



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
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March 13, 2023

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, D.C. 20426

Re: EPA Draft EIS Comments for the CP2 LNG and CP Express Project Cameron and Calcasieu Parishes, Louisiana and Jasper and Newton Counties, Texas, Docket Nos. CP22-21-000 and CP22-22-000

Dear Secretary Bose:

The Region 6 office of the U.S. Environmental Protection Agency (EPA) has reviewed the Federal Energy Regulatory Commission (FERC) Draft Environmental Impact Statement (EIS) (CEQ Number 20230009) for the CP2 LNG and CP Express Project located in Cameron and Calcasieu Parishes, Louisiana and Jasper and Newton Counties, Texas. The Draft EIS was reviewed pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500 – 1508), and by our NEPA review authority under Section 309 of the Clean Air Act.

The proposed project would liquefy, store, and export a liquefaction capacity of 20 million tonnes per annum (MTPA) of liquified natural gas (LNG), with the capability 28.0 MTPA under optimal conditions, to overseas markets by ocean-going vessels. The purpose of the 91-mile pipeline system is to create the firm transportation capacity needed to transport 4 billion cubic feet per day of feed gas required for the proposed LNG export operations from natural gas supply points in east Texas and southwest Louisiana facilities. The Project will impact 192 waterbodies, 169.6 acres of wetland, 304.3 acres of agriculture lands, 163.7 acres of forest and 117.3 acres of pine plantation, 84 acres of open land, and additional residential, industrial, and open lands.

EPA's primary concerns are with Water Quality, Environmental Justice (EJ), Air Quality and Climate Change impacts. The following detailed comments are provided for your consideration.

Water Quality Comments

Despite the long potential lifespan of this project and its assets, abandonment or decommissioning procedures should still be considered in the event that a facility is no longer able to extract sufficient resources as a result of natural or mechanical interference. EPA requests that FERC include tentative abandonment procedures as part of the document's revision process.

We recommend that FERC modify the titles of the tables in Appendix G to differentiate between Texas from Louisiana water bodies.

Appendix G includes a column dedicated to designated uses. For Texas, these are shown as "General Criteria." However, EPA recommends updating this column by removing "general

criteria” and replacing it with specific designated uses in a format similar to Louisiana’s waterbodies in Appendix G. This may include:

- Primary Contact Recreation to all water bodies *unless a different recreation use has been adopted in the Texas Surface Water Quality Standards (TSWQS)*
- Intermittent (i.e., ephemeral) streams have a *presumed minimal aquatic life use*
- Intermittent streams with perennial pools have a *presumed limited aquatic life use*
- Perennial water bodies have a *presumed high aquatic life use*

This information would aid in subsequent reviews, as well as help to better connect with the state’s waterbody identification systems. EPA requests that unnamed waterbodies are supplemented with the state’s corresponding format for listing subsegments as shown in their water quality standards. With only a “unique ID,” waterbody name (most are “unnamed”), and feature type listed, it is nearly impossible to know where crossings are located within the context of the state’s Water Quality Standards and Clean Water Act 303(d) list.

EJ Comments

EPA strongly encourages the use of an updated EJScreen tool to analyze with the most recent version of EJScreen (EJScreen 2.1). The EJ and supplemental indexes summarize how an environmental indicator and socioeconomic factors come together in the same location.

While EJScreen provides access to high-resolution environmental and demographic data, it does not provide information on every potential community vulnerability that may be relevant. The tool’s standard data report should not be considered a substitute for conducting a full EJ analysis, and scoping efforts using the tool should be supplemented with additional data and local knowledge when reasonably available. You may find the latest version and all information relevant to EJScreen (including Technical Documentation) at: <https://www.epa.gov/ejscreen>.

EPA also recommends that FERC selects a proposed alternative that will minimize to be routed through a community with EJ concerns.

Air Quality and Climate Change Comments

2.1.1.6 Carbon Capture and Sequestration

EPA recognizes and appreciates the efforts by CP2 LNG to include carbon capture and sequestration system as part of the proposed project to reduce greenhouse gas (GHG) emissions.

3.2 No-Action Alternative

EPA recommends that FERC evaluate non-gas energy alternatives, as well as other non-project alternatives that satisfy the need for the project under the no-action alternative. We do not believe that that it is overly speculative to broadly assess alternative non-gas energy sources particularly those impacts that are of global scale. Given FERC’s broader mission statement to “assist customers in obtaining reliable, safe, secure and economically efficient energy services at a reasonable cost through appropriate regulatory and market means, and collaborative efforts,” EPA reaffirms that non-gas energy alternatives be considered as part of the no-action alternative.

4.12.1.2 Permitting/Regulatory Requirements

We recommend the EIS should also consider any expected air quality/visibility impacts to Class I Federal Areas identified in 40 CFR Part 81, Subpart D.

4.12.1.3 Construction Emissions and Impacts and Mitigation and 4.12.1.4 Operation Emissions and Mitigation

EPA appreciates the description and reporting of estimated air emissions from the potential construction, commissioning, and operation activities, as well as proposed mitigation measures to minimize those emissions. EPA recommends, however that an appendix be included with the proposed action's air emission calculations for construction and operation. This would provide details on the activity levels assumed in the calculations, frequency of events, equipment type, engine size, emission factors used in the calculations.

4.12.1.3 Construction Emissions and Impacts and Mitigation

Table 4.12.1-6 does not present projected construction emissions of each individual GHG (CO₂, nitrous oxide, or methane); it only expresses GHG emissions in terms of CO₂ equivalent values. In general, when quantifying GHG emissions from a project, EPA believes that the EIS should calculate and report separately annual emission estimates of metric tons of CO₂, methane, and nitrous oxide, as applicable, for proposed projects to enhance public disclosure and decision-making and to account for differences in the impacts of these pollutants in the atmosphere over time. Estimating annual emissions separately for each relevant GHG allows for better consideration of the different environmental impacts associated with emissions of each of the GHGs, including applying the estimated social cost of GHGs. EPA recommends reporting each GHG in the emissions Appendix for both construction, commissioning, and operation.

Table 4.12.1-5 does not present estimated emissions of each individual hazardous air pollutant (HAP) (e.g., Formaldehyde, benzene, ethylbenzene, xylene, etc.); it only expresses emissions in a single column titled "HAPs". The potential health effects of each individual pollutant vary, so it is important to have them disaggregated in a way that is transparent to the public. EPA recommends reporting each HAP separately in the emissions appendix. This will ensure that the subsequent analysis can be replicated and that the public is aware of the specific HAPs of concern. Additionally, we recommend evaluating potential HAP impacts based on relevant inhalation health-based risk for the pollutants identified as available from EPA's Integrated Risk Information System (IRIS).

The text acknowledges that "Residences and recreational vehicle parks are within a quarter mile of the eastern edge of the proposed Project construction site: and that "Emission increases associated with the Project construction activities could have localized impacts on air quality at these locations during construction". In determining the potential significance of air impacts, we recommend FERC identify the proximity (i.e., distance) of these receptors to the construction activities and assess their potential air quality impact. Additional mitigation may be warranted in those areas.

EPA reiterates the importance of minimizing not only fugitive dust, but all criteria pollutants, including exhaust emissions. We recommend FERC identify measures to reduce air emissions from equipment and vehicles, including use of alternatively fueled or zero-emission equipment and low-sulfur fuel, newer tier equipment, diesel emissions controls, and strategies and technologies to enforce idling time (e.g., automatic engine shut-off) as practicable.

4.12.1.4 Operation Emissions and Mitigation Plan

EPA recommends that FERC adopt all practicable GHG mitigation measures, given the reasonableness of such measures from a public interest and necessity standpoint. We also recommend that FERC incorporate such mitigation measures into the proposed terms and conditions required as part of certificate issuance. Potential mitigation options for FERC to consider beyond those discussed here for this proposed action include, but are not limited to: (1) Using work practice standards and equipment types that minimize leaks and venting, including ultrasonic flow meters and low bleed pneumatic devices; (2) Utilize hot tapping, a procedure that makes a new pipeline connection while the pipeline remains in service, flowing natural gas under pressure, to avoid the need to blow down gas; (3) Perform routine leak detection at all compressor seals and wellhead components using appropriate commercially available technologies such as optical gas imaging, point concentration sensors, hyperspectral cameras, differential absorption Lidar (Light Detection and Ranging), and drone mounted Tunable Diode Laser Adsorption Spectrometer (TDLAS) systems. EPA recommends that any standard mitigation, best management practices, mitigations and detection plans developed by the applicant, be included as an appendix or as a linked reference in the EIS if the measures are not specified in the EIS. In addition, EPA recommends that mitigation measures be included as conditions in the certificate Special Order, in a Memorandum of Understanding with the applicant, or in a state or local permit to ensure such measures are real and verifiable. The proposed action may require the use of gas-insulated switchgears. Sulfur hexafluoride (SF₆), which is typically used as the gas in such switchgears, is the most potent known GHGs. Approximately 26,000 times more effective at trapping infrared radiation than carbon dioxide, SF₆ is also a very stable chemical with an atmospheric lifetime of 3,200 years. Thus, a relatively small amount of SF₆ leaking from each of the thousands of switchgears associated with the energy sector can have a significant impact. Emissions of SF₆ also come from the manufacture and recycling of SF₆, as well as charging, repairing, and decommissioning the switchgears. EPA recommends that FERC considers the use of switchgears that are SF₆-free for the proposed alternatives. For additional information see the EPA's references for the Electric Power Systems Partnership at: <https://www.epa.gov/eps-partnership>.

Section 4.12.1.5

Section 4.12.1.5 is called out in four (4) places on pages 4-220, 4-230, 4-238 and 4-333 within Section 4.12.1 but appears to be missing from the Draft EIS. EPA recommends that FERC add the missing section to the Draft EIS.

4.14.2.13 Climate Change

On Page 4-439, the text says that the courts have explained that because the authority to authorize LNG exports rests with Department of Energy (DOE), NEPA does not require FERC to consider the upstream or downstream GHG emissions that may be indirect effects of the export itself when determining whether the related LNG export facility satisfies section 3 of the National Gas Act (NGA). Nevertheless, NEPA requires that FERC consider the direct GHG emissions associated with a proposed LNG export facility. Therefore, the upstream and downstream emissions from the Project are not analyzed in this EIS.

EPA appreciates that the EIS quantifies construction and operational GHG emissions in CO₂e. However, EPA reaffirms the recommendation that the EIS quantify all upstream and downstream GHG emissions associated with the proposed action, as supported by CEQ's final Phase I

rulemaking relating to NEPA Implementing Regulations Revisions. [See CEQ NEPA Phase 1 Final Rule] Federal agencies have a legal obligation to consider direct and indirect impacts associated with a project including upstream and downstream emissions caused by production, processing, transportation, and consumption of the project's resources.

Both upstream and downstream GHG emissions are clearly reasonably foreseeable indirect impacts for NGA section 3 projects. Whether downstream GHG emissions occur within the United States or outside of the United States is not relevant in assessing their climate impacts, given that GHGs have impacts that are global in scale. Whether a project serves domestic consumption or export would not meaningfully affect the location of upstream GHG emissions, which in most cases would be from domestic sources. Given the reasonably close causal relationship between upstream and downstream emissions and FERC's authorization role under the NGA for section 3 projects, FERC should usefully disclose and consider, in its NEPA and NGA analyses, the often large-scale upstream and downstream emission impacts of NGA section 3 projects.

In Section 4.14.2.13 (page 4-439), the text says that to date, FERC has not identified a methodology to attribute discrete, quantifiable, physical effects on the environment resulting from the Project's incremental contribution to GHGs. Without the ability to determine discrete resource impacts, FERC staff are unable to assess the Project's contribution to climate change through any objective analysis of physical impact attributable to the Project.

Additionally, FERC staff have not been able to find an established threshold for determining the Project's significance when compared to established GHG reduction targets at the state or federal level. Ultimately, this EIS is not characterizing the Project's GHG emissions as significant or insignificant because FERC is conducting a generic proceeding to determine whether and how FERC would conduct significance determinations going forward. However, as we have done in prior NEPA analyses, we disclose the Project's GHG emissions in comparison to national and state GHG emission inventories.

EPA recommends that FERC avoid expressing project-level GHG emissions as a percentage of national or state GHG emissions as the comparison of project-level emissions to national and state emissions diminishes the significance of project-scale GHG emissions and associated project-specific contributions to overall GHG emissions. Instead, we recommend the FERC includes a discussion of whether these increases are consistent with the State climate plan as proposed and in conjunction with the cumulative impacts of other LNG and pipeline development projects in the State. Additionally, EPA recommends the EIS discusses whether the estimated GHG emissions from the proposed alternatives are consistent with taking action to achieve science based national GHG reduction targets and any relevant state or local goals.

On Pages 4-440 through 4-441, we acknowledge that FERC provides an estimate of the social cost of carbon using the methods and values in the Interagency Working Group's (IWG) current draft guidance. We agree that this calculation is a useful parameter for disclosing GHG impacts and benefits of mitigation and for comparison across alternatives. We recommend that the full set of assumptions used in this calculation be provided in the air quality appendix in the Final EIS.

4.13 Structures and Natural Hazard Evaluation - Hurricanes, Tornadoes & Other Meteorological Events

We note that FERC provided a comprehensive analysis of hazards associated with hurricanes, tornadoes, and flooding but these in general were based on past historical climate. EPA recommends that the resiliency analysis look at the anticipated future climate in this assessment including extreme temperatures effects such as on building materials and seals and extreme precipitation events.

4.2.3.4 Coastal Erosion and Seal Level Rise

We appreciate FERC's assessment and resiliency measures for sea-level rise taking into consideration projected seal level rise from the Coastal Protection and Restoration Authority's 2017 Coastal Master Plan eustatic sea level rise modeling that predict sea level rise for the Gulf of Mexico region by 2100 ranging from approximately 1 to 6.5 feet. However, it is not clear what height was chosen for proactive actions for pipelines and buildings.

We appreciate the opportunity to review the Draft EIS and are available to discuss our comments. Please send our office an electronic copy of the Final EIS when it is electronically filed with the Office of Federal Activities using the following link: <https://www.epa.gov/nepa/e-nepa-guide-registration-and-preparing-eis-electronic-submission>. If you have any questions, please contact Gabe Gruta, project review lead at 214-665-2174 or gruta.gabriel@epa.gov.

Sincerely,

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