

155 FERC ¶ 61,328
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;
Cheryl A. LaFleur, Tony Clark,
and Colette D. Honorable.

Trunkline Gas Company, LLC Docket Nos. CP14-119-001

Lake Charles LNG Export Company, LLC and CP14-120-001
Lake Charles LNG Company, LLC

Lake Charles LNG Company, LLC CP14-122-001

ORDER DENYING REHEARING

(Issued June 30, 2016)

1. In a December 17, 2015 order, the Commission granted: (1) Lake Charles LNG Export Company, LLC and Lake Charles LNG Company authority to site, construct, and operate new facilities (Liquefaction Project) for the liquefaction and export of natural gas under section 3 of the Natural Gas Act (NGA); (2) Lake Charles LNG NGA section 7(b) authority to abandon facilities and services and to operate the abandoned facilities and services under NGA section 3; and (3) Trunkline Gas Company, LLC NGA section 7(b) and 7(c) authority to abandon, construct, operate, and modify interstate natural gas pipeline facilities (Pipeline Modifications Project) to supply the liquefaction facilities.¹ (Collectively, the Pipeline Modifications Project and the Liquefaction Project are referred to herein as the Project.) On January 19, 2016, Sierra Club filed a request for rehearing, arguing the Commission violated the National Environmental Policy Act of 1969 (NEPA)² by inadequately evaluating the facilities' indirect and cumulative effects during its environmental review. For the reasons discussed below, we deny Sierra Club's request for rehearing.³

¹ *Trunkline Gas Co., LLC*, 153 FERC ¶ 61,300 (2015) (December 2015 Order).

² 42 U.S.C. §§ 4321 *et seq.* (2012).

³ For further description of the facilities, see December 2015 Order, 153 FERC ¶ 61,300 at PP 5-24.

I. Background

2. The December 2015 Order authorized the construction of three liquefaction trains and related equipment, along with the modification of existing LNG storage and marine berthing facilities in Calcasieu Parish, Louisiana. The order also granted Trunkline's proposal to expand and modify its pipeline system and associated compressor stations in Arkansas, Mississippi, and Louisiana in order to meet demand for additional transportation capacity required to deliver gas to the Louisiana Gulf Coast area.

3. The Commission's environmental review of the Project included the issuance of a draft environmental impact statement (EIS) on April 10, 2015, and a final EIS on August 14, 2015. The December 2015 Order concluded that, if constructed and operated as described in the EIS and in accordance with the 95 environmental conditions imposed by the Commission, the Project is an environmentally acceptable action.

4. On rehearing, Sierra Club asserts the Commission too narrowly confined the scope of its NEPA analysis by ignoring indirect effects related to: (1) upstream natural gas production; (2) greenhouse gas (GHG) emissions, including secondary effects resulting from those emissions; and (3) domestic gas-to-coal switching. Sierra Club also asserts the cumulative effects analysis was flawed because it lacked analysis of these effects (natural gas production, GHG emissions, and domestic gas-to-coal switching) when combined with effects from other past, present, and reasonably foreseeable LNG export facilities.

II. Analysis

5. Section 102 of NEPA requires federal agencies to prepare "a detailed statement . . . on the environmental impact" of any proposed major federal action "significantly affecting the quality of the human environment."⁴ In making this determination, agencies must take a "hard look" at the environmental consequences of their actions.⁵ The Council on Environmental Quality's (CEQ) NEPA regulations require agencies to consider three kinds of impacts: direct, indirect, and cumulative.⁶

⁴ 42 U.S.C. § 4332(2)(C)(i) (2012).

⁵ *See Kleppe v. Sierra Club*, 427 U.S. 390, n.21 (1976).

⁶ 40 C.F.R. § 1508.25(c) (2015).

A. Indirect Effects

6. Indirect impacts, which may include growth-inducing effects, are “caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”⁷

1. Induced Natural Gas Production

7. The December 2015 Order concluded that the Project facilities are not the cause of the environmental effects resulting from natural gas production (whether conventional or non-conventional), and that, even accepting, *arguendo*, that the Project facilities did induce natural gas production, the environmental effects resulting from such production are not reasonably foreseeable.⁸

8. On rehearing, Sierra Club contends that approval of the Liquefaction Project is both the “but for” and legally relevant cause of natural gas production. In support, Sierra Club argues that the available evidence indicates that tools used to derive macroeconomic connections between the Liquefaction Project and natural gas production could provide individual forecasts as well.⁹

9. Sierra Club further states that NEPA requires the Commission to consider indirect effects, even when those effects are not under the Commission’s direct regulatory authority, and even when those effects are regulated by other agencies. In this regard,

⁷ *Id.* § 1508.8(b).

⁸ December 2015 Order, 153 FERC ¶ 61,300 at PP 127-138.

⁹ Rehearing Request at 5-6. The Commission has previously addressed the studies cited by Sierra Club and found them to be unpersuasive. For the reasons cited in previous orders, the Commission finds that the “potential impacts from induced production are not reasonably foreseeable because the Commission can only speculate as to where and when the additional production would occur and the extent and nature of the actual infrastructure (wells, pads, gathering lines, etc.) which would be necessary to support such production.” *Sabine Pass Liquefaction Expansion, LLC*, 151 FERC ¶ 61,253, at P 15 (2015) (*Sabine Pass Liquefaction Expansion*). *See id.* P 23 (“The studies set forth general economic projections with respect to LNG exports in the United States but do not assist us in reasonably estimating how much of the Liquefaction Expansion project’s export volumes will come from current versus future natural gas production, or where and when the assumed future production may specifically be located and take place, much less in identifying any associated environmental impacts of such production.”).

Sierra Club rejects the Commission's basis for not addressing economic claims,¹⁰ arguing that the Department of Energy's parallel authority over LNG exports "does not absolve [the Commission] of the NEPA obligation to consider the indirect impacts of siting, constructing, and authorizing export facilities."¹¹ Sierra Club also argues that the Commission created a standard of causality that was contrary to NEPA.¹² Finally, Sierra Club argues the environmental effects caused by induced production are not so speculative as to preclude meaningful review, and calls on the Commission to engage in reasonable forecasting. Sierra Club maintains that forecasts of the amount and region of additional production resulting from Gulf Coast export facilities already exist.

10. The Commission has acknowledged that "production and transportation facilities are components of the general supply chain required to bring gas to market."¹³ The December 2015 Order and previous orders addressing similar issues raised by Sierra Club, further acknowledged studies on the relationship between increases in LNG exports and natural gas production.¹⁴ But Sierra Club attempts to convert this general supply chain relationship to a "particularly unyielding variation of 'but for' causation,"¹⁵

¹⁰ See December 2015 Order, 153 FERC ¶ 61,300 at P 34 ("We decline to address Sierra Club's economic claims, as they concern impacts associated with the exportation of the commodity of natural gas, which DOE is authorized to analyze.").

¹¹ Rehearing Request at 10.

¹² *Id.* at 9. See December 2015 Order, 153 FERC ¶ 61,300 at P 135 ("A causal relationship sufficient to warrant Commission analysis of the non-pipeline activity as an indirect impact would only exist if the proposed pipeline would transport new production from a specified production area and that production would not occur in the absence of the proposed pipeline (i.e., there will be no other way to move the gas).").

¹³ *Texas Gas Transmission, LLC*, 153 FERC ¶ 61,323, at P 63 (2015).

¹⁴ See, e.g., December 2015 Order, 153 FERC ¶ 61,300 at P 127 n.121; *Sabine Pass Liquefaction, LLC*, 140 FERC ¶ 61,076, at P 9 (2012) ("The Commission did not conclude that it was not 'reasonably foreseeable' that the Liquefaction Project would induce increased natural gas production; rather, the order stated that it is virtually impossible to estimate how much, if any, of the export volumes associated with the Liquefaction Project will come from existing or new shale gas production. Moreover, while it may be the case that additional shale gas development will result from the Liquefaction Project, the amount, timing and location of such development activity is simply unknowable at this time.").

¹⁵ *Department of Transportation v. Public Citizen*, 541 U.S. 752, 767 (2004).

resulting in an unreasonable expansion of NEPA's scope. Finding natural gas production within the scope of the Commission's NEPA indirect effects analysis ignores the Supreme Court's admonition that "a 'but for' causal relationship is insufficient to make an agency responsible for a particular effect under NEPA and the relevant regulations."¹⁶

11. The Commission has repeatedly held that approval of natural gas export facilities is not the cause of natural gas production for NEPA purposes.¹⁷ Rather, a number of other factors affect natural gas production, such as the market price of natural gas, production costs, technological developments, and state regulatory provisions.¹⁸

12. The Commission has recognized that NEPA may obligate an agency to evaluate the environmental impacts of non-jurisdictional activities.¹⁹ Nevertheless, in assessing the scope of the analysis required by NEPA, the limitation on the Commission's statutory authority over natural gas production weighs against finding that an LNG export facility is the proximate cause of natural gas production.²⁰ States, not the Commission, have jurisdiction over natural gas production and associated development, including siting and permitting.

13. Even if a causal relationship between the approval of the Liquefaction Project and Pipeline Modifications Project, and additional production were presumed, the scope of the impacts from induced production is not reasonably foreseeable. The statements and reports cited by Sierra Club are broad generic reports that do not show where or when additional development will occur. Such broad analyses, based on generalized assumptions rather than reasonably specific information, will not yield information that

¹⁶ *Id.*

¹⁷ *See, e.g., Sabine Pass Liquefaction Expansion*, 151 FERC ¶ 61,253 at P 13 ("However, the fact remains that the Commission's action in authorizing specific facilities proposed in this proceeding is not the cause of any additional production for purposes of NEPA.").

¹⁸ *Id.* P 12.

¹⁹ *See, e.g., Dominion Transmission, Inc.*, 155 FERC ¶ 61,106, at P 78 (2016).

²⁰ *City of Shoreacres v. Waterworth*, 420 F.3d 440, 452 (5th Cir. 2005) (*City of Shoreacres*) ("[I]t is doubtful that an environmental effect may be considered as proximately caused by the action of a particular federal regulator if that effect is directly caused by the action of another government entity over which the regulator has no control.").

would provide meaningful assistance to the Commission in its decision making, e.g., evaluating potential alternatives to the specific proposal before it.

14. Sierra Club cites to *Calvert Cliffs' Coordinating Committee, Inc. v. U.S. Atomic Energy Commission* for the proposition that the purpose of NEPA would be undercut if review were limited only to those issues “wholly unregulated by any other federal, state or regional body.”²¹ But *Calvert Cliffs'* is a 1971 case that predates the current CEQ NEPA regulations. The case addressed NEPA guidance adopted by the Atomic Energy Commission, including a blanket regulation providing that “no party may raise and the Commission may not independently examine any problem of water quality,” which the court considered “perhaps the most significant impact of nuclear power plants.”²² Rather, the Atomic Energy Commission deferred to state standards adopted pursuant to the Federal Water Pollution Control Act.²³ No similar rule or practice exists here.²⁴

15. Unlike the agency in *Calvert Cliffs'*, the Commission has not adopted a blanket rule to ignore indirect effects in total deference to another agency. Rather, the Commission routinely evaluates the direct, indirect, and cumulative effects of its actions related to water quality as defined by CEQ regulations, regardless of whether those effects are primarily regulated by other state or federal agencies. In short, the Commission's practice is to evaluate fully NEPA issues raised in each case after evaluating the appropriate scope of environmental review on a case-by-case basis.

16. Contrary to Sierra Club's contention, the December 2015 Order did not hold that the Commission is responsible for environmental review of an effect only if the project causes all, as opposed to some, of the development.²⁵ Rather, the Commission has determined that information specifically linking the effects from natural gas production to the Liquefaction Project and Pipeline Modifications Project is lacking because these links are too attenuated. For example, Sierra Club does not identify information regarding the location or timing of the additional natural gas production that would be induced by the

²¹ 449 F.2d 1109, 1122-23 (D.C. Cir. 1971).

²² *Id.* at 1122.

²³ *Id.*

²⁴ *See Constitution Pipeline Co., LLC*, 154 FERC ¶ 61,046, at n.266 (2016).

²⁵ Rehearing Request at 7 (“Nothing in NEPA, its regulations, or applicable case law limits the requirement to evaluate the effects of the development induced by a project to those situations where the project is responsible for causing all, as opposed to some, of the pertinent development.”).

Project. Without such information, it is impossible for the Commission to study the impacts caused by the Project. Recent D.C. Circuit Court of Appeals opinions affirm the Commission's findings in previous LNG export proceedings that NEPA does not require the Commission to analyze impacts from induced natural gas production as an indirect effect.²⁶ For the reasons cited in these recent opinions and their underlying orders, and as explained above, the Commission denies rehearing.

2. Gas-to-Coal Switching

17. Sierra Club argues on rehearing that the Commission should have considered the environmental effects caused by increased domestic coal use.²⁷ Sierra Club points to studies predicting that 27 percent of the natural gas needed to supply LNG export projects will come from existing domestic gas users switching from gas to coal in response to higher natural gas prices. Sierra Club contends that this increase in coal use would exist even if regulatory actions are undertaken to accelerate retirement of coal plants.²⁸

18. The December 2015 Order explained that the Department of Energy has retained authority over the import or export of natural gas as a commodity.²⁹ The Commission's authority under NGA section 3 applies "only to the siting and the operation of the facilities necessary to accomplish an export and not to the project's economic effects of the commodity export itself to be reasonable."³⁰ Accordingly, the Commission does not analyze the potential impacts of changes in electricity generation which might result from the Project's impact upon natural gas prices.

²⁶ *Freeport LNG Development, L.P.*, 148 FERC ¶ 61,076, *reh'g denied*, 149 FERC ¶ 61,119 (2014), *aff'd sub nom Sierra Club and Galveston Baykeeper v. FERC*, No. 14-1275 (D.C. Cir. filed June 28, 2016); and *Sabine Pass Liquefaction, LLC*, 146 FERC ¶ 61,117, *reh'g denied*, 148 FERC ¶ 61,200 (2014), *aff'd sub nom. Sierra Club v. FERC*, No. 14-1249 (D.C. Cir. filed June 28, 2016).

²⁷ *Id.* at 15-16.

²⁸ *Id.* at 15.

²⁹ December 2015 Order, 153 FERC ¶ 61,300 at P 33.

³⁰ *Sabine Pass Liquefaction Expansion*, 151 FERC ¶ 61,253 at P 34.

19. “The level of analysis sought by Sierra Club is neither contemplated nor required by courts or the CEQ regulations.”³¹ As we have previously explained, the studies relied upon by Sierra Club do not establish that a potential increase of domestic gas prices or a potential power sector shift from gas to coal would be caused by or are reasonably foreseeable effects of the Project being considered there.³² Further, even if we accepted Sierra Club’s assumption that the economic impact of gas exports will lead to a switch to coal by some end users and that such end users would have the ability to make the switch, we could only speculate on where additional coal supplies would be produced and where they would be used.³³ Thus, Sierra Club’s reliance on *Airlines for America v. Transportation Security Administration*³⁴ for the proposition that there is a “self-evident” relationship between price increases and the demand side of the market is unavailing.

20. In prior orders, the Commission has extensively considered and rejected the argument that NEPA requires analysis of increased coal use as an indirect effect of LNG export facilities. Two of those orders have now been affirmed by the D.C. Circuit Court of Appeals.³⁵ For the reasons discussed in those orders, and as explained above, rehearing is denied.

³¹ *Id.*

³² *Corpus Christi Liquefaction, LLC*, 151 FERC ¶ 61,098, at P 33 (2015) (*Corpus Christi*) (discussing Energy Information Administration studies).

³³ See U.S. Department of Energy, Final Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States at 2 (Aug. 15, 2014) (“As DOE explained in *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2961-A (Aug. 7, 2012), lacking an understanding of where and when additional gas production will arise, the environmental impacts resulting from production activity induced by LNG exports to non-FTA countries are not “reasonably foreseeable” within the meaning of the Council on Environmental Quality’s NEPA regulations (40 CFR § 1508.7)”; *Magnolia LNG, LLC*, 155 FERC ¶ 61,033, at P 95 (2016) (*Magnolia LNG*) (finding that, even if LNG exports will cause increased coal use, the Commission “could only speculate on where additional coal supplies would be produced and where it would be used”).

³⁴ 780 F.3d 409, 411 (D.C. Cir. 2015).

³⁵ See cases cited *supra* note 26. See also *Corpus Christi*, 151 FERC ¶ 61,098 at P 33; *Sabine Pass Liquefaction Expansion*, 151 FERC ¶ 61,253 at PP 32-34; *Magnolia LNG*, 155 FERC ¶ 61,033 at P 95.

3. Greenhouse Gas (GHG) Emissions

21. Sierra Club argues that the Commission's environmental review was flawed because it did not account for life-cycle GHG emissions, and did not take a hard look at the environmental effects of these GHG emissions.³⁶ Sierra Club states that the latter could be accomplished by: (1) by estimating the social cost of GHG emissions; and (2) by evaluating the compatibility of these emissions with emission reduction targets.³⁷

22. There is not a sufficient causal link between approval of an LNG export facility and impacts related to the ultimate consumption of the gas.³⁸ Nor is there any standard methodology or policy guidance to determine how a project's incremental contribution to GHG emissions would impact the environment.³⁹

23. Sierra Club cites *Mid States Coalition for Progress v. Surface Transportation Board*⁴⁰ to rebut the Commission's determination that global natural gas demand would exist even without the Liquefaction Project and Pipeline Modifications Project.⁴¹ In *Mid States*, the court found — and the project proponent did not dispute — that the proposed project would increase the use of coal for power generation. The court held that where such downstream effects are reasonably foreseeable, they must be analyzed, even

³⁶ Rehearing Request at 18.

³⁷ *Id.*

³⁸ See December 2015 Order, 153 FERC ¶ 61,300 at P 116; *Sabine Pass Liquefaction Expansion*, 151 FERC ¶ 61,253 at P 36. See also Final EIA at L-6 (observing that GHG emission from end use combustion is demand-driven, not supply-driven, and that therefore “regardless of whether the project is constructed, end users would still have a need for fuel, and would need to either rely on the importation of natural gas from another source or on another fuel”).

³⁹ See Final EIS at L-6 (“There is no current methodology or policy guidance to determine how the project's incremental contribution to greenhouse gases would translate into physical effects on the global environment.”); *Columbia Gas Transmission, LLC*, 149 FERC ¶ 61,255, at P 125 (2014) (same).

⁴⁰ 345 F.3d 520 (8th Cir. 2003) (*Mid States*).

⁴¹ December 2015 Order, 153 FERC ¶ 61,300 at P 114 (“In other words, end users would have a need for fuel without the exported natural gas from this project and would obtain gas from another source or another fuel.”); Final EIS at L-6.

if the extent of those effects is uncertain.⁴² Here, by contrast, the Commission has found that, in the absence of this Project, countries seeking to import natural gas will likely continue to negotiate and find natural gas supplies. Therefore, end-use consumption of natural gas will likely occur regardless of whether the Project is approved.⁴³

24. In addition, the *Mid States* court found that parties had identified computer models “that are widely used in the electric power industry to simulate the dispatch of generating resources to meet customer loads.”⁴⁴ No such widely-accepted models are available here that would enable the Commission to meaningfully identify or evaluate the impacts related to the consumption of the natural gas to be exported via the Project. Unlike the Surface Transportation Board in *Mid States*, the Commission has not “completely ignored” the impacts of increased emissions in end-use markets.⁴⁵ We have explained how such downstream emissions are not sufficiently causally related to the Project to warrant additional analysis under NEPA and, even if there were to be a sufficient causal relationship, there is insufficient information available to allow us to meaningfully analyze those downstream impacts.⁴⁶

B. Cumulative Effects

25. A “cumulative impact,” as defined by CEQ is the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.”⁴⁷ On rehearing, Sierra Club argues the December 2015 Order failed to adequately address cumulative effects of all approved or pending LNG export proposals that would result in increased natural gas production, domestic coal use, and natural gas use in importing countries even if the Commission

⁴² *Mid States*, 345 F.3d at 549.

⁴³ December 2015 Order, 153 FERC ¶ 61,300 at P 114; *Sabine Pass Liquefaction Expansion*, 151 FERC ¶ 61,253 at P 29.

⁴⁴ *Mid States*, 345 F.3d at 550.

⁴⁵ Final EIS at L-6 (acknowledging the project’s incremental contribution to GHG emissions and incremental contribution to climate change); Final EIS, section 4.11.1 (discussing air quality, including GHG emissions); and section 4.13.2.11 (discussing air quality cumulative impacts, including impacts related to climate change).

⁴⁶ *See, e.g., Sabine Pass Liquefaction Expansion*, 151 FERC 61,253 at PP 35-38.

⁴⁷ 40 C.F.R. § 1508.7 (2015).

found those effects to be impossible to predict as an indirect effect.⁴⁸ Sierra Club states a programmatic environmental impact statement would be the most effective way to undertake the cumulative effects analysis.⁴⁹

26. Like indirect effects, cumulative impacts must also be reasonably foreseeable.⁵⁰ NEPA does not require an analysis of those cumulative effects that are remote or highly speculative.⁵¹ Each of the environmental issues raised by Sierra Club – natural gas production, gas-to-coal switching, and increases in downstream natural gas consumption in importing countries – is not reasonably foreseeable.⁵² Accordingly, these effects are not required to be included in the cumulative effects analysis.⁵³

27. Moreover, as previously explained, there is no Commission program or policy to promote additional production or export of, or increased reliance on, natural gas.⁵⁴ Nor is there any need for the Commission to review groups of LNG export proposals together. The Commission’s practice is to consider each LNG export project application on its own merits. The Liquefaction Project and Pipeline Modifications Project proposals are not in response to “broad Federal actions such as the adoption of new agency programs or regulations” that might require preparation of a programmatic EIS.⁵⁵

⁴⁸ Rehearing Request at 18-20.

⁴⁹ *Id.* at 20.

⁵⁰ *Tennessee Gas Pipeline Co., L.L.C.*, 154 FERC ¶ 61,191, at P 60 (2016).

⁵¹ *See City of Shoreacres*, 420 F.3d at 453 (“‘Reasonable foreseeability’ does not include ‘highly speculative harms’ that ‘distort[] the decision making process’ by emphasizing consequences beyond those of ‘greatest concern to the public and of greatest relevance to the agency’s decision.’”) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 223, 356 (1989)).

⁵² December 2015 Order, 153 FERC ¶ 61,300 at PP 114-119, 127-138.

⁵³ *See Sabine Pass Liquefaction Expansion*, 151 FERC 61,253 at P 42.

⁵⁴ *See, e.g., Corpus Christi*, 151 FERC ¶ 61,098 at PP 24-31; *Cameron LNG, LLC*, 147 FERC ¶ 61,230, at PP 70-72 (2014).

⁵⁵ 40 C.F.R. § 1502.4(b) (2015).

The Commission orders:

The Commission hereby denies Sierra Club's rehearing request as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.