From: FERGAS

To: jacob.cunningham@orrick.com; cameron.macdougall@newfortressenergy.com; ltonery@orrick.com;

mjohnston@orrick.com

Cc: nathan.Matthews@sierraclub.org; Sweeney, Amy; Lavoie, Brian D.; Wade, Jennifer L.; Bernstein, Cassandra

(Cass); Ku, Ruth C; Le Duc, Edward; Agboola, Ajoke; FERGAS; Skone, Timothy

Subject: NFE Altamira FLNG, S. de R.L. de C.V. - Request for Clarifications for Environmental Assessment (Docket No. 22-

110-LNG)

Date: Wednesday, August 23, 2023 10:20:02 AM

Attachments: image001.png

image002.png image004.png image005.png

NFE Altamira - Memo Request for Clarifications for EA - Docket No. 22-110-LNG.pdf

Dear Mr. MacDougall, Ms. Tonery, Ms. Johnston, and Mr. Cunningham:

Please see attached, Request for Clarifications for Environmental Assessment for the application of NFE Altamira FLNG, S. de R.L. de C.V. in Docket No. 22-110-LNG.

Regards,

Division of Natural Gas Regulation
Office of Resource Sustainability
Office of Fossil Energy and Carbon Management
U.S. Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Phone: 202-586-9478 Email: fergas@hq.doe.gov

Website: https://www.energy.gov/fecm/regulation



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Department of Energy

Washington, DC 20585

Date: August 23, 2023

From: Timothy J. Skone, P.E.; Senior Environmental Engineer,

timothy.skone@hq.doe.gov

Office of Fossil Energy and Carbon Management (FECM)

U.S. Department of Energy

To: Cameron MacDougall, New Fortress Energy Inc.

cameron.macdougall@newfortressenergy.com

CC: Lisa M. Tonery, ltonery@orrick.com

Mariah T. Johnston, mjohnston@orrick.com

Jacob I. Cunningham, jacob.cunningham@orrick.com

Orrick, Herrington & Sutcliffe LLP

Subject: Request for Clarifications for Environmental Assessment

For the application of NFE Altamira FLNG, S. de R.L. de C.V.

In Docket No. 22-110-LNG

I am writing to follow up on the technical meeting held on Monday, August 21, 2023, regarding clarifying questions about NFE Altamira FLNG, S. de R.L. de C.V.'s (NFE Altamira) "Response to Informational Questions for DOE's Environmental Assessment," (July 26 Response) relating to NFE Altamira's application (Application)² filed on September 9, 2022.³

As discussed in the meeting and set forth below, the U.S. Department of Energy (DOE), Office of Fossil Energy and Carbon Management, is requesting clarifications on NFE Altamira's July 26 Response to support DOE's development of an environmental assessment (EA) under the National Environmental Policy Act⁴ in connection with the Application.⁵

¹ NFE Altamira FLNG, S. de R.L. de C.V., Responses to Informational Questions for DOE's Environmental Assessment, Docket No. 22-110-LNG (July 26, 2023), <u>22-110-LNG_NFE Altamira Data Responses 07.26.2023.pdf (energy.gov).</u>

² NFE Altamira FLNG, S. de R.L. de C.V., Application for Long-Term, Multi-Contract Authorizations to Export Natural Gas to Mexico and to Re-Export Liquefied Natural Gas from Mexico to Free Trade Agreement and Non-Free Trade Agreement Nations, Docket No. 22-110-LNG (Sept. 9, 2022), https://www.energy.gov/sites/default/files/2022-09/22-110-LNG.pdf.

³ 15 U.S.C. § 717b(a).

⁴ 42 U.S.C. § 4321 et seq.

⁵ We note that, because the non-FTA portion of the NFE Altamira 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).

I. Request for Clarifications

On July 18, 2023, DOE sent NFE Altamira a "Request for Additional Information for Environmental Assessment." In response, NFE submitted its July 26 Response. At Monday's meeting, I discussed follow-up questions on NFE Altamira's July 26 Response. These questions are:

The project's total fuel consumption for on-site power is stated at 6.5 BCF/year per FLNG, equivalent to 13 BCF of natural gas for fuel use and minor losses. Per the response to Information Request 8, in 22-110-LNG_NFE Altamira Data Response 07.26.2023.pdf, 40 CFR 98 emission factors are used to calculate emission rates for CO2 (53.02 kg/MMBtu), CH4, and N20 (0.0001 kg/MMBtu). Focusing only on natural gas combustion for onsite power production, this results in a fuel consumption rate of 5.03 MJ Natural Gas Fuel Combusted per kg of LNG for export. Multiplying by the 40 CFR 98 emission factor of 53.06 kg/MMBtu or 0.05029 kg CO2/MJ of fuel combusted results in a project total CO2 emissions from fuel combustion of 707,714 tonnes CO2 per year. Appendix F (Rev. 2) Facility-Wide Operational Potential Air Emissions reports power combustion emissions in the first four rows of Appendix F (FLNG 1 Compressor Turbine, FLNG 2 Compressor Turbine, FLNG1 Power Generating Turbines (3 units), FLNG2 Power Generating Turbines (3 units)) for a total CO2 emissions of 1,027,906 tonnes per year.

Note: 40 CFR 98 reports the emission factor for Natural Gas (Weighted U.S. Average) in Table C-1 as 53.06 kg CO2/mmBtu (slightly different than the value of 53.02 reported in response to Information Request 8).

- 1. Question #1: Please explain the carbon dioxide emissions calculation resulting from combustion for power production on-site?
- 2. Question #2: How were the 5 tonnes of methane emissions determined as reported in Appendix F for each of the first four entries?
 - a. Note: Based on 13 BCF/year of fuel consumption and NETL's methane slip rate of 0.06 g CH4/MJ Natural Gas Combusted, a cumulative value of 517 tonnes CH4, or 129 tonnes CH4 for each entry in the first four rows of Appendix F
- 3. Question #3: Could you please confirm the ratio of natural gas fuel consumption per unit of LNG produced for export?
 - a. Note, the ratio is used to estimate the carbon dioxide and methane emissions from combustion of natural gas for power production when scaled to 2.8 MTPA.

FLNG1 and FLNG 2 Wet Flare (acid gas treatment) is reported in Appendix F (Rev. 2) at 94,518 tonnes per year for each unit.

- 4. Question #4: What is the source and volume of these CO2 emissions (CO2 removed from pipeline gas and/or natural gas liquids separated from pipeline gas, other)?
- 5. In the Application, on page 5, the "total productive capacity" of the proposed facility is cited as "approximately 2.1 MTPA of LNG per FLNG." During the discussion on August 21, it was established that this figure was a typo, with the correct figure being the one stated elsewhere in the Application, 1.4 MTPA per FLNG, for a total of 2.8 MTPA. Can you please confirm this?

DOE has asked for written responses to these questions at NFE Altamira's earliest convenience.⁶

We are requesting this information pursuant to: (i) the Council on Environmental Quality's NEPA regulations, which provide, in relevant part, that, "[a]n agency may require an applicant to submit environmental information for possible use by the agency in preparing an environmental document," and (ii) DOE's regulations, which provide that DOE "may at any time require the applicant and other parties to make supplemental filings of additional information necessary to resolve issues raised by the application."

II. 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. To the extent NFE Altamira 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.

⁶ NFE Altamira 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 NFE Altamira's docket, https://www.energy.gov/fecm/articles/nfe-altamira-flng-s-de-rl-de-cv-fecm-dkt-no-22-110-lng.

⁷ 40 C.F.R. § 1506.5(b) ("Agency responsibility for environmental documents").

⁸ 10 C.F.R. § 590.202(d) ("Contents of applications"); *see also id.* § 590.203 ("Deficient applications") (stating that, "[i]f an application is incomplete or otherwise deemed deficient," DOE "may require the applicant to submit additional information or exhibits to remedy the deficiency").

⁹ 10 C.F.R. § 590.202(e).