National Energy Board



Office national de l'énergie

LETTER DECISION

File OF-EI-Gas-GL-W157-2013-01 01 16 December 2013

Mr. Chris W. Sanderson Lawson Lundell LLP 1600 Cathedral Place 925 West Georgia Street Vancouver, BC V6C 3L2 Facsimile 604-694-2902

Mr. Ratnesh Bedi Woodfibre LNG Export Pte. Ltd. 80 Raffles Place #50-01 UOB Plaza 1 Singapore 048624 Malaysia E-mail: Ratnesh_bedi@po-and-g.com

Dear Mr. Sanderson and Mr. Bedi:

Woodfibre LNG Export Pte. Ltd. (Woodfibre LNG) 23 July 2013 Application for a Licence to Export Liquefied Natural Gas (LNG) pursuant to Section 117 of the *National Energy Board Act* (NEB Act) National Energy Board (Board) Reasons for Decision

Recent developments in gas production technology have resulted in a significant increase in the Canadian gas resource base and North American gas supply. One of the major impacts of this increase is lower demand for Canadian gas in traditional gas markets in the United States and eastern Canada. As a result, the Canadian gas industry is seeking to access overseas gas markets through exports of LNG.

On 23 July 2013, Woodfibre LNG applied to the Board pursuant to section 117 of the NEB Act for a licence (licence) authorizing the export of LNG (Application). Woodfibre LNG seeks a licence duration of 25 years, starting on the date of first export, with an annual volume of 2,100,000 tonnes of LNG $(2.10 \text{ MMt/y})^1$, which corresponds to a natural gas equivalent of 0.33 billion cubic feet per day $(Bcf/d)^2$, and a maximum term quantity of 60,375,000 tonnes $(60.38 \text{ MMt})^{3,4}$. The proposed export point would be located near Squamish, British Columbia at the outlet of the loading arm of a proposed natural gas liquefaction terminal.

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¹ Applied-for annual quantity not including tolerance

² As calculated by the Board from Woodfibre LNG's applied for export volume of 105 Bcf/year divided by 365 days. This is equivalent to $2.8 \ 10^9 \ m^3$ /year as stated by Woodfibre LNG

³ As calculated by the Board, Woodfibre LNG's applied for maximum term quantity of 60,375,000 tonnes is equivalent to $85.52 \ 10^9 \ m^3$ given the annual volume and tolerance

⁴ Volumes taken from 13-09-27 Woodfibre LNG Export Pte. Ltd. – Woodfibre LNG Response to NEB IR No.1.2 (a) and (b)

Board Decision

We have decided to issue a licence to Woodfibre LNG, subject to the approval of the Governor in Council, to export liquefied natural gas with the terms and conditions described in Appendix I to this letter.

Our role, under s. 118 of the NEB Act, is to assess whether the natural gas proposed to be exported does not exceed the surplus remaining after due allowance has been made for the reasonably foreseeable requirements for use in Canada, having regard to trends in the discovery of gas in Canada (Surplus Criterion).

In fulfilling this mandate, we recognize that Canadian natural gas requirements are met within a North American integrated market. Depending on regional characteristics, exports and imports contribute to either gas supply or gas demand. It is in this context that we must consider whether the Surplus Criterion in the NEB Act is satisfied.

We have determined that the quantity of gas proposed to be exported by Woodfibre LNG is surplus to Canadian need. The Board is satisfied that the gas resource base in Canada, as well as North America, is large and can accommodate reasonably foreseeable Canadian demand, the LNG exports proposed in this Application, and a plausible potential increase in demand.

We note that the evidence in this Application is generally consistent with the Board's own market monitoring. Recent studies of natural gas resources uncovered significant amounts in the Western Canada Sedimentary Basin and in the United States. The North American gas market is a mature marketplace characterized by a large number of buyers and sellers, an extensive and growing pipeline and storage network and a sophisticated commercial structure. Since deregulation of Canadian gas markets in 1985, gas markets in North America have functioned efficiently and there is no evidence to suggest that they will not continue to do so in the future.

Natural Gas Export Regulation

The Board's regulation of natural gas exports is governed by a statutory framework that includes the following three components:

- that all natural gas exports must be authorized by an order or licence⁵;
- that the Board must satisfy itself that the gas to be exported by licence is surplus to Canadian requirements⁶; and;
- that all exports are reported⁷.

A mandatory hearing for gas export licences is no longer required by the amended NEB Act. For this application, the Board decided to utilize a written process providing a Notice of Application by the applicant and a Comment Period for impacted persons.

⁵ Section 116 of the NEB Act

⁶ Section 118 of the NEB Act

⁷ Section 4 of the National Energy Board Export and Import Reporting Regulations

Summary of the Notice, Comment Process and Submissions

On 14 August 2013, the Board directed Woodfibre LNG to publish a Notice of Application and Comment Period in the *Globe and Mail* and *La Presse* and to serve the Notice of Application and Comment Period on specified persons and agencies. The Notice of Application and Comment Period requested that any impacted person who wished to file submissions on the merits of the Application do so by 25 September 2013. The Board received no submissions from any parties.

The Board issued one Information Request (IR) to Woodfibre LNG on 6 September 2013. Woodfibre LNG filed its response to the IR on 27 September 2013.

Surplus Determination

Woodfibre LNG submitted that the quantity of gas it seeks to export does not exceed the surplus as required by the Surplus Criterion. In support of this submission, Woodfibre LNG submitted the following studies: (1) *Natural Gas Supply and Demand Forecast to 2046* prepared by the Ziff Energy Group (Ziff), (2) *Application for a Gas Export Licence of the National Energy Board: Observations on Export Impact and Surplus Evaluation pursuant to the National Energy Board Act s118* prepared by Mr. Roland Priddle (Mr. Priddle).

Ziff submitted that the North American and Western Canadian gas resource bases are robust and continue to grow with the development of horizontal drilling and multi-stage fracture technologies and there is an abundance of low cost natural gas available in North American and Canadian shale and unconventional gas plays. Ziff expects natural gas markets in North America to continue to function in a rational manner during the forecast period and continue to provide appropriate market signals for development of resources to meet Canadian domestic and export demand.

Ziff and Mr. Priddle submitted that the North American gas market is large, highly liquid, open, efficient, integrated, flexible, and responsive to changes in supply and demand. Ziff and Mr. Priddle concluded that the export of gas proposed by the Applicant will not cause Canadians any difficulty in meeting their natural gas requirements at fair market prices over the forecast period.

Mr. Priddle also observed that North American gas markets have functioned efficiently and there is no evidence that they will not continue to do so in the future. Mr. Priddle's Export Impact and Surplus Evaluation concluded that the resource base is large, that markets are functioning efficiently and will continue to do so, that the small quantity of gas applied to be exported by the Applicant will have little impact on production, prices or consumption and does not exceed the surplus as required by the Surplus Criterion in the NEB Act.

In an IR, the Board requested that Woodfibre LNG provide a Canadian demand sensitivity analysis (additional Canadian demand) and discuss its impact, if any, on Woodfibre LNG's surplus conclusions. Woodfibre LNG consulted with Ziff and Mr. Priddle to provide its response. The more robust demand scenario requested by the IR did not disturb the fundamental conclusions that the LNG exports would not cause Canadians any difficulty in meeting their gas requirements over the forecast period and that the quantity of gas Woodfibre LNG seeks to export does not exceed the surplus as required by the Surplus Criterion.

Views of the Board

The Board is satisfied that the gas resource base in Canada, as well as North America, is large and can accommodate reasonably foreseeable Canadian demand, the LNG exports proposed by this Application, and a plausible potential increase in demand. The Board further accepts that the incremental cost of adding new production to supply any exported LNG or to satisfy a plausible demand increase is low. The Board agrees with Ziff and Mr. Priddle that the North American gas market is large, highly liquid, open, efficient, integrated, flexible, and responsive to changes in supply and demand.

The Board notes that the evidence in this Application is generally consistent with the Board's own market monitoring. Since deregulation of Canadian gas markets in 1985, gas markets in North America have functioned efficiently and there is no evidence to suggest that they will not continue to do so in the future.

Based on all of the foregoing, the Board is satisfied that the quantity of gas proposed to be exported by Woodfibre LNG does not exceed the surplus remaining after due allowance has been made for the reasonably foreseeable requirements for use in Canada, having regard to the trends in the discovery of gas in Canada.

Relief Requested

Relief from Filing Requirements

Woodfibre LNG requested relief from the information requirements for gas export licence applications set out in section 12 of the *National Energy Board Act Part VI (Oil and Gas) Regulations* (Oil and Gas Regulations) and the Board's Filing Manual, except where those requirements are addressed within its application.

The Board notes that it is in the process of updating the Oil and Gas Regulations to align with recent changes to the NEB Act.

Views of the Board

The Board notes that it may exempt applicants for gas export licences from the filing requirements contained in section 12 of the Oil and Gas Regulations. In its Interim Memorandum of Guidance Concerning Oil and Gas Export Applications and Gas Import Applications under Part VI of the National Energy Board Act, dated 11 July 2012, the Board indicated that it no longer requires applicants for gas export licences to file the information contained in section 12(f) of the Part VI Regulations. The Board also recognizes that not all of the other filing requirements contained in section 12 of the Oil and Gas Regulations are relevant to its assessment of this Application. Therefore, the Board exempts Woodfibre LNG from the filing requirements contained in section 12 of the Oil and Gas Regulations that were not included in the Application.

As stated previously, the Board focused its assessment of the Application on the Surplus Criterion contained in section 118 of the NEB Act. The requirements that are needed for the Board's assessment are identified in Guide Q of the Filing Manual⁸. In the Board's view, the information included in Woodfibre LNG's Application met the requirements outlined in Guide Q.

The Board notes that Woodfibre LNG filed some information using an approach consistent with the Board's Market Based Procedure (MBP).⁹ However, the Board would like to make it clear that the MBP is no longer in effect. For LNG export applications filed since the NEB Act was amended in June 2012, the Board has utilized a written public notice and comment process in place of an oral public hearing and the Complaints Procedure. In addition, the Board has issued Guide Q of the Filing Manual which provides guidance on information requirements for gas export licence applications. The Board notes that Guide Q does not prescribe a specific format or specific application content and the information requirements may be met in a variety of ways, including qualitatively and quantitatively.

Additional Licence Terms and Conditions

Woodfibre LNG requested a 15 per cent annual tolerance to the amount of gas that may be exported under the licence in any 12-month period to manage variability in the quantity of LNG that could be produced at the LNG Facility. Woodfibre LNG also requested, as an alternative to the annual tolerance, that any unutilized portion of the annual volume remain available for exports in the subsequent five years.

⁸ Guide Q of the Filing Manual: http://www.neb-one.gc.ca/clf-nsi/rpblctn/ctsndrgltn/flngmnl/flngmnnsrt2013_03-

eng.pdf ⁹ The MBP is a comprehensive procedure by which the Board assessed applications for natural gas export licences Procedures (July 1987)

Woodfibre LNG requested a sunset clause where, unless authorized by the Board the licence will expire on or before 31 December 2021 if exports from the LNG facility have not commenced on or before that date.

Views of the Board

The Board accepts Woodfibre LNG's request for a 15 per cent annual tolerance. The maximum term quantity permitted under the licence is inclusive of the annual tolerance amount. As a result, the Board did not consider Woodfibre LNG's alternative request for unutilized annual export amounts to be available for the subsequent five years.

The Board accepts Woodfibre LNG's request for a sunset clause providing that the Licence shall expire on or before 31 December 2021, as reasonable. It has generally been Board practice in issuing a gas export licence to set an initial period during which, if the export of gas commences, the licence becomes effective for the full term approved by the Board. This condition in the licence is referred to as a sunset clause because the licence would expire if the export did not commence within the specified timeframe.

R.R. George / Presiding Member

P.H. Davies Member

J.Gauthier Member

December 2013 Calgary, Alberta

Appendix I

Terms and Conditions of the Licence to be Issued for the Export of Liquefied Natural Gas

General

1. Woodfibre LNG Export Pte. Ltd. (Woodfibre LNG) shall comply with all of the terms and conditions contained in this licence unless the Board otherwise directs.

Licence Term, Conditions and Point of Export

- 2. Subject to Condition 3, the term of this licence shall commence on the date of first export from the liquefaction terminal referred to in Woodfibre LNG's application dated 23 July 2013, which is to be located near Squamish, British Columbia, Canada (the Liquefaction Terminal) and shall continue for a period of 25 years thereafter.
- 3. Unless the Board otherwise directs prior to 31 December 2021, the term of this licence shall end on 31 December 2021, unless exports from the Liquefaction Terminal commence on or before that date.
- 4. The quantity of natural gas that can be exported under the authority of this licence is:
 - a. Maximum annual quantity that may be exported in any 12-month period, including the 15 per cent tolerance, may not exceed $3.42 \ 10^9 \ m^3$;
 - b. Maximum term quantity may not exceed $85.52 \ 10^9 \ m^3$.
- 5. Natural gas will be exported at a point at the outlet of the loading arm of the Liquefaction Terminal.