NATIONAL ENERGY BOARD

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

AND IN THE MATTER OF an application by Pieridae Energy (Canada) Ltd. for a license pursuant to Section 117 of the *National Energy Board Act* authorizing the import of natural gas and the export of liquefied natural gas.

TO: Secretary of the Board
National Energy Board
444-7th Avenue S.W.
Calgary, Alberta T2P 0X8

APPLICATION

Of

Pieridae Energy (Canada) Ltd.

March 11, 2014

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1 APPLICATION AND PROPOSED LICENCE TERMS AND CONDITIONS

Pieridae Energy (Canada) Ltd., as general partner of **Goldboro LNG Limited Partnership** (collectively, "**Pieridae**" or "**Applicant**"), hereby applies to the National Energy Board ("**NEB**" or "**Board**") pursuant to Section 117 of the *National Energy Board Act* ("**NEB Act**") for a licence authorizing the **import** of up to 365 billion cubic feet per year ("**Bcf/y**") or 10.3 10^9 m^3 of natural gas in vapour form through existing pipeline systems and a licence for the **export** of up to 10 million metric tons of liquefied national gas ("**LNG**") per year (10 MMt/y), which corresponds to a natural gas vapour equivalent of approximately 511 billion cubic feet per year (Bcf/y) or 14.5 10^9 m^3, for a term of 20 years ("**License**").

The Applicant requests the following terms and conditions for the Licence:

TERM: The proposed term of the Licence is a period of 20 years commencing on the date of first export of LNG under the Licence;

EXPORT START DATE: Unless otherwise authorized by the Board, the term of the Licence shall end 10 years after the date of the Governor-in-Council approval of the issuance of the Licence, if export of LNG has not commenced on or before that;

IMPORT TERM QUANTITY: The quantity of natural gas to be imported in vapour form over the term of the Licence shall not exceed 7,300 billion cubic feet ("**Bcf**") or 206.7 10^9 m^3;

EXPORT TERM QUANTITY: The quantity of LNG that may be exported over the term of the Licence shall not exceed 200 million metric tons ("MMt"), (natural gas equivalent of approximately 10,500 Bcf or 297.3 10^9 m^3);

ANNUAL IMPORT QUANTITY: The quantity of natural gas imported in vapour form shall not exceed 365 Bcf or 10.3 10^9 m^3;

ANNUAL EXPORT QUANTITY: The quantity of LNG that may be exported in any 12-month period shall not exceed 10 MMt (natural gas equivalent of approximately 511 Bcf or 14.5 10^9 m^3);

ANNUAL TOLERANCE: The quantity of LNG that may be exported or natural gas that may be imported in any 12-month period may exceed the annual maximum by 15 percent in order to allow for operating, demand and maintenance variables;

GAS IMPORT POINTS: The points of import of natural gas in vapour form ("**Import Points**") from the United States of America ("**U.S.**") into Canada shall include the interconnect between Maritimes and Northeast Canada pipeline and the Maritimes and Northeast U.S. pipeline along the Canadian-U.S. border between the province of New Brunswick and the state of Maine;

LNG EXPORT POINTS: The points of export of LNG ("**Export Points**") from Canada shall include the outlet of the loading arm of the natural gas liquefaction plant to be located near Goldboro, Nova Scotia ("**NS**"), and border locations between Maritimes Canada and the U.S. served by major highways or railways; and

PERMISSION: The Applicant requests a licence to import natural gas and a licence to export LNG on its own behalf and as agent for third parties whom themselves hold title to the natural gas or LNG.

2 GOLDBORO LNG PROJECT OVERVIEW

2.1 The Goldboro LNG Project ("Goldboro LNG" or "**Project**") is to be constructed and operated near Goldboro, Guysborough County, Nova Scotia. The Terminal will be comprised of a natural gas treatment/liquefaction plants, LNG storage, marine and truck loading facilities, ("**Terminal**").

2.2 The liquefaction component of the Terminal will include two separate processing units (herein referred to as "**Trains**") with a cumulative export capacity, which will not exceed 10 million tonnes per year (10 MMT/y, equivalent of approximately 511 Bcf or 14.5 10^9 m^3).

2.3 The Terminal will take delivery of natural gas from the Maritimes and Northeast Pipeline Canada system ("**M&N Canada**"). Feedstock gas will originate from onshore and offshore Maritimes Canada, U.S. and the North America natural gas pipeline grid in general. U.S. sourced gas will be delivered to Canada through the Maritimes and Northeast Pipeline U.S. ("**M&N U.S.**") feeding into the M&N Canada system; both pipelines collectively known as the Maritimes and Northeast Pipeline ("**M&NP**") system.

2.4 The first LNG processing train, designated Train 1, is expected to begin operations in the 2019 - 2020 timeframe. The second train, designate as Train 2, is expected to be operational 6 months after Train 1, but may be influenced by a number of project variables around construction and commercial contracting.

2.5 Gas feedstock for the Terminal will come from Maritimes Canada region and the Northeast U.S. Given the integrated nature of the North American gas market and pipeline network, gas could also potentially come from other Canadian and U.S. basins. It will be a combination of equity gas and commercial gas purchase arrangements.

2.6 Pieridae is applying for an Annual Tolerance of 15% relating to the import of gas and export of LNG. This is to manage the variability of operations, including but not limited to, the effects of temperature, maintenance, seasonal demand and economic opportunity.

3 PROJECT PROPONENT

3.1 The legal name of the Applicant is Pieridae Energy (Canada) Ltd., as general partner of Goldboro LNG Limited Partnership. Pieridae Energy (Canada) Ltd. is a corporation formed and subsisting under the federal laws of Canada with its principal place of business at 1718 Argyle Street, Halifax, NS, B3J-3N6. Pieridae Energy (Canada) Ltd. is a subsidiary corporation of Pieridae Energy Limited, which is a corporation formed and subsisting under the federal laws of Canada. Goldboro LNG Limited Partnership is a limited partnership formed under the laws of the Province of Alberta with its principal place of business at 1718 Argyle Street, Halifax, NS, B3J-3N6. Pieridae Energy Limited is the principal limited partner in Goldboro LNG Limited Partnership.

3.2 Pieridae and certain of its affiliates are the owners of the Project. As is typical for LNG projects, new partners will join as it progresses from development to construction and operation. New partners introduced into the Project's ownership, may have various legal structures, including but not necessarily limited to, incorporated joint ventures, unincorporated joint ventures or partnerships.

3.3 A key success factor for the Project has been Pieridae's capacity to secure long-term LNG sales. Pieridae's network of connections to key LNG markets in Europe, South America and South East Asia has enabled Pieridae to establish and foster long-term, trusted relationships with LNG buyers.

3.4 Pieridae and the additional partners in the Project will bring the necessary expertise and capacity to develop a successful LNG export project and enable significant incremental Canadian gas development in Maritimes Canada.

4 GAS IMPORT LICENCE APPLICATION

4.1 Critical to the Project will be the ability to import gas from the Northeast U.S. through the M&NP system. Pieridae intends to import up to 1.0 Bcf/d (10.3 10^9 m^3) of gas through the M&N U.S. pipeline into Canada. This will be required if the Project is to reach its full potential of 10 MMT/y of LNG production.

4.2 The import gas will provide partial feedstock for the Trains, as well as gas for compressor fuel and utilities associated with operating the Terminal.

4.3 M&N U.S. and M&N Canada are currently planning for the reversal of the M&NP system to move gas from the Northeast U.S. to Canada. This plan for reversal of the flows on the M&NP system is a result of numerous forecasts of declining production in Maritimes Canada. This forecast results from an uncompetitive cost/price environment verse the close U.S. supply basins such as the Marcellus and Utica. Development of the plan to reverse the M&NP system preceded the development of Pieridae's Project.

4.4 Pieridae will obtain capacity on M&NP to move gas from South to North (from the U.S. to Canada). In addition, Pieridae will capacity on upstream interconnection pipelines from a number of new pipeline projects bringing gas to the inlet of the M&N U.S. pipeline at Dracut. These projects are reviewed in more detail in Appendix "A".

4.5 In order to make the necessary commitments on the pipelines a long-term NEB licence to import gas is a necessary element. Establishing the Applicant's right to import gas, will in turn enable the Applicant to complete the long-term sales and supply agreements necessary for the Project's success.

5 EXPORT LICENCE APPLICATION

5.1 Submission

5.1.1 A significant opportunity exists to develop Canadian gas resources to supply new and expanding LNG markets in the Atlantic region and elsewhere around the globe. This opportunity provides the basis for long-term gas resource development and the corresponding local, regional and national economic benefits.

5.1.2 There are significant investments and contractual requirements throughout the Project's value chain, from upstream supply and transmission to downstream LNG markets. This value chain requires firm long-term sales agreements to justify and support the very large capital expenditures of the Project. A long-term NEB licence to export LNG is necessary to establish Pieridae's ability to complete the Project, enabling it to develop the long-term sales and supply arrangements necessary for the realization of the Project.

5.1.3 In support of this Application, Pieridae makes the following submissions with supporting expert evidence:

5.1.3.1 North American and Canadian gas resources are expansive. Reserves have increased substantially with the development of horizontal drilling and multi-stage fracture technologies. There is no reason to expect that this growth pattern will not continue into the future and that additional technological advances will increase economically available reserves to Canada, Atlantic Canada and North America in general.

5.1.3.2 Canada, Atlantic Canada and the Northeast United States have productive gas potential far in excess of projected demand of the Project and forecasted consumption over the requested licence period.

5.1.3.3 Natural gas markets will continue to function over the forecast period with natural gas buyers and sellers establishing fair market prices based on supply and demand fundamentals in Canada, Atlantic Canada and North America in general.

5.1.3.4 Dufour Energy Commodities' conclusions are found in Section 8 and their report is included in Appendix "A" - *Review and Analysis of Natural Gas Supply and Demand Forecasts for Canada and Export Impact Assessment of Goldboro LNG*. ("**Dufour Energy Report**")

5.2 The Dufour Energy Report also concluded:

5.2.1 The gas resources in Canada, Maritimes Canada and the Northeast U.S. supply basins and other basins connected through the North American pipeline grid are substantive and provide a solid basis to pursue this proposed LNG export opportunity.

5.2.2 Canadian, Maritimes Canada and U.S. natural gas resources are robust and resource estimates continue to grow with each new analysis. As a result, expected Canadian natural gas demand is far exceeded by production potential is far in excess of projected domestic demand through 2040.

5.2.3 Natural gas markets will continue to function over the requested licence period establishing market prices based on supply and demand fundamentals.

5.2.4 The import of gas and the export of LNG proposed in this Application will not cause Canadians or Maritimes Canada difficulty in meeting their gas requirements at fair market prices.

5.3 Pieridae respectfully submits, with regard to the Section 118 NEB Act "surplus" criterion, that the Board can conclude, on the basis of the filed evidence, that the requested Import Term Quantity and Export Term Quantity "does not exceed the surplus remaining after due allowance has been made for the reasonably foreseeable requirements for use in Canada and Maritimes Canada, having regard to the trends in the discovery of gas in Canada."

6 REGULATORY FRAMEWORK

6.1 This Application has been prepared generally in accordance with the Board's Filing Manual and the Part VI Regulations. The Applicant has considered the revisions to the NEB Act contained in the Jobs, Growth and Long Term Prosperity Act, the Board's direction 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, and the Board's approach in the LNG Canada Development Inc. ("LNG Canada") decision dated February 4, 2013 (the "LNG Canada Decision"). There are several exceptions in this Application to the Part VI Regulations:

6.1.1 The Application does not contain the information prescribed by section 12(c)(i) of the Part VI Regulations. LNG sold by Pieridae will not be available for before 2019 and Pieridae is unable to undertake firm commitments to particular markets at this time. In the LNG Canada Decision, the Board concluded an analysis of offshore markets was "not particularly relevant" to a determination of whether there existed a surplus for export from Canada. Pieridae submits in its circumstances, identification of all specific markets and terms of sale are similarly not relevant to the Board's determination of surplus for Canada. As such, the Applicant seeks relief from the requirements imposed under section 12(c)(i) of the Part VI Regulations.

6.1.2 The Application does not contain information related to the status of approvals or authorizations pertaining to the importation of gas into the country of destination as required by section 12(h)(ii) of the Part VI Regulations nor does it provide information relating to the facilities that will be required to import the LNG into importing countries as contemplated by section 12(e)(iii) of the Part VI Regulations. There are many LNG markets worldwide that have extensive experience importing LNG from diverse sources. Accordingly, the Applicant does not plan to provide any information in connection with the authorizations or facilities that are going to be required in importing countries. LNG Canada Decision at pg. 4. In these circumstances, the Applicant seeks relief from the requirements imposed under subsections 12(e)(iii) and h(ii) of the Part VI Regulations as they relate to information concerning the country of destination.

6.2 Pieridae also seeks relief from any other requirements contained in section 12 of the Part VI Regulations that are not specifically addressed in this Application.

7 GAS SUPPLY

7.1 The annual outlet capacity of the Terminal at full build is 10 MMt/y or the equivalent of about 1.4 Bcf/d (14.5 10^9 m^3). The Applicant, along with additional partners which may enter the project, will supply gas to the Project and lift LNG from the Export Point(s).

7.2 The Project shall supply natural gas through the following supply options including offshore Nova Scotia, onshore New Brunswick and Importation of natural gas from the Northeast U.S. through the M&NP system.

7.3 The Applicant's Project location is effectively already connected to the North American gas grid by the MN&P system. It is therefore already connected to market hubs where large volumes of gas are traded and market prices are established through trading.

7.4 The Applicant will fulfill the supply requirements through a combination of owned or controlled gas production, the purchase of natural gas under long term contract and the purchase of natural under short term arrangements. The choices exercised will be based on the most economically efficient options at any given point in time.

7.5 The Project will use approximately 1.4 Bcf/d (14.5 10^9 m^3) at its maximum build configuration. Gas feedstock will be a combination of Maritimes Canada and gas sourced through the M&N US pipeline and interconnecting pipelines. The Project will import up to a maximum of 1.0 Bcf/d (10.3 10^9 m^3) from the M&N US pipeline. The Project plans to maximize the use of Maritimes Canada gas and back fill with gas from M&N US. These plans are subject to commercial negotiations between counterparties.

7.6 The M&NP will deliver feed gas to the Project. The capacity of the M&N Canada and M&N U.S. will have enough capacity to service both the Project and demand in Maritimes Canada.

7.7 Stimulation of Development of Maritimes Canada Reserves

7.7.1 Increased gas production from relatively low cost shale gas basins in the U.S. have significantly lessened the share of the U.S. gas market served by Canadian gas. As a result, Maritimes Canada reserve development has become uncompetitive.

7.7.2 With supply now surplus to demand, including Maritimes Canada demand, a significant opportunity exists to target the Maritimes Canada reserves to supply the expanding LNG markets worldwide. This opportunity LNG provides the only competitive driver for long-term gas development in Maritimes Canada and accompanying local, regional and national economic benefits associated with it.

8 MARKET-BASED PROCEDURE

8.1 Complaints Procedure

8.1.1 Canadian gas users are made aware of the proposed export by the filing of this Application, by further information that may be filed by the Applicant, and by any publication of notices as directed by the NEB. The Project's environmental assessment process has been ongoing for over a year, which provided a number of public notices about it.

8.1.2 Pieridae is not aware of a Canadian natural gas purchaser that has raised a concern that it will be unable to obtain gas on similar or better terms to those offered to export customers.

8.1.3 The price of the gas supplied by the Applicant to the Terminal will be determined by the functioning North American gas market as reflected at the relevant gas market trading hubs. The same price of gas at the Terminal inlet, purchased under the same conditions, will be equally available in the market to Canadian gas users.

8.1.4 The gas supply for the Terminal will be obtained by the Applicant on the same type of terms and conditions as Canadian gas users, adjusting for local conditions and similar contracts. The functioning, highly competitive Canadian and broader North American gas markets ensure such non-discriminatory treatment of gas users.

8.1.5 The Applicant has neither the intent, nor the ability to obtain gas for the Terminal supply on terms and conditions, including price, more favourable than other users contracting under similar conditions.

9 NATURAL GAS SUPPLY/DEMAND & EXPORT IMPACT ASSESSMENT

9.1 Dufour Energy Commodities have been retained to prepare a study to assess the merits and impact of the proposed exports relative to the Board's legislative mandate. The study was aimed at addressing the Board's Section 118 criterion that "*the quantity of oil and gas to be exported does not exceed the surplus remaining after due allowance has been made for he reasonably foreseeable requirements for use in Canada, having regard to the trends in the discovery of oil or gas in Canada."*

9.2 Dufour Energy Commodities Report and Conclusions:

9.2.1 North American gas resources are prolific and well able to meet Canadian consumers' energy requirements at fair market prices over the requested licence period .

9.2.2 Canadian gas resource is approximately 1,093 Tcf, subject to variability of the gas price environment, which has a large effect on exploration and production effort.

9.2.3 Canadian gas production should average about 17 Bcf/d by 2035, similar to production in 2000.

9.2.4 The U.S. based gas resource production will increase from approximately 63 Bcf/d in 2011 to 90 Bcf/d in 2040 under modest pricing environment. This gives combined Canada and U.S. production estimate of about 107 Bcf/d.

9.2.4.1 Within the forecast, the U.S. expects to move from a net importer of pipeline natural gas in 2020 to a net exporter of pipeline natural gas in 2040 of approximately 5.7 Bcf/d.

9.2.4.2 The U.S. also expects to export LNG in the order of 4.0 Bcf/d by 2040.

9.2.5 The Marcellus and Utica shale basin plays, which are geographically closest to the Maritimes Canada region, have a range of resource estimates of between 63 Tcf to 204 Tcf, depending upon the price environment.

9.2.6 The Atlantic Canada region has a resource estimate of approximately 75 Tcf,

9.2.6.1 The majority of the resource being offshore Nova Scotia and New Brunswick shale plays.

9.2.6.2 The forecasted North American gas pricing environment and competing gas basins means it is unlikely to attract development capital over the licence period.

9.2.7 Maritimes Canada will have access to natural gas in the quantities necessary to meet forecasted demand. These sources of gas will come from Maritimes Canada and, largely as time progresses, the Northeast U.S.

9.2.8 Maritimes Canada will continue to have access to market based pricing for natural gas, adjusted for transportation costs from the particular supply basin accessed. The market based pricing will be open access and highly visible to market participants as it currently is.

9.2.9 The Project will not restrict the amount of gas that Canadians would be able to access at market pricing.

9.2.10 The Project will not restrict the amount of gas the Maritime Canada region would otherwise be able to access at market pricing.

9.2.11 The usage of between 3.2 and 5.0 Tcf of Canadian sourced gas verse the estimated gas reserves of 1,093 Tcf in Canada and 91 Tcf in the Maritimes Canada region means there will still be significant reserves available to Canada and Maritimes Canada with the Project for the foreseeable future.

9.2.12 The Project will have a beneficial effect by reinforcing on the natural gas infrastructure in the Maritimes Canada region.

10 LNG MARKETS

10.1 Commercial agreements contemplated, under negotiation, or executed between Pieridae and any customer, supplier or service provider are or will be subject to confidentiality provisions typical of the oil and gas industry and cannot be disclosed as part of the Application.

11 RELIEF REQUESTED

11.1 The Applicant respectfully requests pursuant to section 117 of the NEB Act, a Licence subject to following terms:

11.2 **TERM:** The proposed term of the Licence is a period of 20 years commencing on the date of first export of LNG under the Licence;

11.2.1 **EXPORT START DATE:** Unless otherwise authorized by the Board, the term of the Licence shall end 10 years after the date of the Governor-in-Council approval of the issuance of the Licence, if export of LNG has not commenced on or before that;

11.2.2 **IMPORT TERM QUANTITY:** The quantity of natural gas to be imported in vapour form over the term of the Licence shall not exceed 7,300 billion cubic feet ("**Bcf**") or 206.7 10^9 m^3;

11.2.3 **EXPORT TERM QUANTITY:** The quantity of LNG that may be exported over the term of the Licence shall not exceed 200 million metric tons ("MMt"), (natural gas equivalent of approximately 10,500 Bcf or 297.3 10^9 m^3);

11.2.4 **ANNUAL IMPORT QUANTITY:** The quantity of natural gas imported in vapour form shall not exceed 365 Bcf or 10.3 10^9 m^3;

11.2.5 **ANNUAL EXPORT QUANTITY:** The quantity of LNG that may be exported in any 12-month period shall not exceed 10 MMt (natural gas equivalent of approximately 511 Bcf or 14.5 10^9 m^3);

11.2.6 **ANNUAL TOLERANCE:** The quantity of LNG that may be exported or natural gas that may be imported in any 12-month period may exceed the annual maximum by 15 percent in order to allow for operating, demand and maintenance variables;

11.2.7 **GAS IMPORT POINTS:** The points of import of natural gas in vapour form from the U.S into Canada shall include the interconnect between Maritimes and Northeast Canada pipeline and the Maritimes and Northeast U.S. pipeline along the Canadian-U.S. border between the province of New Brunswick and the state of Maine;

11.2.8 **LNG EXPORT POINTS:** The points of export of LNG from Canada shall include the outlet of the loading arm of the natural gas liquefaction plant to be located near Goldboro, NS"), and border locations between Maritimes Canada and the U.S. served by major highways or railways; and

11.2.9 **PERMISSION:** The Applicant requests a licence to import natural gas and a licence to export LNG on its own behalf and as agent for third parties whom themselves hold title to the natural gas or LNG.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

Dated this 11 of March, 2014.

Per:

Thomas Dawson

EVP & COO, Pieridae Energy (Canada) Ltd.

All questions pertaining to this Application, including export sales contracts and other commercial agreements related to the Project, should be directed to:

Thomas Dawson

Suite 730

1718 Argyle Street

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P (902) 492-4044 F (902) 492-5211

12 APPENDIX A

Review and Analysis of Natural Gas Supply and Demand Forecasts for Canada and Export Impact Assessment of Goldboro LNG

Dufour Energy Commodities

Attached