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ORIGINAL

15-149-LNG

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September 28, 2015

Mr. John Anderson
U.S. Department of Energy
Office of Fossil Energy
Docket Room 3F-056, FE-50
Forrestal Building
1000 Independence Avenue, S.W.
Washington, D.C. 20585

**Re: *ConocoPhillips Alaska Natural Gas Corp.*, Docket No. 15-⁴⁹-LNG
Application for Blanket Authorization to Export Liquefied Natural
Gas from Alaska to Free Trade and Non-Free Trade Agreement
Countries**

Dear Mr. Anderson:

Pursuant to Section 3 of the Natural Gas Act, 15 U.S.C. § 717b, and Part 590 of the regulations of the Department of Energy, 10 C.F.R. Part 590 (2015), ConocoPhillips Alaska Natural Gas Corporation hereby files an original and fifteen (15) copies of its "Application for Blanket Authorization to Export Liquefied Natural Gas from Alaska to Free Trade and Non-Free Trade Agreement Countries." A check in the amount of \$50 is enclosed as the filing fee stipulated by 10 C.F.R. § 590.207 (2015).

Thank you for your attention to this matter. If you have any questions regarding this filing, please contact the undersigned at (202) 429-8801.

Respectfully submitted,

Douglas F. John
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Counsel for ConocoPhillips Alaska Natural
Gas Corporation

Enclosures

**UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY**

In the matter of:

**CONOCOPHILLIPS ALASKA
NATURAL GAS CORPORATION**

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FE Docket No. 15-149-LNG

**APPLICATION FOR BLANKET AUTHORIZATION TO
EXPORT LIQUEFIED NATURAL GAS FROM ALASKA TO
FREE TRADE AND NON-FREE TRADE AGREEMENT COUNTRIES**

Pursuant to Section 3 of the Natural Gas Act (“NGA”), 15 U.S.C. § 717b, and Part 590 of the Department of Energy’s (“DOE”) regulations, 10 C.F.R. Part 590 (2015), ConocoPhillips Alaska Natural Gas Corporation (“CPANGC”) hereby submits this application to DOE’s Office of Fossil Energy (“DOE/FE”) for blanket authorization to export a quantity of liquefied natural gas (“LNG”) in an amount up to the equivalent of 40 billion cubic feet (“Bcf”) of natural gas on a cumulative basis over a two-year period. CPANGC seeks blanket authorization to export this volume of LNG from facilities located near Kenai, Alaska, on its own behalf or as agent for others, to any country that has or in the future develops the capacity to import LNG and with which the United States either (1) has, or in the future enters into, a Free Trade Agreement (“FTA”) requiring national treatment for trade in natural gas, or (2) does not have a FTA requiring national treatment for trade in natural gas but with which trade is not prohibited by United States law or policy (“non-FTA countries”).¹ CPANGC seeks such authorization for a two-year period to commence on February 19, 2016. In support of this application, CPANGC submits the following:

¹ CPANGC seeks blanket authorization to export a quantity of LNG in an amount up to the equivalent of 40 Bcf of natural gas on an aggregate basis to both FTA and non-FTA countries.

I.
COMMUNICATIONS AND CORRESPONDENCE

All correspondence and communications concerning this application, including all service of pleadings and notices, should be directed to the following persons:²

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Pursuant to the requirements of 10 C.F.R. § 590.103(a) (2015), CPANGC hereby certifies that the persons listed above and undersigned are its duly authorized representatives.

II.
DESCRIPTION OF APPLICANT

The exact legal name of CPANGC is ConocoPhillips Alaska Natural Gas Corporation. CPANGC is a Delaware corporation with its principal place of business in Anchorage, Alaska. CPANGC is a wholly-owned subsidiary of ConocoPhillips Company (“ConocoPhillips”), a publicly-traded Delaware corporation. CPANGC is authorized to do business in the State of Alaska, among other states.

² CPANGC requests waiver of 10 C.F.R. § 590.202(a) (2015) to the extent necessary to include outside counsel on the official service list in this proceeding.

III. AUTHORIZATIONS REQUESTED

CPANGC seeks blanket authorization to export a quantity of LNG in an amount up to the equivalent of 40 Bcf of natural gas from the Kenai LNG Facility, acting on its own behalf or as agent for others, to any country that has or in the future develops the capacity to import LNG and with which the United States either (1) has, or in the future enters into, an FTA requiring national treatment for trade in natural gas, or (2) does not have an FTA requiring national treatment for trade in natural gas but with which trade is not prohibited by United States law or policy. CPANGC is willing to comply with the agency requirements imposed by DOE/FE in past orders.³

CPANGC seeks such authorizations for a two-year period to commence on February 19, 2016, which is the day after CPANGC's currently-effective blanket authorization to export LNG from the Kenai LNG Facility to FTA countries will expire. CPANGC's currently-effective blanket authorization to export LNG from Alaska to non-FTA countries began on April 14, 2014 and extends through April 13, 2016. Upon issuance of the requested authorizations, CPANGC would relinquish the remainder of the non-FTA authorization issued to it by DOE/FE in DOE/FE Order No. 3418 in light of DOE's policy against allowing a single entity to hold duplicate permits running concurrently.

CPANGC expects that LNG prices will vary from time to time to reflect changes in market conditions. Consistent with DOE/FE precedent, natural gas purchase and sales contracts

³ See, e.g., *Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC*, DOE/FE Order No. 2913 (Feb. 10, 2011) (approving applicants' proposal to register each LNG title holder for whom they seek to export LNG as agent, with such registration including a written statement by the title holder acknowledging and agreeing to comply with all applicable requirements included by DOE/FE and to include those requirements in any subsequent purchase or sale agreement entered into by that title holder).

are not being filed as part of this application for blanket authorization to export LNG from the Kenai LNG Facility.⁴

CPANGC certifies that there are no other proceedings related to this application currently pending at either DOE or any other Federal agency.

IV. BACKGROUND

CPANGC has the ability to manufacture LNG from natural gas that is produced from fields in the Cook Inlet region of Southcentral Alaska and transported by pipeline to the Kenai LNG Facility. As discussed below, CPANGC or its predecessors have exported LNG from the State of Alaska for almost fifty years pursuant to several export authorizations granted by DOE/FE or its predecessor agencies.

The original long-term authorization to export LNG to Japan was granted to CPANGC predecessor Phillips Petroleum Company (“Phillips”) and Marathon Oil Company (“Marathon”) by the Federal Power Commission (“FPC”) in 1967.⁵ Phillips and Marathon were specifically authorized to export LNG from the State of Alaska to supply Tokyo Electric Power Company Inc. (“Tokyo Electric”) and Tokyo Gas Company Limited (“Tokyo Gas”) for a 15-year period terminating on May 31, 1984. The 1967 order also authorized Phillips and Marathon to construct the necessary liquefaction and marine terminal facilities in the Cook Inlet Basin near Kenai, Alaska. The original export authorization was subsequently amended by DOE/FE’s predecessor, Economic Regulatory Administration (“ERA”),⁶ in 1982, 1986, and 1987.⁷

⁴ *Phillips Alaska Natural Gas Corp. and Marathon Oil Co.*, DOE/FE Order and Opinion No. 1580, 2 FE ¶ 70,472 (Apr. 10, 2000) (Order No. 1580).

⁵ *Phillips Petroleum Co. and Marathon Oil Co.*, 37 FPC ¶ 777 (Apr. 19, 1967).

⁶ In 1977, the FPC’s regulatory authority over imports and exports of natural gas was transferred to the Secretary of Energy by the Department of Energy Organization Act, 42 U.S.C. §§ 7151, 7172. In turn, the Secretary of Energy delegated the authority to the Administrator of the Economic Regulatory Administration, Delegation Order No. 0204-111, 49 Fed. Reg. 6690 (Dep’t of Energy Feb. 22, 1984), and then to the Assistant Secretary of

On July 28, 1988, ERA granted Phillips 66 Natural Gas Company and Marathon an extension of the long-term authorization to export LNG to Japan for a 15-year period ending March 31, 2004.⁸ DOE/FE subsequently approved the transfer of the authorization from Phillips 66 Natural Gas Company to Phillips Alaska Natural Gas Corporation (“PANGC”) and approved amendments of the long-term export authorization in 1991, 1992, and 1995.⁹

On April 2, 1999, DOE/FE granted PANGC, which was subsequently renamed ConocoPhillips Alaska Natural Gas Company, and Marathon another five-year extension of the long-term authorization to annually export up to 64.4 Trillion British thermal units (“TBtus”) of LNG from the State of Alaska to Japan for a period commencing April 1, 2004 and terminating March 31, 2009.¹⁰ DOE/FE approved amendments to this long-term export authorization in 2000 and 2008.¹¹

On April 10, 2000, DOE/FE granted CPANGC and Marathon blanket authorization to export up to 10 TBtus of LNG from the Kenai LNG Facility to international markets over a two-

Fossil Energy, Delegation Order No. 0204-127, 54 Fed. Reg. 11436 (Dep’t of Energy Mar. 10, 1989). On September 23, 2005, this authority was delegated to the Assistant Secretary of Fossil Energy in Redelegation Order No. 00-002.04B.

⁷ See DOE/ERA Opinion and Order No. 49, 1 ERA ¶ 70,116 (Dec. 14, 1982) (extending export authority through May 31, 1989); DOE/ERA Opinion and Order 49-A, 1 ERA ¶ 70,127 (Apr. 3, 1986) (transferring export authorization from Phillips Petroleum Company to Phillips 66 Natural Gas Company); DOE/ERA Opinion and Order No. 206, 1 ERA ¶ 70,128 (Nov. 16, 1987) (amending pricing formula for LNG exports).

⁸ DOE/ERA Opinion and Order No. 261, 1 ERA ¶ 70,130 (Jul. 28, 1988) (approving extension and modification of export authorization).

⁹ See DOE/FE Opinion and Order No. 261-A, 1 FE ¶ 70,454 (Jun. 18, 1991) (amending pricing formula for LNG exports); DOE/FE Opinion and Order No. 261-B, 1 FE ¶ 70,506 (Dec. 19, 1991) (transferring export authorization from Phillips 66 Natural Gas Company to PANGC); DOE/FE Opinion and Order No. 261-C, 1 FE ¶ 70,607 (Jul. 15, 1992) (increasing annual export authority to Japan from 52 TBtus to 64.4 TBtus); DOE/FE Opinion and Order No. 261-D, 1 FE ¶ 71,087 (Mar. 2, 1995) (amending pricing formula for LNG exports); DOE/FE Opinion and Order No. 261-E, 2 FE ¶ 71,429 (Jul. 18, 1997) (dismissing complaint).

¹⁰ DOE/FE Opinion and Order No. 1473, 2 FE ¶ 70,317 (Apr. 2, 1999) (Order No. 1473).

¹¹ See DOE/FE Opinion and Order No. 261-F (Jun. 20, 2000) (amending pricing provisions of Japanese sales contracts); DOE/FE Opinion and Order No. 261-G, 2 FE ¶ 71,597 (Jan. 30, 2008) (reflecting name change from PANGC to CPANGC).

year period.¹² This blanket authorization, which supplemented the long-term authorization issued by DOE/FE on April 2, 1999, was activated on September 29, 2007. DOE/FE later granted the request of CPANGC and Marathon to vacate this blanket authorization on April 1, 2009, contemporaneous with the effective date of the blanket authorization granted in Order No. 2500 (discussed below).

On June 3, 2008, DOE/FE issued Order No. 2500, which authorized CPANGC and Marathon to export up to 99 TBtus of LNG on a short-term or spot-market basis from the Kenai LNG Facility to Japan and/or one or more countries in the Pacific Rim over a two-year period commencing on April 1, 2009 and terminating March 31, 2011.¹³ DOE/FE affirmed this authorization on rehearing in Order No. 2500-A.¹⁴

On October 5, 2010, DOE/FE issued Order No. 2860, which granted CPANGC and Marathon blanket authorization to export the balance of the 99 TBtus of LNG authorized for export in Order Nos. 2500 and 2500-A which had not been exported by the termination of that authorization on March 31, 2011.¹⁵ This authorization to export LNG from the Kenai LNG Facility to Japan and/or one or more other countries in the Pacific Rim with which trading is not prohibited by United States law commenced on April 1, 2011 and expired on March 31, 2013. At that time, CPANGC did not seek authorization to export LNG beyond March 31, 2013 due to then-perceived uncertainties regarding the near-term adequacy of natural gas supplies in the Cook Inlet region for regional needs.

¹² DOE Opinion and Order No. 1580, 2 FE ¶ 70,472 (Apr. 10, 2000).

¹³ DOE/FE Order and Opinion No. 2500, 2 FE ¶ 71,623 (Jun. 3, 2008) (Order No. 2500).

¹⁴ DOE/FE Order and Opinion No. 2500-A, 2 FE ¶ 71,652 (Jul. 30, 2008) (Order No. 2500-A).

¹⁵ DOE Order and Opinion No. 2860 (Oct. 5, 2010). Of the 99 TBtus authorized by DOE/FE in Orders Nos. 2500, 2500-A and 2860, approximately 82 TBtus were exported prior to the expiration of the last authorization on March 31, 2013.

However, in light of changed circumstances, which are discussed in more detail below, on December 11, 2013, CPANGC filed two separate applications for blanket authorization to export LNG in the aggregated volume of equivalent of 40 Bcf of natural gas to FTA countries and non-FTA countries, respectively. On February 19, 2014, DOE/FE issued DOE/FE Order No. 3392 which authorized CPANGC to export LNG up to the equivalent of 40 Bcf of natural gas to FTA countries.¹⁶ This authorization is effective for a two-year term beginning on February 19, 2014 and extending through February 18, 2016. Shortly thereafter, on April 14, 2014, DOE/FE issued DOE/FE Order No. 3418 which authorized CPANGC to export LNG up to the equivalent of 40 Bcf of natural gas from the Kenai LNG Facility to non-FTA countries for a two-year term beginning on April 14, 2014 and extending through April 13, 2016.¹⁷ CPANGC is filing the instant application in order to secure the authorization needed to continue exporting LNG from the Kenai LNG Facility to both FTA and non-FTA countries after the most recent authorizations expire in 2016.

V. PUBLIC INTEREST ANALYSIS FOR FTA COUNTRIES

DOE/FE reviews applications for blanket authorization to export LNG to FTA countries under Section 3(c) of the NGA, 15 U.S.C. § 171b(c).¹⁸ As amended by Section 201 of the Energy Policy Act of 1992 (Pub. L. 102-486), Section 3(c) of the NGA provides that:

[T]he exportation of natural gas to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas, shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall be granted without modification or delay.¹⁹

¹⁶ *ConocoPhillips Alaska Natural Gas Corp.*, DOE/FE Order No. 3392 (Feb. 19, 2014).

¹⁷ *ConocoPhillips Alaska Natural Gas Corp.*, DOE/FE Order No. 3418 (Apr. 14, 2014). The April 14, 2014 order provided that the 40 Bcf export limit would apply to the combined volume exported under the February 19, 2014 FTA and April 14, 2014 non-FTA authorizations.

¹⁸ *See Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2833 (Sept. 7, 2010) (reviewing application for authorization to export LNG to FTA countries under Section 3(c) of the NGA).

¹⁹ 15 U.S.C. § 717b(c). Natural gas is defined to include LNG in 10 C.F.R. § 590.102(i) (2015).

DOE/FE has found that the requirements for public notice of applications and other hearing-type procedures in 10 C.F.R. Part 590 (2015) inapplicable to applications for authorization to export LNG to countries with which the United States has a FTA.²⁰ In accordance with NGA Section 3(c) and prior precedent, CPANGC requests that DOE/FE expeditiously approve its application for authorization to export LNG to FTA countries without modification or delay.

VI. PUBLIC INTEREST ANALYSIS FOR NON-FTA COUNTRIES

Under Section 3 of the NGA, DOE/FE must authorize an export of natural gas from the United States to a foreign country unless there is a finding that the export “will not be consistent with the public interest.”²¹ DOE/FE has found that Section 3 of the NGA creates a statutory presumption in favor of approval of a properly-framed export application, which opponents bear the burden of overcoming.²² DOE/FE’s public interest determination is guided by DOE Delegation Order No. 0204-111, which “designates domestic need for the natural gas proposed to be exported as the only explicit criterion that must be considered in determining the public interest.”²³ For several decades, DOE/FE has consistently found the regional need for the natural gas proposed to be exported to be the principal focus of its review for an application for authorization to export LNG from the State of Alaska.²⁴ DOE/FE has in turn evaluated regional need in Southcentral Alaska by determining whether there is sufficient evidence that regional

²⁰ *Trunkline LNG Export, LLC*, DOE/FE Order No. 3252 at n. 10 (Mar. 7, 2013).

²¹ 15 U.S.C. § 717b. Natural gas is defined to include LNG in 10 C.F.R. § 590.102(i) (2015).

²² Order No. 1473 at p. 13, *citing*, *Panhandle Producers and Royalty Owners Association v. ERA*, 822 F. 2d 1105, 1111 (D.C. Cir. 1987), the court found Section 3 of the NGA “requires an affirmative showing of inconsistency with the public interest to deny an application” and that a “presumption favoring...authorization...is completely consistent with, if not mandated by, the statutory directive.” *See also Independent Petroleum Association v. ERA*, 870 F. 2d 168, 172 (5th Cir. 1989); *Panhandle Producers and Royalty Owners Association v. ERA*, 847 F. 2d 1168, 1176 (5th Cir. 1988).

²³ Order No. 1473 at p. 14, *citing*, Delegation Order No. 0204-111, 49 Fed. Reg. 6684 (Feb. 22, 1984).

²⁴ Order No. 1473 at p. 15, n. 48; Order No. 2500 at pp. 44-45.

natural gas supplies will be adequate to meet both regional needs and the proposed LNG export during the relevant export period. DOE/FE has also considered other factors to the extent they are shown to be relevant to the public interest determination for an export authorization.

As demonstrated below, CPANGC's application for blanket authorization to export LNG from the Kenai LNG Facility to non-FTA countries is not inconsistent with the public interest. The natural gas to be exported by CPANGC under the requested blanket authorization is not needed to meet regional demand for natural gas during the proposed export period. Moreover, by providing an additional source of demand, particularly during the warmer months when domestic demand is low, the requested export authorization will also provide tangible benefits to the local community by not only preserving gas well deliverability and enhancing the current supply security of Southcentral Alaska but also by providing an economic incentive and market opportunity for continued exploration and additional gas supply development in the Cook Inlet. Rather than viewing the export and local markets as mutually exclusive, in this instance they should instead be seen as symbiotic. The continuation of LNG export activity will help ensure that regional natural gas demands will be satisfied by providing an economic incentive and market opportunity for continued exploration in the Cook Inlet.

A. There Are Sufficient Natural Gas Supplies to Meet Regional Needs During the Proposed Export Period

1. 2013 Letter from the State of Alaska's Department of Natural Resources.

On September 8, 2013, the State of Alaska's Department of Natural Resources ("DNR") sent a letter to ConocoPhillips Alaska, a copy of which is filed in Appendix C, which discussed changes in circumstances and highlighted the vital role that the Kenai LNG Facility plays in providing natural gas supply security in Southcentral Alaska. The letter also addressed the

unique role played by the Kenai LNG Facility as an additional source of demand during warmer periods, which will help preserve gas well deliverability and provide an economic incentive and market opportunity for continued exploration in the Cook Inlet.

The 2013 DNR letter requested that CPANGC file an application with DOE/FE for new authorization to export LNG from the Kenai LNG Facility in order to provide an additional market opportunity for natural gas produced in the Cook Inlet. The DNR discussed several reasons why there had been a resurgence in investment and exploration in the Cook Inlet in recent years, among which were legislative support for tax credits, ownership transitions and state advocacy. These factors had led to significant and successful spending in Cook Inlet by new companies with substantial exploration budgets and in-field developments that are revitalizing existing fields. The DNR explained that this investment not only brought energy security, but also jobs and economic opportunities to Alaskans.

However, the DNR expressed concern that future exploration budgets may be scaled back because local utility demand was contracted through the first quarter of 2018. More specifically, the DNR was concerned that companies would lack the incentive to invest in continued exploration activities if there were no market opportunities for natural gas, which could in turn lead to supply contractions in the future as existing wells' production levels decline.

The DNR also noted that lack of natural gas demand threatened the long-term deliverability of both existing and future Cook Inlet area wells. Specifically, during periods of low domestic demand (such as the warmer seasons) producing wells may need to be shut-in, allowing water encroachment/saturation and destabilization of the reservoir near the well bore, with a consequent loss of both well deliverability as well as ultimate recovery of the gas resource. The DNR opined that renewed operations and exports from the Kenai LNG Facility

would provide an additional market for produced gas during the warmer seasons and avoid these negative impacts to well deliverability and resource recovery.

The DNR concluded that the reopening of the Kenai LNG Facility was the only viable means of creating the incremental near-term market (*e.g.*, one that could materialize within the period covered by the export authorizations granted by DOE/FE in DOE Order Nos. 3392 and 3418) needed to sustain exploration and development budgets and activity in the Cook Inlet.

The 2013 DNR letter remains pertinent today. Local utility demand remains contracted through the first quarter of 2018, within which period the term of these proposed authorizations will be contained. The resurgence in investment and market for natural gas created in part by the Kenai LNG Facility has resulted in continued exploration and forecasted production by several new market entrants.

2. Cook Inlet Natural Gas Supply

In DOE Opinion and Order No. 2680, DOE/FE found that there were sufficient supplies of natural gas to satisfy both local demand and the export volume during the two-year export period which expired on March 31, 2013. DOE/FE reached that conclusion based in part on several studies filed or referenced by CPANGC as part of its application in Docket No. FE10-63-LNG, including the “Preliminary Engineering and Geological Evaluation of Remaining Cook Inlet Gas Reserves” (“2009 DNR Study”) issued by the DNR’s Division of Oil and Gas and Division of Geological & Geophysical Surveys in December 2009.²⁵ The DNR undertook this study to quantify remaining accessible reserves in major natural gas fields in the Cook Inlet and categorize these volumes based on readiness and certainty of production. The 2009 DNR Study

²⁵ State of Alaska, Department of Natural Resources, Division of Oil and Gas and Division of Geological & Geophysical Surveys, *Preliminary Engineering and Geological Evaluation of Remaining Cook Inlet Gas Reserves* (Dec. 2009), available at: http://dog.dnr.alaska.gov/ResourceEvaluation/Documents/Cook_Inlet_Natural_Gas_Production_Cost_Study.pdf.

concluded that “enough proved and probable gas reserves exist in Cook Inlet Reservoirs to satisfy local demand well into, and possibly beyond the next decade.”²⁶

In June 2011, the DNR’s Division of Oil and Gas issued a new study entitled, “Cook Inlet Natural Gas Production Cost Study” (“2011 DNR Study”), which built upon the 2009 DNR Study.²⁷ The 2011 DNR Study analyzed what investment and associated producer revenues would be required to generate specific rates of return from developing the Cook Inlet natural gas reserves identified in the 2009 DNR Study to meet existing Cook Inlet natural gas demand requirements through 2025. The 2011 DNR Study estimated that there were approximately 1,500 Bcf of natural gas reserves in existing fields in Cook Inlet.²⁸ Among the conclusions reached in the 2011 DNR Study was that, given sufficient continued investments, the Cook Inlet basin is capable of supplying regional natural gas needs through 2018-2020²⁹ while inclusion of the most likely pay category of resource would extend this past 2025.³⁰ The 2011 DNR Study assumed that there would be no LNG export demand, but also assumed the absence of exploratory success. The DNR’s September 5, 2013 letter indicated that, based in large part on the exploratory successes that have occurred in the interim, the DNR believed that there will be enough natural gas to support both regional natural gas needs and LNG exports during the

²⁶ *Id.* at p. 34. The study assumed that CPANGC and Marathon would produce and export the full 99 TBtus of LNG authorized in Order No. 2500 by March 31, 2011, and that LNG exports would cease as of that date. However, the 2009 DNR Study did not conclude that regional demand would only be met after March 2011 if that premise held true, and DNR subsequently clarified that its study should not be interpreted to imply such a conclusion. In a letter dated March 15, 2010, the DNR clarified that the 2009 DNR Study provided a basis for there being a supply of natural gas for continuation of LNG exports after March 31, 2011 (pursuant to the export authorization granted to CPANGC in DOE Opinion and Order No. 2860) while also meeting local demand. CPANGC filed a copy of that letter with DOE/FE as part of its application in Docket No. FE10-63-LNG.

²⁷ State of Alaska, Department of Natural Resources, Division of Oil and Gas, *Cook Inlet Natural Gas Production Cost Study* (Jun. 2011), available at: http://dog.dnr.alaska.gov/ResourceEvaluation/Documents/Cook_Inlet_Natural_Gas_Production_Cost_Study.pdf.

²⁸ *Id.* at p. 9, Figure 6.

²⁹ *Id.* at pp. 23-24.

³⁰ *Id.* at p. 4, Figure 2, Geologic Analysis, Pay + 50%-risk Potential Pay Category (643 BCF increment, 4 fields).

proposed export period. Aside from DNR discovered reserves assessments, the DNR's September 2013 letter also indicates that the United States Geological Survey ("USGS") had estimated that the Cook Inlet area basin may also contain trillions of cubic feet of undiscovered gas resources. Specifically, the USGS's assessment of Cook Inlet undiscovered gas resources at the time indicated total undiscovered gas resource estimates for Cook Inlet ranging from a minimum (F95) of over 3,100 Bcf to a maximum (F5) of over 28,000 Bcf with a mean estimate of over 13,000 Bcf from the conventional gas resource category alone.³¹

In its December 31, 2012 assessment, the Potential Gas Committee ("PGC"), Colorado School of Mines, which employs more conservative gas resource estimating methods, indicated a total most likely onshore gas resource of over 4,400 Bcf for the Cook Inlet-Susitna Basins. In its most recent assessment, issued in April 2015 and covering reserve estimates as of December 31, 2014, the PGC's total most likely onshore gas resource assessment for the Cook Inlet-Susitna Basins remains unchanged at over 4,400 Bcf.³²

3. Southcentral Alaskan Utilities' Needs Are Satisfied

Confirmation that the volumes for which export authorization is here being sought will be surplus to local needs is provided by the fact that the regional demand for Cook Inlet natural gas attributable to Southcentral Alaskan utilities are contracted through at least the first quarter of 2018. The Regulatory Commission of Alaska ("RCA") has approved natural gas supply contracts which will meet all of Chugach Electric Association, Inc.'s ("Chugach") – the largest

³¹ *Assessment of Undiscovered Oil and Gas Resources of the Cook Inlet Region, South Central Alaska, 2011*, USGS Fact Sheet 2011-3068, available at: <http://pubs.usgs.gov/fs/2011/3068/fs2011-3068.pdf>.

³² *Potential Supply of Natural Gas in the United States* at pp. 65-67 (April 2015). CPANGC is providing a copy of the relevant pages from the report in Appendix D to this application with the written permission of the Potential Gas Committee, Colorado School of Mines.

utility in Southcentral Alaska – natural gas requirements through the first quarter of 2018.³³ All of ENSTAR Natural Gas Company’s (“ENSTAR”) natural gas requirements through the first quarter of 2018 will also be met pursuant to RCA-approved natural gas supply contracts.³⁴ Municipal Light and Power (“ML&P”) has entered into a supplemental natural gas purchase agreement with ConocoPhillips, ConocoPhillips Alaska, Inc. and CPANGC for gas purchases through 2019.³⁵ Matanuska Electric Association has an RCA-approved natural gas supply contract with Hilcorp Alaska, LLC (“Hilcorp”) which will meet its fuel requirements for a new power plant through the first quarter of 2018.³⁶ Under these circumstances, the LNG to be exported by CPANGC pursuant to the requested blanket authorization can be safely assumed not to be needed to satisfy the requirements of utilities in Southcentral Alaska during the proposed export period.³⁷

³³ See *Chugach Electric Ass’n Inc.*, Docket No. TA305-8, Letter Order No. L0900456 (Aug. 21, 2009) (approving Base Contract for Sale and Purchase of Natural Gas with ConocoPhillips and ConocoPhillips Alaska that satisfies approximately 35% of Chugach’s needs in 2016); *Chugach Electric Ass’n Inc.*, Docket No. TA377-8, Letter Order No. L1300429 (Sept. 10, 2013) (approving Gas Sale and Purchase Agreement with Hilcorp that will satisfy up to 100% of Chugach’s unmet natural gas requirements for 2015 through the first quarter of 2018).

³⁴ See *ENSTAR Natural Gas Co.*, Docket No. TA239-4, Letter Order No. L1300387 (Aug. 2, 2013) (approving Gas Sales Agreement with Buccaneer Alaska, LLC that will help satisfy ENSTAR’s needs for 2014 through June 2016); *ENSTAR Natural Gas Co.*, Docket No. TA241-4, Letter Order No. L1300408 (Aug. 16, 2013) (approving Gas Sales Agreement with ConocoPhillips, ConocoPhillips Alaska and CPANGC that will help satisfy ENSTAR’s needs for 2016 and 2017); *ENSTAR Natural Gas Co.*, Docket No. TA242-4, Letter Order No. L1300428 (Sept. 9, 2013) (approving Gas Sale and Purchase Agreement with Hilcorp that satisfies ENSTAR’s unmet needs through the first quarter of 2018).

³⁵ See *Municipality of Anchorage d/b/a Municipal Light & Power*, Docket No. TA331-121, Letter Order No. L1300506 (Nov. 8, 2013) (approving inclusion of the ML&P-ConocoPhillips Alaska GSA in ML&P’s cost of power).

³⁶ *Matanuska Electric Association, Inc.*, Docket No. U-13-160, Order No. 2 (Feb. 12, 2014) (approving gas supply agreement with Hilcorp Alaska, LLC which will meet its requirement through March 31, 2018).

³⁷ ConocoPhillips, through its subsidiaries with gas producing assets in Cook Inlet, is currently marketing such assets for sale. To the extent the aforementioned utility supply commitments are made by a ConocoPhillips company and ConocoPhillips’ producing assets are sold, any such sale will require the purchaser assume these existing supply commitments.

4. Natural Gas Storage Developments in Cook Inlet

Cook Inlet Natural Gas Storage Alaska, LLC (“CINGSA”), an underground natural gas storage facility located in Kenai, Alaska, began operations in 2012. The natural gas storage facility currently has a working gas capacity of 11 Bcf which may be expanded in the future. Natural gas injected into the storage facility during summer months by CINGSA’s firm customers – Chugach, ENSTAR and ML&P – provides incremental deliverability in periods of peak demand during the winter. The availability of natural gas storage further reduces any risk that the natural gas supplies to be exported through the Kenai LNG Facility during the short duration of the requested blanket authorization will be needed to meet local demand.

5. Diversion of LNG Feedstock Gas In Times of Peak Need

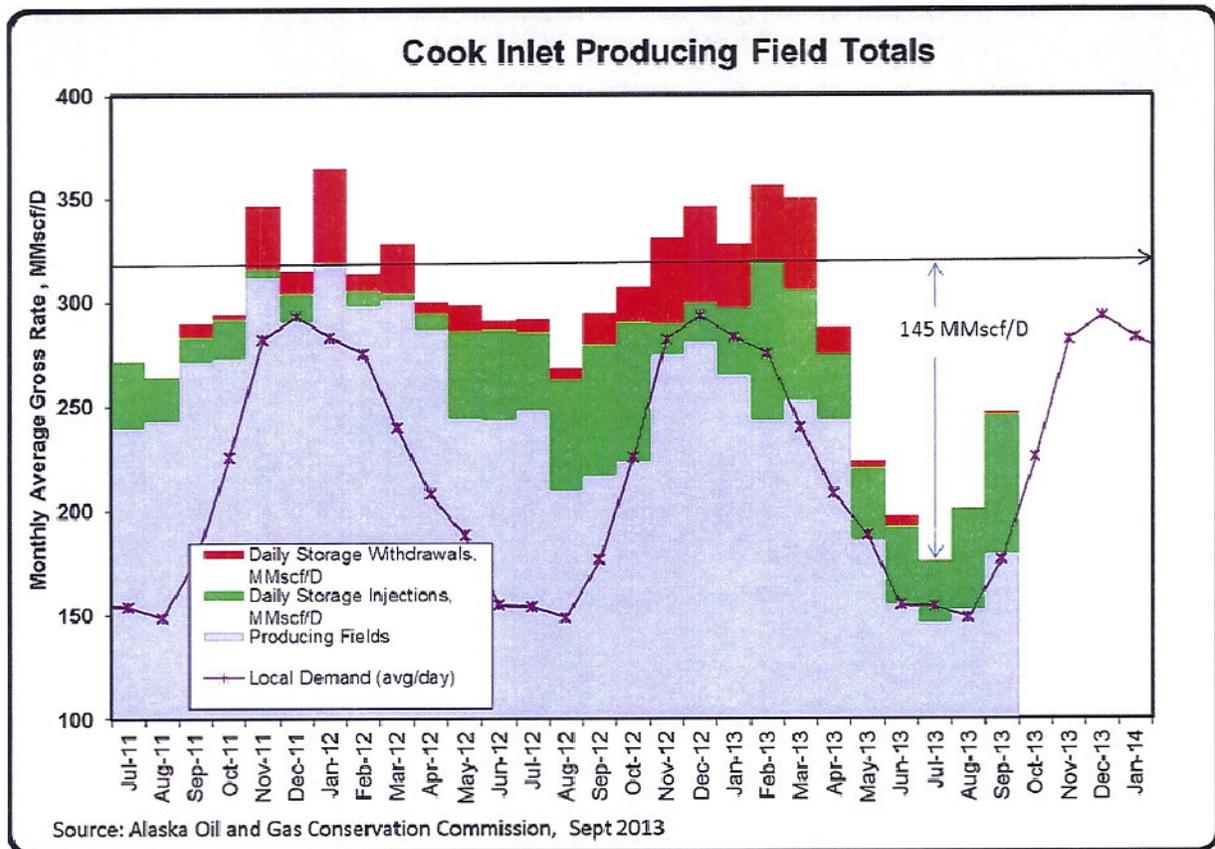
Historically, CPANGC has diverted gas from the Kenai LNG Facility during times of peak need.³⁸ As necessary, CPANGC will continue this practice to meet its supply obligations to local utilities during times of peak demand. However, as noted above, the largest Southcentral Alaska utilities’ natural gas requirements are met through at least the first quarter of 2018. In addition, the CINGSA natural gas storage facility provides winter peaking deliverability. DOE/FE predicted in Order No. 2500 that “market forces will drive the installation of adequate [local] delivery mechanisms . . .” such as “additional natural gas storage and other peak-shaving resources . . .”³⁹ As this prediction has proved true, in the prospective license period, CPANGC anticipates the Kenai LNG Facility primarily will support local winter deliverability by balancing demand during warmer periods and avoiding negative impacts to wells and resource recovery.

³⁸ Order No. 2500 at p. 52; Order No. 2860 at p. 16.

³⁹ Order No. 2500 at pp. 52-53.

6. The Kenai LNG Facility Will Provide a Base Level of Demand to Prevent Well Shut-In

The Kenai LNG Facility has historically provided a base level of demand for natural gas during the summer months, which ensured that natural gas wells were not curtailed or shut-in due to decreased local utility demand during those months, hence protecting reserves and well deliverability to serve utility demand during the colder months. The Kenai LNG Facility's historical demand for natural gas in the warmer months was absent during the summer of 2013 due to the fact that CPANGC's export authorization had expired on March 31, 2013. As illustrated below, publicly-available data indicate that this lack of base demand for natural gas led to the shut-in of as much as 145 MMcf per day, as a monthly average, of Cook Inlet production during summer 2013.



Continuation of LNG exports by CPANGC pursuant to the requested blanket authorization will help avoid the recurrence of this problem by maintaining the base level of natural gas demand historically provided by the Kenai LNG Facility during warmer months.

B. Other Factors Relevant to the Public Interest

DOE/FE has previously stated that domestic need is the only explicit public interest consideration identified by DOE Delegation Order No. 0204-111, but that it will consider other factors to the extent they are shown to be relevant to its public interest determination, including benefits to the Alaskan economy⁴⁰ The Kenai LNG Facility has historically played an important role in the economy of Southcentral Alaska. When the Kenai LNG Facility is in operation, the plant employs approximately 85 people, some with ConocoPhillips, some working for contractors, generating an estimated \$13.1 million in personal income. The Kenai LNG Facility has a significant impact on the state and local economy. In part by purchasing gas during warmer periods when local demand is low, the plant also facilitates the generation of many millions per year in royalties and taxes for the State of Alaska, as well as other tax revenues for the Kenai Peninsula Borough.

C. Letters and Resolutions in Support

In addition to the DNR letter discussed above, letters in support of the requested export authorization have been provided by AIX Energy LLC, Aurora Gas, LLC, Furie Operating Alaska, LLC, and WesPac Midstream LLC. Copies of these letters are being filed in Appendix E to this application. These letters provide corroborating evidence that the requested blanket authorization to export LNG will be consistent with the public interest and is important to the supply security of the Cook Inlet region.

⁴⁰ Order No. 2500 at pp. 55-56. *See also Yukon Pacific Corp.*, DOE Opinion and Order No. 350, 1 FE ¶ 70,259 (1989), *reh'g denied*, 1 FE ¶ 70,259 (1990) (considering the potential effects of the export on other aspects of the public interest).

VI. REQUEST FOR EXPEDITED ACTION

CPANGC requests that DOE/FE act upon this application as expeditiously as possible, well in advance of February 18, 2016, the date upon which its currently-effective blanket authorization to export LNG from the Kenai LNG Facility to FTA countries is scheduled to expire. CPANGC believes that expedited action is warranted under the circumstances. CPANGC does not expect material, substantive opposition to the requested export authorization from key stakeholders in Southcentral Alaska. The DNR letter reproduced in Appendix C and the letters in support filed in Appendix E demonstrate support for issuance of the requested blanket authorization to CPANGC. In addition, CPANGC is relying upon supply studies, including the April 2015 PGC Report, that fully support the availability of surplus production volumes for liquefaction and export via the Kenai LNG Facility.

VII. ENVIRONMENTAL IMPACTS

Approval of this application is not a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 *et seq.*, and no environmental impact statement or environmental assessment is required. The proposed export of LNG would not require any changes to the Kenai LNG Facility. The LNG manufacturing and storage facilities that will be utilized during the blanket authorization already exist and have been operated safely without major disruption of supply or accident from their startup in 1969.

VIII. APPENDICES

The following appendices are attached to this application and incorporated by references herein:

Appendix A: Verification

Appendix B: Opinion of Counsel

Appendix C: Letter from Department of Natural Resources

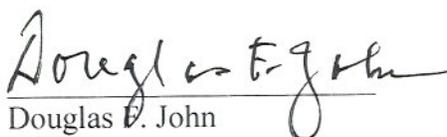
Appendix D: Excerpt from April 2015 Report of the Potential Gas Committee

Appendix E: Letters in Support

IX. CONCLUSION

For the foregoing reasons, CPANGC respectfully requests that DOE/FE grant its request for blanket authorization to export a quantity of LNG in an amount up to the equivalent of 40 Bcf of natural gas from the Kenai LNG Facility, acting on its own behalf or as agent for others, to any country that has or in the future develops the capacity to import LNG and with which the United States either (1) has, or in the future enters into, an FTA requiring national treatment for trade in natural gas, or (2) does not have an FTA requiring national treatment for trade in natural gas but with which trade is not prohibited by United States law or policy.

Respectfully submitted,

A handwritten signature in black ink that reads "Douglas E. John". The signature is written in a cursive style with a horizontal line underneath the name.

Douglas E. John
Elizabeth A. Zembruski
JOHN & HENGERER
Suite 600
1730 Rhode Island Avenue, N.W.
Washington, D.C. 20036
Phone: (202) 429-8800
Email: djohn@jhenergy.com
ezembruski@jhenergy.com

Counsel for ConocoPhillips Alaska Natural Gas
Corporation

Dated: September 28, 2015.

Appendix A

Verification

VERIFICATION

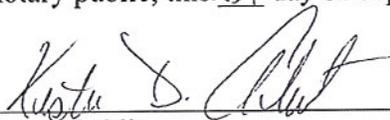
STATE OF ALASKA)
)
THIRD JUDICIAL DISTRICT) SS:

BEFORE ME, the undersigned authority, on this day personally appeared Kevin Snow, who, having been by me first duly sworn, on oath says that he is Vice President of ConocoPhillips Alaska Natural Gas Corporation and is duly authorized to make this Verification; that he has read the forgoing instrument and that the facts therein stated are true and correct to the best of his knowledge, information and belief.



Kevin Snow

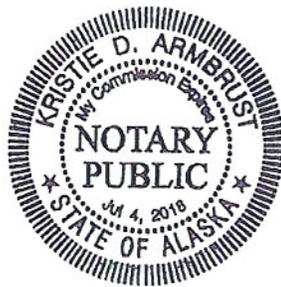
Subscribed and sworn to before me, a notary public, this 23rd day of September, 2015.



Notary Public

My Commission expires:

7/4/2018



Appendix B

Opinion of Counsel



Barbara F. Fullmer
Managing Counsel
Legal Department

P. O. Box 100360
Anchorage, AK 99510-0360
phone 907.265.1341
fax: 907.263.4438

September 25, 2015

Office of Fuels Program
Fossil Energy, U.S. Department of Energy
Docket Room 3F-056, FE 50
Forrestal Building
1000 Independence Avenue, S.W.
Washington, D.C. 20585

**Re: Application of ConocoPhillips Alaska Natural Gas Corporation
Company for Blanket Authorization to Export Liquefied Natural Gas
from Alaska to Free Trade and Non-Free Trade Agreement Countries**

Dear Sir or Madam:

This opinion of counsel is provided in accordance with the requirements of Section 590.202(c) of the U.S. Department of Energy's regulations, 10 C.F.R. § 590.202(c) (2015). I have examined the Certificate of Incorporation and Bylaws of ConocoPhillips Alaska Natural Gas Corporation ("CPANGC"), a Delaware corporation, the Delaware corporation law and other authorities as necessary, and have concluded that the proposed exportation of liquefied natural gas by CPANGC is within its corporate powers. Further, CPANGC is authorized to do business in Alaska and engage in foreign commerce.

Respectfully,

A handwritten signature in cursive script that reads "Barbara F. Fullmer".

Barbara F. Fullmer

Attorney for ConocoPhillips Alaska Natural Gas Corporation

Appendix C

Letter from Department of Natural Resources



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Natural Resources

Office of the Commissioner
550 West 7th Avenue, Suite 1400
Anchorage, Alaska, 99501-3650
Phone: 907.269.8431
Fax: 907.269.8918

September 5, 2013

Trond-Erik Johansen
President
ConocoPhillips Alaska
700 G Street, ATO 2100 (99501)
P.O. Box 100360
Anchorage, AK 99510-0360

Dear Mr. Johansen,

I am writing to you to request that ConocoPhillips take action to support the State's broad interests in continued investment and exploration in Cook Inlet. Recent filings at the Regulatory Commission of Alaska (RCA) indicate that local utility demands will be supported by contracts that cover the next five years, or until 2018. The State's objective is to foster an environment in Cook Inlet that continues to provide supplies of gas that are adequate to meet demand and can be reliably contracted for by local utilities. This requires market opportunities in the near term that incentivize companies to invest in the exploration and development today that will lead to secure supplies in the future. Robust oil and gas activity in the Inlet is critical to the State's primary focus on energy security – that an adequate supply of natural gas from Cook Inlet is available for Alaskans' heating and electricity needs.

To provide an additional market opportunity for gas from the Inlet, I request that Conoco Phillips file an application with the Department of Energy's Office of Fossil Energy for a three year authorization to export Liquefied Natural Gas (LNG) from your facility in Kenai, Alaska. In addition to promoting energy security, the oil and gas activity this market opportunity would support also advances the State's interests in economic health, robust employment, and responsible development of the State's abundant natural resources.

The current supply of local utilities' contracted gas is the result of a resurgence in investment in Cook Inlet during the last several years. A variety of factors have supported the recent increase, including legislative support for tax credits, ownership transitions, and state advocacy. Recent years have seen significant spending in the Inlet by new companies with substantial exploration budgets, as well as in-field developments that are revitalizing existing fields. This investment brings jobs and economic opportunities to Alaskans in addition to energy security. It is very much in Alaskans' interest that these high levels of Cook Inlet investment continue, both within existing fields and in new exploration areas.

Now that contracts can support local utility demands through 2018, there are concerns that future exploration budgets may be significantly scaled back. Without market opportunities for gas discoveries, companies lack the incentive to invest in continued exploration activities. In addition to the economic challenges this would present for those employed in the Cook Inlet energy industry, a lack of healthy exploration now may lead to supply contractions in the future as existing wells' production levels decline.

Diminished exploration budgets also hurt the State's interest in seeing its resources developed. State lands in Cook Inlet hold tremendous amounts of possibly recoverable natural gas, and the United States Geological Survey has estimated that the entire basin may still hold trillions of cubic feet. More market opportunities would create a more attractive business environment for gas sales that would in turn encourage aggressive exploration to utilize the State's resources.

Were exploration efforts to encounter significant success, new long-term industrial and economic opportunities in the State's interest, including long-term LNG exports, could be considered. While it appears that Agrium is interested in re-starting their facility, which would support a long-term demand for Cook Inlet supplies, their project start-up date could leave a gap in the near-term. It appears that the only near-term market opportunity for significant additional demand lies with the re-opening of the Kenai LNG facility.

As you are aware, limited market opportunities threaten the long-term deliverability of existing gas wells in addition to future exploration prospects. When existing wells that could be in production are 'shut-in' due to lack of demand for gas, water can migrate through the reservoir and mix with sandstone clays. This creates sand in the well bore and causes serious operational problems when there are attempts to restart production. Such operational problems negatively impact the State – especially in cases where the State is the resource owner – as they limit resource recovery and thus economic activity on leases. Renewed operations at the Kenai LNG facility will allow wells to maintain flow during the summer months when local utility demand is at its lowest and avoid these problems.

Consistent with the interests described above, I also request that you install an appropriate LNG truck-rack and other necessary equipment at the Kenai facility to support the shipment of LNG by truck throughout Alaska. The Governor and State Legislature have taken important steps to support the use of North Slope gas in the Interior of Alaska, including financial support for the build-out of distribution infrastructure. The installation of truck-rack equipment in Kenai would provide a back-up plan to strengthen Interior Alaska's energy security, as well as another possible outlet for Cook Inlet's gas supplies.

The operation of ConocoPhillips Kenai LNG export facility is needed to sustain exploration and development budgets and activity in the Inlet. The State's concern is that the recent rise in investment will falter if these kinds of market opportunities are not available in the near future. The State is making every effort to continue to support exploration in Cook Inlet and advance Alaska's interrelated interests in energy security, economic security, and resource recovery.

Thank you for your consideration. I would be happy to discuss these issues further and answer any questions that you may have. I look forward to continuing to work with you to support Cook Inlet's oil and gas industry.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Balash', written in a cursive style.

Joseph R. Balash
Acting Commissioner
Department of Natural Resources

Appendix D

**Excerpt from April 2015
Report of the Potential Gas Committee**

Potential Supply of Natural Gas in the United States

**Report of the
Potential Gas Committee
(December 31, 2014)**

Natalie H. Reagan
President & General Chairman

Editorial Committee

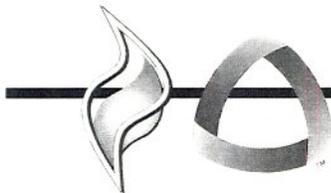
Stephen D. Schwochow, Chairman

Kenneth H. Dwight
John D. Haun
J. Scott Jenkins
Allen L. Kelley

John B. Curtis (ex officio)
Michael K. Decker (ex officio)
Darrell L. Pierce (ex officio)

Colorado School of Mines
Potential Gas Agency
John B. Curtis, Director
Linda D'Epagnier, Administrative Manager

50th Anniversary Report



Potential Gas Agency

April 2015

Colorado School of Mines

Alaska Area

Natural gas production has been established in four of the 31 provinces comprising the Alaska Area, but conventional resources are believed to exist in about twenty provinces. Petroleum is produced from the Alaska North Slope—both onshore (P-701) and in shallow, state-administered waters (“submerged lands”) of the nearshore Beaufort Sea Shelf (P-971)—and from Cook Inlet onshore (P-707) and offshore (P-995) (Figure 37, p. 68). Cook Inlet’s reserves were discovered in 1957, and Prudhoe Bay on the North Slope came online in 1968. North Slope offshore production currently is limited to four fields—Endicott, online in 1987, Northstar (straddling federal jurisdiction) in 2001, and Oooguruk and Nikaitchuq in 2008. All of Cook Inlet’s offshore oil and gas production comes from six fields in state waters of the upper inlet, one of which produces only gas.

Known and inferred conventional natural gas resources are concentrated primarily in the onshore and offshore areas surrounding the North Slope (including the northern Brooks Range foothills) and Cook Inlet, and secondarily in unexplored shallow-water shelf basins of the eastern Bering Sea. Postaccretionary Cenozoic sedimentary basins and lowlands of the Alaskan interior appear to be prospective for conventional gas accumulations and, in some cases, coalbed gas, but these areas remain almost entirely unexplored. Substantial coalbed gas resources exist in the Cook Inlet and North Slope basins.

The North Slope, Beaufort Sea, Bering Sea and Gulf of Alaska contain what the U.S. Geological Survey has indicated to be vast volumes of natural gas hydrates in place. Several projects are under way to characterize North Slope gas hydrate occurrences and properties and to evaluate drilling techniques and potential producibility. The PGC has not assessed technically recoverable natural gas hydrate resources.

To date, oil exploration and production have dominated because the region lacks the means to transport natural gas outside Alaska and to destinations within Alaska beyond the immediate North Slope and Cook Inlet production areas. Presently, all but about 0.5 Tcf of Alaska’s approximately 3 Tcf of annual gross natural gas withdrawals is reinjected into North Slope oil reservoirs for pressure maintenance or otherwise mixed with other gases as a miscible injectant for enhanced oil recovery. North Slope associated gas that is not reinjected is consumed mostly for field operations. Operators also deliver 500 to 1,000 Mcfd of gas via pipeline to the Native village of Nuiqsut in exchange for access across Native lands to Colville River Unit satellite oil fields and prospects just inside the eastern boundary of the National Petroleum Reserve-Alaska (NPR-A). The only nonassociated gas presently produced on the North Slope supplies the village of Barrow.

Associated and nonassociated natural gas from Cook Inlet, where reserves are becoming depleted, is consumed in Anchorage area residential, commercial and powergen markets. On the Kenai Peninsula south of Anchorage, substantial volumes of natural gas are consumed in vital industrial markets, specifically as oil refinery fuel and as feedstock for production of LNG that has been exported exclusively to Japan since 1969. The latter operation, presently the country’s only LNG export facility, is now running at reduced capacity and faces an uncertain future in light of the inlet’s gas supply situation and the prospects for a larger scale plant that would liquefy North Slope gas for export.

The PGC’s year-end 2014 assessments of potential natural gas resources for the 31 provinces of the Alaska Area (onshore and offshore) are summarized in Table 17 (p. 66–67). The arithmetically additive grand total of the Most Likely values of Traditional resources (exclusive of coalbed gas) for all provinces is **143,050 Bcf**. The separately aggregated (nonadditive) mean grand total value is **193,831 Bcf**.

All resource assessments remained unchanged for 2014. No revisions were warranted based on the limited number of recent exploration and development wells drilled in the state’s producing and nonproducing provinces. However, some discussion of recent activities may offer insight into the special considerations involved in PGC’s resource assessments in Alaska.

North Slope (P-701)

Inasmuch as the vast majority of gross gas withdrawals on the North Slope is reinjected, no changes in PGC’s assessments have been warranted, even though some new oil fields (with associated gas) have been brought into production over the last decade or more. Exploration and development drilling continue at their necessarily slow pace in the Arctic’s limited field season and harsh working conditions.

The one factor sooner likely to result in changes in assessments was the prospect of commercial gas sales to supply the Alaska regional gas pipeline. As conceptualized, this giant 52-inch, 4.5-Bcfd pipeline would have run 1,800 miles from the North Slope parallel to TAPS to Delta Junction, at which point it would head east along the Alaska Highway across Yukon Territory and British Columbia and eventually tie into the elaborate gas gathering and distribution network known as the “prebuild” in Alberta, from which gas finally would be exported via existing interstate lines to the Lower 48 U.S., as it has for many years. At Delta Junction a spur line was planned to bring some of that gas to the greater Anchorage area to supplement Cook Inlet basin’s declining reserves.

Under the administration of former Governor Palin, Trans-Canada Pipelines was awarded a state contract to build
(text continued on page 67)

Table 17. Potential Gas Committee assessments of recoverable resources of Traditional natural gas (conventional, tight and shale gas) and coalbed gas for provinces of the Alaska Area, December 31, 2014 (billion cubic feet).

PROVINCE	PROBABLE			POSSIBLE			SPECULATIVE			TOTAL
	Min.	M. Likely	Max.	Min.	M. Likely	Max.	Min.	M. Likely	Max.	M. Likely
Traditional (Conventional and Tight):										
Onshore, 0–15,000 ft										
P-701, Alaska North Slope	26,200	30,200	36,100	4,000	15,000	43,000	6,000	23,000	72,000	68,200
P-702, S. Foothills and Brooks Range	–	–	–	–	–	–	*	*	1,000	0
P-703, Yukon Flats and Kandik Basins	–	–	–	–	–	–	*	200	500	200
P-704, Alaska Interior Basins	–	–	–	–	–	–	*	500	2,500	500
P-705, Northern Gulf of Alaska	–	–	–	–	–	–	100	700	3,550	700
P-706, Southeastern Alaska	–	–	–	–	–	–	*	*	*	0
P-707, Cook Inlet-Susitna Basins	400	650	1,600	700	1,400	2,800	*	2,400	4,800	4,450
P-708, Alaska Peninsula-Shelikof	–	–	–	–	–	–	*	200	300	200
P-709, Alaska Peninsula-Bristol Bay	–	–	–	–	–	–	400	700	1,400	700
P-710, Aleutian Islands	–	–	–	–	–	–	*	*	1,000	0
Onshore, 15,000–30,000 ft										
P-701, Alaska North Slope	–	–	–	–	–	–	No reliable data			–
P-702, S. Foothills and Brooks Range	–	–	–	–	–	–	No data			–
P-703, Yukon Flats and Kandik Basins	–	–	–	–	–	–	No data			–
P-704, Alaska Interior Basins	–	–	–	–	–	–	No data			–
P-705, Northern Gulf of Alaska	–	–	–	–	–	–	No reliable data			–
P-706, Southeastern Alaska	–	–	–	–	–	–	*	*	*	*
P-707, Cook Inlet-Susitna Basins	–	–	–	–	–	–	*	*	*	*
P-708, Alaska Peninsula-Shelikof	–	–	–	–	–	–	No reliable data			–
P-709, Alaska Peninsula-Bristol Bay	–	–	–	–	–	–	No reliable data			–
P-710, Aleutian Islands	–	–	–	–	–	–	No reliable data			–
Traditional (Shale):										
Onshore, 0–15,000 ft										
P-701, Alaska North Slope	–	–	–	–	–	–	–	–	–	–
P-702, S. Foothills and Brooks Range	–	–	–	–	–	–	–	–	–	–
Offshore, 0-200 m										
P-971, Beaufort Sea Shelf	1,000	2,000	11,000	3,000	12,000	41,000	3,500	19,500	62,500	33,500
P-973, Chukchi Shelf	–	–	–	–	–	–	3,500	19,500	62,500	19,500
P-974, Norton Basin	–	–	–	–	–	–	*	200	600	200
P-975, Hope Basin	–	–	–	–	–	–	*	550	2,000	550
P-979, St. Matthew Basin-Bethel Basin Shelf	–	–	–	–	–	–	*	*	*	0
P-981, Navarin Basin Shelf	–	–	–	–	–	–	*	1,000	4,000	1,000
P-983, St. George Basin Shelf	–	–	–	–	–	–	200	1,500	2,500	1,500
P-985, Bristol Bay Shelf	–	–	–	–	–	–	1,850	3,750	6,000	3,750
P-987, Shumagin-Kodiak Shelf	–	–	–	–	–	–	200	1,700	5,200	1,700
P-989, Aleutian Shelf	–	–	–	–	–	–	*	*	1,000	0
P-991, Northern Gulf of Alaska Shelf	–	–	–	–	–	–	100	800	2,400	800
P-993, Southeastern Alaska Shelf	–	–	–	–	–	–	200	850	2,600	850
P-995, Cook Inlet Basin	200	400	800	350	700	1,400	*	1,000	2,400	2,100
Offshore, 200-1,000 m										
P-972, Beaufort Sea Slope	–	–	–	–	–	–	Not assessed			–
P-982, Navarin Basin Slope	–	–	–	–	–	–	*	*	500	*
P-984, St. George Basin Slope	–	–	–	–	–	–	*	*	500	*
P-988, Shumagin-Kodiak Slope	–	–	–	–	–	–	Not assessed			–
P-990, Aleutian Slope	–	–	–	–	–	–	*	*	*	*
P-992, N. Gulf of Alaska Slope	–	–	–	–	–	–	450	2,650	6,550	2,650
P-994, Southeastern Alaska Slope	–	–	–	–	–	–	No data			–
Offshore, >1,000 m										
P-980, Southwest Bering Sea Slope	NOT ASSESSED—ALL WATER DEPTHS >1,000 m									

* Negligible quantity of natural gas estimated.

(continued on next page)

Note: In addition to the Probable resource assessment of 6,000 Bcf for the North Slope province P-701, reserves of approximately 24,600 Bcf have been demonstrated to exist in fields currently developed on the Alaska North Slope according to estimates of the Committee on Natural Gas Reserves of the American Gas Association. Reserves of approximately 25,000 Bcf are included in reserves estimates published by the U.S. Department of Energy's Energy Information Administration. These reserves are not carried in assessments of proved reserves prepared by some companies and have been considered as additional Probable resources.

Table 17, continued.

TOTALS	PROBABLE			POSSIBLE			SPECULATIVE			TOTAL	
	Min.	M. Likely	Max.	Min.	M. Likely	Max.	Min.	M. Likely	Max.	M. Likely	
Sum of Most Likely Assessments											
Onshore, 0–15,000 ft (Traditional, C/T)		30,850			16,400			27,700		74,950	
Onshore, 0–15,000 ft (Traditional, Sh)		0			0			0		0	
Onshore, 0–15,000 ft (Total Traditional)		30,850			16,400			27,700		74,950	
Onshore, 15,000–30,000 ft (Total Trad.)		*			*			*		*	
Total Onshore, all drilling depths		30,850			16,400			27,700		74,950	
Offshore, 0–200 m		2,400			12,700			50,350		65,450	
Offshore, 200–1,000 m		*			*			2,650		2,650	
Total Offshore, all water depths		2,400			12,700			53,000		68,100	
AREA GRAND TOTAL (Most Likely Values)		33,250			29,100			80,700		143,050	
AREA GRAND TOTALS (Mean Values)											
Total Onshore, all drilling depths		31,720			22,300			40,420		94,430	
Total Offshore, all water depths		5,140			19,500			74,790		99,370	
Grand Total (nonadditive)		36,860			41,820			115,130		193,830	
PROVINCE											
Coalbed Gas Resources											
North Slope, Kobuk, Upper and Lower Koyukuk, Yukon Flats, Middle Tanana, Nenana, Copper River, Susitna, Cook Inlet, Alaska Peninsula coal basins		–	–	–	–	–	–	15,000	57,000	76,000	57,000
Total Coalbed Gas			0			0			57,000		57,000

* Negligible quantity of natural gas estimated.

and operate the line, with a consortium of the North Slope majors supplying the gas principally in the form of “offtake” from the active oil fields. Ideally the pipeline would have encouraged other companies to develop supplemental gas supplies, specifically from state lands that were leased over the southern coastal plain and northern Brooks Range foothills (foreland fold belt), an area believed to be gas prone.

With the onset of unprecedented levels of shale gas production in the Lower 48 States, the multibillion-dollar regional line could, however, no longer be justified. That concept has now transformed into a shorter in-state pipeline designed for export of LNG. This smaller, 42- to 48-in. line also would begin near Prudhoe Bay at a large new gas-conditioning facility, which would be required to remove the unusually high concentrations of CO₂ in the gas stream. Following TAPS to Fairbanks, the line then would head south to Anchorage and on down the Kenai Peninsula to a site already selected for a new liquefaction plant, consisting of three 5- to 6-mta (million metric tons per annum) trains. At five or more points along the line, notably at Fairbanks, 300 to 350 MMcfd of gas would be diverted for delivery to interior communities that presently rely almost entirely on expensive imported diesel fuel for their energy needs.

Variations on this general scheme are under debate among Alaska legislators and stakeholders, and many issues remain

unresolved, including the level of state participation, third-party access, fiscal terms and how royalties on state-owned gas would be paid. In addition to the State and its facilitator, the Alaska Gasline Development Corporation (AGDC), industry stakeholders in the Alaska LNG Project include ExxonMobil, BP, ConocoPhillips and TransCanada Pipelines. (To ensure that state interests are met, the State simultaneously is allowing AGDC to pursue its own smaller, in-state Alaska Stand Alone Pipeline, or ASAP, project.)

Offtake still remains an issue. At the startup of Prudhoe Bay field in 1977, the Alaska Oil and Gas Conservation Commission (AOGCC) set the maximum offtake rate at 2.7 Bcfd, that is, the volume of gas that could safely be diverted while not materially depleting volumes needed to maintain oil reservoir pressure. Of that amount, 2.0 Bcfd was designated for eventual pipeline sales. In 2005 and 2006 the AOGCC reexamined that issue using simulated offtake rates of 2.3 to 4.3 Bcfd with gas sales commencing between 2015 and 2024. No specific recommendations were offered.

To supply a 3.0- to 3.5-Bcfd-capacity line, gas will come initially from offtake in the Prudhoe Bay fields. Normally this gas would be classified as proved reserves and would not be produced from what the PGC considers Probable resources. However, in 1990, the PGC made an unusual change in its North Slope assessment.

Appendix E

Letters in Support

AIX Energy LLC

2441 High Timbers Drive, Suite 120, The Woodlands, TX 77380
832-813-0900 Phone
832-585-0133 Facsimile

June 25, 2015

Mr. Leo Ehrhard
Vice President, Commercial Assets
ConocoPhillips Alaska
700 G Street, ATO 21-2126
Anchorage, AK 99501

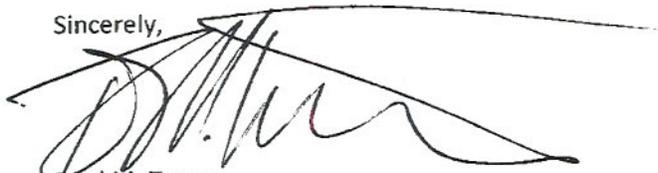
RE: Kenai LNG export authorization

AIX Energy LLC supports the efforts of ConocoPhillips Alaska to seek a new license from the DOE for export of liquefied natural gas (LNG) from its Kenai plant, beyond expiration of the current license in 2015.

The Cook Inlet basin natural gas industry in Alaska is dependent upon a healthy and diversified market. Such a market necessitates both utility *and* industrial users of natural gas. Industrial users such as the Kenai LNG plant play an important role in maintaining a healthy natural gas market by providing an outlet for gas supplies in excess of that needed to meet local utility demands, particularly in summer months when utility usage is low.

AIX Energy LLC is an independent producer and operator of natural gas leases on the Kenai Peninsula, Alaska, in the Cook Inlet Basin. In addition to operating producing gas wells, AIX holds exploration leases in the Cook Inlet area. Future development and exploration decisions are dependent upon the assurance of market demand for AIX's future natural gas production. Accordingly, AIX stands in support of the continued export of LNG from the Cook Inlet Basin.

Sincerely,



Fred M. Tresca
Manager



Aurora Gas, LLC

June 25, 2015

Mr. Leo Ehrhard
Vice President, Commercial Assets
ConocoPhillips Alaska
700 G Street, ATO 21-2126
Anchorage, AK 99501

Re: Support for LNG Export License

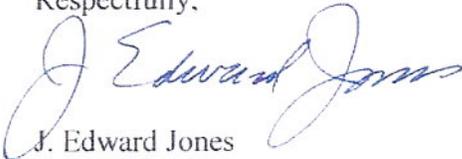
Dear Mr. Ehrhard:

Aurora Gas, LLC (Aurora) submits this letter of support to ConocoPhillips Alaska for the reauthorization for the export of Liquid Natural Gas (LNG) from Cook Inlet.

It has been well documented that Cook Inlet natural gas supplies have been in decline, and continued and expanding exploration and development activity is required to ensure the demand for natural gas in southcentral Alaska is met. Multiple markets provide the necessary demand for locally produced natural gas that is required for companies to invest in exploration and development of natural gas in the Cook Inlet Basin. Aurora recognizes LNG manufacture and export as an integral component to encourage exploration, as it provides an alternative market for locally produced natural gas, which would otherwise not be available. Aurora has utilized this market as one of several for sales of our natural gas production.

Aurora appreciates the effort by the U.S. Department of Energy to review this application and believes that an export renewal should not be the singular burden of one operator to support. All producers with surplus gas reserves should be considered when reviewing the export renewal, as all are potential suppliers of gas for export.

Respectfully,



J. Edward Jones
President



August 14, 2015

Leo Ehrard
Vice President
Commercial Assets
ConocoPhillips Alaska
700 G Street, ATO 2126
Anchorage, Alaska 99510

RE: Potential Kenai LNG Export License Extension

Dear Mr. Ehrard

Furie Operating Alaska, LLC ("Furie") is newest independent producers of natural gas in South Central Alaska with production starting in November 2015 from the offshore Kitchen Lights Unit. Furie will have the capability of producing up to 100 MMCF per day / more than 30 BCF per year. We are pleased to learn ConocoPhillips Alaska is evaluating an extension of the existing LNG export authorization.

As you know, the Cook Inlet natural gas and world LNG markets are dynamic and challenging markets. While Furie is committed to meeting in-state gas needs, it welcomes the opportunity for placement of new gas production to the world LNG market. Access to the plant under commercially reasonable terms will facilitate Furie's ability to develop gas future prospects thereby benefitting the State of Alaska and fadditional job opportunities for our fellow Alaskans.

We look forward to working with ConocoPhillips Alaska regarding the continued growth of the South Central Alaska and LNG world markets.

Best regards,

A handwritten signature in blue ink, which appears to read "Lewis West".

Sr. Vice President
Furie Operating Alaska, LLC



July 15, 2015

Leo Ehrhard
Vice President, Commercial Assets
ConocoPhillips Alaska
700 G Street, ATO 21-2126
Anchorage, AK 99501

Re: Support Letter LNG Export

Dear Mr. Ehard,

BlueCrest Energy Inc. ("BlueCrest") and WesPac Midstream LLC ("WesPac") have agreed to pursue the joint development of the Cosmopolitan field located near Anchor Point, Alaska, which remains the largest undeveloped field in the Cook Inlet. WesPac, as 100% working interest owner in the shallow gas formations has committed to fund the drilling and installation of production platforms and pipelines capable of producing up to 70 MMscf/day. This quantity of gas is significant in terms of its ability to serve the local market, enhance potential export volumes, create new jobs, provide economic development for the community and help lower the cost of energy for the State of Alaska. However, given the geographic disposition of Alaska's resources, proximity to markets, the lack of infrastructure and the overall high cost of development, the ultimate success of any program is contingent upon a robust local and export gas market along with the current development incentives provided by the State. Therefore, continued access to the world market through an export facility is imperative for the continued exploration and development of natural gas resources in the Cook Inlet. In turn, this activity brings substantial economic benefit to the local economy in the form of increased employment, additional State royalties and an expanded tax base.

We are firmly committed to our natural gas development program in the Cook Inlet and are glad to support the export of liquefied natural gas from the ConocoPhillips LNG plant in Kenai, Alaska... We are also available at your convenience to meet and further discuss our development efforts of the Cosmopolitan field in the Cook Inlet.

Sincerely,

A handwritten signature in blue ink that reads "Michael L. Cox". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Michael L. Cox
Vice-President, WesPac Midstream LLC