

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

**Mexico Pacific Limited LLC**

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**FE Docket No. 18-70-LNG**

**APPLICATION OF MEXICO PACIFIC LIMITED LLC FOR  
LONG-TERM, MULTI-CONTRACT AUTHORIZATION  
TO EXPORT LIQUEFIED NATURAL GAS TO  
FREE TRADE AGREEMENT AND NON-FREE TRADE AGREEMENT NATIONS**

**June 18, 2018**

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Mexico Pacific Limited LLC (“MPL”) hereby requests, pursuant to Section 3 of the Natural Gas Act of 1938, as amended (“NGA”)<sup>1</sup> and Part 590 of the Department of Energy’s regulations,<sup>2</sup> that the DOE Office of Fossil Energy (“DOE/FE”) grant MPL, on its own behalf and as agent for others, long-term, multi-contract authorization to export domestically produced natural gas to Mexico and to convert such natural gas to liquefied natural gas (“LNG”) for re-export to both free trade agreement (“FTA”) and non-free trade agreement (“non-FTA”) nations, and for consumption in Mexico. MPL seeks this authorization in an amount of up to 1,684,000 MMBtu/d or approximately 614,400,000 MMBtu/year (12 million tonnes per annum (“MTPA”)) for an initial period of up to twenty (20) years, commencing on the earlier of the date of the first export or five years from the date of the final order granting export authorization.

MPL is filing this application in connection with its development of a LNG production and storage facility which will be located in the State of Sonora, Mexico (the “MPL Facility”). Once constructed, the MPL Facility will be capable of receiving, processing, and liquefying natural gas, storing the resulting LNG, and loading LNG onto oceangoing LNG carriers for re-export to other countries and for delivery to markets elsewhere in Mexico. During its initial

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<sup>1</sup> 15 U.S.C. § 717b (2012).

<sup>2</sup> 10 C.F.R. Part 590 (2017).

years of operation, the MPL Facility will rely on natural gas feedstock sourced mostly from supplies imported into Mexico from the United States, but may also procure natural gas produced from Mexican oil and gas wells. MPL anticipates placing the MPL Facility into commercial operation in late 2023 or early 2024.

The MPL Facility will generate substantial benefits for both the U.S. and for Mexico. Exports of LNG from the MPL Facility will benefit U.S. natural gas producers, which through the MPL Facility will gain competitively advantaged access to new markets for the large quantities of low cost natural gas which are readily available in, and in some cases trapped within, the Permian Basin, the San Juan Basin, the Eagle Ford Formation, the Barnett Shale and other producing basins in the Southwest U.S. Given its location in a protected area on the Gulf of California, on the west coast of North America, the MPL Facility will be a low cost source of LNG for markets in Asia, the Pacific and South America, and hence will offer U.S. gas supplies a durable competitive advantage in these key LNG markets. The availability of LNG from the MPL Facility will also benefit Mexican markets for LNG, including in particular markets that are remote from Mexico's national gas pipeline grid but can be served through waterborne LNG deliveries. Construction of the Facility will benefit both U.S. and Mexican providers of design and construction services and of construction materials and specialized equipment, as well as construction workers to be drawn from both U.S. and Mexican labor pools. The MPL Facility's operation will provide needed employment to residents of the area around Puerto Libertad. Exports of natural gas for liquefaction at the MPL Facility will directly reduce the U.S.' trade deficit with Mexico.

Accordingly, the LNG exports MPL seeks authorization to undertake are fully consistent with the public interest from both the U.S. and Mexican perspectives. DOE/FE should conclude

as much, and should determine that, as NGA Section 3 requires, the proposed exports are not inconsistent with the public interest.

## **I. APPLICANT DESCRIPTION**

The exact legal name of the applicant is Mexico Pacific Limited LLC. MPL is a limited liability company organized under the laws of Delaware with its principal place of business at 5444 Westheimer Road #1685, Houston, TX 77056.

MPL is owned by MPL Pacific Limited LLC, which is jointly owned by DKRW Energy Sonora Holding LLC and ACAP Sonora Energy, LLC. DKRW Energy Sonora Holding LLC is a wholly owned subsidiary of DKRW Energy LLC. ACAP Sonora Energy, LLC is owned by AECOM Capital Inc., which is a subsidiary of AECOM (a multinational engineering firm that provides design, consulting, construction, and management services). AECOM Capital is an investor and developer of real estate, infrastructure and public-private partnerships across North America and select international markets currently having a total development value of approximately \$5 billion.

## **II. COMMUNICATIONS AND CORRESPONDENCE**

Communications regarding this application should be directed to:

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## **III. PROJECT DESCRIPTION**

The MPL Facility will be located in the State of Sonora, Mexico, at a coastal site which has been permitted for LNG storage and related marine activities for a decade. The site is

situated on the Gulf of California adjacent to Puerto Libertad, Mexico, approximately 160 miles south of a point at the U.S.-Mexico border at Sasabe, Arizona. The MPL Facility's general location is presented in the MPL LNG Project Overview, included as **Attachment 1**, at pages 3 and 4.

Through its affiliate Mexico Pacific Assets Holding S. de R.L. de C.V. ("MPL Assets Holding"), MPL owns in excess of 1,000 acres surrounding the MPL Facility project site in fee. Approximately 300 acres of this total have been designated for LNG development and originally were permitted for an LNG import facility. MPL has obtained a shoreline concession permit, and is in the process of securing modifications to existing environmental and construction permits that will authorize the construction and operation of a liquefaction facility and exports of LNG from the MPL Facility project site. These permits are held by MPL Assets Holding through two subsidiaries, Mexico Pacific Permit Holdings S. de R.L. de C.V. and Mexico Pacific Land Holdings S. de R.L. de C.V. The sequence of conveyances through which MPL has obtained ownership of the MPL Facility project site and the manner in which the required permits are held are depicted in **Attachment 2**.

Construction of the MPL Facility has not yet begun. MPL currently expects to commence construction in 2019.

MPL plans initially to receive natural gas produced primarily in the United States and exported to Mexico via existing cross-border gas transmission pipelines. Among these are an interstate natural gas pipeline owned by Sierrita Gas Pipeline LLC which extends from an interconnection with the El Paso Natural Gas Pipeline Company, L.L.C. ("EPNG") system just west of Tucson, Arizona to the Arizona-Mexico border near Sasabe, where it interconnects with the Gasoducto Sonora pipeline, operated by Infraestructura Energética Nova, S.A.B. de C.V. (the

“IEnova Pipeline”), which will serve the MPL Facility via a short lateral. In order to ensure that the IEnova Pipeline can accommodate the quantities of natural gas it eventually anticipates processing, MPL intends to participate in an open season through which the IEnova Pipeline is expected to offer additional capacity of as much as 390,000 MMBtu/day that can access U.S. gas markets through the Sierrita Pipeline and the EPNG systems.

Other gas export pipelines through which natural gas may ultimately be pathed to the IEnova Pipeline include the Comanche Trail, Roadrunner and Trans Pecos intrastate natural gas pipelines in west Texas. The various routes by which natural gas may be transported to the MPL Facility are shown in **Attachment 1**, at page 6. With more than 4 Bcf/d of pipeline capacity to be available to export natural gas from west Texas to Mexico by the end of 2018,<sup>3</sup> there is available ample existing cross-border capacity to support delivery of the quantities of gas MPL plans to liquefy.

MPL plans to obtain the natural gas it will liquefy from suppliers such as CFENERGÍA, S.A. de C.V. (“CFENERGÍA”), a direct subsidiary of the Comisión Federal de Electricidad (“CFE”), and from other producers and marketers of U.S. and Mexican gas.<sup>4</sup> MPL and CFENERGÍA are currently in the process of concluding a gas supply agreement which, if consummated, would secure for MPL the right to purchase an annual average of 400,000 MMBtu/day for delivery via CFE-controlled pipeline capacity to the U.S. border and from the U.S. border to the MPL Facility through the IEnova Pipeline, on which CFE controls the first

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<sup>3</sup> PointLogic Energy, *Mexico Gas Pipeline Network Filling Out in 2017* (May 24, 2017), available at <https://www.pointlogicenergy.com/market-news/Get-the-Point/2017/2017-5-24-mexico-gas.html> (last visited April 16, 2018).

<sup>4</sup> CFE’s subsidiary, CFE International LLC, has been granted blanket authorization to import and export up to a combined total of 2,920 Bcf of natural gas from and to Mexico via pipeline. See *CFE International LLC*, DOE/FE Order No. 4051 (June 8, 2017).

770 MMcf/d of capacity.<sup>5</sup> Additionally, MPL will have the right to purchase natural gas from third party U.S. natural gas producers and enter into a transportation agreement with CFE providing for the transportation and delivery of that third-party gas via CFE-controlled capacity in the U.S. and Mexico. Under the proposed contract, MPL would also be in a position to purchase Mexican-produced natural gas as such supplies become available via pipeline systems interconnecting with the IEnova Pipeline which are currently under construction or are planned (see **Attachment 1** at page 6).

MPL plans to construct the MPL Facility in phases. The initial phase of the project (approximately 2 to 4 MTPA of LNG capacity) will be relatively small in scale; the MPL Facility will then be scaled up over time by the addition of liquefaction units. Each of the planned liquefaction units will have the capacity to produce approximately 1.0 MTPA (+/- 40%). The resulting LNG will be loaded onto oceangoing LNG carriers for delivery to markets in Mexico and for re-export to other nations.

Among the markets for which the MPL Facility is particularly well positioned are markets in Korea, Japan, China, Hawaii and Guam (each of which can be supplied by vessel from the MPL Facility without having to transit the Panama Canal), as well as markets in South America (in particular Chile, Colombia and Ecuador), and the west coast of Mexico. This subject is discussed in **Attachment 1** at pages 3 and 7.

#### **IV. AUTHORIZATION REQUESTED**

MPL seeks authorization, on its own behalf and as agent for others, to export natural gas to Mexico, to transform such natural gas into LNG, and to re-export quantities of LNG that are not sold into Mexican markets to (1) any country with which the United States currently has, or

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<sup>5</sup> The IEnova Pipeline has the ability to expand its capacity to over 1 bcf/d with the addition of compression.



in the future may enter into, a free trade agreement requiring national treatment for trade in natural gas; and (2) any country with which the United States does not have a free trade agreement requiring national treatment for trade in natural gas and with which trade is not prohibited by United States law or policy. It seeks this authorization for an initial period of twenty (20) years, in an amount of up to 1,684,000 MMBtu/d or approximately 614,400,000 MMBtu/year (12 MTPA). MPL requests that this authorization be effective on the earlier of the date of the first export or five years from the date of the final order granting export authorization.

MPL expects to commence construction of the MPL Facility in 2019 or early 2020 and to place the MPL Facility into commercial operation in 2023. It anticipates that the first LNG exports from the MPL Facility could occur in 2023 or early 2024.

MPL requests authorization to export natural gas and LNG on its own behalf and as an agent for customers which may wish to procure natural gas from their own sources and have that gas liquefied in the MPL Facility for re-export or delivery into Mexican markets. MPL's agreements will require that the parties conduct their transactions in a manner consistent with applicable Mexico laws and regulations. Additionally, to ensure that all natural gas exports are permitted and lawful under U.S. law and policies, MPL will comply with all DOE/FE requirements applicable to exporters and agents. As required by DOE precedent, it will register with DOE/FE each LNG titleholder for which MPL seeks to export LNG, consistent with DOE/FE Order No. 2913.<sup>6</sup> It will provide DOE/FE with registration materials that include an acknowledgement and agreement by the LNG title holder to supply information necessary to permit MPL to register that person or entity with DOE/FE in accordance with DOE/FE requirements. These materials will document (i) the Registrant's agreement to comply with any

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<sup>6</sup> *Freeport LNG Expansion, L.P.*, DOE/FE Order No. 2913 (Feb. 10, 2011).

order issued by DOE/FE in response to this Application and all applicable requirements of DOE's regulations at 10 C.F.R. Part 590, including destination restrictions; (ii) the exact legal name of the Registrant, state/location of incorporation/registration, primary place of business, and the Registrant's ownership structure, including the ultimate parent entity if the Registrant is a subsidiary or affiliate of another entity, (iii) the name, title, mailing address, e-mail address, and telephone number of a corporate officer or employee of the Registrant to whom inquiries may be directed; (iv) within 30 days of execution, a copy of any long-term contracts, not previously filed with DOE/FE, including both a non-redacted copy for filing under seal and either (x) a redacted version of the contract or (y) a summary of the major provisions of the contract, for public posting.<sup>7</sup> MPL will set forth in agreements with its customers the terms and conditions relevant to the use of MPL's export authorization, and MPL will provide DOE/FE with a written statement by the titleholder acknowledging and agreeing to comply with the requirements of MPL's long-term export authorization and to include those requirements in any of its subsequent purchase or sale agreements.<sup>8</sup>

As of the date of this application, MPL has not finalized and executed any long-term gas supply or long-term export contracts in connection with the natural gas and LNG export authorization requested here. MPL is engaged in commercial discussions with a number of interested counterparties concerning LNG supply arrangements that would be targeted for export destinations in both FTA and non-FTA countries, as well as potential LNG sales in Mexico. It anticipates entering into either LNG Sales and Purchase Agreements or LNG Tolling Arrangements. Under LNG Sales and Purchase Agreements, MPL will procure the natural gas to

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<sup>7</sup> See, e.g., *Dominion Cove Point LNG, LP*, DOE/FE Order No. 3331 (Sept. 11, 2013).

<sup>8</sup> See *id.*; see also *Southern LNG Co., LLC*, DOE/FE Order No. 3106 (June 15, 2012); *Excelerate Liquefaction Solutions I, LLC*, DOE/FE Order No. 3128 (Aug. 9, 2012).

be processed through the MPL Facility, take title to the natural gas no later than the time it is received at the MPL Facility, and transfer title to the produced LNG to customers upon loading of the oceangoing LNG carriers for export. In transactions structured as LNG Tolling Arrangements, MPL will process natural gas to which the tolling party has title through the MPL Facility and will deliver the resulting LNG to the tolling party in exchange for the payment of a tolling fee.

In DOE/FE's recent orders granting long-term authorization to export LNG to non-FTA countries, DOE/FE has found that applicants need not submit all transaction-specific information with the initial application to satisfy Section 590.202(b) of the DOE regulations, particularly if such information is not available because contracts have not yet been executed.<sup>9</sup> Instead, DOE/FE has permitted applicants to submit such information when contracts are executed, finding that this conforms with the regulatory requirement that such information be submitted "when practicable."<sup>10</sup> As DOE has required of other applicants, MPL will file any long-term gas supply or long-term export contracts under seal with DOE/FE once they are executed.

## **V. SOURCES OF NATURAL GAS TO BE EXPORTED**

MPL will receive at the MPL Facility natural gas produced in the United States and exported to Mexico via existing cross-border gas transmission pipelines, as well as natural gas that may be sourced from Mexican oil and gas wells. The U.S. sources of this natural gas will include natural gas producing regions located throughout the southwestern United States (*e.g.*, the Permian Basin, the San Juan Basin, the Eagle Ford Formation and the Barnett Shale), and could include natural gas produced in the Mid-continent region, the Gulf Coast region and even

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<sup>9</sup> See 10 C.F.R. § 590.202(b).

<sup>10</sup> See, *e.g.*, *Golden Pass Prods. LLC*, DOE/FE Order No. 3978 (Apr. 25, 2017); *Jordan Cove Energy Project, L.P.*, DOE/FE Order No. 3413 (Mar. 24, 2014); *Cameron LNG, LLC*, DOE/FE Order No. 3391 (Feb. 11, 2014); *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2833 (Sept. 7, 2010).

the shale plays of the Appalachian region. Suppliers to the MPL Facility will have the capability to access the entire U.S. national gas pipeline grid through various interconnections, such as those available at the San Juan Hub, the Waha Hub and Henry Hub. Potential gas suppliers include the numerous producers operating in the major gas supply basins accessible through pipelines ultimately connecting with the various U.S.-Mexico export pipelines. Those sources of natural gas supply will be more than adequate to support MPL Facility exports for the term of the authorization MPL requests.

## **VI. PUBLIC INTEREST ANALYSIS**

As DOE/FE has found in numerous export authorization orders issued over the past several years,<sup>11</sup> given the abundance of the U.S. gas supply base, the excess of available gas deliverability over domestic gas demand, and the benefits associated with increased trade in natural gas, the export of natural gas from the U.S. is generally consistent with the public interest. The same considerations are applicable here, and they clearly support the conclusion that the export authorizations MPL requests will not be inconsistent with the public interest. The requested authorizations accordingly should be granted under the provisions of NGA Section 3 which apply to exports of natural gas to FTA and non-FTA countries, respectively.

### **a. FTA Nations – Standard of Review**

Section 3(c) of the NGA, as it was amended by Section 201 of the Energy Policy Act of 1992 (Pub. L. 102- 486), 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

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<sup>11</sup> See generally cases cited in footnotes 13 and 15-22.

interest, and applications for such importation or exportation shall be granted without modification or delay.<sup>12</sup>

Under this statutory provision, the portion of MPL's Application seeking authorization to export LNG to nations with which the United States currently has, or in the future may enter into, an FTA requiring national treatment for trade in natural gas, is deemed to be consistent with the public interest. Accordingly, MPL requests that DOE/FE grant this aspect of the Application without modification or delay, as it routinely does for other projects seeking authorization for export to FTA nations, consistent with the statute.<sup>13</sup>

**b. Non-FTA Nations – Standard of Review**

Section 3(a) of the NGA sets forth the general standard for review of export applications:

[N]o person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the [Secretary of Energy] authorizing it to do so. The [Secretary] shall issue such order upon application, unless, after opportunity for hearing, [the Secretary] finds that the proposed exportation or importation will not be consistent with the public interest. The [Secretary] may by [the Secretary's] order grant such application, in whole or in part, with such modification and upon such terms and conditions as the [Secretary] may find necessary or appropriate.<sup>14</sup>

DOE/FE consistently has found that this section creates a rebuttable presumption that proposed exports of natural gas are in the public interest, and DOE/FE must grant such an application unless those who oppose the application overcome that presumption.<sup>15</sup> To do this, an opponent

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<sup>12</sup> 15 U.S.C. § 717b(c).

<sup>13</sup> See, e.g., *Golden Pass Prods. LLC*, DOE/FE Order No. 3978; *Cameron LNG, LLC*, DOE/FE Order No. 3680 (July 10, 2015); *American LNG Mktg. LLC*, DOE/FE Order No. 3656 (May 29, 2015); *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2833; *Freeport LNG Expansion, L.P.*, DOE/FE Order No. 2913; *Magnolia LNG, LLC*, DOE/FE Order No. 3245 (Feb. 26, 2013).

<sup>14</sup> 15 U.S.C. § 717b(a) (emphasis added). This authority has been delegated to the Assistant Secretary for Fossil Energy, pursuant to Redelegation Order No. 00-002.04D (Nov. 6, 2007).

<sup>15</sup> See, e.g., *Freeport LNG Expansion, L.P. & FLNG Liquefaction, LLC*, DOE/FE Order No. 3282 at 5-6 (May 17, 2013); *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2961 at 28 (May 20, 2011); *Cameron LNG, LLC*, DOE/FE Order No. 3391 (Feb. 11, 2014).

must affirmatively demonstrate that the proposal is inconsistent with the public interest.<sup>16</sup> DOE/FE reviews the evidence developed in the record of each application proceeding to make its public interest determination.<sup>17</sup>

While NGA section 3(a) establishes a broad public interest standard and a presumption favoring export authorizations, it does not define “public interest” or identify the criteria that must be considered. DOE/FE has explained that in evaluating the extent to which an export application is consistent with the public interest, it focuses on (i) the domestic need for the natural gas proposed to be exported, (ii) whether the proposed exports pose a threat to the security of domestic natural gas supplies, (iii) whether the arrangements are consistent with DOE/FE’s policy of promoting market competition, and (iv) any other factors bearing on the public interest.<sup>18</sup> It has identified some of these “other factors” as including, for example, whether exports are beneficial for regional economies, the extent to which exports will mitigate trade imbalances, various international impacts, security of the domestic natural gas supply, and other economic and environmental impacts.<sup>19</sup>

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<sup>16</sup> See *Freeport LNG*, DOE/FE Order No. 3282 at 6; see also *Phillips Alaska Natural Gas Corp. & Marathon Oil Co.*, DOE/FE Order No. 1473 at 13, n. 42 (Apr. 2, 1999) (“Section 3 creates a statutory presumption in favor of approval of an export application and the Department must grant the requested export [application] unless it determines the presumption is overcome by evidence in the record of the proceeding that the proposed export will not be consistent with the public interest.”).

<sup>17</sup> *Freeport LNG*, Order No. 3282 at 7.

<sup>18</sup> See, e.g., *American LNG Mktg. LLC*, DOE/FE Order No. 3690 at 10 (setting forth the specific factors); see also, e.g., *Golden Pass Prods. LLC*, DOE/FE Order No. 3978 at 11-12 (Apr. 25, 2017); *Cameron LNG, LLC*, DOE/FE Order No. 3391-A at 8 (Sep. 10, 2014); *Freeport LNG*, Order No. 3282 at 7; *Lake Charles Exports*, DOE/FE Order No. 3324 at 8 (Aug. 7, 2013); *Dominion Cove Point LNG*, Order No. 3331 at 8-9 (Sep. 11, 2013); *Freeport LNG Expansion, LP*, Order No. 3357 at 9 (Nov. 15, 2013); *Jordan Cove*, Order No. 3413 at 8; *Oregon LNG*, Order No. 3465 at 8 (Jul. 31, 2014); *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2961.

<sup>19</sup> See, e.g., *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2961 at 34-38 (May 20, 2011); *Freeport LNG*, Order No. 3282 at 6; *Lake Charles Exports*, Order No. 3324 at 7; *Dominion Cove Point LNG*, Order No. 3331 at 7; *Freeport LNG*, Order No. 3357 at 8; *Cameron LNG*, Order No. 3391-A at 8; *Jordan Cove*, Order No. 3413 at 6-7; *Oregon LNG*, Order No. 3465 at 7.

Consistent with its Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, DOE/FE examines whether evidence of domestic supply shortages overcomes the statutory presumption that a proposed export is not inconsistent with the public interest.<sup>20</sup> Although the Policy Guidelines deal specifically with imports, DOE/FE has held that their principles also are applicable to exports.<sup>21</sup> The Policy Guidelines are intended to “minimize federal control and involvement in energy markets and to promote a balanced and mixed energy resources system.”<sup>22</sup> According to DOE/FE:

The market, not government, should determine the price and other contract terms of imported [or exported] gas. . . . The federal government’s primary responsibility in authorizing imports [or exports] should be to evaluate the need for the gas and whether the import [or export] arrangement will provide the gas on a competitively priced basis for the duration of the contract while minimizing regulatory impediments to a freely operating market.<sup>23</sup>

As demonstrated below, the export of LNG produced from U.S. natural gas as proposed in MPL’s Application is not inconsistent with the public interest, and should be allowed to proceed.

**c. Domestic Need for Natural Gas to be Exported**

In determining whether there is a domestic need for gas to be exported, DOE/FE traditionally has compared the total volume of gas reserves and recoverable resources available to be produced during the proposed export period to the total gas demand anticipated for the same period.<sup>24</sup> According to data compiled by the U.S. Energy Information Administration

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<sup>20</sup> See, e.g., *Freeport LNG*, Order No. 3282; *Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas*, 49 Fed. Reg. 6684 (Feb. 22, 1984) (“*Policy Guidelines*”).

<sup>21</sup> *Freeport LNG*, Order No. 3282 at 7; see also *Phillips Alaska Natural Gas Corp. and Marathon Oil Co.*, DOE/FE Order No. 1473 at 14 (Apr. 2, 1999); *Sabine Pass Liquefaction*, Order No. 2961 at 28.

<sup>22</sup> *Freeport LNG*, Order No. 3282 at 6.

<sup>23</sup> *Policy Guidelines* at 6685.

<sup>24</sup> See, e.g., *Conoco Phillips Alaska Natural Gas Corp. & Marathon Oil Co.*, DOE/FE Order No. 2500 at 43 (Jun. 3, 2008); *Phillips Alaska Natural Gas Corp. & Marathon Oil Co.*, DOE/FE Order No. 1473 at 29, 40, 46 (Apr. 2, 1999).

(“EIA”), recoverable reserves of natural gas in the U.S. are plentiful, economical, and more than adequate to meet domestic demand for many years to come.<sup>25</sup> Granting MPL long-term authorization to export natural gas will not cause any significant change in domestic supply, demand, or prices for natural gas. But such exports will promote both domestic employment opportunities and global environmental benefits as countries transition to natural gas from other fossil fuels that emit greater amounts of greenhouse gases. Importantly, MPL should provide an additional premium pricing point and liquid market for natural gas produced in the United States, in particular in the prolific basins of west Texas and New Mexico, which will help support the U.S. oil and natural gas industry by providing a new source of demand close to abundant and growing gas supply sources in search of markets. Overall, granting MPL the requested export authorization will have positive impacts on the U.S. economy and positive global environmental effects, without detrimentally impacting the market for U.S. natural gas, consistent with the public interest.

*i. Domestic Natural Gas Supply and Demand*

Current market trends strongly indicate that the export of domestically produced natural gas is in the U.S. public interest. Improvements in natural gas drilling and extraction technologies have increased drilling productivity domestically, leading to rapid growth in available natural gas supplies and to a transition from conventional gas supplies toward the unconventional shale gas-bearing formations in the United States.<sup>26</sup> Natural gas reserves in the

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<sup>25</sup> EIA, *Annual Energy Outlook 2018*, at 62 (Feb. 6, 2018) (“EIA AEO 2018”), [https://www.eia.gov/outlooks/aeo/pdf/AEO2018\\_FINAL\\_PDF.pdf](https://www.eia.gov/outlooks/aeo/pdf/AEO2018_FINAL_PDF.pdf) (“U.S. natural gas consumption and production increase in all cases with production growth outpacing natural gas consumption in all cases”); EIA, *Annual Energy Outlook 2016*, at MT-24 (Aug. 2016) (“EIA AEO 2016”), [http://www.eia.gov/forecasts/aeo/pdf/0383\(2016\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2016).pdf) (“In the Reference case, U.S. natural gas production is sufficient to meet increases in demand for both domestic consumption and net exports through 2040 . . . . The United States transitions from being a net importer of [natural gas] . . . to a net exporter in 2018.”).

<sup>26</sup> EIA, *Annual Energy Outlook 2017*, at 50 (Jan. 5, 2017) (“EIA AEO 2017”), [http://www.eia.gov/outlooks/aeo/pdf/0383\(2017\).pdf](http://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf) at 54 (“Since 2005, technologies to more efficiently produce



United States are sufficient to meet domestic demand for decades.<sup>27</sup> EIA estimates that dry natural gas production will be 81.7 Bcf/d in 2018, an increase of 8.1 Bcf/d from the 2017 level, establishing a new record.<sup>28</sup> Given these substantial additional resources and the relatively minor increases in domestic natural gas demand during the same time period, there are more than sufficient natural gas resources to accommodate both domestic demand and LNG exports, including the volume of exports proposed in this Application, throughout the proposed export authorization period.

Domestic natural gas production has grown considerably over the past several years, led by unconventional production. In AEO 2017, EIA projects in its Reference Case that U.S. dry natural gas production will increase by 49% between 2015 and 2050, and that production from shale resources and tight oil plays will increase from 13.5 Tcf in 2015 to 27.5 Tcf in 2050.<sup>29</sup> In AEO 2018, EIA projects that shale gas and tight oil plays will account for nearly three-quarters of U.S. natural gas production by 2050.<sup>30</sup>

Although domestic demand for natural gas is anticipated to grow over the next 25 years, demand will continue to be outpaced by available natural gas supply. Since 2009, production of

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natural gas from shale and tight formations have driven prices down, spurring growth in consumption and net exports.”).

<sup>27</sup> EIA AEO 2017 at 56 (noting that “natural gas prices stay relatively flat after 2030 as technology improvements keep pace with rising demand”); EIA AEO 2016 at MT-24 – MT-25 and Table A13. This view is shared by a number of organizations engaged in energy supply, demand and pricing projections. *See generally* EIA AEO 2016 at CP-9 – CP-11 (outlooks produced by EIA, ICF, BP, ExxonMobil and EVA all project increases in U.S. natural gas production, growth in U.S. natural gas consumption and growth in U.S. natural gas exports from 2015).

<sup>28</sup> EIA, Short-Term Energy Outlook at 1 (Mar. 6, 2018), [https://www.eia.gov/outlooks/steo/pdf/steo\\_full.pdf](https://www.eia.gov/outlooks/steo/pdf/steo_full.pdf).

<sup>29</sup> EIA AEO 2017 at Tables 13–14; *see also* Letter from Jack N. Gerard, Pres. and Chief Exec. Officer, API to Rick Perry, Sec’y of Energy (Mar. 14, 2017), <http://www.api.org/~media/Files/News/Letters-Comments/2017/3-14-17-Ltr-to-DOE-Secretary-Perry-LNG-Exports-Authorization.pdf> (projecting domestic natural gas production to increase 42 percent between 2016 and 2040).

<sup>30</sup> EIA AEO 2018 at 65-66.

natural gas has increased faster than demand, in large measure due to the shale gas revolution.<sup>31</sup> According to EIA's data, natural gas demand was only 16% higher in 2017 than it was in 2000.<sup>32</sup> EIA estimates that annual U.S. consumption of natural gas will grow at an annual rate of only 0.8% over the period from 2017 to 2050, with consumption expected to reach 34.48 Tcf in 2050, as compared to 26.68 Tcf in 2017.<sup>33</sup> By contrast, total U.S. dry gas production during the same period is projected to grow at an annual growth rate of 1.4%.<sup>34</sup> This increase is adequate to support both the growth in U.S. gas consumption and a substantial volume of LNG exports (8.5 Tcf in 2050).<sup>35</sup>

The MPL Facility will receive and liquefy only a small amount of the abundant natural gas resource that is now and for many years to come will be available in the U.S. DOE/FE can readily conclude here, as it has in other LNG export authorization proceedings, that there will be more than enough natural gas available to be produced in the U.S. over the next 25 years to satisfy all domestic requirements as well as to support significant LNG exports, including exports through the MPL Facility.

***ii. Impact on Domestic Prices of Natural Gas Exports; Net Economic Impacts***

U.S. shale gas production has contributed to the decline in U.S. natural gas prices from a high in 2008 of approximately \$11/MMBtu to the current wellhead price levels ranging from \$2.00-\$3.00/MMBtu. The annual average Henry Hub spot price for natural gas fell from \$8.86

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<sup>31</sup> The Brattle Group, *Understanding Natural Gas Markets*, at 3 (Sept. 2014), <http://www.api.org/~media/files/oil-and-natural-gas/natural-gas-primer/understanding-natural-gas-markets-primerhigh.pdf>.

<sup>32</sup> EIA, *Natural Gas Consumption by End Use* (Feb. 28, 2018), [http://www.eia.gov/dnav/ng/ng\\_cons\\_sum\\_dcu\\_nus\\_a.htm](http://www.eia.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm).

<sup>33</sup> EIA AEO 2018 at Table 13.

<sup>34</sup> *Id.*

<sup>35</sup> EIA AEO 2017 at Table 62.

per MMBtu in 2008 to \$2.52 per MMBtu in 2016.<sup>36</sup> On June 7, 2018, according to *Platts Gas Daily*, the national average price for flow on June 7, 2018 was \$2.56 per MMBtu.<sup>37</sup> In its AEO 2018 Reference case, EIA estimates that the Henry Hub spot price for natural gas, stated in 2017 dollars, will remain well under \$5.00 per MMBtu through 2025, and will not exceed \$7.59 in any year on average over the period from 2016-2040.<sup>38</sup>

Several analyses which DOE/FE has commissioned or reviewed over the past several years have concluded that LNG exports in the range 6 to 12 Bcf/d, and even at levels greater than 12 Bcf/d, would not have any significant impact on domestic prices. For example, the Peterson Institute for International Economics report, *Liquefied Natural Gas Exports: An Opportunity for America*, analyzed recent economic analyses, which predicted LNG exports would raise domestic natural gas prices in the range of 3.5 to 16.0% from otherwise depressed price levels given that U.S. natural gas supply outstrips aggregate domestic demand.<sup>39</sup> According to ICF, LNG exports are projected to have only moderate impacts on domestic U.S. natural gas prices, with those impacts ranging from approximately \$0.32 to \$1.02 per MMBtu, on average, between 2016 and 2035. ICF projects the 2016-2035 average Henry Hub natural gas prices to be between \$5.03 and \$5.73/MMBtu, depending on the LNG export case chosen for analysis.<sup>40</sup>

Even assuming, however, that LNG exports were to have more than modest impacts on domestic natural gas prices, analyses performed and commissioned by DOE/FE demonstrate that

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<sup>36</sup> EIA, *Natural Gas Spot and Futures Prices*, [http://www.eia.gov/dnav/ng/ng\\_pri\\_fut\\_s1\\_a.htm](http://www.eia.gov/dnav/ng/ng_pri_fut_s1_a.htm) (last accessed Mar. 7, 2018).

<sup>37</sup> *S&P Global Platts Gas Daily* (June 7, 2018) at p. 1.

<sup>38</sup> See EIA AEO 2018 at Table 13.

<sup>39</sup> Gary Clyde Hufbauer (PIIE), et al., *Liquefied Natural Gas Exports: An Opportunity for America*, No. PB 13-6 (Feb. 2013), at 13 (attributing differences to differing assumptions about the price elasticity of domestic demand and the elasticity of supply and recoverable resources of domestic natural gas), <https://piie.com/sites/default/files/publications/pb/pb13-6.pdf>.

<sup>40</sup> ICF International, *U.S. LNG Exports: Impacts on Energy Markets and the Economy* (May 15, 2013) (the “ICF Study”), <http://www.api.org/~media/Files/Policy/LNG-Exports/API-LNG-Export-Report-by-ICF.pdf>.

LNG exports from the United States will not result in any adverse economic impacts upon U.S. consumers. In 2012, DOE/FE released a two-part study evaluating the impacts of LNG exports on the U.S. economy (the “LNG Export Study”). Part 1 of the LNG Export Study was conducted by the EIA for DOE/FE.<sup>41</sup> It evaluated potential micro-economic impacts of LNG exports on domestic energy consumption, production, and prices. On the basis of this study, the EIA projected that natural gas prices would rise over time, even without additional LNG exports.<sup>42</sup> In 2014, the EIA released an updated study, also commissioned by DOE/FE, which evaluated the effects of increased LNG exports, ranging from 12 Bcf/d to 20 Bcf/d, on the U.S. energy markets.<sup>43</sup> EIA’s updated study found that even if LNG exports are greater than forecasted, “[i]ncreased energy production spurs investment, which more than offsets the adverse impact of somewhat higher energy prices when the export scenarios are applied.”<sup>44</sup>

Part 2 of the DOE LNG Export Study, conducted by NERA Economic Consulting (“NERA”),<sup>45</sup> assessed macroeconomic impacts of LNG exports, and in particular impacts on domestic natural gas prices, under several supply and demand scenarios, including scenarios with unlimited LNG exports. In each scenario, NERA found that the U.S. would experience net economic benefits from increased LNG exports.<sup>46</sup> NERA also projected that “price changes

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<sup>41</sup> EIA, *Effect of Increased Natural Gas Exports on Domestic Energy Markets, as Requested by the Office of Fossil Energy* (Jan. 2012), [https://www.eia.gov/analysis/requests/fe/pdf/fe\\_lng.pdf](https://www.eia.gov/analysis/requests/fe/pdf/fe_lng.pdf).

<sup>42</sup> *Id.* at 6-7.

<sup>43</sup> EIA, *Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets* (Oct. 2014) , <https://www.eia.gov/analysis/requests/fe/pdf/lng.pdf>.

<sup>44</sup> *Id.* at 12.

<sup>45</sup> NERA Economic Consulting, *Macroeconomic Impacts of LNG Exports from the United States* (Dec. 3, 2012) (the “NERA Study”), [https://energy.gov/sites/prod/files/2013/04/f0/nera\\_lng\\_report.pdf](https://energy.gov/sites/prod/files/2013/04/f0/nera_lng_report.pdf).

<sup>46</sup> *Id.* at 6.

attributable to LNG exports [would] remain in a relatively narrow range across the entire range of scenarios.”<sup>47</sup>

NERA found net benefits to U.S. consumers even in export scenarios involving the greatest theoretical price increases projected by the EIA:

Across the scenarios, U.S. economic welfare consistently increases as the volume of natural gas exports increased. This includes scenarios in which there are unlimited exports. The reason for this is that even though domestic natural gas prices are pulled up by LNG exports, the value of those exports also rises so that there is a net gain for the U.S. economy measured by a broad metric of economic welfare or by more common measures such as real household income or real GDP. Although there are costs to consumers of higher energy prices and lower consumption and producers incur higher costs to supply the additional natural gas for export, these costs are more than offset by increases in export revenues along with a wealth transfer from overseas received the form of payments for liquefaction services. The net result is an increase in U.S. households’ real income and welfare.<sup>48</sup>

NERA further found that these net economic benefits became greater with higher levels of exports, even assuming unlimited exports and the highest prices estimated by EIA.<sup>49</sup>

NERA updated its 2012 study in 2014. Sabine Pass Liquefaction filed the updated NERA study with DOE/FE in support of its applications for various export authorizations.<sup>50</sup> Using more recent data, NERA analyzed scenarios in which no limits were placed on the level of U.S. LNG exports. In all scenarios studied, the updated NERA study found that (i) the U.S. would experience net economic benefits from increased LNG exports and (ii) as the volume of

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<sup>47</sup> *Id.* at 2.

<sup>48</sup> *Id.* at 6 (footnote omitted).

<sup>49</sup> *Id.* at 6, 12; *see also* *Cameron LNG, LLC*, DOE/FE Order No. 3391 (Feb. 11, 2014).

<sup>50</sup> NERA Economic Consulting, *Updated Macroeconomic Impacts of LNG Exports from the United States* (prepared for Cheniere Energy, Inc.) (Feb. 20, 2014) (the NERA Study II”), <http://www.nera.com/publications/archive/2014/updated-macroeconomic-impacts-of-lng-exports-from-the-united-sta.html>. This study was submitted to DOE/FE on February 28, 2014 by Sabine Pass Liquefaction, LLC in support of its long-term LNG export authorization application, in Docket Nos. 13-30-LNG, 13-42-LNG and 13-121-LNG.

natural gas exports increases, U.S. economic welfare also increases consistently, with the greatest U.S. economic welfare under scenarios in which unconstrained exports occur.<sup>51</sup> DOE/FE repeatedly has found that the NERA Study is sound and supports the proposition that the United States will experience net economic benefits from LNG exports and the conclusion that proposed LNG exports are not inconsistent with the public interest.<sup>52</sup>

The most recent study of the potential macroeconomic impacts of LNG exports came to similar conclusions even as to exports of quantities of LNG greater than those evaluated in earlier analyses. This study, *The Macroeconomic Impact of Increasing U.S. LNG Exports*, completed in October 2015,<sup>53</sup> was performed by The Center for Energy Studies at Rice University's Baker Institute and Oxford Economics, who were commissioned by Leonardo Technologies, Inc. on behalf of the Department of Energy to undertake a scenario-based assessment of the macroeconomic impact of alternative levels of U.S. LNG exports under a range of assumptions concerning U.S. resource endowment, U.S. gas demand, and the international market environment. The CES October 2015 Study considered international conditions sufficient to support 12 Bcf/d and 20 Bcf/d of U.S. LNG exports. It finds that:

The overall macroeconomic impacts of increasing U.S. LNG exports to 20 Bcf/d from 12 Bcf/d are small, reflecting the small size of the shocks relative to the economy overall .... In the Reference domestic scenario, the increase in net gas exports is equivalent to 0.02 percent of GDP on average over 2026–2040, and the incremental investment in the gas sector associated with

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<sup>51</sup> NERA Study II.

<sup>52</sup> See, e.g., *Freeport LNG*, DOE/FE Order No. 3282 at 110; *Lake Charles Exports*, DOE/FE Order No. 3324 at 123; *Dominion Cove Point LNG*, DOE/FE Order No. 3331 at 140; *Freeport LNG*, DOE/FE Order No. 3357 at 153; *Cameron LNG*, DOE/FE Order No. 3391 at 130-31; *Jordan Cove*, DOE/FE Order No. 3413 at 141; *Oregon LNG*, DOE/FE Order No. 3465 at 139; *American LNG*, DOE/FE Order No. 3690 at 129-32; *Flint Hills Res.*, DOE/FE Order No. 3829 at 17.

<sup>53</sup> The Center for Energy Studies at Rice University's Baker Institute and Oxford Economics, *The Macroeconomic Impact of Increasing U.S. LNG Exports* (Oct. 2015) (the "CES October 2015 Study"), [http://energy.gov/sites/prod/files/2015/12/f27/20151113\\_macro\\_impact\\_of\\_lng\\_exports\\_0.pdf](http://energy.gov/sites/prod/files/2015/12/f27/20151113_macro_impact_of_lng_exports_0.pdf) (last accessed June 12, 2017).

the increase in exports in that span is just 0.06 percent of GDP. In aggregate, the size of the economy is little changed in the long run, with GDP 0.03 percent (\$7.7 billion USD annually in today's prices) higher on average over 2026–2040 than in the 12 Bcf/d export case.<sup>54</sup>

It goes on to conclude that:

[T]he overall macroeconomic impacts of LNG exports are marginally positive. Across the domestic cases, the positive impacts of higher U.S. gas production, greater investment in the U.S. natural gas sector, and increased profitability of U.S. gas producers typically exceeds the negative impacts of higher domestic natural gas prices associated with increased LNG exports.<sup>55</sup>

Several other publicly available studies similarly find that the U.S. will benefit from exporting domestically produced LNG. These studies include, for example:

- Charles Ebinger, *et al.*, *Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas*, Brookings Institution (May 2012), [https://www.brookings.edu/wp-content/uploads/2016/06/0502\\_lng\\_exports\\_ebinger.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/0502_lng_exports_ebinger.pdf);
- Michael Levi, *A Strategy for U.S. Natural Gas Exports*, The Hamilton Project, Brookings Institution (June 2012), [https://www.brookings.edu/wp-content/uploads/2016/06/06\\_exports\\_levi.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/06_exports_levi.pdf);
- Kenneth B. Medlock II, Ph.D., *U.S. LNG Exports: Truth and Consequence*, Energy Forum at the James A. Baker Institute for Public Policy, Rice University (Aug. 10, 2012), [http://www.bakerinstitute.org/media/files/Research/da5493d4/US\\_LNG\\_Exports\\_-\\_Truth\\_and\\_Consequence\\_Final\\_Aug12-1.pdf](http://www.bakerinstitute.org/media/files/Research/da5493d4/US_LNG_Exports_-_Truth_and_Consequence_Final_Aug12-1.pdf);
- Deloitte, *Exporting the American Renaissance: Global Impacts of LNG Exports from the United States* (2013), [https://www2.deloitte.com/content/dam/Deloitte/fpc/Documents/secteurs/energie-et-ressources/deloitte\\_global-impact-exports-american-renaissance\\_en\\_janv2013.pdf](https://www2.deloitte.com/content/dam/Deloitte/fpc/Documents/secteurs/energie-et-ressources/deloitte_global-impact-exports-american-renaissance_en_janv2013.pdf); and
- The ICF Study.

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<sup>54</sup> *Id.* at 14.

<sup>55</sup> *Id.* at 16.

The following chart illustrates the positive impacts of LNG exports on employment, GDP, and natural gas prices over a twenty-year period, in three different export scenarios:<sup>56</sup>

**Table 1**  
**Economic Impacts of LNG Exports**

Impact (2016-2035 Averages)*	LNG Export Case (Change from Zero Exports Case)		
	ICF Base Case (up to ~4 Bcfd)	Middle Exports Case (up to ~8 Bcfd)	High Exports Case (up to ~16 Bcfd)
Employment Change (No.)	73,100-145,100	112,800-230,200	220,100-452,300
GDP Change (2010\$ Billion)	\$15.6-\$22.8	\$25.4-\$37.2	\$50.3-\$73.6
Henry Hub Price (2010\$/MMBtu)	\$5.03	\$5.30	\$5.73
Henry Hub Price Change (2010\$/MMBtu)	\$0.32	\$0.59	\$1.02

*Source: ICF estimates. Note: \* Includes direct, indirect, and induced impacts*

In recent orders authorizing LNG exports, DOE/FE has found that EIA’s projections in AEO 2017 provide independent support for the proposition that domestic supplies will be adequate both to meet domestic needs and to support additional LNG exports and other final non-FTA LNG exports it has previously authorized.<sup>57</sup> The same conclusion is appropriate here, given the quantities of LNG that MPL proposes to export.

MPL hereby incorporates all of the publicly available studies cited above into this Application, and asks that DOE/FE deem these studies to be included in the record in this proceeding. MPL offers these studies as further support for the proposition that the long-term export authorization requested here is not inconsistent with the public interest.

MPL’s proposed exports are modest in scope as compared with those envisioned for many of the LNG export projects proposed for the U.S. Gulf Coast and West Coast. Yet, as demonstrated by the several studies referenced above, LNG exports, regardless of the quantities

<sup>56</sup> ICF Study at Exhibit 1-2.

<sup>57</sup> *Delfin LNG LLC*, DOE/FE Order No. 4028 (June 1, 2017) at 138; *Golden Pass Prods. LLC*, DOE/FE Order No. 3818 (Apr. 25, 2017) at 144.



involved, will offer economic benefits to U.S. consumers, in terms of net gains in real household income and real GDP.<sup>58</sup>

**d. Other Public Interest Factors**

The MPL Facility will result in the following economic and environmental benefits, all of which are consistent with the public interest:

- Providing economic stimulus indirectly for the U.S. economy, through the creation of jobs, increased economic activity, increased tax revenue, and exports;
- Promoting the use of abundant domestic natural gas supplies for environmentally beneficial applications, including marine bunkering and vehicle fueling; and
- Promoting the export of LNG to customers outside of the United States who are currently burning coal, diesel, or other high carbon fuels in those countries, thereby increasing economic trade and ties with foreign nations, while displacing those fuels.

**i. *Economic Benefits***

MPL’s export authorization could help mitigate the United States’ trade deficit, which was \$566 billion in 2017, reflecting \$2.3 trillion in exports and \$2.9 trillion in imports.<sup>59</sup> The United States imported over \$162 billion in crude oil and petroleum products in 2017, which was a significant contributing driver of the trade deficit that year. Exports from the MPL Facility will contribute, even if only modestly, to a reduction in the nation’s trade deficit. DOE/FE has recognized comparable benefits as supporting LNG export authorizations in other cases.<sup>60</sup> It should be noted that realization of the benefits of increased exports is particularly likely in the case of the MPL Facility which, given its advantaged location on the west coast of North

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<sup>58</sup> See, e.g., *Delfin LNG LLC*, DOE/FE Order No. 4028 (June 1, 2017) at 164 (observing that the U.S. “would experience net economic benefits” in all scenarios examined in the 2014 and 2015 LNG Export Studies).

<sup>59</sup> U.S. Census Bureau, U.S. Bureau of Economic Analysis, *U.S. International Trade in Goods and Services* (Dec. 2017), [https://www.census.gov/foreign-trade/Press-Release/current\\_press\\_release/ft900.pdf](https://www.census.gov/foreign-trade/Press-Release/current_press_release/ft900.pdf).

<sup>60</sup> See, e.g., *Flint Hills Resources*, DOE/FE Order No. 3829 at 17-18 (noting the Administration goal, as set forth in the National Export Initiative and related Executive Order, to “improve conditions that directly affect the private sector’s ability to export” and to “enhance and coordinate Federal efforts to facilitate the creation of jobs in the United States through the promotion of exports”).

America, is particularly well positioned to compete successfully for LNG markets in Asia, the Pacific and the west coast of South America.

Consistent with the aims of the National Export Initiative, MPL’s proposed exports will “benefit the liquidity of international natural gas markets”<sup>61</sup> and positively contribute to the trade balance of the United States.<sup>62</sup> Furthermore, even though the MPL Facility will be constructed in Mexico, MPL will draw on individuals and entities in the United States for design, specialized equipment fabrication and construction services, as well as equity capital. The project will therefore help to encourage and facilitate the development of jobs in the United States through the promotion of exports.<sup>63</sup>

***ii. Environmental Benefits***

LNG exports to Mexico and other countries will result in significant environmental benefits in those countries and the regions of which they are a part. According to the U.S. Environmental Protection Agency, natural gas-fired power generation facilities produce half as much carbon dioxide (CO<sub>2</sub>), less than a third as much nitrogen oxides (NO<sub>x</sub>), and one percent as much sulfur oxides (SO<sub>x</sub>), as compared to the average air emissions from coal-fired power generation facilities.<sup>64</sup> Increasing the amount of LNG exported to countries outside of the United States will provide a low-cost energy alternative and encourage these countries to switch

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<sup>61</sup> See *Lake Charles Export Company, LLC*, DOE/FE Order No. 4010 at 26 (June 29, 2017); *Carib Energy (USA) LLC*, DOE/FE Order No. 3937 at 22 (Nov. 28, 2016).

<sup>62</sup> *National Export Initiative*, Executive Order No. 13534 (Mar. 11, 2010).

<sup>63</sup> *Id.* See also *Eagle LNG Partners Jacksonville II LLC*, DOE/FE Order No. 4078 at 28 (Sept. 15, 2017); *Lake Charles Export Company, LLC*, DOE/FE Order No. 4010 at 29-30; *Carib Energy (USA) LLC*, DOE/FE Order No. 3937 at 19, 26.

<sup>64</sup> See *Clean Energy, Natural Gas – Electricity from Natural Gas*, U.S. Env’tl. Protection Agency, <http://www.epa.gov/cleanenergy/energy-and-you/affect/natural-gas.html> [<http://web.archive.org/web/20150915164453/http://www.epa.gov/cleanenergy/energy-and-you/affect/natural-gas.html>]; see also *Freeport LNG*, Order No. 3282.

from fuel oil and diesel to more environmentally friendly fuels. As DOE/FE has noted, “[E]xports of U.S. LNG may decrease global GHG emissions,” or, at least, “the record does not support the conclusion that U.S. LNG exports will increase global GHG emissions in a material or predictable way.”<sup>65</sup> Exporting LNG to other countries, in which natural gas can displace consumption of coal, fuel oil and diesel, will reduce carbon emissions, and will facilitate stronger relationships with foreign nations.

### *iii. International Trade Benefits*

Exports of LNG through the MPL Facility will help to improve economic trade and ties between the U.S. and the destination countries, which could include developing nations in Asia and South America, as well as industrialized nations in Europe, Asia and the Middle East. These results would be consistent with the aims of the National Export Initiative<sup>66</sup> and the DOE’s policy of “promoting competition in the marketplace by allowing commercial parties to freely negotiate their own trade arrangements.”<sup>67</sup>

Authorizing LNG exports to non-FTA countries is also consistent with U.S. obligations under the General Agreement on Tariffs and Trade (“GATT”). According to a report prepared for the Hamilton Project, Article IX and the GATT “prohibits sustained quantitative restrictions on energy exports unless they are related ‘to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or

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<sup>65</sup> See *Cameron LNG, LLC*, DOE/FE Order No. 3391-A at 83 (Sept. 10, 2014) (citing DOE/FE, *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States* (May 14, 2014), <http://energy.gov/sites/prod/files/2014/05/f16/Life%20Cycle%20GHG%20Perspective%20Report.pdf> (last accessed June 12, 2017)); see also *Freeport LNG Expansion, L.P.*, DOE/FE Order No. 3357-B at 94 (Nov. 14, 2014).

<sup>66</sup> *National Export Initiative*, Executive Order No. 13534 (March 11, 2010).

<sup>67</sup> *Jordan Cove*, Order No. 3413 at 7.

consumption.”<sup>68</sup> A policy of restricting LNG exports in the face of plentiful domestic supplies of natural gas for the purposes of lowering domestic prices and increasing domestic consumption would be inconsistent with the U.S.’s commitments under GATT. Accordingly, exporting natural gas through the MPL Facility would help promote free and open trade.

LNG exports from the MPL Facility could have wider geopolitical benefits as well. DOE/FE has recognized that LNG exports provide energy security benefits to U.S. allies and trading partners, which “may advance the public interest.”<sup>69</sup> Increased access to LNG supplies could help to reduce European reliance on Russian natural gas supplies, indeed, “Russia’s dominant position in the European gas market is being eroded by the increased availability of LNG.”<sup>70</sup> Moreover, increased access to U.S.-sourced natural gas supplies would benefit the global LNG market by representing “a source of predictable natural gas supply that is relatively free from unexpected production or shipping disruption.”<sup>71</sup> Exports of U.S.-sourced natural gas to Asia in particular may “provide a degree of increased energy security and pricing relief to LNG importers” by helping to decouple LNG prices from oil prices.<sup>72</sup>

According to indicative pricing information MPL has recently gathered, the delivered price of gas derived from MPL-produced LNG is expected to be competitive with the anticipated price of natural gas delivered into China by the Public Joint Stock Company Gazprom’s Power

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<sup>68</sup> Michael Levi, *A Strategy for U.S. Natural Gas Exports*, prepared for The Hamilton Project, at p.18 (Jun. 2012), available at <http://www.brookings.edu/research/papers/2012/06/13-exports-levi> (“Hamilton Study”).

<sup>69</sup> *Freeport LNG*, Order No. 3357-B at 96.

<sup>70</sup> Charles Ebinger, Kevin Massy, Govinda Avasarala, *Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas*, Energy Security Initiative at Brookings, at 42 (May 2012).

<sup>71</sup> *Id.* at p. 43.

<sup>72</sup> *Id.*

of Siberia Pipeline, which is expected to be commissioned by the end of 2019.<sup>73</sup> A major reason MPL-sourced LNG will be competitive in this market is MPL's favored location on the west coast of North America, close to the prolific Permian and San Juan Basins, an advantage unlikely to be exploited by many other LNG project developers. Thus MPL's location on the Gulf of California, on the west coast of North America, is likely to translate into a durable competitive advantage for the U.S. natural gas suppliers and purchasers of U.S. gas supplies whose gas will be exported through the MPL Facility.

Finally, U.S. exports of natural gas to support MPL's production of LNG will generate substantial balance of trade benefits for the U.S. The aggregate value of U.S. natural gas exported to Mexico for liquefaction in the MPL Facility will be substantial: if the Facility were to operate at one hundred percent of the annual capacity for which it seeks export authorization, even at today's currently depressed prices for natural gas produced in West Texas, the value of gas exported for liquefaction in the MPL Facility in a single year once it achieves full capacity would be in excess of \$1,265,664,000.<sup>74</sup> The U.S.' trade deficit with Mexico in that year would be reduced on a dollar-for-dollar basis by this significant amount. It is thus fair to anticipate (conservatively) that exports of U.S. natural gas for liquefaction at and re-export from the MPL Facility will reduce the U.S.' trade imbalance with Mexico by more than \$1 billion per year each year during the period in which the MPL Facility operates.

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<sup>73</sup> See *Linear Part of Power of Siberia Gas Pipeline Completed by 75.5 per cent*, Gazprom (Mar. 21, 2018) ("Russian gas supplies to China's CNPC would start on December 20, 2019"), <http://www.gazprom.com/press/news/2018/march/article413496/>.

<sup>74</sup> This calculation assumes that the MPL Facility liquefies a quantity of 614,400,000 MMBtu in a given year, that all this natural gas is procured from U.S. sources, and that the price paid for this gas is the midpoint price for purchases of natural gas at the Waha Hub (\$2.06/MMBtu) reported in the June 11, 2018 *Platts Gas Daily* Daily Price Survey for Trade Date 08 Jun 2018.

Accordingly, the development of the MPL Facility in Sonora State, Mexico will redound to the considerable benefit of U.S. producers and the U.S. economy as a whole. The interests of U.S. and Mexican gas producer-suppliers, gas pipeline owners, construction contractors, materials suppliers, service companies and workers will be significantly advanced by authorization of the exports proposed here.

## **VII. ENVIRONMENTAL IMPACT**

MPL's proposed natural gas and LNG exports do not involve or require the construction of any U.S. facilities that would yield environmental effects cognizable under NEPA. Therefore, MPL respectfully submits that DOE/FE may satisfy its obligations under NEPA by determining that the proposed action is categorically excluded from the need to prepare either an Environmental Assessment or an Environmental Impact Statement.

Specifically, MPL requests DOE/FE to apply categorical exclusion B5.7, *Import or export natural gas, with operational changes*, which applies to “[a]pprovals . . . of new authorizations . . . [to] export natural gas under section 3 of the Natural Gas Act that involve minor operational changes (such as changes in natural gas throughput, transportation, and storage) but not new construction.”<sup>75</sup> This categorical exclusion applies to MPL's requested authorization because no MPL facilities will be constructed in the United States, quantities of natural gas initially required to support MPL's planned export activities can readily be accommodated by existing U.S.-Mexico border crossing pipeline capacity, and the precise nature of any modifications or expansions of U.S. pipelines that might later be made to support expanded exports of natural gas by way of the MPL Facility are currently unknown. That is, the

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<sup>75</sup> 10 C.F.R. § Part 1021, Subpt. D, App. B, Categorical Exclusion B5.7.

MPL project proposal does not require and will not drive the construction or operation of any pipeline facilities in the United States.

In support of the application of the B5.7 categorical exclusion, MPL confirms that its proposal has not been segmented to meet the definition of a categorical exclusion and that there are no extraordinary circumstances related to the Application indicating that further environmental review is warranted. Moreover, as DOE/FE has acknowledged, NEPA's reach does not extend beyond the territorial boundaries of the United States.<sup>76</sup> DOE/FE has applied categorical exclusion B5.7 in the context of other projects proposing natural gas exports and re-exports from the United States.<sup>77</sup> Thus, a determination that a categorical exclusion applies here would be appropriate and consistent with DOE/FE precedent and well-established NEPA principles.

The MPL LNG Facility will use gas turbine compression either directly or indirectly to produce LNG and the related auxiliary power. The Mexican permitting authorities will review these technologies and their planned deployment within the MPL Facility, and will ensure through their permit review that the facility meets all of Mexico's environmental requirements. Thus the extraterritorial environmental impacts associated with exports of natural gas by way of the MPL Facility will be limited and will be consistent with the applicable requirements of Mexican environmental laws and regulations.

## **VIII. APPENDICES**

The following appendices are included with this application:

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<sup>76</sup> See, e.g., DOE – Office of Electricity Delivery and Energy Reliability, *Final Champlain Hudson Power Express Transmission Line Project Environmental Impact Statement Summary* at S-7, <https://www.energy.gov/sites/prod/files/2014/08/f18/EIS-0447-FEIS-Summary-2014.pdf> (“NEPA does not require an analysis of potential environmental impacts that occur solely within another sovereign nation with its own environmental statutes and regulations that result from actions approved by that sovereign nation.”).

<sup>77</sup> See, e.g., *Bear Head LNG Corporation*, DOE/FE Order No. 3770 at 22 (Feb. 5, 2016).





## **Attachment 1**

### **Mexico Pacific Limited LNG Project Overview**

**(Location and Layout of the MPL Facility;  
Description of the MPL Facility and its Target Markets)**

# MPL

**Mexico Pacific Limited LLC**

## **Pacific Coast LNG Terminal**

# General Disclaimer

The Mexico Pacific LNG Development Plan presentation attached hereto (the “Overview”) is being provided to you at your request for the sole purposes of your evaluation of a potential business opportunity related to the Mexico Pacific Limited site at Puerto Libertad (the “Transaction”), is proprietary and confidential, and is only being furnished to those parties who have agreed to be bound by the terms of a confidentiality agreement (the “CA”) entered into between the you (or your affiliates) and Mexico Pacific Limited LLC (“MPL”) on or prior to the date the recipient was provided the Overview. By accepting the Overview, the recipient agrees that it will, and will cause its Representatives (as defined in the CA), to use the Overview and all of the information contained herein only to evaluate the Transaction and for no other purpose, and shall return the Presentation together with any copies to MPL upon request. Receipt of the Overview constitutes your acknowledgement that you will maintain the information contained herein in strict confidence and in accordance with the CA.

The Overview consists of a summary of those factors considered by MPL in connection with its consideration of the Transaction and should not be considered a comprehensive description of all of the factors required to evaluate the Transaction, including, without limitation, the risks associated with the Transaction. Any recipient of the Overview should conduct its own independent analysis of the Transaction and the data contained or referred to in the Overview. The calculations and conclusions included in the Overview are based on assumptions made by MPL. These assumptions are highly subjective and based on internal research and analytics that may not be reliable. Any deviation from the assumptions relied upon in the preparation of the Overview (whether or not such deviation is material in of itself) could materially alter the conclusions reached in the Overview. The recipient acknowledges that any risk mitigants described in the Overview were considered by MPL solely for purposes of MPL’s underwriting and risk assessment and the recipient should consider its own assessment of risks of Transaction and any related mitigating factors. The Overview should not be considered a recommendation to purchase or sell any security or take part in any transaction and may not be relied on in any manner as legal, tax or investment advice. MPL is not acting as an underwriter of the Transaction nor in an advisory role or otherwise as your agent or advisor in connection with the Transaction.

The Overview contains projected returns used by MPL in connection with its assessment of the Transaction, which projections are based on internal underwriting assumptions developed by MPL. It is not possible to accurately predict or project internal rates of return for any investment and you should not consider the projected returns as indicative of what your returns will be should you choose to invest in the Transaction. It is possible that you may experience a loss as a result of your decision to invest. Projected returns on invested capital reflected in the Overview (including the internal rates of return (“IRRs”) and cash on cash return) represent estimated, unaudited, annualized, pre-tax, compounded returns, are calculated on the basis of the projected timing and amount of projected cash inflows and outflows with respect to each individual investment, and are subject to the inaccuracies of the underlying assumptions used to develop such projections.

Certain information contained in the Overview (including financial information and projections) has been obtained from published and non-published sources, and may constitute “forward-looking statements.” Such forward-looking statements are generally identified by the use of words such as “outlook,” “believe,” “expect,” “potential,” “continue,” “may,” “will,” “should,” “could,” “would,” “seek,” “approximately,” “predict,” “intend,” “plan,” “estimate,” “anticipate,” “opportunity,” “pipeline,” “comfortable,” “assume,” “remain,” “maintain,” “sustain,” “achieve” or the negative version of those words or other comparable words. Any forward-looking statements contained in the Overview are based upon historical information and on plans, estimates and expectations. The inclusion of forward-looking information should not be regarded as a representation by MPL, or any other person, that the future plans, estimates or expectations contemplated will be achieved. Such forward-looking statements are subject to various risks, uncertainties and assumptions, including but not limited to future operating results, global economic, business and market conditions as well as other conditions impacting the real estate industry. If one or more of these or other risks or uncertainties materialize, or if the assumptions or estimates prove to be incorrect, the actual results may vary materially from those indicated in the Overview. There can be no assurance that an investor’s capital will be returned or that it will receive the returns projected in this Overview. Any forward-looking statements contained in the Overview are made only as of the date of the Overview. Neither MPL nor any of its respective members, partners or affiliates undertakes any obligation to update or review any forward-looking statement, whether as a result of new information, future developments or otherwise.

For the avoidance of doubt, neither MPL nor any of its affiliates, nor any of its or their respective subsidiaries, affiliates, officers, directors, managers, shareholders, members, partners, employees, consultants, advisors, agents or representatives (collectively, “Representatives”), make any representation or warranty, express or implied, at law or in equity, in connection with any of the information made available either herein or subsequent to the provision of the Overview, orally or in writing in connection with the Transaction (or otherwise). Accordingly, you will rely solely on your own independent examination and assessment of the Transaction (including any written and oral information provided by MPL, any of its affiliates, or any Representatives) in making any decision in connection with the Transaction. In no event shall you (or any recipient of this Overview) be entitled to rely on any such information and, by your receipt hereof, you confirm that you are not relying on such information in making a decision to invest or not invest in any Transaction. You further acknowledge that the Overview does not purport to contain all information that may be required to evaluate the Transaction, and that none of MPL, any of its affiliates, or any Representatives undertakes any obligation to provide additional information or to correct or update any of the information set forth in the Overview. Neither MPL, any of its affiliates, nor any Representative, shall have any liability to any recipient party or any other person arising out of such person receiving and/or evaluating any information concerning the Transaction (including, but not limited to, the Overview).

The Overview is not, and nothing contained herein should be construed as, an offer to sell or a solicitation to purchase securities that may in the future be offered by or through MPL or any of its affiliates or Representatives. Under no circumstances, and at no time, should any person infer or consider that a Transaction has occurred, or will occur, unless and until a definitive agreement with respect to the Transaction with MPL has been properly executed.

# MPL's Site is Located Adjacent to the City of Puerto Libertad

The MPL site is immediately south of the Arizona – U.S. border and has unique attributes that make it ideal for an energy hub / LNG export facility

## MPL Site Strategically Located in Western Mexico



## MPL Site Advantages

**Immediate Access to Cheap Shale Natural Gas**

**Pacific Basin Advantaged Supply Node**

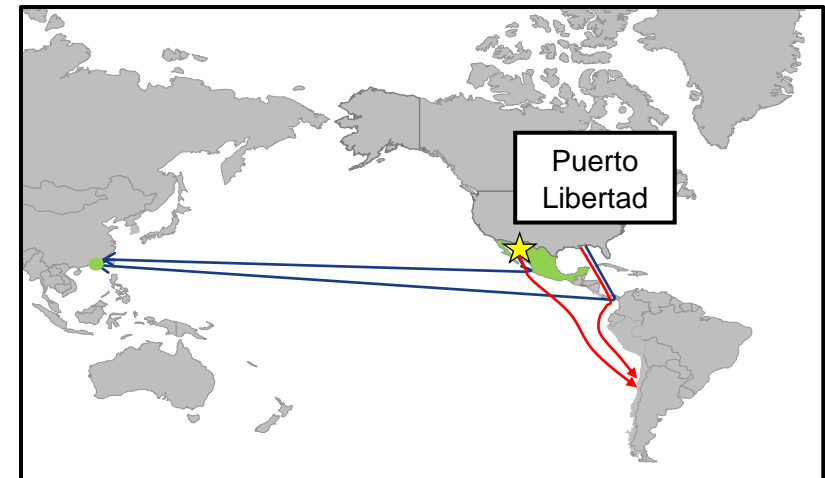
**300 Acre Remote Industrial Site**

**Deep Water Access – No Dredging Required**

**Mid-Scale Investment**

**Permits, Right-of-Ways Already in Place**

## West Coast Advantage



# MPL Site Offers Unique Attributes for LNG Development

## Ideally suited for supplying growing regional and Pacific LNG demand

### Site Overview

- MPL owns 1,100 acres in fee that has more than 1.2 miles of seashore access and close proximity to cheap U.S. shale resources
  - 300 acres of the overall site plus all right-of-ways have been designated for LNG development (the “Site”)
- The Gasoducto Sonora pipeline, completed in 2015 and operated by IEnova (the “IEnova Pipeline”), has a planned interconnection node only 4.2 km away from the Site
  - IEnova Pipeline is a 36” line through Sonora with 770 mmcf/d of capacity before compression or looping
  - CFE controls the first 770 mmcf/d of capacity on the IEnova Pipeline (most of which is currently not utilized)
  - CFE is currently taking natural gas from the IEnova Pipeline across the MPL asset to fuel an existing CFE power plant
- Approximately 35% fewer shipping days than GOM cargos to growing markets and avoids the Panama Canal
- Site has strong LNG development attributes
  - Seismic Design Category C, which is benign and superior to other potential Pacific LNG locations such as Manzanillo
  - Limited surrounding population density
  - Deep port with 15 meters of draft at 1.2 km offshore which is protected from hurricanes (benign harbor conditions with no need for a break-water) and allows Panamax sized vessels to access the jetty without dredging

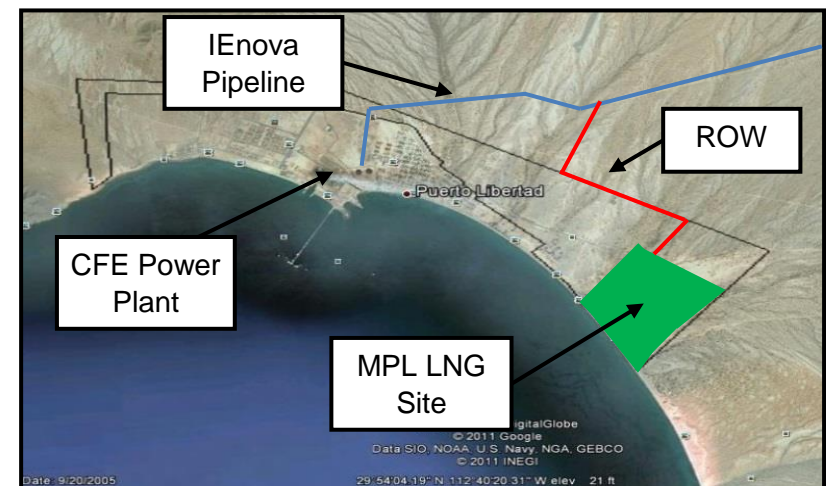
### CFE Power Plant

- CFE owns a 630 MW power plant adjacent to the MPL assets that is currently producing ~180 MW
- The existing plant was converted from a fuel oil fired plant in 2015 and is scheduled to be decommissioned in 2019 per CFE’s long term plans

### Sonora Government

- Supportive of industrial development at the site
- The LNG project will support several hundred full-time jobs and absorb some of the displaced workforce currently operating the CFE power plant

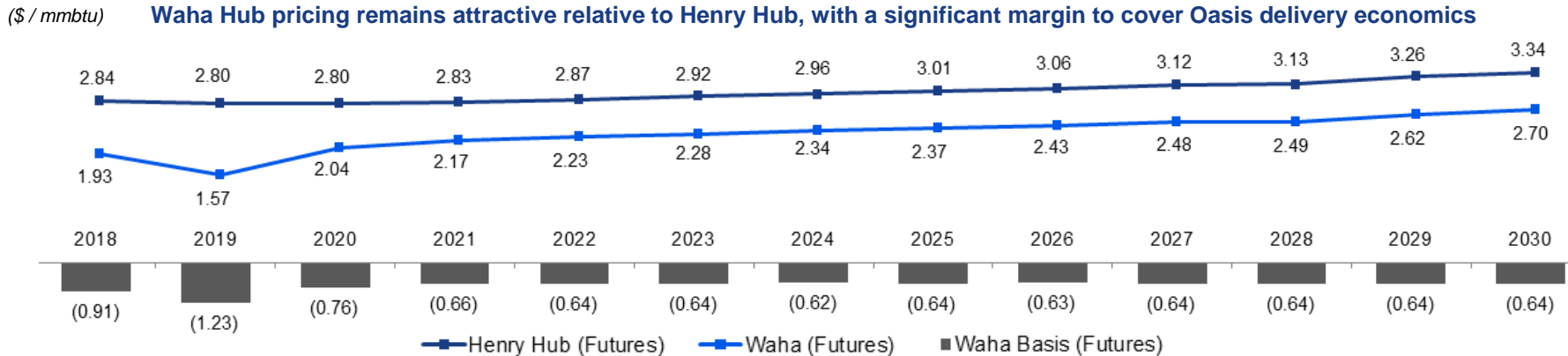
### MPL Energy Hub – Illustrative Map



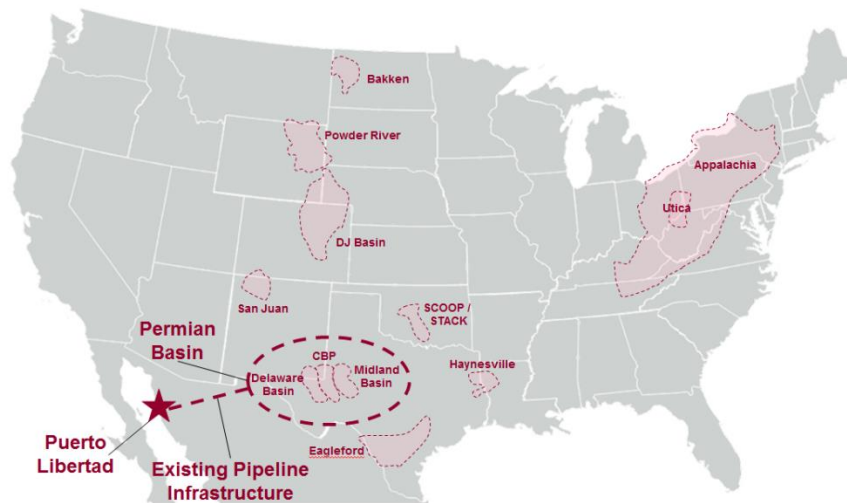
# Attractive, Natural Gas Supply Options and Economics

- MPL's site will source advantaged Waha Hub gas from West Texas (Permian Basin)
- Abundance of oil and liquids production in the Permian basin generating oversupply of associated gas which MPL will source
- Waha gas sustainably advantaged versus Henry Hub, where the majority of new methanol capacity in North America sources gas

## Attractive Base Pricing From Growing Permian Basin Associated Gas Supply<sup>(2)</sup>



## ...With Multiple Delivery Paths / Supply Options Being Negotiated and Considered



(1) Inspected and In-Service by YE 2018.

(2) Futures curve as of Feb 9, 2018.

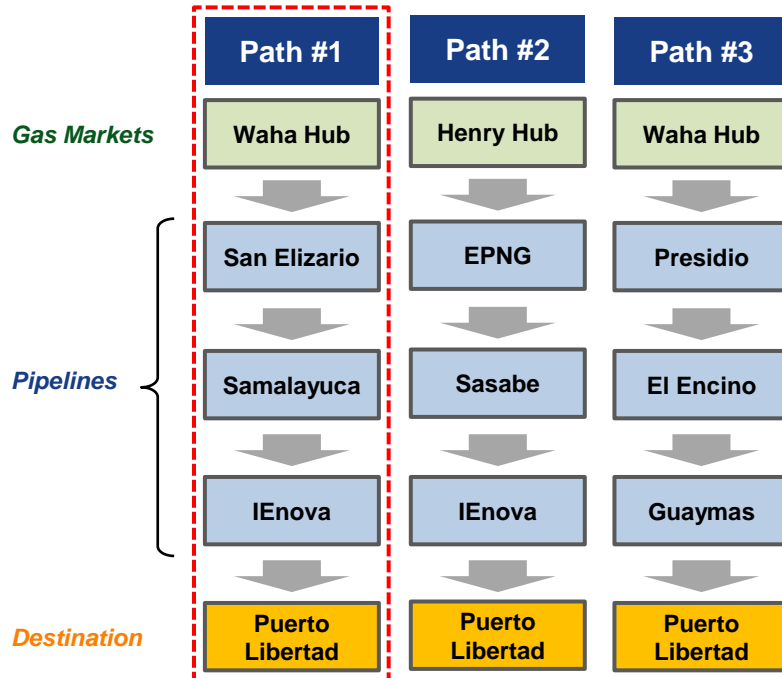
# Multiple Natural Gas Supply Options

Four gas pipeline route options with 2-3 bcf/d of near-term capacity (before expansion) link MPL to low cost natural gas in the US, ensuring cost competitive and reliable fuel supply

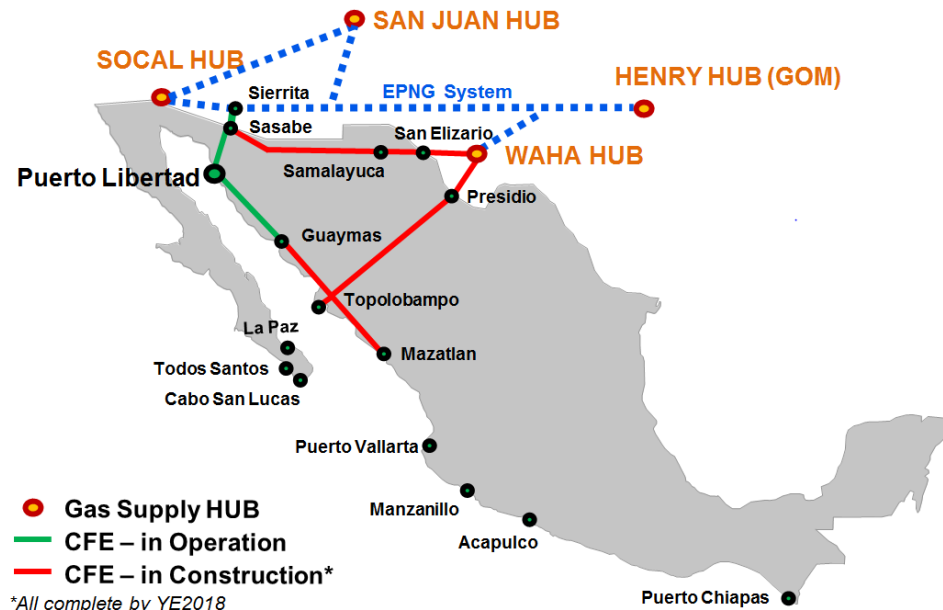
## MPL Gas Supply

- MPL site is adjacent to the 36" IEnova Pipeline
  - CFE owns 100% of the 770 mmcf/d capacity on the IEnova Pipeline with the ability to expand to over 1 bcf/d with compression
  - Robust and redundant supply of natural gas through multiple paths that are linked to key liquid natural gas hubs including Henry Hub and Waha
  
- MPL also has preliminary environmental permits and has studied the feasibility of building a dedicated MPL-owned 42" pipeline to the Site from the U.S. border
  - The pipeline construction should be relatively easy and inexpensive because it crosses through barren Sonora desert
  - Would require interconnection negotiations in the U.S.

## Existing Supply Options



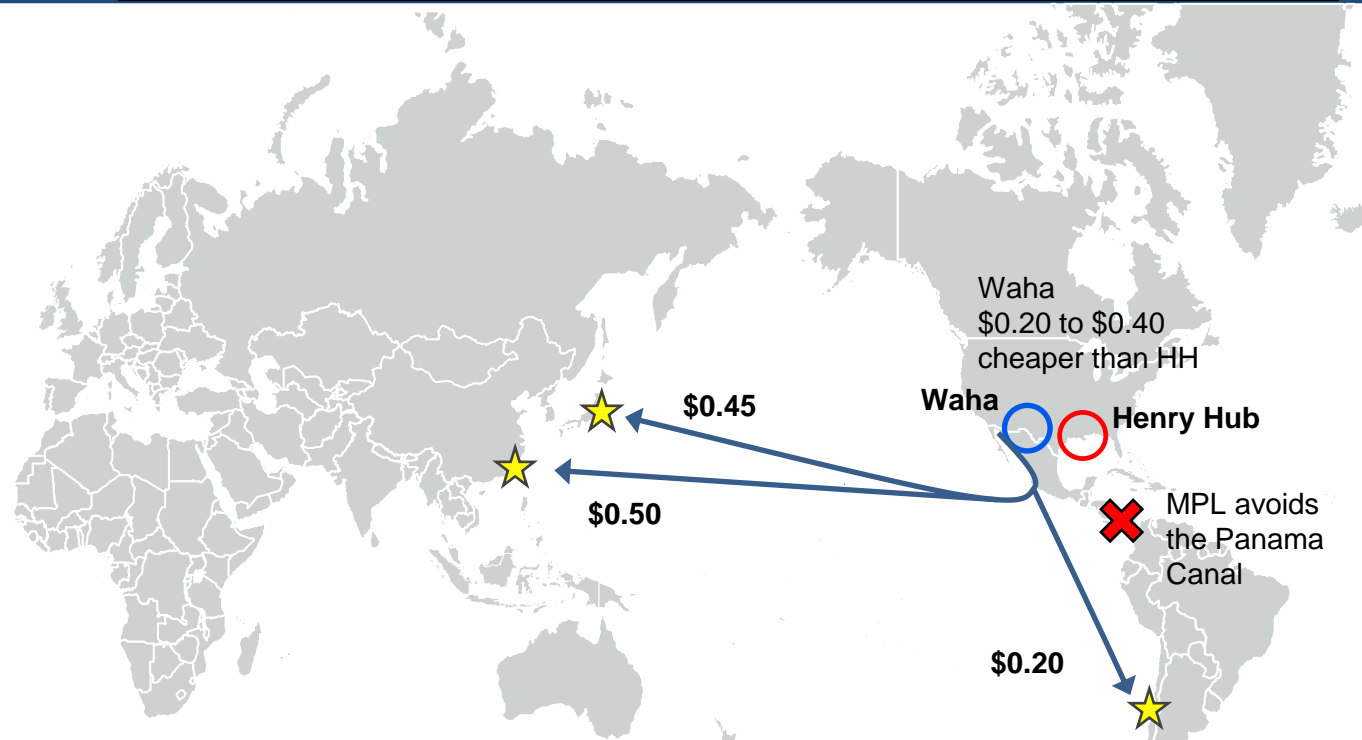
## Regional Gas Pipeline System



# MPL Shipping Advantage

## MPL's West Coast Location Advantages

- ✓ Closer proximity to LNG demand growth in Asia and South America
- ✓ Avoids the Panama Canal. Currently only 1 LNG carrier is allowed to traverse the Panama Canal per day - significant risk of delays and security
- ✓ Avoids fog issues in the Gulf of Mexico
- ✓ Safer from extreme weather and tsunami/earthquakes
- ✓ Provides geographic diversity and supply chain resilience



	Japan		China		Chile		Mexico		Taiwan		Korea	
	MPL	GOM	MPL	GOM	MPL	GOM	MPL	GOM	MPL	GOM	MPL	GOM
<u>Base Case:</u>												
Shipping Costs <sup>(1)</sup>	\$0.90	\$1.45	\$0.90	\$1.55	\$0.60	\$0.80	\$0.15	\$0.70	\$1.05	\$1.70	\$0.90	\$1.50
<b>MPL Advantage</b>	<b>\$0.55</b>		<b>\$0.65</b>		<b>\$0.20</b>		<b>\$0.55</b>		<b>\$0.65</b>		<b>\$0.60</b>	
Potential extra costs associated with Panama Canal delays												
Shipping Costs <sup>(1)(2)</sup>	\$0.90	\$1.60	\$0.90	\$1.65	\$0.60	\$0.95	\$0.15	\$0.85	\$1.05	\$1.80	\$0.90	\$1.60
<b>MPL Advantage</b>	<b>\$0.70</b>		<b>\$0.75</b>		<b>\$0.35</b>		<b>\$0.70</b>		<b>\$0.75</b>		<b>\$0.70</b>	

(1) Shipping costs assumed \$65,000 day rates on LNG long term charter and 0.10%/day boil off

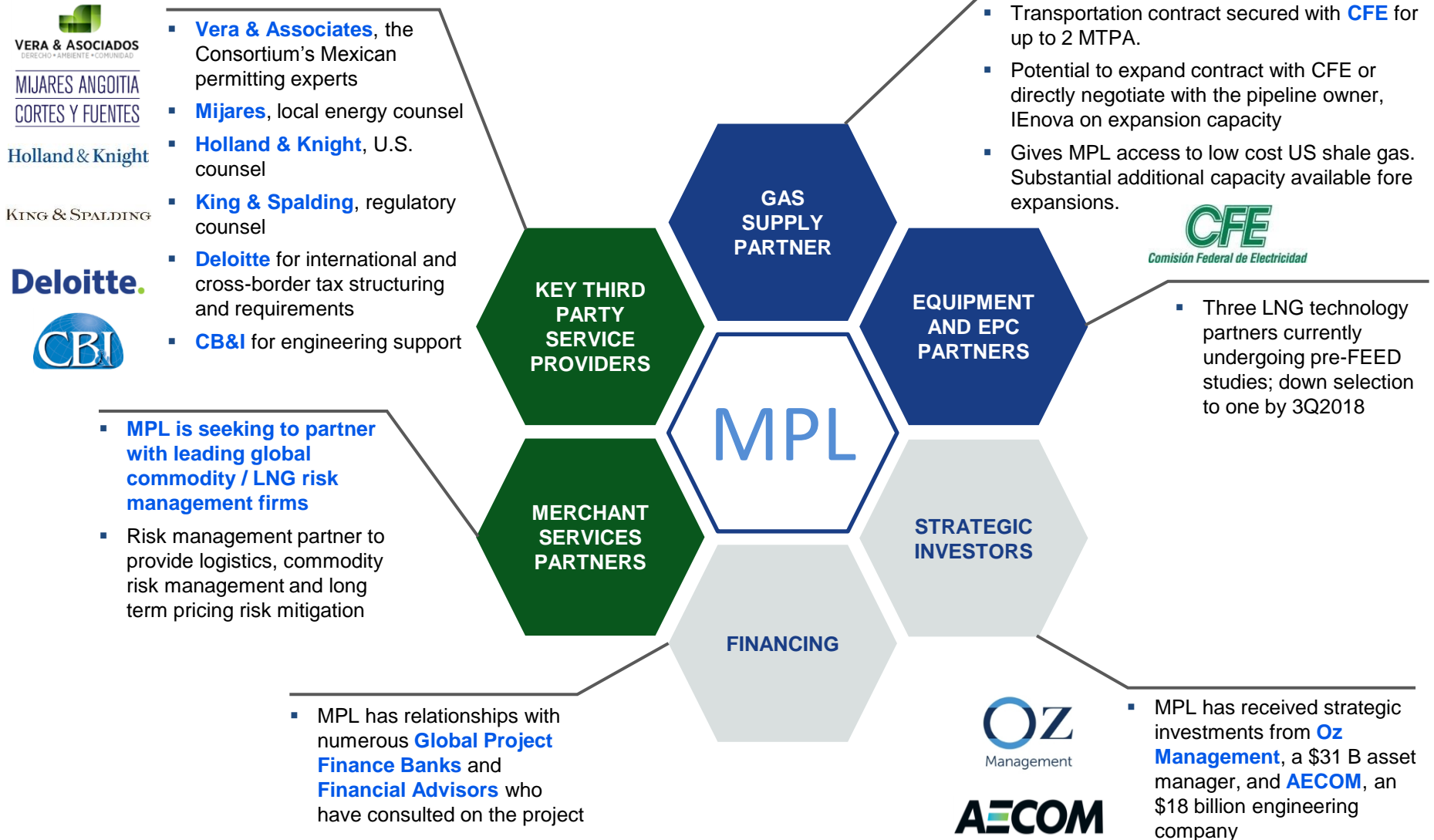
(2) Assumes 5 extra days of demurrage related to inefficiencies at Panama Canal on average.

Does not reflect sail around time if Panama Canal congestion becomes prohibitive



# MPL Consortium Consists of World Class Partners

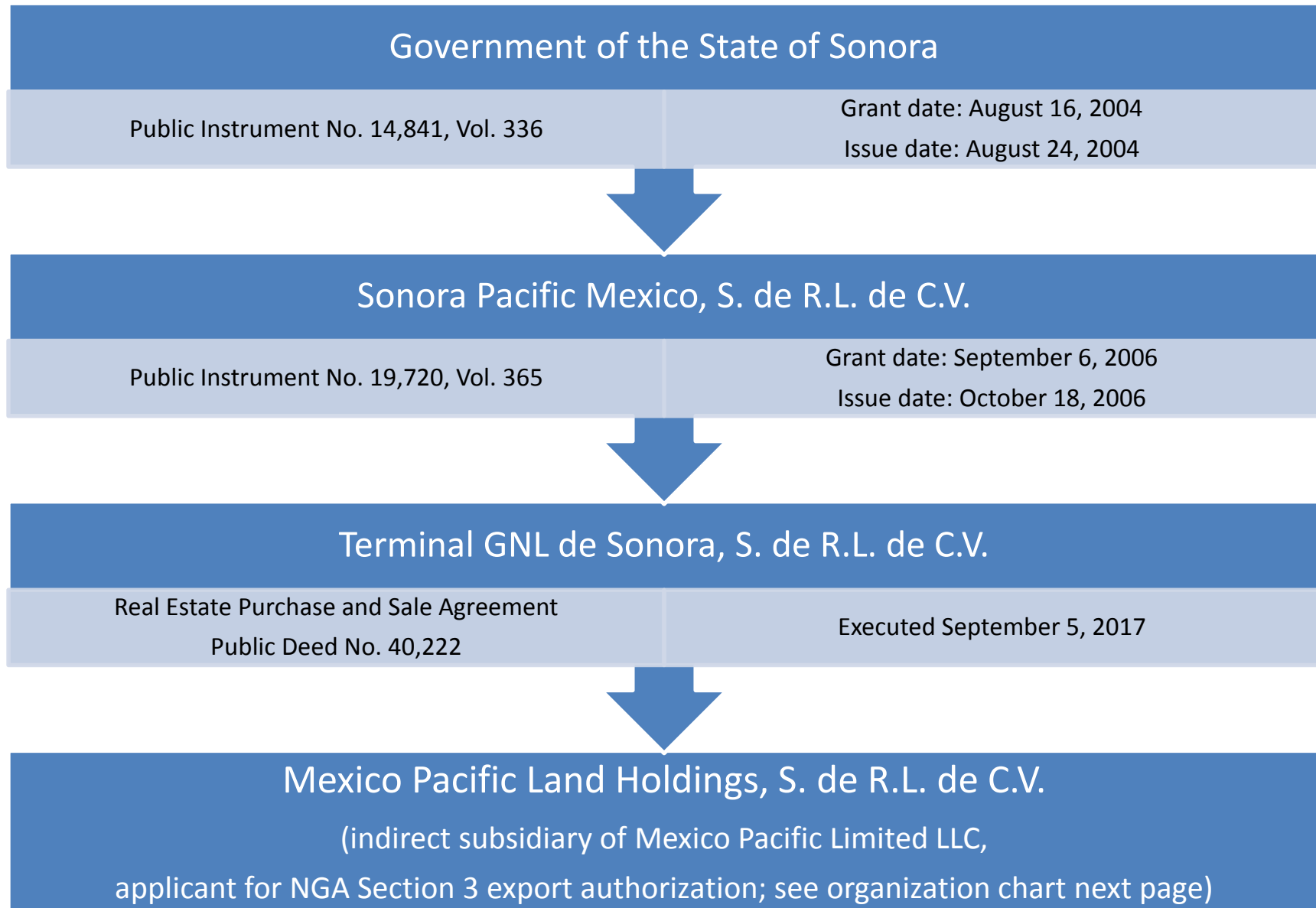
The MPL site is immediately south of the Arizona – U.S. border and has unique attributes that make it ideal for an energy hub / LNG export facility

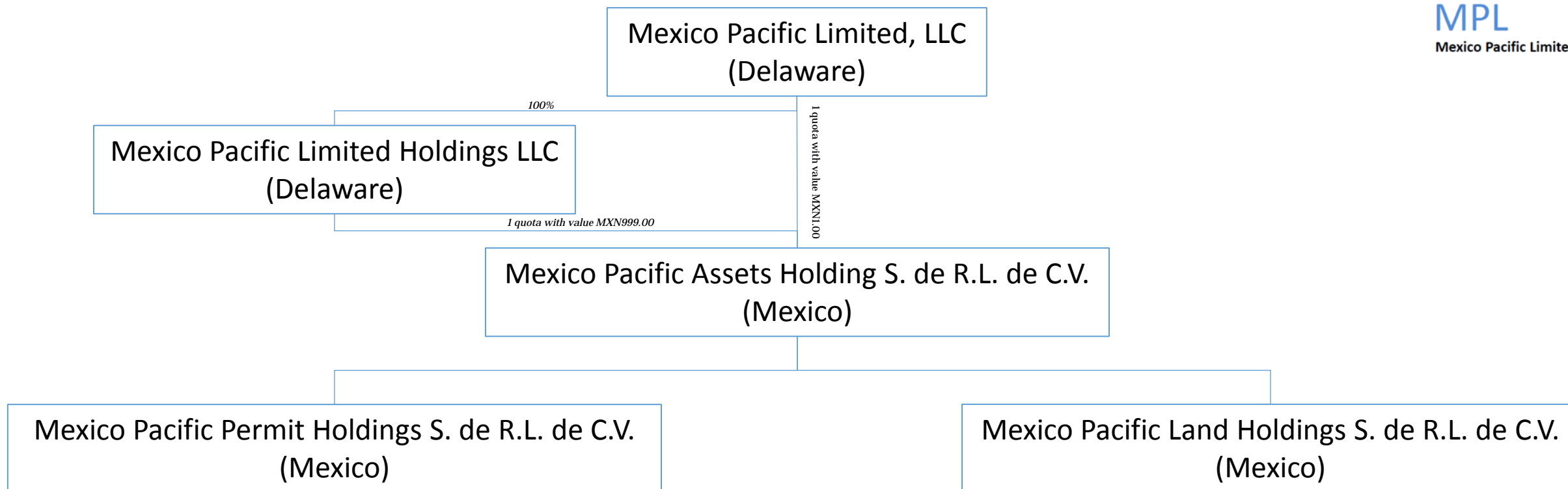


## **Attachment 2**

### **Mexico Pacific Limited Project Site Ownership (Chain of Title Diagram and Organization Chart)**

# Chain of Mexico Pacific Limited LLC's Title to the MPL Facility Site





- Terminal Fraction 4
- Terminal Fraction 4-A
- Terminal Fraction 4-B
- Terminal Fraction 4-C
- Terminal Fraction 4-D
- Fraction 3
- Fraction 1
- ZOFEMAT Concession permit document no. DGZF – 028/05
- Land Use License Writ No. 19/2009

- Terminal Fraction 1
- Easement through Ejido Puerto Libertad
- ZOFEMAT concession permit Document No. DGZF
- Environmental Impact Authorization No. S.G.P/DGIRA.DDT.2277.06
- Environmental Impact Authorization No. S.G.P/DGIRA.DDT.2453.06

## **Appendix A**

### **Legal Opinion of Counsel for MPL**

# KING & SPALDING

King & Spalding LLP  
1700 Pennsylvania Avenue, N.W.  
Washington, D.C. 20006-4706  
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Fax: +1 202 626-3737  
www.kslaw.com

James F. Bowe, Jr.  
Partner  
Direct Dial: +1 202 626-9601  
Direct Fax: +1 202 626-3737  
jbowe@kslaw.com

June 18, 2018

Ms. Amy Sweeney  
Office of Fossil Energy (FE-34)  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585

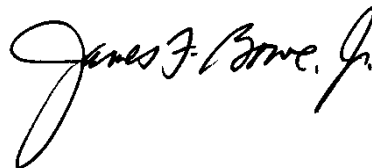
**Re: *Mexico Pacific Limited LLC*, FE Docket No. 18-\_\_\_-LNG  
Application for Long-Term Authorization to Export Liquefied Natural Gas  
to Both FTA and Non-FTA Countries**

Dear Ms. Sweeney:

This opinion is provided pursuant to Section 590.202(c) of the Department of Energy Regulations, 10 C.F.R. § 590.202(c), in support of the Application of Mexico Pacific Limited LLC (“MPL”) for Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas to Free Trade Agreement and Non-Free Trade Agreement Nations.

I am counsel to MPL, a limited liability company organized under the laws of the State of Delaware. I have reviewed and relied upon the corporate documents of MPL, and it is my opinion that the proposed exports described in the Application are within the limited liability company powers of MPL.

Very truly yours,



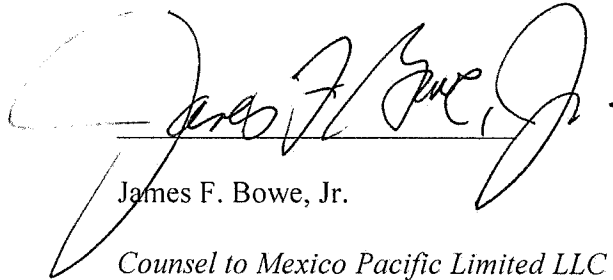
James F. Bowe, Jr.

*Counsel to Mexico Pacific Limited LLC*

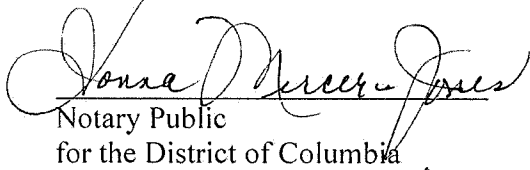
**Appendix B**  
**Verification**

**VERIFICATION**

I, James F. Bowe, Jr., being first duly sworn, state that I am a duly authorized representative of Mexico Pacific Limited LLC; I have read the above Application and I am familiar with its contents; and the matters set forth in the Application are true and correct to the best of my knowledge, information, and belief.

  
James F. Bowe, Jr.  
*Counsel to Mexico Pacific Limited LLC*

Sworn and subscribed before me this 18th day of June, 2018.

  
Notary Public  
for the District of Columbia

My Commission expires: October 31, 2019

