Holding Ltd and Asia Symbol), palm oil (Asian Agri and Apical), rayon and specialty pulp (Sateri International) and energy (Pacific Oil & Gas).

Mr. Tanoto strongly believes that a company can only be successful if it is a responsible corporate citizen. Guided by his principle that all business should be conducted in a manner that is good for the people, good for the country and good for the company, Mr. Tanoto ensures that each of his businesses undertakes responsible environmental and social stewardship by embracing and integrating the concept of corporate social responsibility (CSR) into its business. CSR programs include integrated farming training schemes which have changed thousands of subsistence villagers into self-sufficient and sustainable farmers. Other community development activities include small and medium enterprise programs to help establish businesses, vocational training, community fibre farms and social infrastructure support.

Mr. Tanoto is a member of the INSEAD International Council, the Wharton Board of Overseers, the Wharton Executive Board for Asia, and various other educational, community and industry bodies. He is a recipient of the Wharton School Dean's Medal Award, which recognizes individuals for their contributions to the enlargement of the global economy and to the improvement of lives worldwide. Past recipients of the award include Chiefs of State, Nobel Prize winners, and Chairmen and CEOs of companies.

#### MINISTRY OF NATURAL GAS DEVELOPMENT

#### BRIEFING NOTE FOR INFORMATION

- I PREPARED FOR: Honourable Rich Coleman
- II ISSUE: Meeting with John Walker, Executive Vice President, Western Canada Operations with FortisBC

#### III BACKGROUND:

### **Expansion of the Tilbury Facility**

- The Tilbury LNG facility has been in operation since 1971, and with its planned expansion will begin to meet both the expanding domestic and international demand for natural gas.
- Starting in the fourth quarter of 2014, FortisBC began an expansion of the Tilbury LNG facility.
  - The \$400 million expansion will add approximately 1.1 million gigajoules of LNG storage as well as approximately 34,000 gigajoules of liquefaction capacity per day.
  - This expansion will better equip FortisBC to meet the growing LNG demands of B.C.'s transportation sector, remote communities, industrial customers and the marketplace.
  - On July 29, 2014, FortisBC announced that is has selected Bechtel Canada Co. as the contractor (EPC) for its Tilbury LNG facility expansion project.
- In August 2014, Hawaiian Electric signed an agreement with FortisBC to deliver 0.8 million tonnes per annum. The company hopes to have LNG shipments arriving by late 2017 in Hawaii.
- BC Ferries has signed a 10-year contract with FortisBC to supply LNG for three ferries currently under construction. Fortis BC will supply up to 300,000 gigajoules of LNG per year, the energy equivalent of 7.8 million litres of diesel fuel. The LNG will be supplied by FortisBC's Tilbury facility as well as the Mt. Hayes facility which is located on Vancouver Island.
- s.21

### Confidential - FortisBC/Mitsui Project

- FortisBC and Mitsui entered into an MOU in June 2014 for the joint feasibility study of a new (3-5 MTPA) LNG project in the Lower Mainland.
- The concept of this mid-scale LNG project would be to utilize capacity within the existing gas
  pipeline to the greatest extent possible.
- To connect to the existing natural gas pipeline to provide the facility with the required feedstock would require less than 10 km of new pipeline.
- The facility would be located on Tsawwassen First Nation land and would utilize the Delta Port owned by PMV.
- At present it is assumed that Mitsui would offtake the entire volume produced.

### Woodfibre LNG & Eagle Mountain - Woodfibre Gas Pipeline (Fortis)

- Woodfibre LNG Ltd. is proposing to construct a small-scale LNG processing and export
  facility on the former Western Forest Products pulp mill site, near Squamish. The waterfront
  industrial site is located entirely on private land and within the municipality of Squamish.
- The project will use existing natural gas pipeline capacity and a new looped gas pipeline from FortisBC, the Eagle Mountain – Woodfibre Gas Pipeline Project.
- FortisBC considered a number of factors when evaluating proposed pipeline routing and location of compressor stations. In determining the proposed route, FortisBC collaborated with experts from various fields (engineering, environment, construction planning and land) and took into consideration input from regulatory agencies, First Nations and the public.

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#### Environmental Assessment

- Both the facility and its related pipeline have submitted their applications for an Environmental Assessment certificate. On January 12 and 13, 2015, the 180-day Application review period commenced for the Eagle Mountain – Woodfibre Gas Pipeline Project and Woodfibre LNG Project respectively.
- The project has been the subject of significant public interest. On February 23, 2015, the public comment period for both the pipeline and the facility was extended from 45 to 60 days.
- A number of local governments have raised concerns about the EA process and expected
  effects of the Woodfibre LNG project. Representatives from the District of Squamish (DoS),
  the Squamish-Lillooet Regional District, the Sunshine Coast Regional District and Islands
  Trust participate on the Advisory Working Group for Woodfibre LNG. The District of West
  Vancouver and the Municipality of the Village of Lions Bay were recently invited to participate
  on the working group.
- The EAO presented information on the EA process and opportunities for public engagement to the Squamish LNG Committee in mid-February, 2015. They also offered a site visit to the DoS Council.
- Tsleil-Waututh Nation is represented on the working group. Squamish Nation is participating
  in the environmental assessment at a technical level through the working group. Squamish
  Nation is undertaking an independent process that engages directly with Woodfibre LNG Ltd.
  through the "Squamish Process".

### Squamish Council Denial of Test Drilling Application by FortisBC

- In January 2015, FortisBC applied to the Ministry of Forest, Lands and Natural Resource Operations (FLNRO) for authorization to drill boreholes in the 673 hectare Wildlife Management Area in the Squamish estuary. FortisBC is currently proposing a horizontal directional drill (HDD) crossing, which would substantially minimize impacts to the WMA and estuary.
- FLNRO approved three of the proposed boreholes, but not the fourth whose proposed site was too close to a BC red-listed ecological plant community.
- The purpose of this drilling is purely exploratory as construction would require both an EA certificate as well as a separate set of permits.

- FortisBC also required permits from Squamish Council for this drilling. The staff report
  recommended approval based on the fact that the proponent had met all conditions associated
  with the development permit area and provincial and federal requirements.
- However, on January 20, 2015, Council turned down the development permit application for FortisBC to undertake exploratory drilling in the Squamish estuary.

### IV DISCUSSION:

### Woodfibre LNG & Eagle Mountain – Woodfibre Gas Pipeline (Fortis)

- On March 10, 2015, FortisBC filed a petition with B.C.'s Supreme Court against the district of Squamish, after the municipality rejected an application to study the feasibility for a natural gas pipeline.
  - o In its petition, FortisBC stated that the "Squamish council unlawfully refused to issue the development permit."
- FortisBC has indicated in confidence to EAO that they are exploring alternative crossing methods.
- Two tools are available to the Province to intervene in a local decision like this:
  - o The Significant Projects Streamlining Act (SPSA) which is under the responsibility of the Ministry of Transportation and Infrastructure (MOTI)
  - O The second is section 874 of the Local Government Act, which gives the Community, Sport, and Cultural Development Minister the authority to override a local government zoning bylaw (or other types of land use bylaws) in situations where a bylaw that has been enacted by a local government "is contrary to the public interest".
- To date neither approach has been used by the Province. The Ministry of Community, Sport and Cultural Development is observing the decision by Council carefully and are in dialogue with other ministries and the local government administration.
- While the Province has tools to intervene in local affairs to deal with matters of public interest, it respects local autonomy and the rights of Councils to make decisions in light of community interests.
- Fortis has provided information confirming that the District of Squamish is moving to amend their Official Community Plan to ban any commercial activity in, under or through the estuary (see attached). Fortis has indicated that this would not only impact their Eagle Mountain project but also inhibit their ability expand their services on Vancouver Island and the Sunshine Coast.
- The Province does not have the ability to intervene and refute Official Community Plan bylaws.
- Recently FortisBC has requested a compressor station for the proposed pipeline be moved from its planned location onto unencumbered crown land. According to the Ministry of Forest, Lands and Resource Operations this move would not create an issue.
  - However, this move would require a change to the application currently with the Environmental Assessment Office which could potentially lead to a delay in that process.
- Finally, Fortis has provided that that a pipe coating company (Shaw) is looking at siting operations on the old BC Rail lands in Squamish. This could potentially create 150 jobs in

Squamish. Shaw is potentially a supplier to the Fortis' Eagle Mountain project as well as to other LNG projects. A negative outcome for Fortis could potentially have a negative outcome for this pipe coating company.

### **Expansion of the Tilbury Facility**

- According to its initial timeline FortisBC expected that LNG from the expanded facility will supply vehicles by the fourth quarter of 2016.
- As well, exports to Hawaii are anticipated to commence in the latter part of 2017.
- However, to date neither FortisBC nor WesPac Marine has received an export license from the National Energy Board.
  - o WesPac Marine's application is still under consideration by the Board.
- Finally, MNGD has recently commenced discussions with FortisBC with respect to a PDA related to this project.

### Confidential - FortisBC/Mitsui Project

- During the last meeting (September 2014) with Mitsui, MNGD officials were informed of the MOU and the feasibility study.
- However, since that point neither further details nor any public statements have been made regarding the project.

#### V CONCLUSION:

- Minister should acknowledge the successful completion of the Electricity Supply Agreement and Load Interconnect Agreement between BC Hydro and FortisBC.
- Community views on the Woodfibre LNG project remain very mixed which is also reflected by the fact that the Council is split between pro-development and anti-development factions.
- Further to this, there may be confusion on the part of Council as to what these permits actually
  allow. The exploratory drilling would assist in assessing the viability of installing a pipeline
  there, but the permit does not provide authorization for the actual construction of the pipeline.
- The Province intends to continue to work closely with residents, municipalities and proponents
  as we work towards building the nascent LNG industry in British Columbia.

Attachments: Bios John Walker; Map of proposed pipeline route through the District of Squamish

REVIEWED BY:

APPROVED BY:

Brian Hansen, ADM √

Steve Carr, DM

### Attachments



### John Walker - Executive Vice President, Western Canadian Operations

Mr. Walker is Executive Vice President, Western Canadian Operations, Fortis Inc. He serves on the Board of Directors of FortisAlberta and UNS Energy. He has held continuously progressive positions within the Fortis Inc. group of companies since 1983, most recently as President and CEO of FortisBC Energy Inc. and FortisBC Inc. He is the past Chair of the Board of Western Energy Institute, past Vice-Chair of Canadian Gas Association and past Board member of the Canadian Electricity Association.

Figure - Map of Proposed Pipeline Route through Squamish



Date: 2015/02/10 CLIFF #: 88703

### MINISTRY OF NATURAL GAS DEVELOPMENT

#### BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Rich Coleman

II ISSUE: Meeting with MLA Jordan Sturdy, Mayor of Squamish, CAO of Squamish and 2 city councilors regarding proposed Woodfibre LNG facility and related Eagle Mountain – Woodfibre pipeline.

#### III BACKGROUND:

- Woodfibre LNG Ltd. is proposing to construct a small-scale LNG processing and export
  facility on the former Western Forest Products pulp mill site, near Squamish. The waterfront
  industrial site is located entirely on private land and within the municipality of Squamish.
  - In February 2015 Western Forest Products announced that it has completed the sale of its former pulp mill site to Woodfibre LNG at a purchase price of \$21.8 million.
- The project will use existing natural gas pipeline capacity and a new looped gas pipeline from Fortis BC, the Eagle Mountain – Woodfibre Gas Pipeline Project.
- In September 2014, the Linde Group was awarded a contract to provide engineering and procurement (EPC) for Woodfibre LNG.
- Woodfibre has confirmed that additional work is being undertaken to optimize the design for the plant, tank design and jetty. This work is expected to take 3 months to complete, based on start date of February 1'2015 and driven by higher than expected costs advanced by their EPC bidders.

### IV DISCUSSION:

### **Environmental Assessment:**

- Both the facility and its related pipeline have submitted their applications for an Environmental Assessment certificate. On January 12 and 13, 2015, the 180-day Application review period commenced for the Eagle Mountain – Woodfibre Gas Pipeline Project and Woodfibre LNG Project respectively.
- The project is undergoing a substituted environmental assessment (EA). There will be one EA
  by the province to inform separate provincial and federal decisions.
- The project has been the subject of significant public comment:
  - The Environmental Assessment Office (EAO) received 1,299 comments during the preapplication public comment period in June/July 2014.
  - o Over 100 people attended an EAO-led open house in Squamish on June 18, 2014.
- Increased public interest in the project during application review, compared with preapplication period, will likely result in greater open house attendance and public comments received.
- Public concerns related to effects of the proposed project included:
  - o Impacts to local tourism and recreation;
  - Impacts to property values;
  - o Safety, accidents and malfunctions;
  - Impacts to Howe Sound marine ecosystems;

Page 1 of 4

- o Fracking, climate change and reliance on a non-renewable resource; and
- o Transparency of the EA process and public consultation.
- Local governments have raised concerns about the EA process and expected effects:
  - o Representatives from the District of Squamish, the Squamish-Lillooet Regional District, the Sunshine Coast Regional District and Islands Trust participate on the Advisory Working Group for Woodfibre LNG. The District of West Vancouver and the Municipality of the Village of Lions Bay were recently invited to participate on the working group.
  - o Tsleil-Waututh Nation is represented on the working group. Squamish Nation is participating in the environmental assessment at a technical level through the working group. Squamish Nation is engaging directly with Woodfibre LNG Ltd. through the "Squamish Process".
  - The EAO has been invited to present information on the EA process and opportunities for public engagement to the Squamish LNG Committee and the District of Squamish Council in early February, 2015.

### Squamish Council Denial of Test Drilling Application by FortisBC

- In January 2015 FortisBC applied to the Ministry of Forest, Lands and Natural Resource Operations (FLNRO) for authorization to drill boreholes in the 673 hectare Wildlife Management Area in the Squamish estuary.
- FLRNRO approved three of the proposed boreholes, but not the fourth whose proposed site
  was too close to a BC red-listed ecological plant community.
- The purpose of this drilling is purely exploratory as construction would require both an EA certificate as well as a separate set of permits.
- FortisBC also required permits from Squamish Council for this drilling. On January 20, 2015,
  Council turned down the development permit application for FortisBC to undertake exploratory
  drilling in the Squamish estuary. The staff report recommended approval based on the fact that
  the proponent had met all conditions associated with the development permit area and
  provincial and federal requirements.
- Fortis is now contemplating legal action to challenge that decision (their current advice is that
  their case is very strong), but that process could take a lengthy amount of time to complete.
- Two tools are available to the Province to intervene in a local decision like this:
  - The Significant Projects Streamlining Act (SPSA) which is under the responsibility of the Ministry of Transportation and Infrastructure (MOTI)
  - O The second is section 874 of the Local Government Act, which gives the Community, Sport, and Cultural Development Minister the authority to override a local government zoning bylaw (or other types of land use bylaws) in situations where a bylaw that has been enacted by a local government "is contrary to the public interest".
- To date neither approach has been used by the Province.

### **BC Housing & Squamish**

- BC Housing is currently in preliminary discussions with the Sea to Sky Community Services Society to locate their multiple services in one, affordable site with housing on the top floor.
- BC Housing is also in contact with a seniors group in Squamish to redevelop their site.
- BC Housing is working with the Howe Sound Women's Centre Society to potentially add capacity to the transition house, possibly serving the Sea to Sky Corridor.
- BC Housing is also working with Squamish Nation in several ways:

- Delivering SkillsPlus Training, a property maintenance skills training program developed by BC Housing and Douglas College, to Squamish Nation employees. SkillsPlus training enables staff to handle minor repairs instead of retaining outside contractors, improving service to tenants and ultimately lowering building maintenance costs.
- 2. BC Housing is undertaking building condition assessments to help Squamish Nation with capital planning and asset management.
- 3. BC Housing is delivering home maintenance education to Squamish Nation, including home safety, durability and an indoor air quality workshop.

#### V CONCLUSION:

- Community views on the Woodfibre LNG project remain very mixed which is also reflected by the fact that the Council is split between pro-development and anti-development factions.
- Further to this, there may be confusion on the part of Council as to what these permits actually
  allow. The exploratory drilling would assist in assessing the viability of installing a pipeline
  there, but the permit does not provide authorization for the actual construction of the pipeline.
- The Province intends to continue to work closely with residents, municipalities and proponents as we work towards building the nascent LNG industry in British Columbia.

Attachments: Bios Corien Becker (CAO);

REVIEWED BY: APPROVED BY:

Brian Hansen, ADM √ Steve Carr, DM

### Attachment



### Corien Becker - CAO of Squamish

Corien Becker is a former Kootenay resident originally from the Creston Valley. She began her career in local government in 1991 with the City of Cranbrook. In 1998 Corien accepted a position with the City of Prince Rupert, in 2004 she was appointed CAO for the District of Elkford, and in 2012 she was appointed CAO for the District of Squamish.

Corien is a Certified General Accountant with a senior certificate in Local Government Administration from the Province of British Columbia, and a diploma in Local Government Management from the University of Victoria. She is currently completing the Bachelor of Commerce program through Thompson Rivers University.

Corien is enjoying life in Squamish with mountain biking, hiking, and golfing, and she is enjoying numerous concerts and sporting events in the lower mainland.

# **WOODFIBRE LNG**

Topic: Details and status for Woodfibre LNG proposal.

- Last year, Woodfibre LNG received an environmental assessment certificate from British Columbia.
- We have high expectations in B.C. for industry projects.
   These proposals must prove they will be responsibly developed and safely operated.
- There are 25 conditions Woodfibre LNG must meet as part of the environmental assessment certificate.
- Conditions were developed following consultation and input from First Nations, government agencies, communities and the public.
- A federal environmental assessment decision has not been announced yet.

# **Background:**

	Lik Like Like Like Like Like Like Like L
Proponent	Pacific Oil and Gas
Location	Squamish area (former Woodfibre pulp mill site, 7 kilometres southwest of Squamish)
Export Licence	Approved - 25 years, with annual volume of 2.1 million tonnes of LNG
Environmental Assessment	British Columbia issued an environmental assessment certificate to Woodfibre LNG Ltd on October 26, 2015. Certification was granted with 25 conditions. Link <a href="here">here</a> .
Pipeline	The Eagle Mountain - Woodfibre Gas Pipeline Project, an upgrade of pipeline, owned by FortisBC, from Coquitlam to the Woodfibre site
Estimated Investment	\$1.6 billion
Jobs	Construction: approximately 1,000 person-years (500 workers for two years)  Operations: approximately '2,500 person-years'
Latest Developments	British Columbia issued an environmental assessment certificate to Woodfibre LNG Ltd on October 26, 2015.  ***Woodfibre LNG is the second project to be granted a certificate following a substituted environmental assessment. Substitution means that the Environmental Assessment Office conducts a single process; federal minister and provincial ministers make separate decisions. A federal environmental assessment decision has not yet been announced.***

### Diacu, Raz MNGD:EX

From:

Diacu, Raz MNGD:EX

Sent:

Friday, March 18, 2016 3:49 PM

To:

Thompson, Sharon LASS:EX

Cc:

Knudsen, Mark ENV:EX; Shiff, Alexander ENV:EX; Wang, Marc LASS:EX

Subject:

FW: CEAA approval for Woodfibre

Hi Sharon,

My apologies, the e-mail below only went to Jordan and Nicola; I meant to include you on it as well.

Thanks,

Raz

From: Diacu, Raz MNGD:EX

**Sent:** Friday, March 18, 2016 3:38 PM **To:** XT:Sturdy, Jordan GCPE:IN **Cc:** Bentley, Nicola LASS:EX

Subject: CEAA approval for Woodfibre

Hi Jordan,

Wanted to give you a heads up that CEAA has approved the Woodfibre project; our KMs are below and I've included a copy of the fed NR as well:

#### **KEY MESSAGES:**

- The Province welcomes today's news that Canada's Minister of Environment and Climate Change has approved Woodfibre LNG.
- This is more good news for British Columbia and our goal to diversify the natural gas sector, create jobs, and export clean energy to Asia.
- We look forward working alongside Woodfibre LNG as they continue their plan to build a facility in our province.
- Woodfibre LNG is the third export proposal to conclude the federal environmental assessment process. British Columbia granted the proposal with an environmental assessment certificate last year.

### Woodfibre LNG Project: Environmental Assessment Decision

March 18, 2016 — Ottawa — Canadian Environmental Assessment Agency

The Honourable Catherine McKenna, Minister of Environment and Climate Change, today announced that the proposed <u>Woodfibre LNG Project</u>, located near Squamish, British Columbia, is not likely to cause significant adverse environmental effects.

In her <u>Environmental Assessment Decision Statement</u>, the Minister established legally binding conditions, which include mitigation measures and follow-up requirements with which the proponent must comply throughout the life of the project.

"The Woodfibre LNG Project underwent a thorough, science-based environmental assessment that considered public and Indigenous input and views," said Minister McKenna. "The process benefited from scientific and technical expertise, Indigenous traditional knowledge and constructive feedback that helped to inform my decision."

The Government of British Columbia conducted the <u>environmental assessment</u> of the Woodfibre LNG Project on behalf of both the federal and provincial governments, with the participation of several expert federal authorities such as Transport Canada, Fisheries and Oceans Canada, Environment and Climate Change Canada, Natural Resources Canada and Health Canada.

"As a result of our government's commitment to tackling climate change and our interim approach and principles for environmental assessments, this review also benefited from an analysis of anticipated greenhouse gas emissions associated with the project. The federal government also carried out additional consultations with the public and Indigenous groups."

The next steps are for the proponent to obtain approvals and permits, including regulatory authorizations from Fisheries and Oceans Canada and Transport Canada.

- 30 -

### **Relevant Links**

- Backgrounder Woodfibre LNG Project
- MOU with British Columbia on Environmental Assessment Substitution

### Contacts:

Caitlin Workman
Press Secretary
Office of the Minister of Environment and Climate Change
819-938-9436
caitlin.workman@canada.ca

Karen Fish
Communications Advisor
Canadian Environmental Assessment Agency
613-957-0278
Karen.Fish@ceaa-acee.gc.ca

Follow us on Twitter: @CEAA ACEE

### Diacu, Raz MNGD:EX

From:

Diacu, Raz MNGD:EX

Sent:

Friday, March 18, 2016 2:52 PM

To:

Mills, Shane LASS:EX

Cc:

Myers, Tobie A MNGD:EX; Hirji, Keivan MNGD:EX; Kapac de Frias, Martina E ENV:EX;

Knudsen, Mark ENV:EX

Subject:

CEAA approval for Woodfibre

Hi Shane,

CEAA has approved the Woodfibre project; our KMs are below and I've included a copy of the fed NR as well.

#### **KEY MESSAGES:**

- The Province welcomes today's news that Canada's Minister of Environment and Climate Change has approved Woodfibre LNG.
- This is more good news for British Columbia and our goal to diversify the natural gas sector, create jobs, and export clean energy to Asia.
- We look forward working alongside Woodfibre LNG as they continue their plan to build a facility in our province.
- Woodfibre LNG is the third export proposal to conclude the federal environmental assessment process. British Columbia granted the proposal with an environmental assessment certificate last year.

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In her <u>Environmental Assessment Decision Statement</u>, the Minister established legally binding conditions, which include mitigation measures and follow-up requirements with which the proponent must comply throughout the life of the project.

"The Woodfibre LNG Project underwent a thorough, science-based environmental assessment that considered public and Indigenous input and views," said Minister McKenna. "The process benefited from scientific and technical expertise, Indigenous traditional knowledge and constructive feedback that helped to inform my decision."

The Government of British Columbia conducted the <u>environmental assessment</u> of the Woodfibre LNG Project on behalf of both the federal and provincial governments, with the participation of several expert federal

authorities such as Transport Canada, Fisheries and Oceans Canada, Environment and Climate Change Canada, Natural Resources Canada and Health Canada.

"As a result of our government's commitment to tackling climate change and our interim approach and principles for environmental assessments, this review also benefited from an analysis of anticipated greenhouse gas emissions associated with the project. The federal government also carried out additional consultations with the public and Indigenous groups."

The next steps are for the proponent to obtain approvals and permits, including regulatory authorizations from Fisheries and Oceans Canada and Transport Canada.

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#### **Relevant Links**

- Backgrounder Woodfibre LNG Project
- MOU with British Columbia on Environmental Assessment Substitution

#### Contacts:

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### Diacu, Raz MNGD:EX

From:

Woolley, Paul GCPE:EX

Sent:

Friday, March 18, 2016 2:27 PM

To: Cc: Myers, Tobie A MNGD:EX

Cubicat

Hirji, Keivan MNGD:EX; Diacu, Raz MNGD:EX

Subject:

Fw: Woodfibre LNG - KM and statement

**Attachments:** 

KM\_Woodfibre LNG\_March 18 2016.docx

Follow Up Flag:

Flag for follow up

Flag Status:

Completed

CEAA approved Woodfibre. Draft statement here.

Sent from my BlackBerry 10 smartphone on the TELUS network.

From: Beaupre, Darren GCPE:EX < Darren.Beaupre@gov.bc.ca>

Sent: Friday, March 18, 2016 2:25 PM

**To:** Woolley, Paul GCPE:EX; Ash, Christine GCPE:EX **Subject:** Woodfibre LNG - KM and statement

For consideration:

The Province welcomes today's news that Canada's Minister of Environment and Climate Change has approved Woodfibre LNG.

This is more good news for British Columbia and our goal to diversify the natural gas sector, create jobs, and export clean energy to Asia. We look forward to working alongside Woodfibre LNG as they continue their plan to build a facility in our province.

Woodfibre LNG is the third export proposal to conclude the federal environmental assessment process. British Columbia granted the proposal with an environmental assessment certificate last year.

#### **Darren Beaupre**

Government Communications and Public Engagement (GCPE)

Ministry of Natural Gas Development

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E-mail: darren.beaupre@gov.bc.ca

# **WOODFIBRE LNG**

<u>Topic:</u> Details and status for Woodfibre LNG proposal following approval by the Canadian Environmental Assessment Agency.

- The Province welcomes today's news that Canada's Minister of Environment and Climate Change has approved Woodfibre LNG.
- This is more good news for British Columbia and our goal to diversify the natural gas sector, create jobs, and export clean energy to Asia.
- We look forward working alongside Woodfibre LNG as they continue their plan to build a facility in our province.
- Woodfibre LNG is the third export proposal to conclude the federal environmental assessment process. British Columbia granted the proposal with an environmental assessment certificate last year.

# **Background:**

Proponent	Pacific Oil and Gas
Location	Squamish area (former Woodfibre pulp mill site, 7 kilometres southwest of Squamish)
Export Licence	Approved - 25 years, with annual volume of 2.1 million tonnes of LNG
Environmental Assessment	British Columbia issued an environmental assessment certificate to Woodfibre LNG Ltd on October 26, 2015. Certification was granted with 25 conditions. Link <a href="here">here</a> .
Pipeline	The Eagle Mountain - Woodfibre Gas Pipeline Project, an upgrade of pipeline, owned by FortisBC, from Coquitlam to the Woodfibre site
Estimated Investment	\$1.6 billion
Jobs	Construction: approximately 1,000 person-years (500 workers for two years)  Operations: approximately '2,500 person-years'
Latest Developments	On March 18, 2016: The Minister of Environment and Climate Change, today announced the proposed Woodfibre LNG project is not likely to cause significant adverse environmental effects.  The announcement can be found <a href="here">here</a> .