

**NATIONAL ENERGY BOARD**

IN THE MATTER OF the *National Energy Board Act*, R.S.C. 1985, c. N-7, as amended, and the Regulations made thereunder;

AND IN THE MATTER OF an Application by WesPac Midstream – Vancouver LLC for a licence pursuant to section 117 of the *National Energy Board Act* authorizing the export of natural gas.

To: Secretary  
National Energy Board  
444 – 7th Avenue SW  
Calgary, AB T2P 0X8

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**APPLICATION OF WESPAC MIDSTREAM – VANCOUVER LLC**

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**June 20, 2014**

## I. APPLICATION

1. WesPac Midstream – Vancouver LLC (“WPMV” or the “Applicant”) hereby applies to the National Energy Board, pursuant to section 117 of the *National Energy Board Act* (the “NEB Act”), for a licence to export gas in accordance with the following terms and conditions:

**Term:** The term of the licence shall be 25 years commencing on the date of first export of gas under the licence.

**Early Expiration Date:** Unless otherwise directed by the Board, the term of the licence shall end 10 years after the date of issuance of the licence if the export of gas has not commenced on or before that date.

**Annual Quantity:** Subject to the Annual Tolerance below, the quantity of gas that may be exported in any 12-month period shall not exceed 146 Bcf which is approximately 4.14 billion cubic metres.

**Annual Tolerance:** The quantity of gas that may be exported in any 12-month period may not exceed the Annual Quantity by more than 15 percent.

**Term Quantity:** The quantity of gas that may be exported over the term of the licence shall not exceed 3,650 Bcf which is approximately 103.303 billion cubic metres.

**Export Point:** Gas will be exported from Canada at both:

- (a) the outlet of the loading arm at the WesPac LNG Marine Terminal adjacent to; and
- (b) the hose connector of the pump at the truck rack where ISO LNG shipping containers or truck tankers are filled with LNG for export via marine vessel or truck at

the natural gas liquefaction plant located at Tilbury Island in Delta, British Columbia, Canada.

2. In submitting this Application, the Applicant has had regard for:

- The criteria for considering an application for a licence to export gas, set out in section 118 of the *NEB Act*, that the Board shall satisfy itself that the quantity of gas 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 the trends in the discovery of gas in Canada;
- The filing requirements set out in Guide Q of the Board's Filing Manual;
- The *Interim Memorandum of Guidance Concerning Oil and Gas Export Applications and Gas Import Applications under Part VI of the National Energy Board Act* ("Interim MOG") issued by the Board on July 11, 2012;
- The Board's Letter Decision dated February 4, 2013 respecting the export licence application of LNG Canada Development Inc. ("LNG Canada"); and
- Other recent Decisions of the Board respecting export licence applications of other parties.

3. This Application demonstrates that the quantity of gas 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 the trends in the discovery of gas in

Canada, as required by section 118 of the *NEB Act*. Consistent with Guide Q of the Filing Manual, the Interim MOG and the LNG Canada Letter Decision, the Applicant seeks relief from the filing requirements contained in the Board's Filing Manual and section 12 of the *National Energy Board Act Part VI (Oil and Gas) Regulations* ("Part VI Regulations"), except where those requirements are addressed in this Application.

## **II. BACKGROUND**

### **(a) The Applicant**

4. WPMV is a limited liability company registered under the laws of the State of Delaware, and is a wholly-owned subsidiary of WesPac Midstream LLC ("WesPac LLC"). WesPac LLC is a limited liability company registered in the State of Delaware, United States of America, and is 85% owned by Highstar Capital LP IV-A, a Delaware limited partnership; 7.5% owned by Primoris Services Corporation, a publicly traded construction firm incorporated in Delaware; and 7.5% owned by its management.

### **(b) Export Need**

5. Pursuant to the requested licence, the Applicant itself, and as agent on behalf of affiliates and third parties, will export the LNG from Canada pursuant to the terms of the licence.
6. Prospective LNG buyers are looking to acquire reliable long-term supply to meet growing demand in their downstream markets. Prospective markets for LNG export include Asia, Central America, South America and the United States and its territories.

### **(c) WesPac LNG Marine Terminal**

7. WPMV will export LNG produced at the Tilbury LNG Plant located in Delta, British Columbia. The Tilbury LNG Plant is currently owned and operated by FortisBC Energy Inc. ("FEI"), and it has a production capacity of approximately 5 million cubic feet per day of natural gas equivalent LNG production. LNG is currently produced at the Tilbury LNG Plant for sale in both local British Columbia markets and regional markets (including truck-based exports to the United States by other parties), and for utility peak-shaving service to enhance local gas system reliability. The Tilbury LNG Plant is

currently being expanded to increase the LNG production capacity at the site by approximately 33 million cubic feet per day of natural gas equivalent LNG production.

8. Pursuant to a development agreement with affiliates of FEI, WPMV is currently developing a marine terminal facility (the “WesPac LNG Marine Terminal”) in the Fraser River adjacent to the Tilbury LNG Plant. The WesPac LNG Marine Terminal will provide a means of loading LNG produced at the Tilbury LNG Plant onto LNG carrier ships for bulk transport and export from Canada. The WesPac LNG Marine Terminal will also provide a means of loading LNG onto barges for marine bunkering (ship fueling) activities, which may also involve the export of LNG.
9. Additionally, LNG will be loaded into LNG ISO shipping containers by way of truck racks at the Tilbury LNG Plant, for transportation and export on ships and barges by way of several existing cargo terminals in the Metro Vancouver area. Finally, LNG will be loaded into truck tankers or LNG ISO shipping containers by way of truck racks at the Tilbury LNG Plant for transportation and export by truck.
10. Engineering and site analyses have confirmed that the Tilbury site is capable of accommodating further LNG export production expansion of approximately 462 million cubic feet per day of natural gas equivalent LNG production. The timing of further expansion will be largely driven by market demand for LNG export capacity and the receipt of regulatory approvals to construct and operate new liquefaction and storage equipment. The applied-for export licence volume corresponds to 400 million cubic feet per day of natural gas equivalent LNG production.
11. Obtaining the requested Licence is an important step in the development of the WesPac LNG Marine Terminal and further expansion of LNG export production capacity at the Tilbury LNG Plant. More specifically, the Licence will facilitate WPMV’s ability, and the ability of others on whose behalf WPMV will act as agent, to enter into long term LNG export market supply agreements to underpin such development and expansion.
12. Applications are currently being prepared for the regulatory approvals that will be required to construct and operate the WesPac LNG Marine Terminal. Subject to the

receipt of all necessary permits and approvals, construction of the WesPac LNG Marine Terminal is scheduled to begin in 2015, with completion targeted for late 2016. LNG exports under the applied-for licence, however, could commence by way of LNG ISO shipping containers or truck tankers as soon as the Board grants the licence.

**(d) Gas Supply**

13. The Applicant, on its own behalf or as agent on behalf of third parties that procure, or have direct access to, gas resources, expects to export gas sourced primarily from the Western Canadian Sedimentary Basin. This gas supply could be secured through a variety of commercial arrangements, including arrangements made with actual owners of the gas resources, gas purchase contracts made with other resource holders and through transactions made at market hubs. The Tilbury LNG Plant and the export points are connected by pipeline systems to principal Canadian market hubs where large volumes of natural gas are traded and market prices are established through trading.

**(e) Transportation Arrangements**

14. Preliminary discussions indicate that sufficient pipeline capacity is currently available on the Spectra system from northern British Columbia to the Vancouver area. FEI has confirmed to WPMV that there is sufficient capacity available, or that its pipelines in existing rights-of-way can be readily expanded to ensure that there is sufficient capacity available, on its system to accommodate current and future liquefaction capacity at the Tilbury LNG Plant.

**III. SURPLUS DETERMINATION**

15. As stated by the Board in the Interim MOG and the LNG Canada Letter Decision, the role of the Board, in considering a gas export application, is to evaluate whether the gas to be exported is surplus to reasonably foreseeable Canadian requirements. To that end, the Applicant retained Navigant Consulting Inc. (“Navigant”) to prepare a report entitled “Supply and Demand Market Assessment” dated May 28, 2014. The Navigant report is attached as Appendix A to this Application.

16. The Navigant report provides descriptions of the gas supplies expected to be available to the Canadian market and of the expected gas requirements for Canada over the requested export licence term. The main conclusions of Navigant are:

- Overall natural gas supply growth in North America continues to be remarkable in both the US and Canada;
- Increases in gas supply are largely attributable to the presence of prolific supplies of unconventional gas which can now be produced economically;
- Canadian gas production is expected to increase by 62% between 2013 and 2045, from 15.4 Bcfd to 25.1 Bcfd;
- North American gas production is expected to increase by 60% between 2013 and 2045, from 87.3 Bcfd to 139.5 Bcfd;
- Canadian and North American forecasts are likely to increase with further oil or shale gas basins are developed or discovered; and
- The stabilizing impact of increased shale gas production will be strengthened even further by the integrated nature of the Canadian and US regions within the North American gas market.

17. The Navigant report also addresses Canadian gas demand and markets. The main conclusions of Navigant in this respect are:

- Total Canadian demand growth is expected to be driven by growth in electric generation gas consumption and industrial growth;
- Canadian gas demand is expected to increase by 100% between 2013 and 2045, from 9.8 Bcfd to 19.5 Bcfd;
- The anticipated supply abundance creates the potential for an unbalanced market that could potentially lead to stagnation of gas asset development, particularly for Canadian natural gas production;

- Strong production growth is able to meet increasing Canadian demand, and strong production forecasts actually require expansion of demand;
  - LNG exports can be an important contributor to the long-term sustainability of the gas market by contributing to demand levels that will incent important production and distribution investments;
  - Assumed level of ultimate LNG exports of about 7.8 Bcfd from North America are capable of being cleared through the market;
  - Henry Hub prices over the forecast term average \$6.20/MMBtu and remain under \$8.00/MMBtu through to 2043;
  - Hub prices in Alberta (AECO) and BC (Westcoast Sta.2) are forecasted to be lower, averaging less than \$5.70/MMBtu and remaining below \$7.00 per MMBtu through 2040; and
  - the export of gas volumes will be associated with reasonable gas prices.
18. Navigant also addresses a “plus 20 percent” demand growth sensitivity, based on increasing demand growth rates by 20 percent as requested of other applicants by the Board in Information Requests. This would increase Navigant’s Canadian demand growth rate from 2.19% to 2.62%, and Navigant’s 2045 estimate of Canadian demand from 19.5 Bcfd to 22.4 Bcfd. This increase of 2.9 Bcfd in 2045 is only about two-thirds of the 4.3 Bcfd of excess production forecast in 2045 represented by the net pipe exports from Canada as calculated in Navigant’s modeling. Further, as the 2.9 Bcfd represents only a 15 percent increase in Canadian domestic demand, or a 2 percent increase in North American domestic demand, Navigant concludes that it is not material given the huge resource base and the long resource lives described in the report.
19. For completeness with respect to the Board’s previously expressed interest in demand sensitivities, the Navigant report also addresses the potential for the requested license term extending beyond the 2045 forecast term reflected in its baseline assessment. In a scenario where operations did not begin until 2025 (approximately ten years after the



issuance of the requested export license), pushing the export term out to 2050, Navigant states that all the conclusions of its report would remain valid and unchanged, including the finding of a surplus condition of Canadian natural gas supply with respect to the exports proposed by WPMV. The basis for Navigant's conclusion is that the sensitivity demand growth rate of 2.62% per year would increase the sensitivity demand level from 22.4 Bcfd in 2045 to 25.5 Bcfd in 2050, or by 3.1 Bcfd. Navigant concludes that this demand increment related to additional years beyond the forecast period, like the initial sensitivity amount, is not material to the conclusions given the size of the gas resource.

20. In addition to the Supply and Demand Market Assessment, Mr. Gordon Pickering, a Director of Navigant with expertise in energy pricing, particularly in natural gas and liquefied natural gas and in the areas of price forecasting and risk management, has also prepared a report entitled "Export Impact Assessment" dated May 28, 2014. Mr. Pickering's report is attached as Appendix B to this Application. Mr. Pickering's main conclusions are as follows:

- The extensive and well established Canadian energy and gas market is healthy and will be able to readily support the export of the applied-for volumes;
- The integrated gas market in North America is capable of meeting the gas requirements for the export licence, particularly due to recent increases in gas supply across North America;
- The gas market will benefit from the approval of this Application;
- Export volumes in the range of 8 to 10 Bcfd from North America represents a reasonable estimate of eventual volumes;
- The volumes requested for export in this Application are relatively small in the context of the market that will support gas delivery;
- If this Application is approved, it is highly unlikely that exports will cause Canadians difficulty in meeting their energy requirements over the term of the licence;

- If this Application is approved, Canadians will not need to adjust their energy consumption patterns by means of energy conservation or fuel switching to alternative fuels; and
- As a result of expected growth in the gas market over time, the integrated nature of the industry across North America and the long standing performance of the industry, there are safeguards built into the gas market that will provide assurance against extraordinary demands on Canadian gas supply.

21. Navigant's Supply and Demand Market Assessment and Export Impact Assessment demonstrate that the quantity of gas to be exported by the Applicant 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. Navigant concludes that there will be more than adequate amounts of natural gas available to serve Western and Canadian gas demand, including to serve WPMV's proposed export volumes, as well as other projects.

#### **IV. RELIEF REQUESTED**

22. The Applicant respectfully requests that the Board issue a licence authorizing the export of gas subject to the following terms and conditions:

**Term:** The term of the licence shall be 25 years commencing on the date of first export of gas under the licence.

**Early Expiration Date:** Unless otherwise directed by the Board, the term of the licence shall end 10 years after the date of issuance of the licence if the export of gas has not commenced on or before that date.

**Annual Quantity:** Subject to the Annual Tolerance, the quantity of gas that may be exported in any 12-month period shall not exceed 146 Bcf which is approximately 4.14 billion cubic metres.

**Annual Tolerance:** The quantity of gas that may be exported in any 12-month period may not exceed the Annual Quantity by 15 percent.

**Term Quantity:** The quantity of gas that may be exported over the term of the licence shall not exceed 3,650 Bcf which is approximately 103.303 billion cubic metres.

**Export Point:** Gas will be exported from Canada at both of:

(a) the outlet of the loading arm at the WesPac LNG Marine Terminal adjacent to; and

(b) the hose connector of the pump at the truck rack where ISO LNG shipping containers or truck tankers are filled with LNG for export via marine vessel or truck at

the natural gas liquefaction plant located at Tilbury Island in Delta, British Columbia, Canada.

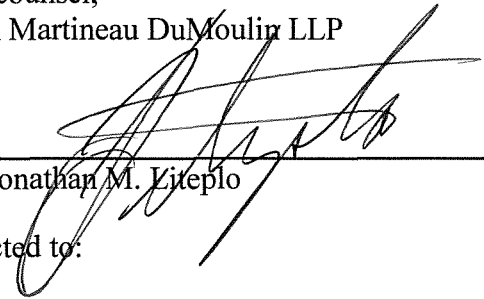
23. The Applicant also respectfully requests that the Board issue a licence authorizing the export of gas subject to the following terms and conditions:

- Relief from the information requirements set out in section 12 of the Part VI Regulations, except where those requirements are addressed within this Application;
- Relief from the information requirements set out in the Filing Manual, except where those requirements are addressed within this Application;
- Any further terms or relief as may be requested by the Applicant or as the Board may consider appropriate in the circumstances.

**ALL OF WHICH IS RESPECTFULLY SUBMITTED this 20th day of June, 2014.**

WesPac Midstream – Vancouver LLC  
By its counsel,  
Fasken Martineau DuMoulin LLP

Per:

  
Jonathan M. Liteplo

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