

## Department of Energy Washington, DC 20585

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Office of Fossil Energy and Carbon Management (FECM)

U.S. Department of Energy

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King & Spalding LLP

**Subject:** Informational Questions for the Department of Energy's Environmental

Assessment for Mexico Pacific Limited LLC's Application to Export LNG,

Docket No. 22-167-LNG

I am writing to follow up on the technical discussion held on Wednesday, November 1, 2023, regarding Mexico Pacific Limited LLC's (MPL) application (Application)<sup>1</sup> filed on December 28, 2022.<sup>2</sup>

As discussed at the meeting and set forth below, the U.S. Department of Energy (DOE), Office of Fossil Energy and Carbon Management, is requesting clarification and supplemental information to support DOE's development of an Environmental Assessment (EA)<sup>3</sup> under the National Environmental Policy Act<sup>4</sup> in connection with the Application.<sup>5</sup>

<sup>3</sup> Mexico Pacific Limited LLC, Notice of Environmental Assessment, Docket No. 22-167-LNG (Oct. 23, 2023).

<sup>&</sup>lt;sup>1</sup> Mexico Pacific Limited LLC, Application for Additional Long-Term, Multi-Contract Authorization to Export Natural Gas to Mexico and to Re-Export Liquefied Natural Gas to Free Trade Agreement and Non-Free Trade Agreement Nations, Docket No. 22-167-LNG (Dec. 28, 2022), https://www.energy.gov/sites/default/files/2023-01/22-167-LNG\_0.pdf. [hereinafter Application].

<sup>&</sup>lt;sup>2</sup> 15 U.S.C. § 717b(a).

<sup>&</sup>lt;sup>4</sup> 42 U.S.C. § 4321 et seq.

<sup>&</sup>lt;sup>5</sup> We note that, because the non-FTA portion of the MPL proceeding is contested under DOE's regulations (10 C.F.R. § 590.102(b)), the meeting and this letter are consistent with DOE's regulations governing off-the-record communications (10 C.F.R. § 590.108).

DOE will post this communication and your written responses to the questions below (upon receipt) in the MPL docket. Please provide written responses at your earliest convenience, and if possible, within a week of this request.<sup>6</sup>

## I. Background

MPL is requesting an increase in the volume of U.S. natural gas it is authorized to export from the United States to Mexico, liquefy at a proposed facility to be located near Puerto Libertad in the State of Sonora, Mexico (MPL Facility), and export to non-Free Trade Agreement countries. MPL filed the Application in connection with its continuing development of the MPL Facility. MPL previously sought, and was granted by DOE, authorization to export U.S.-sourced natural gas to Mexico for end use in Mexico and/or, after liquefaction in Mexico, for export by vessel in the form of LNG from the proposed MPL Facility to FTA and non-FTA nations. The Application states that MPL is seeking authorization to export an additional 425.57 Bcf/y of natural gas by pipeline from the U.S. to Mexico to align with increased peak planned liquefaction capacity.

## II. Request for Information to Support a Review of Greenhouse Gas Emissions

The purpose of this request is to inform DOE on the operational GHG performance of the proposed MPL Facility.

In the Application, MPL states that its original request to export up to 621 Bcf/year reflected estimates made in 2018 based on the then-current design for the MPL Facility and the anticipated LNG output of the MPL Facility predicated on that design. The Application states that as MPL moved to final design and the negotiation of an engineering, procurement, and construction contract for the MPL Facility, it became aware of opportunities to improve on the liquefaction train design over that assumed in its Original Application. MPL states that it found it could achieve significant improvements to facility efficiency and operational flexibility through improvements to the design of the liquefaction trains. At the time it submitted its original application, MPL had planned to install liquefaction trains capable of producing 4 mtpa (207 Bcf/y), in three increments of 4 mtpa each, to yield a total liquefaction capacity of at least 12

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<sup>&</sup>lt;sup>6</sup> MPL is free to submit the responses to DOE by letter. Regardless of format, the written responses should comply with DOE's regulations (including service requirements) at 10 C.F.R. Part 590 and will be posted to MPL's docket, <a href="https://www.energy.gov/fecm/articles/mexico-pacific-limited-llc-mpl-fecm-docket-no-22-167-lng">https://www.energy.gov/fecm/articles/mexico-pacific-limited-llc-mpl-fecm-docket-no-22-167-lng</a>.

<sup>&</sup>lt;sup>7</sup> Mexico Pacific Limited LLC, Application for Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas to Free Trade Agreement and Non-Free Trade Agreement Nations, Docket No. 18-70-LNG (June 18, 2018) <a href="https://www.energy.gov/fecm/mexico-pacific-limited-llc-mpl-fe-dkt-no-18-70-lng">https://www.energy.gov/fecm/mexico-pacific-limited-llc-mpl-fe-dkt-no-18-70-lng</a> [hereinafter "Original Application"]

<sup>&</sup>lt;sup>8</sup> Mexico Pacific Limited LLC, DOE/FE Order No. 4248, Docket No. 18-70-LNG, Order Granting Long-Term Multi-Contract Authorization to Export Natural Gas to Mexico and to Other Free-Trade Agreement Nations (Sept. 19, 2018) and Mexico Pacific Limited LLC, DOE/FE Order No. 4312, Docket No. 18-70-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export U.S.-Sourced Natural Gas by Pipeline to Mexico for Liquefaction and Re-Export in the form of Liquefied Natural Gas to Non-Free Trade Agreement Countries (Dec. 14, 2018).

<sup>9</sup> Application at 3.

<sup>&</sup>lt;sup>10</sup> Application at 8.

mtpa (equivalent to 621 Bcf/y). MPL now expects that the three natural gas liquefaction trains will have a total projected capacity of 17.6274 mtpa (912.22 Bcf/year) rather than 12 mtpa (621 Bcf/y). <sup>11</sup>

As part of its evaluation of the potential life cycle GHG emissions related to the proposed exports, DOE requests information on the greenhouse gas emissions estimated to be released from liquefaction facility operations, representative of one year of operation for the requested (incremental) volume of 427.57 Bcf/year. (Data can also be provided for the full proposed capacity of the MPL Facility, if doing so reduces the burden in providing the information requested.)

- Please provide all information and descriptions in the form of a written response.
- The information requested includes:
  - o the mass of each pollutant (methane [CH<sub>4</sub>], carbon dioxide [CO<sub>2</sub>], and nitrous oxide [N<sub>2</sub>O]) in metric tonnes per year for each source of emissions.
  - o the quantity of natural gas used for fuel (received and internal boil of gas if recycled for power use) and
  - o the quantity of feed gas entering the liquefaction operation.
- Please provide this information in the form of a carbon balance depicting the quantity of gas received at the facility, quantity consumed, quantity emitted to the atmosphere, and quantity exported.
- Please describe the liquefaction technology, power production technology and expected energy conversion efficiency, compression equipment type and seals, loading arm emissions management, and boil of gas management practices.
- Please also describe any best management practices employed at the facility to reduce greenhouse gas emissions to the atmosphere and any plant efficiency actions to assist the DOE in understanding the greenhouse gas emissions performance of the liquefaction facility.

## III. Confidential Treatment of Information

DOE's regulations allow confidential treatment of information or data supplied in support of an application, if the submitting party requests such treatment, shows why the information or data should be exempted from public disclosure, and DOE determines that the information or data warrants confidential treatment in accordance with 10 C.F.R. § 1004.11.20. To the extent

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<sup>&</sup>lt;sup>11</sup> *Id*.

MPL believes that any information or data submitted in response to this request contains confidential business information, we ask that you mark it accordingly.

We look forward to receiving this information so that DOE can proceed with the EA expeditiously. Should you have any questions concerning the requested information, please contact both me, at timothy.skone@hq.doe.gov, and Karl Lang, at karl.lang@keylogic.com.