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U.S. Department of Energy (FE-34)
Office of Oil and Gas Global Security and Supply
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Re: FE Docket No. 14-179-LNG -- Pieridae Energy (USA) Ltd.; Application (“Application”)¹ for Long-Term Authorization to Export Domestically Produced Natural Gas through Canada to Non-Fee Trade Agreement Countries After Liquefaction to Liquefied Natural Gas for a 20-Year Period

To whom it may concern:

With regards to the above-referenced matter, for the reasons stated in Section A of this letter below, the Department should find that the granting of authorization to Pieridae Energy (USA) Ltd. (“Pieridae”) to export domestically produced natural gas through Canada to Non-Free Trade Agreement Countries (“Non-FTA Countries”) after liquefaction to liquefied natural gas (“LNG”) would not be consistent with the public interest. Pursuant to its authority under Section 3(a) of the National Gas Act (“NGA”), the Department should deny Pieridae’s Application for this authorization to export natural gas.

In addition, for the reasons stated in Section B of this letter below, the Department should not find that the Application and any resulting authorization would be categorically excluded from the preparation of either an Environmental Assessment or Environmental Impact Statement under the National Environmental Policy Act (“NEPA”).

Background

On December 10, 2014 the Department of Energy (“Department”) published in the Federal Register a Notice of Application (“Notice”) with respect to the above-referenced request and Application, for review pursuant to section 3(a) of the Natural Gas Act (“NGA”), 15 U.S.C.

¹ For purposes of this comment letter, the Application is considered to include both the cover letter from Erik J.A. Swenson of Norton Rose Fulbright to Mr. John Anderson of the Office of Fossil Energy, U.S. Department of Energy, dated October 24, 2014 (referenced herein as Application, cover letter), and the attached application, United States of America Before the Department of Energy / Office of Fossil Energy, In the Matter Of: Pieridae Energy (USA) Ltd., Docket No. 14-179-LNG, (referred to herein as “Application,” with specified page numbers or appendices as appear in this attached application).

717b(a).² Under Section 3(a) of the NGA, the Department may deny such a request to export natural gas if it finds that such exportation “will not be consistent with the public interest.”³

Issues to be included in the Department’s review

In the Notice, the Department noted that in its review it would consider any issues required by law or policy, particularly calling out the following issues, among others, for consideration to the extent they were determined to be relevant:

- “the domestic need for the natural gas proposed to be exported [and] the adequacy of domestic natural gas supply”, and
- “the cumulative impact of the requested authorization and any other LNG export application(s) previously approved on domestic natural gas supply and demand fundamentals”.

In addition, the Department stated in the Notice it would consider the following environmental documents in the course of this review:

- *Addendum to Environmental Review Documents Concerning Exports of Natural Gas From the United States*, 79 FR 48,132 (Aug. 15, 2014) (“Addendum”); and
- *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States*, 79 FR 32,260 (June 4, 2014) (“Life Cycle Report”).⁴

Background presented in Pieridae’s Application

Pieridae, a Canadian corporation, filed the Application in its capacity as sole general partner of Goldboro LNG Limited Partnership II, a limited partnership formed under the laws of the province of Alberta, Canada, having a principal place of business in Halifax, Nova Scotia, Canada.⁵ In its Application, Pieridae asked the Department for a 20-year authorization to export up to 292 billion cubic feet of natural gas per year (Bcf/y), or approximately 0.8 billion cubic feet of natural gas per day (Bcf/d) from the U.S. for:

- (a) use as a feedstock in a Canadian LNG facility, where the LNG produced would be exported from Canada to one or more countries with which the U.S. has a Free Trade Agreement (“FTA Countries”);

² Department of Energy, Office of Fossil Energy, “Pieridae Energy (USA) Ltd.; Application for Long-Term Authorization To Export Domestically Produced Natural Gas Through Canada to Non-Free Trade Agreement Countries After Liquefaction to Liquefied Natural Gas for a 20-Year Period,” [FE Docket No. 14-179-LNG] Federal Register, Vol. 79, No. 237, (Dec. 10, 2014), pp. 73285, 73286, available at http://energy.gov/sites/prod/files/2014/12/f19/FR%20Published%2014_179%2012_10_14_0.pdf.

³ See 15 U.S.C. 717b(a).

⁴ The Department’s signed FR Notice of Application with respect to this matter is also available at www.energy.gov/sites/prod/files/2014/12/f19/Pieridae_Signed_FR_Notice.pdf, and footnote 5 of this version of the Department’s Notice gives a live weblink to this Life Cycle Greenhouse Gas Report at: <http://energy.gov/fe/life-cycle-greenhouse-gas-perspective-exporting-liquefied-natural-gas-united-states>. This Life Cycle report is also available at www.energy.gov/sites/prod/files/2014/05/f16/Life_Cycle_GHG_Perspective_Report.pdf.]

⁵ See Application, p. 5.

- (b) use as a feedstock in a Canadian LNG facility, where the LNG produced would be exported from Canada to one or more Non-FTA Countries; or
- (c) use in Canada as an energy source to operate a Canadian LNG facility and for other potential uses in Canada.⁶

As discussed in more detail in Section A.2 of this letter, Pieridae is planning to transport up to 0.8 Bcf/d of natural gas from Dracut, Massachusetts to a planned Goldboro, Nova Scotia LNG plant, using the Maritimes & Northeast Pipeline, for liquefaction there and export overseas to FTA- and/or Non-FTA countries. Pieridae has asked for Department authorization to do so for a 20-year term beginning on the earlier of (i) the date of first export by Pieridae, or (ii) seven years from the date the Department issues the authorization of requested by Pieridae in its Application.⁷

A. Granting this export authorization would not be consistent with the public interest

Although there are grounds related to each of the issues specified in the Notice on which the Department could find that granting the requested authorization to export domestic natural gas is not consistent with the public interest,⁸ this letter focuses on two:

- 1) Climate change concerns related to the environmental documents the Department noted for consideration in its review; and
- 2) Domestic need and supply concerns related to the Department's review issues noted in the first and second bullet point above, particularly with respect to domestic gas and supply concerns in New England, including the likely cumulative impact of allowing multiple LNG export proposals.

Each of these grounds would be sufficient to deny the Application, and each is addressed in turn.

1) Climate change concerns

By invoking the Life Cycle Report and the Addendum, the Department's Notice implicitly raised potential Greenhouse Gas ("GHG") / climate change impacts⁹ as a part of its review of the

⁶ See Application, pp. 3-5.

⁷ See Application, p. 5.

⁸ Without necessarily endorsing any of the specific lines of argument advanced, for example, by the trade organization America's Energy Advantage, I note that this organization, for one, with manufacturing, commodity-producing and other business members, including Dow, Alcoa and Huntsman, has argued that allowing LNG export of domestically produced natural gas will raise natural gas prices in the U.S., undercut the stable availability and affordability of natural gas it says is "powering an American manufacturing comeback", harm the economy, and, in the case of LNG export to Non-FTA countries, undermine efforts of U.S. trade negotiators to open closed markets to American goods and services. See, e.g., America's Energy Advantage (AEA), "AEA Statement on Additional LNG Export Approvals," (Sept. 10, 2014), available at <http://www.americasenergyadvantage.org/blog/entry/aea-statement-on-additional-lng-export-approvals>.

⁹ The Greenhouse Gas (GHG) emissions, Global Warming Potential (GWP), and climate change impact of various energy option alternatives, including exported LNG, are so interwoven in terms of their effect on the public interest

Application. The fact that increasing the risk of greater climate change is not in the public interest does not need substantiation at this point. The potential for increased GHG emissions and climate change impact, due to expanded LNG export of U.S. natural gas as proposed in the Application, makes such export inconsistent with the public interest.

As the Addendum notes, the Department commissioned a study by the U.S. Energy Information Administration (“EIA”) that modeled a variety of U.S. LNG export scenarios.¹⁰ The Addendum notes that the “EIA projected that, across all cases, an average of 63 percent of increased export volumes would be accounted for by increased domestic [natural gas] production. Of that 63 percent, EIA projected that 93 percent would come from unconventional sources (72 percent shale gas, 13 percent tight gas, and 8 percent coalbed methane . . .)”, with certain caveats.¹¹

In other words, increasing LNG export is likely to increase domestic production and ultimate global combustion of natural gas, a fossil fuel contributing to climate change. Moreover, that increased domestic production is likely to come primarily from unconventional sources, like shale gas, which may have a higher methane leakage rate (and therefore climate change impact), as compared to conventional gas production, according to a study by both the National Energy Technology Laboratory and by Cornell University’s Howarth.¹² Because LNG export is likely to increase the domestic production and ultimate global combustion of natural gas, particularly natural gas derived from unconventional sources like shale, contributing to climate change, such export is not in the public interest.

As the Department is aware, Greenhouse Gas (“GHG”) emissions, and the consequent climate change impact from natural gas, result from methane leakage, non-combustion carbon dioxide (CO₂) emissions, and combustion (to drive pipeline compressors, etc.) in the “upstream” segments of natural gas systems, and not simply from the combustion of the natural gas at the point of end use.¹³ Where liquefaction to LNG, and marine shipment of the LNG to the end user are involved, there are additional GHG emissions related to the energy needed to liquefy, ship the LNG, and then re-gasify the LNG for use.¹⁴ For that reason, a simple comparison of carbon

with respect to climate change, that they are essentially synonymous terms for purposes of this discussion and are used interchangeably herein.

¹⁰ See U.S. Department of Energy, [Final] *Addendum to Environmental Review Documents Concerning Exports of Natural Gas From the United States*, 79 FR 48,132 (Aug. 15, 2014) [hereinafter, “Addendum”], p. 4.

¹¹ See Addendum, pp. 4-5.

¹² See Addendum, p. 41, Table 10 (Comparison of Leakage Rates from Upstream U.S. Natural Gas Industry by various authors, listing a 2014 National Energy Technology Laboratory (NETL) study that found a 1.4% methane leakage rate for unconventional resources and a 1.3% methane leakage rate for conventional resources, and a Howarth (Cornell University) study that found a 5.75% methane leakage rate for unconventional resources and a 3.85% methane leakage rate for conventional resources).

¹³ See, e.g., Addendum, p. 33, Table 7 (showing GHG emissions from upstream U.S. natural gas systems including methane (CH₄) [emissions], non-combustion carbon dioxide [CO₂] releases, and carbon dioxide from combusted methane in the upstream segment).

¹⁴ See, e.g., U.S. Department of Energy, Office of Fossil Energy / National Energy Technology Laboratory, *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States*, (May 29, 2014), DOE/NETL-2014/1649, referenced in 79 FR 32,260 (June 4, 2014) [hereinafter, “Life Cycle Report”, see also footnote 4, giving weblinks], p. 11, Figure 6-3 (showing component breakdown of GHG emissions for U.S. LNG

dioxide output per million Btu at the point of end use combustion of natural gas, versus coal or oil, does not give the full picture of the relative climate change impact of exported natural gas versus these other fossil fuels. Instead, a “life cycle” analysis of exported LNG’s climate change impact is more appropriate, factoring in methane leakage impacts, processing and shipping emissions, and the like.

The 2014 Life Cycle Report, prepared for the Department, compared the estimated GHG emissions / global warming potential (“GWP”) / climate change impact of four alternative scenarios for supplying either Europe or Asia with additional electric energy from fossil fuels:

- 1) LNG from the Marcellus shale area of the United States (“Scenario 1”),
- 2) LNG from a nearer regional source (Algeria for Europe, Australia for Asia) (“Scenario 2”),
- 3) Natural gas piped from Russia (“Scenario 3”), and
- 4) Regional coal (in Germany for Europe, China for Asia) (“Scenario 4”).¹⁵

While the Life Cycle Report did find that the Global Warming Potential under the regional coal scenario was likely to be higher than for most, if not all, of the natural gas / LNG scenarios, it did not definitively determine that LNG from the United States had the lowest Global Warming Potential of these four fossil fuel scenarios. On the contrary, charts in the Life Cycle Report show that the lowest end of the range for estimated possible GWP was for the scenario of LNG from a nearer regional source (Algeria for Europe / Australia for Asia), not LNG from the United States, on both the 20 year and 100 year time horizons¹⁶ -- although overlapping uncertainty bars make this a less than certain outcome.

Moreover, in the European case, overlapping uncertainty bars in the full life cycle analysis make it quite possible that either or both Algerian LNG or piped Russian natural gas would have lower Greenhouse Gas emissions (less climate change impact / Global Warming Potential) than LNG exported to Europe from the U.S.¹⁷ Similarly, in the Asian case, overlapping uncertainty bars make it possible that either or both Australian LNG or piped Russian natural gas would have lower Greenhouse Gas emissions than LNG exported to Asia from the U.S.¹⁸ In addition, at the extremes of the range of uncertainties shown in the Life Cycle Report, in the Asian case, regional Chinese coal use for electricity generation might actually have lower life cycle climate change impact than LNG exported from the U.S., on the twenty year time horizon.¹⁹

shipped to Europe, including GHG emissions from gas extraction, gas processing, domestic pipeline transport of the gas, liquefaction, tanker transport, tanker berthing and deberthing, and LNG regasification).

¹⁵ See Life Cycle Report, pp. 3-4 (discussing the three gas scenarios -- scenario 1 & 2 based on LNG, and scenario 3 [Russian gas] based on transmission by pipeline directly to the destination European power plant, and scenario 4 based on coal extraction in Germany and China).

¹⁶ See Life Cycle Report, p. 9, Fig. 6-1; p. 10, Fig. 6-2.

¹⁷ See Life Cycle Report, p. 9, Fig. 6-1.

¹⁸ See Life Cycle Report, p. 10, Fig. 6-2.

¹⁹ See Life Cycle Report, p. 10, Fig. 6-2 (showing top of range of uncertainty for US LNG export at over 1,000 kg CO₂e/MWh in Greenhouse Gas emissions, and bottom of range of uncertainty for Chinese regional coal use at under 1,000 kgCO₂e/MWh in Greenhouse Gas emissions).

Among the reasons for these outcomes, is that LNG export is more energy intensive and creates more Greenhouse Gas emissions than domestic use of natural gas (with longer LNG shipping routes also being more energy intensive than shorter ones, all other factors being equal). As the Life Cycle Report notes, “[c]ompared to domestically produced and combusted gas, there is a significant increase in the life cycle GHG emissions that are attributed to the LNG supply chain, specifically from liquefaction, tanker transport, and regasification processes.”²⁰

So, even within the limited range of fossil fuel-based energy options analyzed in the Life Cycle Report, it is not at all clear that U.S. LNG export would have the lowest climate change impact, and there is some indication that closer regional LNG sources would be more likely to have the lowest climate change impact of the options considered by the report.

Most significantly, however, the Life Cycle Report does not weigh the climate change impacts of exporting U.S. LNG against non-fossil fuel scenarios for electricity generation in Europe or Asia which are likely to have even lower Global Warming Potential. We know, for example, that Denmark is aggressively pursuing the elimination of fossil fuels in its energy system by 2050,²¹ that Germany produced 31% of its electricity from renewables in the first half of 2014 (including 17% from wind and solar), according to *Bloomberg Business*,²² and that Scotland has announced its intention to produce the equivalent of all its electricity needs from renewable energy by 2020.²³ So, the question is no longer, ‘Does exported U.S. LNG have a lower Global Warming Potential than regional coal used for electricity generation in Europe and Asia?’ The question the Department should ask in its review with respect to climate change impact is: ‘Does exported U.S. LNG have a lower Global Warming Potential than renewable and other energy options for Europe and Asia?’

If the answer to that question is that other countries have energy options with lower Global Warming Potential than exported U.S. LNG, which seems likely, then that is another reason that export of U.S. LNG should be denied as inconsistent with the public interest.

²⁰ Life Cycle Report, p. 10.

²¹ See Katherine Boehrer, “Denmark’s Smart Lighting Lab Offers A Glimpse At The Streetlights Of The Future,” *Huffington Post* (Nov. 6, 2014), available at http://www.huffingtonpost.com/2014/11/06/denmark-smart-lighting-lab_n_6114744.html (“Denmark’s ambitious climate goals, include[e] eliminating the use of fossil fuels by 2050 . . .”).

See also Denmark’s Klima-, Energi- Og Bygningsministeriet, “From coal, oil and gas to green energy” (2/24/11), linked by Boehrer above and available at <http://www.kebmin.dk/node/845> (“The Danish Government today unveiled its ‘Energy Strategy 2050’, which describes how the country can achieve its independence from coal, oil and gas by 2050 and significantly reduce its greenhouse gas emissions.”; discussing new fossil fuel energy reduction initiatives that “will put Denmark well on its way to complete independence of fossil fuels by 2050.”)

²² See Caroline Winter, “Germany Reaches New Levels of Greendom, Gets 31 Percent of Its Electricity From Renewables,” *Bloomberg Business*, (Aug. 14, 2014), available at <http://www.bloomberg.com/bw/articles/2014-08-14/germany-reaches-new-levels-of-greendom-gets-31-percent-of-its-electricity-from-renewables> .

²³ See Scottish Government, “Energy in Scotland: Get the facts,” (downloaded 2/9/15), available at <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Facts> (“The Scottish Government has an ambitious but achievable target for renewable energy in Scotland to generate the equivalent of 100 per cent of gross annual electricity consumption and 11 per cent of heat consumption by 2020.”).

2) Domestic need and supply concerns, particularly in New England

Authorizing the proposed LNG export proposed in the Application raises domestic need and supply concerns, particularly in Massachusetts and the rest of New England, especially where any gas available at the Dracut, MA origin point of the Maritimes & Northeast Pipeline would be diverted for export through Canada. Such authorization would therefore not be consistent with the public interest and the Application should be denied on these grounds.

Pieridae states in its Application that it will not “construct, expand or modify any pipeline facilities in the US in conjunction with the proposed export of natural gas from the US. Moreover, neither Pieridae nor any Pieridae affiliate has entered into an agreement or commitment of any kind with any third party in relation to any proposal to construct or expand or modify any pipeline system in the US.”²⁴

Pieridae anticipates obtaining pipeline transport for its gas for export in Massachusetts, New Hampshire and Maine primarily from the operators of the Maritimes & Northeast Pipeline in the U.S.²⁵ Pieridae expects that pipeline transportation of its gas would be provided in Canada by the Canadian operators of the Maritimes & Northeast Pipeline.²⁶ Pieridae notes that the Canadian portion of the Maritimes & Northeast Pipeline extends from the Canadian border where it connects to the U.S. portion of the Maritimes & Northeast Pipeline, to a point immediately adjacent to Pieridae’s proposed Goldboro LNG Project location at the Goldboro Industrial Park in Guysborough County, Nova Scotia.²⁷

According to Pieridae: “The natural gas, which will be sourced from the US, is intended to be exported from the US and imported into Canada via the M&N Pipeline [Maritimes & Northeast Pipeline].”²⁸ Pieridae notes that the Maritimes & Northeast Pipeline runs from Dracut, Massachusetts to Goldboro and other Nova Scotia locations.²⁹

In short, Pieridae is planning to transport up to 0.8 Bcf/d of natural gas from Dracut, Massachusetts to a Goldboro, Nova Scotia LNG plant, using the Maritimes & Northeast Pipeline, for liquefaction there and export overseas to FTA- and Non-FTA countries. Moreover, Pieridae says it will do so without constructing or expanding any pipelines or contracting with others to do so.

²⁴ See Application, p. 8. See also the Department’s Notice (noting that Pieridae is “not proposing to construct, expand or modify any pipeline facilities in the United States in conjunction with its proposed export of natural gas.”).

²⁵ See Application, p. 9. See also Application, p. 4, note 5 (defining “M&N Pipeline” and “M&N US Pipeline”).

²⁶ See Application, p. 9. See also Application, p. 4, note 5 (defining “M&N Pipeline”).

²⁷ See Application, p. 9. See also Application, p. 8 (noting that Pieridae’s export into Canada would be made at a point located near Baileyville, Maine on the Maritimes & Northeast Pipeline at or near meter station ID 30014).

²⁸ Application, p. 17.

²⁹ See Application, p. 17.

A recent Massachusetts Department of Energy Resources / Synapse study, looking at future peak gas demand needs for Massachusetts, concluded that without the construction of additional pipeline infrastructure, Massachusetts would likely be short 0.6 to 0.9 Bcf/d of natural gas on peak demand days.³⁰ The argument has been made by the Kinder Morgan / Tennessee Gas Pipeline companies that a new pipeline to the interconnection point with the Maritimes & Northeast Pipeline in Dracut, Massachusetts is needed, for Massachusetts and other New England consumers and electricity generators serving Massachusetts and other New England consumers, in order to meet such an anticipated peak demand shortfall.³¹ Such a pipeline to Dracut, however, has not yet been approved by the Federal Energy Regulatory Commission (“FERC”). FERC is unlikely to approve the Kinder Morgan pipeline proposal, if at all, before the end of 2016 at the earliest.

Pieridae, however, has asked the Department here for expedited approval of its Application for export authorization by March 15, 2015.³² That would mean approval on March 15, 2015 of the export of up to 0.8 Bcf/d of natural gas from the Dracut, Massachusetts origin terminal of the Maritimes & Northeast Pipeline to Canada for LNG export, without knowing if inbound pipeline infrastructure to Dracut would be added to make up for the extra gas transportation infrastructure into Massachusetts that Pieridae would need.

In the absence of newly constructed transmission supply pipelines to Dracut, MA (or even approval to construct the same), it would appear that any approval of Pieridae’s Application by the Department now would therefore amount to approval to divert up to 0.8 Bcf/d of the existing gas transmission capability into Dracut from use by New England consumers and electricity generators, to instead be used for foreign export of natural gas as LNG out of Canada. In order for Pieridae to export gas from Dracut, MA, it would have to use pipeline infrastructure into Dracut to supply the gas for export. Such a diversion of reportedly constrained pipeline infrastructure into Massachusetts, for the LNG export interests of a private Canadian corporation,

³⁰ See Synapse, “Massachusetts Low Gas Demand Analysis: Final Report / RFR-ENE-2015-012 / Prepared for the Massachusetts Department of Energy Resources [DOER],” (Jan. 7, 2015), pp. 3, 35.

See also Mary Serreze, “Massachusetts needs more natural gas pipeline capacity to meet future needs, report says,” The Republican / [Masslive.com](http://www.masslive.com) (Jan. 10, 2015), available at http://www.masslive.com/news/index.ssf/2015/01/report_massachusetts_needs_mor.html (“Synapse determined that Massachusetts will be short about 600-800 million cubic feet [0.6 – 0.8 Bcf] of natural gas on a hypothetical cold winter day by 2020, and up to 900 million cubic feet short by 2030.”).

³¹ See, e.g., Kinder Morgan, “More Pipeline Capacity Benefits Consumers, the Environment, (downloaded 2/9/15) available at http://www.kindermorgan.com/pages/business/gas_pipelines/east/neenergydirect/capacity.aspx, in arguing for its proposed “Northeast Energy Direct” pipeline project connecting the Marcellus shale gas production area to the Dracut, MA interconnection point with the Maritimes & Northeast Pipeline:

“As the EIA [U.S. Energy Information Administration] stated, Massachusetts has exceptionally high natural gas prices, resulting from a serious lack of pipeline capacity supplying the power generation sector. The Commonwealth also suffers from some of the highest gas price volatility in the country, exacerbated by the lack of supply coupled with significant demand growth. Gas prices are a function of supply and demand in the market, and the current regional supply infrastructure cannot meet the significantly higher demand levels of the region. This has resulted in sharp increases in natural gas prices in New England during the past two winters, and these high prices ‘suggest a natural gas delivery system that is stretched significantly.’”

³² See Application, p. 78.

would be inconsistent with the public interest, particularly the public interest of New England businesses and consumers.

Moreover, any approval by the Department of this Application by March 15, 2015, could amount to a prejudgment of the outcome of FERC's review of the proposed Kinder Morgan pipeline to Dracut or other similar pipelines being considered, which would be inappropriate.

Even if the Massachusetts Department of Energy Resources / Synapse study is wrong, and there is actually no peak demand capacity constraint on natural gas transmission into Dracut or other Massachusetts points, as seems quite possible, or even a surplus of available natural gas in Dracut above and beyond peak demand needs, there would have to be a surplus of inbound gas pipeline capacity at or above 0.8 Bcf/d for Pieridae's export use, in order to avoid any impact on the domestic natural gas supply needs of New England consumers. If there is less than 0.8 Bcf/d of surplus natural gas available in Massachusetts to meet peak demand, the approval of Pieridae's Application to export 0.8 Bcf/d from Dracut, MA would appear to negatively impact the availability of supply of natural gas to Massachusetts and other New England consumers on peak demand days.

Pieridae appears to tacitly acknowledge this potential shortfall of supply infrastructure into Dracut in its Application, when it states that "[a]lthough the present capacity of these [pipeline] facilities is not sufficient to accommodate the full volume of exports for which Pieridae . . . is seeking authorization, M&N US [Maritimes & Northeast Pipeline US] and other third parties have announced various projects to construct or expand pipeline infrastructure for the purpose of transporting natural gas from the Marcellus and Utica producing regions to customers in northeastern US and eastern Canada."³³

In the absence of any such expanded pipeline infrastructure into Massachusetts, expansion which has not yet been approved, much less built, it seems highly likely that there would be domestic need for any natural gas proposed to be exported from Dracut. In such a case, any inbound pipeline capacity used for the Pieridae gas for export would likely cause shortfalls in the inbound pipeline capacity used to supply natural gas to meet Massachusetts and other New England consumers' needs. In such circumstances, Department approval of the Application would be inconsistent with the public interest, particularly if granted on the requested expedited timeline. Consequently, such approval should be denied.

B. The Application should not be categorically excluded from review under NEPA

Pieridae notes in the Application that the National Environmental Policy Act (NEPA) requires the Department to determine whether granting an application relating to LNG that will not be consumed in an FTA Country will have a significant impact on the environment.³⁴ The Application clearly anticipates that LNG from Pieridae's proposed project may not be consumed

³³ Application, pp. 17-18.

³⁴ See Application, p. 58.

in an FTA Country, but rather in a non-FTA Country.³⁵ Therefore NEPA appears to generally be applicable to the Department's review, which Pieridae does not seem to dispute.

Pieridae notes that to comply with NEPA, the Department must then determine whether the authorization requested is either categorically excluded from the preparation of an Environmental Assessment ("EA") or an Environmental Impact Statement ("EIS"), or requires the preparation of an EA and a Finding of No Significant Impact or requires the preparation of an EIS.³⁶ As Pieridae observes, "[g]enerally the level of environmental review associated with authorizing LNG exports depends on whether such authorization will result in (i) the construction of major new natural gas pipelines or facilities, or (ii) minor modifications to existing pipelines or facilities."³⁷ In fact, the Pieridae proposal cannot be fully undertaken without construction of major new natural gas pipelines connecting inbound to Dracut from gas production areas.

Pieridae essentially argues that its proposal under the Application should be granted a categorical exclusion from NEPA review, because it only involves minor operational changes to the Maritimes & Northeast Pipeline. Alternatively, Pieridae argues that, while Pieridae anticipates that Maritimes & Northeast Pipeline – US "will modify its pipeline system in a manner that provides for adequate capacity to meet the needs of Pieridae US, M&N US [Maritimes & Northeast US] will not be making changes specifically to accommodate Pieridae US, but rather will make changes to meet the overall demand of the market"³⁸ This is a semantic, not a real distinction, and should not be accepted to justify avoidance of something as important as an environmental review under NEPA.

Pieridae goes on to argue that any anticipated construction by third parties of pipeline infrastructure to transport natural gas from the Marcellus and Utica shale regions to the New England States and Canada, also does not trigger NEPA review of this Application because these projects have not been initiated specifically to accommodate Pieridae,³⁹ noting that "[a]s of the date of this Application, [Pieridae] has not entered into any agreement or given any commitment to secure natural gas pipeline transportation capacity with any third party."⁴⁰ (Emphasis added.) But Pieridae is also requesting expedited review in order to allow it time to "participate in current open seasons for pipeline transportation capacity that could impact the economics of its business"⁴¹ So, clearly, Pieridae anticipates entering into commitments to secure sufficient gas pipeline transportation capacity, and the economics of its project depend on that.

Moreover, as noted above, Pieridae has acknowledged that "present capacity of these [pipeline] facilities is not sufficient to accommodate the full volume of exports for which Pieridae . . . is

³⁵ See Application, pp. 3-4.

³⁶ See Application, pp. 58-59.

³⁷ Application, p. 59.

³⁸ Application, p. 63.

³⁹ See Application, pp. 66-67.

⁴⁰ Application, p. 67.

⁴¹ Application, p. 78.

seeking authorization, ... [but] third parties have announced various projects to construct or expand pipeline infrastructure for the purpose of transporting natural gas from the Marcellus and Utica producing regions to customers in northeastern US and eastern Canada."⁴² In other words, Pieridae cannot undertake its full requested project without such pipeline infrastructure construction, which is being planned. Such pipeline construction is a necessary precondition for Pieridae's full proposal and thus should establish the threshold requiring NEPA review through an EIS of Pieridae's application. Because Pieridae's proposal hinges on obtaining commitment of sufficient pipeline transportation, and that pipeline transportation cannot be sufficient unless new pipeline is built, Pieridae's export proposal depends on new pipeline construction and so should be subject to an EIS.

On the other side of the equation, such pipeline construction is unlikely to obtain financing to make it happen if it cannot obtain contracted or committed transportation customers, like Pieridae. These are intertwined and symbiotic business relationships, and if EIS review of LNG export is not done as part of the Department's review of Pieridae's or other such export applications, the Department should insist on it being done as part of FERC's review of proposals like Kinder Morgan's Northeast Energy Direct pipeline project, on which Pieridae may need to rely to export all of its gas.

To avoid EIS-level review under NEPA of the important environmental question regarding climate impacts and other impacts of exporting LNG, by putting blinders on, and segmenting the review of each component of this pipeline construction / LNG export symbiosis, would not be in the public interest.

Thank you for consideration of these comments in your review of the Application.

Sincerely,



Rutilious (Rudy) B. Perkins III, Esq.

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Cc: Senator Elizabeth Warren
Senator Edward Markey
Representative James McGovern

⁴² Application, pp. 17-18.