ANALYSIS OF INDIRECT AND CUMULATIVE IMPACTS: DO THE *SIERRA CLUB V. FERC* OPINIONS SIGNAL A LIMITATION OF NEPA'S REACH?

VALERIE CHARTIER-HOGANCAMP*

* J.D. Candidate, Florida State University College of Law, 2018; M.B.A., Environmental Management, Florida Atlantic University, 2008; B.S., Environmental Science/ Conservation Biology, University of Miami, 2005. The author would like to thank Captain Michael T. Palmer, U.S. Navy, for the inspiration for this Note, and Professor David L. Markell, Florida State University College of Law, for his guidance during the writing and editing of this Note.

I. INTRODUCTION

Many environmental scholars have called the National Environmental Policy Act (NEPA) "revolutionary" in its framework.[1] In a forty-year review of NEPA, the Environmental Law Institute summarized the benefits realized by NEPA as follows: "NEPA recognizes that when the public and federal experts work together, better decisions are made[,] . . . public participation really matters[, and] . . . the government [has] to explain itself."[2] Notably, the Environmental Law Institute also recognized judicial review as a key factor in NEPA's success.[3] In fact, only three years after Congress enacted NEPA[4], the United States Court of Appeals for the Fourth Circuit affirmed NEPA as "a value judgment by the Congress" that agencies must *consider* environmental impacts in the decision-making process.[5] The court held that even "essential" federal infrastructure projects must comply with NEPA.[6] Over the past four and a half decades, the judiciary has stood as a check in the process to ensure that federal agencies are properly implementing NEPA.[7]

---

1. ENVTL. LAW INST., NEPA SUCCESS STORIES: CELEBRATING 40 YEARS OF TRANSPARENCY AND OPEN GOVERNMENT 3 (2010) [hereinafter ELI, NEPA SUCCESS STORIES] ("[NEPA] . . . brought about . . . a revolutionary change in governmental decisionmaking that is important to this day."); Harvey Black, *Imperfect Protection, NEPA at 35 Years*, 112 ENVTL. HEALTH PERSP. A292, A293 (2004) ("NEPA introduced what was at the time a fairly revolutionary process, whereby the whole government decision-making process was opened up in a way that it was never opened up before."); Marc B. Mihaly, *Citizen Participation in the Making of Environmental Decisions: Evolving Obstacles and Potential Solutions Through Partnership With Experts and Agents*, 27 PACE ENVTL. L. REV. 151, 194 ("Both popular and scholarly literature recognize NEPA and its progeny as revolutionary in many respects.").

2. ELI, NEPA SUCCESS STORIES, *supra* note 1, at 6–7.

3. *Id.* at 7.

4. NEPA was passed by Congress in 1969, and *Arlington Coalition on Transportation v. Volpe* was decided in 1972. National Environmental Policy Act, 42 U.S.C. §§ 4321–4347 (2012); Arlington Coal. on Transp. v. Volpe, 458 F.2d 1323 (4th Cir. 1972).

5. *Arlington Coal. on Transp.*, 458 F.2d at 1326. However clear the affirmation by the court in *Arlington Coalition*, it is important to note the distinction between NEPA, which is a process-driven environmental statute, and other environmental laws, such as the Endangered Species Act (ESA), which are results-driven and require substantive protection of the environment. *See* National Environmental Policy Act, 42 U.S.C. §§ 4331–4335; Endangered Species Act, 16 U.S.C. §§ 1531–1544. The only action-forcing language in NEPA is found at 42 U.S.C. § 4332(C) (requiring agencies to "include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official"), which only requires an agency to consider the proposed environmental impacts of a project and not necessarily avoid or mitigate those impacts. 42 U.S.C. § 4332(C). In contrast, for example, the ESA requires an agency to "insure that any action . . . is not likely to jeopardize the continued existence of any endangered species or threatened species." 16 U.S.C. § 1536. Therefore, as long as the statutory framework of NEPA remains only process-driven and does not require any substantive protection of the environment, it seems as though the environment will not "be afforded the highest of priorities" over other agency missions. Tenn. Valley Auth. v. Hill, 437 U.S. 153, 174 (1978). This distinction and the shortfall of NEPA in not requiring substantive environmental protection are discussed in Section IV, *infra*.

6. *Arlington Coal. on Transp.*, 458 F.2d at 1326.

7. ELI, NEPA SUCCESS STORIES, *supra* note 1, at 7.

Two recent decisions by the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court) appear to be implicitly asserting that NEPA may have reached its functional limitation for consideration of certain environmental impacts for federal projects.[8] The pair of *Sierra Club v. Federal Energy Regulatory Commission* (FERC) cases decided on the same day in June 2016, seem to be a signal from the court that it is drawing a figurative line in the sand in terms of the environmental impacts (specifically in regards to indirect and cumulative effects) that must be considered by federal agencies in order to comply with the process requirements of NEPA.[9] The *Sierra Club v. FERC* opinions potentially indicate a limitation on the environmental effects required to be considered by federal agencies under NEPA in three ways. First, the D.C. Circuit Court held that FERC did not have to analyze the indirect effect of potential greenhouse gas (GHG) emissions from increased domestic energy production (i.e., either more liquefied natural gas (LNG) or a substitute energy source such as coal) resulting from the increased LNG exports. Second, the court limited the scope of cumulative impacts analyses (most notably for GHG emissions) to those actions "within the statutory jurisdiction of the permitting agency and . . . proximately caused by the agency action."[10] Third, the court almost unconditionally deferred to FERC to define the area of assessment, which was geographically limited, for the analysis of its project's cumulative effects, placing a limitation on the scope of environmental impacts that are required to be considered by the federal agency for each project.

This Note is organized as follows. Part II facilitates an understanding of the complex statutory framework underlying the *Sierra Club v. FERC* cases by providing an overview of the Natural Gas Act of 1938 and NEPA, and the regulations and guidance documents promulgated by multiple agencies under the authority of these two acts. Part III reviews the project at issue in each case, including the agency actions which were predecessors to the two cases in the D.C. Circuit Court. Part IV examines the three potentially significant holdings by the D.C. Circuit Court, discussed *supra*, and the potential implications of such in terms of the impact on future indirect and cumulative impacts analyses required to be conducted

8. It is yet to be seen, but this limitation may not be unlike the stance that the judiciary has taken throughout history as the use of powers have expanded over time, such as the modern revival of limitations on the Commerce Clause that began in 1995. *See generally* United States v. Lopez, 514 U.S. 549 (1995).

9. Sierra Club v. Fed. Energy Reg. Comm'n, 827 F.3d 36 (D.C. Cir. 2016); Sierra Club v. Fed. Energy Reg. Comm'n, 827 F.3d 59 (D.C. Cir. 2016).

10. David T. Buente, Jr. et al., *D.C. Circuit Upholds FERC's Limited Impacts Analysis in NEPA Documents Addressing Greenhouse Gases*, SIDLEY AUSTIN LLP, NEWS & INSIGHTS (July 6, 2016), http://www.sidley.com/news/2016-07-06-environmental-update.

by federal agencies under NEPA. Finally, Part V looks at unanswered questions remaining in light of pending litigation against the U.S. Department of Energy (DOE) for the same projects at issue in these decisions.

II. STATUTORY FRAMEWORK

A. Natural Gas Act of 1938

The Natural Gas Act of 1938 was enacted by Congress "to create a comprehensive and effective regulatory scheme" over the natural gas industry in order to protect consumers from price exploitation by natural gas companies.[11] However, as the D.C. Circuit Court notes, the Act also created "a tangled web of regulatory processes."[12]

The Natural Gas Act originally gave the Federal Power Commission "exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal."[13] In 1977, the DOE Organization Act abolished the Federal Power Commission; created DOE, and FERC as an independent agency component of DOE; and transferred the Section 3 powers of the Natural Gas Act to the Secretary of the newly created DOE.[14] DOE has delegated approval authority for construction and operation of export facilities back to FERC but retained authority to approve imports or exports of natural gas.[15] The Natural Gas Act also includes a clause specifying that natural gas exports from the U.S. must be in the public interest.[16] This public interest determination it to be made by DOE and is dependent upon several factors, including the country where the natural gas will be exported and whether the U.S. has a free trade agreement with that country that includes provisions for trade of natural gas.[17] Under this scheme, a natural gas exporter has to obtain authorization from FERC to construct and operate natural gas facilities and from DOE to actually export the natural gas.[18]

---

11. Panhandle E. Pipe Line Co. v. Pub. Serv. Comm'n, 332 U.S. 507, 520 (1947).
12. *Sierra Club*, 827 F.3d at 40.
13. 15 U.S.C. § 717b(e)(1) (2012).
14. 42 U.S.C. §§ 7131, 7134, 7151 (2012).
15. U.S. DEP'T OF ENERGY, DELEGATION ORDER NO. 00-004.00A, §§ 1.21A, 3.3 (2006).
16. 15 U.S.C. § 717b(a) (2012).
17. *Id.* § 717b(c).
18. This delegation of authority to FERC has gone through several iterations with the issuance and rescission of multiple delegation orders by DOE since 1977. *See Delegations*, U.S. DEP'T OF ENERGY, DIRECTIVES PROGRAM, OFFICE OF MGMT., https://www.directives.doe.gov/delegations (last visited Apr. 14, 2017). Ironically, DOE appears to have originally delegated responsibilities under the Natural Gas Act in this manner to resolve issues of regulatory consistency created by the DOE Organization Act. ("The division of regulatory responsibilities for imported [and exported] natural gas brought about by the

In addition to the regulatory approval process created by the Natural Gas Act, a NEPA review is also required for any "major Federal action[]" that will "significantly affect[] the quality of the human environment,"[19] as discussed in Section II.B, *infra*, including any projects conducted under the authority of DOE or FERC that are considered major federal actions. However, the Natural Gas Act dictates which agencies are responsible for complying with NEPA for natural gas projects meeting this threshold. The Act designated the Federal Power Commission as the lead agency for all federal authorizations, including compliance with NEPA.[20] As discussed above, the DOE Organization Act transferred this authority to DOE.[21] For LNG projects, FERC is designated as the lead agency, while DOE acts as a "cooperating agency."[22] In complying with NEPA, "[a] cooperating agency may adopt without recirculating" the environmental document prepared by the lead agency.[23]

B. National Environmental Policy Act

Congress passed NEPA in 1969 with the lofty purpose of striking a harmonious balance between humans and the natural environment.[24] NEPA directs that all federal agencies must use a "systematic" approach to ensure that environmental impacts are properly calculated into the decision-making process for any "major Federal actions [that have the potential to] significantly affect[] the quality of the human environment."[25] The Act requires that the responsible federal agency for a project prepare "a detailed statement" of proposed environmental effects,[26] including a description of project alternatives, a discussion of unavoidable adverse environment impacts, a comparison of short-term uses of resources with resulting long-term productivity, and an accounting of any "irreversible and irretrievable commitment[] of resources."[27] The

---

[DOE] Organization Act, and the assignment of these responsibilities to [agencies under the DOE, including] the FERC, presented inherent problems of coordination and regulatory consistency that did not exist when this responsibility was all exercised by the [Federal Power Commission]."). Natural Gas Imports: Policy Guidelines and Delegation, 49 Fed. Reg. 6684, 6689 (Feb. 22, 1984).

19. 42 U.S.C. § 4332(C) (2012).

20. *See Id.* § 7172.

21. *Id.* § 7151 (2012).

22. Cooperating Agencies, 40 C.F.R. § 1501.6. CEQ's implementing regulations for NEPA define a cooperating agency as "any other Federal agency which has jurisdiction by law, [or] . . . has special expertise with respect to any environmental issue." *Id.*

23. Adoption, 40 C.F.R. § 1506.3.

24. 42 U.S.C. § 4321.

25. *Id.* §§ 4332(A), (C).

26. For any federal action with the potential to meet the previously defined threshold of "significantly affecting the quality of the human environment." *Id.* § 4332(C).

27. *Id.* §§ 4332(C)(i)–(v).

broad language of NEPA left open to interpretation the methodology which would satisfy the statutory requirements. NEPA also created the Council on Environmental Quality (CEQ), an Executive agency, to fill in the gaps left by Congress.[28]

1. Council on Environmental Quality Regulations and Guidance

As directed by Executive Order 11,514,[29] CEQ promulgated detailed regulations to guide agencies in complying with NEPA, commonly referred to as the "implementing regulations."[30] The implementing regulations define the thresholds for the level of analysis and documentation required by an agency under NEPA (i.e., which projects require an Environmental Impact Statement (EIS) versus an Environmental Assessment (EA) and which projects could be categorically excluded from documentation requirements).[31] The CEQ regulations direct that all NEPA environmental documents must include an analysis of direct, indirect, and cumulative effects and their significance.[32] CEQ defines indirect effects as those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable."[33] Examples of such indirect effects include actions which could induce population growth, changes in land use, and consequentially related effects on the natural environment.[34] CEQ defines cumulative impacts as the aggregate of incremental environmental impacts

28. *Id.* § 4371(c)(2).

29. Exec. Order No. 11,514, § (3)(h) (1970), *as amended by* Exec. Order No. 11,541, 35 Fed. Reg. 10,737 (1970) and Exec. Order 11,991, 42 Fed. Reg. 26,967 (1977).

30. Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 767 (2004).

31. When to Prepare an Environmental Assessment 40 C.F.R. § 1501.3; Whether to Prepare an Environmental Impact Statement, 40 C.F.R. § 1501.4. A proposed agency action may be "categorically excluded" from the NEPA requirements of 42 U.S.C. § 4332(C) when the proposed action is not anticipated to "have a significant effect" on the environment. Categorical Exclusion, 40 C.F.R. § 1508.4; *see also National Environmental Policy Act Review Process*, U.S. ENVTL. PROT. AGENCY, https://www.epa.gov/nepa/national-environmental-policy-act-review-process (last visited Apr. 14, 2017). If an agency determines that a proposed action does not qualify for a categorical exclusion, then the agency may prepare an EA, which is designed to aid the agency in determining "whether or not the proposed action "has the potential to cause significant environmental effects," and thus requires preparation of an EIS. *Id.*; *see also* Environmental Assessment, 40 C.F.R. § 1508.9. An EIS is required when an agency determines during the scoping for a project that the action has the potential to significantly affect the quality of the human environment, or when an agency has prepared an EA and then determined that a project has the potential to significantly affect the quality of the human environment. *National Environmental Policy Act Review Process*, U.S. ENVTL. PROT. AGENCY, https://www.epa.gov/nepa/national-environmental-policy-act-review-process (last visited Apr. 14, 2017). As EPA appropriately notes, "[t]he regulatory requirements for an EIS are more detailed and rigorous than the requirements for an EA." *Id.*

32. Environmental Consequences, 40 C.F.R. § 1502.16(a)–(b).

33. Effects, 40 C.F.R. § 1508.8(b).

34. *Id.*

resulting from the project in question and "past, present, and reasonably foreseeable future actions."[35] For the analysis of cumulative impacts, actions must be considered from all federal and non-federal entities, "regardless of what agency . . . or person undertakes such other actions."[36] CEQ regulations warn that minor actions taken over time collectively may result in a significant impact.[37]

On August 1, 2016, CEQ released a memorandum detailing its "Final Guidance for Federal Departments and Agencies on Consideration of [GHG] Emissions and the Effects of Climate Change in [NEPA] Reviews."[38] By defining climate change as "a fundamental environmental issue, [whose] effects fall squarely within NEPA's purview," it would seem that CEQ is stating that accounting for GHG emissions in all NEPA documents is essential to complying with NEPA (and in keeping with NEPA's purpose of protecting the environment).[39] However, the guidance only *recommends* that agencies quantify an action's direct and indirect impact from GHG emissions.[40] Further, the guidance employs non-mandatory language (e.g., "recommend," "may," "should")[41] and specifically states that it "is not legally enforceable."[42] Because the final guidance is new at the time of this Note, it remains to be seen if and how agencies will translate this recommendation into practice in NEPA documentation and, perhaps more importantly, how courts will interpret the guidance and whether they will accord it any force of law.

2. Federal Energy Regulatory Commission Regulations and Guidance

Because FERC was created as an independent agency by the DOE Organization Act, the question arises as to whether CEQ's NEPA regulations apply to FERC. CEQ answered this question in the affirmative, stating that the statutory requirements of NEPA apply to all federal agencies, and CEQ's regulations provide the implementing framework for compliance with the statute.[43] In

35. *Id.* at § 1508.7.
36. *Id.*
37. *Id.*
38. COUNCIL ON ENVTL. QUALITY, MEMORANDUM FOR HEADS OF FEDERAL DEPARTMENTS AND AGENCIES, FINAL GUIDANCE FOR FEDERAL DEPARTMENTS AND AGENCIES ON CONSIDERATION OF GREENHOUSE GAS EMISSIONS AND THE EFFECTS OF CLIMATE CHANGE IN NATIONAL ENVIRONMENTAL POLICY ACT REVIEWS 1 (2016) [hereinafter CEQ MEMO].
39. *Id.* at 2.
40. *Id.*
41. *Id.* at 2, n.3.
42. *Id.*
43. Council on Envtl. Quality's 40 Questions, 31a, 46 Fed. Reg. 18,026 (Mar. 16, 1981).

short, CEQ's NEPA implementing regulations do apply to independent agencies such as FERC.[44] In 1987, FERC provided its position on the question of whether it was bound as an independent agency to the CEQ's implementing regulations by issuing its own implementing regulations for NEPA and "voluntarily" agreeing to comply with CEQ's implementing regulations.[45] The final rule issued by FERC purports to comply with and supplement CEQ regulations.[46] However, in the Federal Register notice for the final rule, FERC notes that it does not need to address the question of whether CEQ's regulations are binding on FERC because its compliance is purely voluntary.[47] FERC then goes on to clearly state that CEQ's implementing regulations are not binding on it "to the extent they are inconsistent with [FERC's] statutory obligations."[48]

FERC has also promulgated its own set of implementing regulations that guide specifically how FERC should implement NEPA.[49] These regulations specifically define what actions conducted under FERC's authority can be categorically excluded from NEPA as well as those actions that require an EA or EIS.[50] The regulations also specify the environmental reporting that the agency requires for projects that require submittal of an application under the Natural Gas Act.[51] The regulations explain the requirements for documentation with open-ended language, stating that the amount of detail for the environmental documents "must be commensurate with the complexity of the proposal and its potential for environmental impact."[52] The general requirements for the environmental documentation include an accounting of the indirect effects and cumulative effects from "existing or reasonably foreseeable projects."[53] FERC has also published a companion *Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act*.[54] The purpose of the manual is to assist entities filing applications with FERC in complying with the NEPA process and providing appropriate environmental documentation.[55]

---

44. *Id.*

45. Regulations Implementing the National Environmental Policy Act, 52 Fed. Reg. 47,897 (Dec. 17, 1987) (to be codified at 18 C.F.R. pts. 2, 157, 380) [hereinafter FERC Order 486].

46. *Id.*

47. *Id.*

48. *Id.*

49. Regulations Implementing the National Environmental Policy Act, 18 C.F.R. § 380 (2015).

50. *Id.* at §§ 380.4–.6.

51. *Id.* at § 380.12.

52. *Id.* at § 380.12(a)(2).

53. *Id.* at § 380.12(b)(3).

54. FED. ENERGY REG. COMM'N, GUIDANCE MANUAL FOR ENVIRONMENTAL REPORT PREPARATION FOR APPLICATIONS FILED UNDER THE NATURAL GAS ACT (2015).

55. *Id.*

III. LITIGATION BACKGROUND

A. Freeport Project

The Freeport project consists of two separate projects—one located on Quintana Island near Freeport, Texas (referred to as the liquefaction project) and a second project located 2.5 miles north of Quintana Island (referred to as the phase II modification project)[56]; because the projects are related, both were addressed in one NEPA document[57]. The liquefaction project consists of a new liquefaction plant, pretreatment plant facilities, and a pipeline/utility line system occupying a permanent footprint of 269 acres.[58] The phase II modification project consists of modification to previously authorized but not yet constructed LNG facilities totaling approximately 15 acres[59]; these facilities would support import and export capabilities. [60]

1. Federal Energy Regulatory Commission Litigation History

FERC prepared an EIS for the Freeport project, which resulted in a Record of Decision (ROD) published in November 2014.[61] In the Final EIS, FERC concluded that the projects would result in both short-term and long-term adverse environmental impacts but (with mitigation) would be in compliance with NEPA, the Endangered Species Act, the National Historic Preservation Act, the Clean Air Act, and the Coastal Zone Management Act.[62] On these findings, FERC issued an order granting authorization for the Freeport project.[63] Sierra Club and Galveston Baykeeper filed a request for rehearing of FERC's order, which was denied by FERC.[64]

---

56. FED. ENERGY REG. COMM'N, FREEPORT LNG LIQUEFACTION PROJECT PHASE II MODIFICATION PROJECT FINAL ENVIRONMENTAL IMPACT STATEMENT 2-1, 2-7 (2014) [hereinafter FREEPORT EIS].

57. *Id.* at 1-1 ("This final EIS analyzes the effects of these two interconnected projects.").

58. *Id.* at 2-1, 2-3, 2-5, 2-9.

59. *Id.* at 2-7, 2-9.

60. *Id.* at 2-7.

61. Record of Decision and Floodplain Statement of Findings for the Freeport LNG Expansion, L.P. Export Application, 79 Fed. Reg. 69,101–104 (Nov. 20, 2014) (FERC, as "the federal agency responsible for evaluating applications [for] construct[ion] and operat[ion of] interstate natural gas facilities," prepared the EIS as the lead agency for the project; DOE, EPA, the U.S. Department of Transportation, the U.S. Army Corps of Engineers, and the National Oceanic and Atmospheric Administration joined as cooperating agencies for the EIS).

62. FREEPORT EIS, *supra* note 56, at ES-10.

63. Freeport LNG Dev., L.P., 148 F.E.R.C. P61,076, 61476, 2014 FERC LEXIS 1191, *2, 2014 FERC LEXIS 1191 (F.E.R.C. 2014).

64. Freeport LNG Dev., L.P., 149 F.E.R.C. P61,119, 61769–70, 2014 FERC LEXIS 1817, *1, 2014 FERC LEXIS 1817 (F.E.R.C. 2014).

In response to FERC's denial, Sierra Club brought suit in D.C. Circuit Court, challenging the order by FERC granting authorization for the Freeport project under Section 3 of the Natural Gas Act.[65] Sierra Club argued that FERC failed to comply with NEPA in two respects—first, by failing to consider the indirect impacts resulting from an increase in domestic LNG production induced by the Freeport project, and second, by failing to analyze the cumulative impacts of the Freeport project along with other proposed LNG export projects nationwide.[66] The D.C. Circuit Court rejected Sierra Club's challenges to FERC's EIS, and specifically noted that FERC's NEPA review of the project was considered "separate and apart" from any environmental impacts analysis which might be required for DOE's "independent decision to authorize exports" at the Freeport terminal.[67]

2. U.S. Department of Energy Litigation History

DOE independently reviewed and adopted FERC's Final EIS for the Freeport project and issued its own ROD.[68] DOE then granted final authorization for LNG exports associated with the Freeport project.[69] Sierra Club filed a request for rehearing of the order with DOE, which was denied because DOE found that Sierra Club had

65. Brief for Petitioners, Sierra Club v. Fed. Energy Reg. Comm'n, 2015 WL 1136642 (C.A.D.C.), 1.

66. Sierra Club v. Fed. Energy Reg. Comm'n, 827 F.3d 36, 42 (D.C. Cir. 2016). For the cumulative impacts analysis, Sierra Club argued that FERC must "analyze the cumulative environmental effects of [the Freeport project] with 'the many proposed export projects' across the country, including, 'at a minimum,' those already authorized and 'all other export projects to have received conditional authorization from' the [DOE]." *Id.* at 42.

67. *Sierra Club*, 827 F.3d at 51.

68. Environmental Impact Statements; Notice of Availability, 79 Fed. Reg. 61,303, 61,304 (Oct. 10, 2014) (providing notice that DOE adopted FERC's Final EIS for the Freeport project).

69. Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas, to Non-Free Trade Agreement Nations, DOE/FE Order No. 3357-B. DOE had previously issued four conditional orders authorizing LNG exports from the Freeport terminal. *Freeport LNG Expansion L.P. and FLNG Liquefaction, LLC*, DOE/FE Order No. 3357, FE Docket No. 11-161- LNG, Order Conditionally Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas to Non-Free Trade Agreement Nations (Nov. 15, 2013); Freeport LNG Expansion L.P. et al., DOE/FE Order No. 3066, FE Docket No. 12-06-LNG, Order Granting Long- Term Authorization to Export Liquefied Natural Gas from Freeport LNG Terminal to Free Trade Nations (Feb. 10, 2012). On Feb. 7, 2014, DOE/FE issued Order No. 3066-A, which amended Order No. 3066 to add FLNG Liquefaction 2, LLC and FLNG Liquefaction 3, LLC as applicants and authorization holders; Freeport LNG Expansion L.P. et al., DOE/FE Order No. 3282, FE Docket No. 10-161-LNG, Order Conditionally Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas to Non-Free Trade Agreement Nations (May 17, 2013).

not shown that the order was inconsistent with the public interest.[70] In response, Sierra Club brought suit against DOE in D.C. Circuit Court, arguing that DOE violated NEPA by failing to fully analyze the indirect and cumulative effects of proposed LNG export actions under its jurisdiction and acted arbitrarily or capriciously by concluding that the Freeport project was "consistent with the public interest."[71] The case against DOE is pending at the time of this Note.

B. Sabine Pass Project

The original Sabine Pass project consisted of construction and operation of liquefaction and export facilities covering approximately 191 acres at the existing Sabine Pass LNG terminal in Cameron Parish, Louisiana.[72] After both FERC and DOE authorized the original project, an application was filed seeking to amend the authorization to allow for additional export capacity.[73]

1. Federal Energy Regulatory Commission Litigation History

FERC prepared an EA for the original Sabine Pass Project, which was published in December 2011.[74] The EA concluded that the Sabine Pass project does not involve any significant environmental impacts requiring an EIS.[75] FERC then issued an order granting authorization for the project in April 2012.[76] In January 2014, FERC published an EA accounting for the impacts associated with the requested increase in production capacity.[77] FERC then issued an order granting authorization for the revised project in

70. Opinion and Order Denying Request for Rehearing of Orders Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas, to Non-Free Trade Agreement Nations, DOE/FE Order No. 3357-C, 36. (Dec. 4, 2015).

71. Sierra Club v. U.S. Dep't of Energy, No. 15-1489 (filed July 5, 2016), petition for review at 1-2, 2016 WL 3612095 (C.A.D.C.).

72. FED. ENERGY REG. COMM'N, ENVIRONMENTAL ASSESSMENT FOR THE SABINE PASS LIQUEFACTION PROJECT 1-1 (2011) [hereinafter SABINE PASS EA].

73. *Id.*

74. *Id.* FERC was the lead agency and prepared the EA; the U.S. Army Corps of Engineers and the U.S. Department of Transportation participated as cooperating agencies in the preparation of the EA. *Id.* at 1-2.

75. *Id.* at 4-1.

76. Order Granting Section 3 Authorization, Sabine Pass Liquefaction, LLC and Sabine Pass LNG, L.P., 139 FERC ¶ 61,039 (Apr. 16, 2012).

77. Environmental Assessment for the Sabine Pass Liquefaction Project, Sabine Pass Liquefaction, LLC, and Sabine Pass LNG, L.P., FERC Docket No. CP14-12-000 (Jan. 2014).

February 2014.[78] Sierra Club filed a request for rehearing with FERC, which was denied in September 2014.[79]

In response to FERC's denial, Sierra Club brought suit in D.C. Circuit Court, challenging the order by FERC granting authorization for the amended Sabine Pass project under Section 3 of the Natural Gas Act.[80] Sierra Club argued two main points—increasing the authorized volume for LNG exports will (1) induce growth in domestic natural gas production and result in environmental impacts associated with the increased production activities, and (2) induce growth in coal extraction and burning and result in increased air pollution resulting from the coal burning.[81] Sierra Club contended that the environmental impacts resulting from the induced growth in both the natural gas and coal industries constituted indirect effects, which should be analyzed by FERC for the Sabine Pass project along with similar cumulative effects from other projects.[82] On the merits, the D.C. Circuit Court dismissed Sierra Club's petition in part and denied it in part.[83]

2. U.S. Department of Energy Litigation History

DOE was a cooperating agency on the Sabine Pass EA.[84] The agency conducted an independent review of the EA and issued its own Finding of No Significant Impact (FONSI) in August 2012,[85] and granted an order authorizing LNG export from the terminal.[86]

---

78. Order Amending Section 3 Authorization, Sabine Pass Liquefaction, LLC and Sabine Pass LNG, L.P., 146 FERC ¶ 61,117 (Feb. 20, 2014).

79. Order Denying Rehearing, Sabine Pass Liquefaction, LLC and Sabine Pass LNG, L.P., 148 FERC ¶ 61,200 (Sept. 18, 2014) R. 15, JA 277.

80. Opening Brief of Petitioners at 1, Sierra Club v. Fed. Energy Reg. Comm'n, 2015 WL 2457447 (C.A.D.C.).

81. Sierra Club v. Fed. Energy Reg. Comm'n, 827 F.3d 59, 64 (D.C. Cir. 2016). Sierra Club premised its argument for induced growth in coal extraction and burning on three factors: "(1) increasing the volume of natural gas exports would more fully integrate the domestic natural gas market with the global market, where the price of natural gas is generally higher; (2) market integration would cause domestic natural gas prices to rise as the lower domestic price and the higher global price reach an equilibrium; (3) this hike in domestic gas prices would prompt U.S. energy consumers—in particular electric utilities—to switch from using natural gas to using coal, which is cheaper than natural gas but generates more air pollution." *Id.* at 64.

82. *Id.* at 64.

83. *Id.* at 70.

84. SABINE PASS EA, *supra* note 72, at 1-2.

85. U.S. DEP'T OF ENERGY, FINDING OF NO SIGNIFICANT IMPACT FOR SABINE PASS LIQUEFACTION, LLC REGARDING ORDER GRANTING LONG-TERM AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS FROM SABINE PASS LNG TERMINAL TO NON-FREE TRADE NATIONS (2012) [hereinafter SABINE PASS FONSI].

86. Final Opinion and Order Granting Long-Term Authority to Export Liquefied Natural Gas from Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations, DOE/FE Order No. 2961-A, FE Docket No. 10-111-LNG (Aug. 7, 2012).

DOE also prepared a separate *Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States* in August 2014.[87] The Addendum was not specifically directed at the Sabine Pass project but was prepared in response to numerous comments for multiple projects received by the agency that expressed concern about induced impacts from increased production and export of natural gas.[88] In the Addendum, DOE acknowledged the "fundamental uncertainties" paramount in the prediction of induced impacts resulting from the granting of any specific authorization for export of natural gas.[89] DOE then assumed, without conceding, that the approval of export applications would result in a net increase in export volumes and associated induced impacts.[90] Finally, DOE reminded the reader (and the courts) that it prepared the Addendum only to provide the public with a more thorough understanding of potential induced environmental impacts and did so in excess of the statutory requirements of NEPA because the induced impacts discussed are not "reasonably foreseeable" within the meaning of the CEQ definition.[91]

DOE then commenced an over fifty-page hypothetical discussion of potential environmental impacts resulting from the induced growth of domestic energy production.[92] Regarding water resources, DOE stated that impacts cannot be predicted on a regional scale and concludes that impacts could be significant given factors such as "improper techniques, irresponsible management, inadequately trained staff, or site-specific events outside of an operator's control," but would be minor with proper regulatory oversite, and administrative and engineering controls.[93] The Addendum also considered the potential for induced seismic events related to natural gas development projects. [94] Quoting a recent study from the National Research Council, DOE seemed to dismiss any concern about induced seismic activity because none of the recent induced seismic events resulting from natural gas projects has resulted in "loss of life or significant structural damage."[95] In regards to air quality and GHG emissions, the potential environmental effects are more

87. U.S. DEP'T OF ENERGY, ADDENDUM TO ENVIRONMENTAL REVIEW DOCUMENTS CONCERNING EXPORTS OF NATURAL GAS FROM THE UNITED STATES (2014) [hereinafter DOE ADDENDUM].

88. *Id.* at 3.

89. *Id.* at 1.

90. *Id.*

91. *Id.* at 2. To support this assertion, DOE specifically refers to the conclusion stating such in the Sabine Pass EA. *Id.*

92. *Id. See id.* at 10–68 for a discussion of impacts.

93. *Id.* at 19.

94. *Id.* at 55.

95. *Id.* (quoting NAT'L RES. COUNCIL, INDUCED SEISMICITY POTENTIAL IN ENERGY TECHNOLOGIES 26 (2013)).

significant. Again, DOE began its discussion by noting the difficulty of analysis because of the intermittent and dynamic nature of air emissions and the complicated process of translating GHG emissions into discrete measurements in the science of climate change.[96] DOE concluded that air emissions from LNG projects combined with present and future emissions from other sources may result in additional areas of non-attainment.[97] And perhaps more significantly, DOE concluded that cumulative air emissions may confound state efforts to bring existing non-attainment areas into attainment.[98] Finally, DOE concluded that these GHG emissions may contribute to climate change but that the ultimate result will depend upon the sources of production for replacement energy needs, and "there may be a net positive impact in terms of climate change."[99]

During the summer of 2014, DOE also published a report for another study that it conducted in reference to LNG exports and GHG emissions—*Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States*.[100] The underlying life cycle analysis was published as a companion document—*Life Cycle Analysis of Natural Gas Extraction and Power Generation*.[101] The study was aimed at determining how LNG exports from the U.S. compare with regional LNG or regional coal as electric power generation sources in Europe and Asia in terms of life cycle GHG emissions.[102] The study concluded[103] that, from a life cycle perspective, LNG exports from the U.S. used for electric power generation in Europe and Asia do not increase GHG emissions compared with regional power generation sources (i.e., regionally-sourced LNG or coal).[104]

In June 2015, DOE issued its amended opinion and order for the export of additional LNG associated with the Sabine Pass project.[105] In its order, DOE independently reviewed and approved FERC's EA for the increase in capacity associated with the project,

---

96. *Id.* at 32, 44.

97. *Id.* at 32.

98. *Id.*

99. *Id.* at 44.

100. U.S. DEP'T OF ENERGY, NAT'L ENERGY TECH. LAB., LIFE CYCLE GREENHOUSE GAS PERSPECTIVE ON EXPORTING LIQUEFIED NATURAL GAS FROM THE UNITED STATES (2014) [hereinafter LIFE CYCLE PERSPECTIVE].

101. U.S. DEP'T OF ENERGY, NAT'L ENERGY TECH. LAB., ANALYSIS OF NATURAL GAS EXTRACTION AND POWER GENERATION (2014) [hereinafter LIFE CYCLE ANALYSIS].

102. LIFE CYCLE PERSPECTIVE, *supra* note 100, at 1.

103. *Id.* The study made this conclusion while also acknowledging the "uncertainty in the underlying model data." *Id.* at 18.

104. *Id.*

105. Final Opinion & Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Sabine Pass LNG Terminal Located in Cameron Parish, Louisiana, to Non-Free Trade Agreement Nations, DOE/FE Order No. 3669, FE Docket Nos. 13-30-LNG, 13-42-LNG, 13-121-LNG (June 26, 2015).

including comments received on the DOE Addendum, and concluded that the requested export application was not inconsistent with the public interest and therefore granted the amended export application.[106] DOE also issued a FONSI for the additional export volume.[107] In July 2015, Sierra Club filed a timely request for rehearing of DOE's order[108]; DOE granted Sierra Club's request.[109] DOE considered Sierra Club's arguments and issued an order denying its request for rehearing.[110] Shortly thereafter, Sierra Club filed a Petition for Review of DOE's export authorization order for Sabine Pass with the D.C. Circuit Court.[111] The case against DOE for the Sabine Pass project is pending at the time of this Note.

IV. SIGNIFICANCE OF THE *SIERRA CLUB V. FERC* DECISIONS

A. Agency Deference

In the *Freeport* opinion, the court makes clear that its decision was not based upon any principle of deference but from the court's own understanding of binding precedent.[112] Specifically, the court does not have to defer to FERC's interpretation of NEPA because the statute is not entrusted to any particular federal agency but

106. *Id.*

107. SABINE PASS FONSI, *supra* note 85.

108. Opening Brief of Petitioner at 1, Sierra Club v. U.S. Dep't of Energy, 2016 WL 7012288 (C.A.D.C.).

109. Order Granting Request for Rehearing and Motion for Leave to Answer for the Purpose of Further Consideration, FE Docket Nos. 13-30-LNG, 13-42-LNG, 13-121-LNG (Aug. 24, 2015).

110. Opinion and Order Denying Request for Rehearing of Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Sabine Pass LNG Terminal Located in Cameron and Calcasieu Parishes, Louisiana, to Non-Free Trade Agreement Nations. DOE/FE Order No. 3669-A. (May 26, 2016).

111. Petition for Review, Sierra Club v. U.S. Dep't of Energy 2016 WL 3612095 (C.A.D.C.) (July 5, 2016) (on Petition for Review of Orders of the Dep't of Energy 3357-B (Nov. 14, 2014) and 3357-C (Dec. 4, 2015)).

112. Sierra Club v. Fed. Energy Reg. Comm'n, 827 F.3d 36, 49 (D.C. Cir. 2016) ("Our decision here follows not from *de novo* factual findings or independent policy judgments, but from our interpretation of NEPA and binding Supreme Court precedent—neither of which trenches upon a 'determination specially entrusted to [FERC's] expertise.'").

is directed at all federal agencies.[113] Therefore, *Chevron* deference does not apply to these cases.[114]

B. Indirect and Cumulative Effects

1. Indirect and Cumulative Greenhouse Gas Emissions

Shortly after the release of the two *Sierra Club v. FERC* opinions by the D.C. Circuit, one analyst noted that these "decisions may make it more difficult for CEQ to demand that future EISs and EAs prepared for proposed actions impacting climate change and GHG emissions should include upstream and downstream impacts as part of the discussion of indirect and cumulative impacts."[115] Moreover, the language in these decisions appears directly contrary to the goals of the final climate change guidance issued by CEQ just over a month after the D.C. Circuit Court issued these opinions.

In the *Freeport* decision, the court rejected Sierra Club's attempted application of *Mid States Coalition for Progress v. Surface Transportation Board* in its argument that FERC had failed to

---

113. *Id.* (citing Grand Canyon Trust v. Fed. Aviation Admin., 290 F.3d 339, 342 (D.C. Cir. 2002)). This precedent of courts declining to give deference to an agency interpretation of a statute of general applicability is not new. *See e.g.,* Dubois v. U.S. Dep't of Agric., 102 F.3d 1273, 1285 n.15 (1st Cir. 1996) (noting that *Chevron* does not apply because the court is "not reviewing an agency's interpretation of the statute that it was directed to enforce."); Alaska Ctr. for the Env't v. West, 31 F. Supp. 2d 714, 721 (D. Alaska 1998) ("With respect to the challenges under [the Endangered Species Act (ESA)] and NEPA, *Chevron* deference is inapplicable, because administration of ESA and NEPA has not been entrusted to the [Army] Corps [of Engineers]."). However, the Supreme Court as well as lower courts have also explicitly recognized that NEPA is entrusted to CEQ, and as such, is entitled to appropriate deference (though some of these cases were decided prior to the 1984 landmark *Chevron* decision). Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 372 (1989) (stating that the CEQ's implementing regulations for NEPA "are entitled to substantial deference."); Andrus v. Sierra Club, 442 U.S. 347, 358 (1979) ("CEQ's interpretation of NEPA is entitled to substantial deference."); Warm Springs Dam Task Force v. Gribble, 417 U.S. 1301, 1309–10 (1974) (stating that "determination [by CEQ regarding an EIS] is entitled to great weight."); Sierra Club v. U.S. Dep't of Agric., 777 F. Supp. 2d 44, 68 (D.D.C. 2011) ("CEQ guidelines are entitled to substantial deference in interpreting the meaning of NEPA provisions, even when CEQ regulations are in conflict with an interpretation of NEPA adopted by one of the Federal agencies."); Crosby v. Young, 512 F. Supp. 1363, 1386 (E.D. Mich. 1981) ("CEQ has been delegated the responsibility to implement the procedural requirements of NEPA. Its interpretation of NEPA is entitled to substantial deference.").

114. *Id.* ("We are not obligated to defer to an agency's interpretation of Supreme Court precedent under *Chevron* or any other principle.") (citing New York New York, LLC v. Nat'l Labor Relations Bd., 313 F.3d 585, 590 (D.C. Cir. 2002)). It is also important to note the currency of the *Chevron* deference debate as Congress is presently (as of the writing of this Note) considering House Resolution 5, the "Regulatory Accountability Act of 2017." H.R. Res. 5, 115th Cong. (2017). Title II ("Separation of Powers Restoration Act") of the Regulatory Accountability Act would overturn *Chevron* by "modif[ying] the scope of judicial review of agency actions to authorize courts reviewing agency actions to decide de novo (without giving deference to the agency's interpretation) all relevant questions of law." CONG. RES. SERVICE, H.R. 76 – 115th Congress (2017–2018), https://www.congress.gov/bill/115th-congress/house-bill/76 (last visited Mar. 24, 2017) ("Summary" section).

115. Buente Jr. et al., *supra* note 10.

include an indirect effects analysis of potential air quality impacts (i.e., GHG emissions) from increased domestic energy production resulting from the increased LNG export capacity proposed as part of both projects. Instead, the court invoked the "reasonably close causal relationship" doctrine established by the Supreme Court in *Department of Transportation v. Public Citizen*.[116] While this may seem like a typical case of *stare decisis*, it is yet notable for the way the court expressly rejected Sierra Club's attempted application of *Mid States*.

In *Mid States*, petitioners successfully argued that "increased availability of coal will 'drive' the construction of additional power plants," an indirect effect that is required to be analyzed under NEPA.[117] The Eighth Circuit invoked the familiar "hard look" requirement for NEPA compliance.[118] The court held that "it is reasonably foreseeable—indeed, it is almost certainly true—that the proposed project will increase the long-term demand for coal and any adverse effects that result from burning coal."[119] In requiring the Surface Transportation Board to analyze these indirect effects of potential air quality impacts resulting from increased coal usage, the court based its decision on the fact that the Board had itself identified such air quality impacts as potential impacts yet failed to analyze them.[120]

In *Public Citizen*, the court employed an analysis similar to the "familiar doctrine of proximate cause from tort law," stating that "a 'but for' causal relationship is insufficient to make an agency responsible for [an indirect effect] under NEPA." [121] Further, the court stated that NEPA requires "a reasonably close causal relationship" between the cause and resulting environmental impact.[122]

In the *Freeport* opinion, the court leaned on the reasoning from *Public Citizen* and held that Sierra Club had not identified any reasonably foreseeable "specific and causally linear" indirect effects that could be considered by FERC absent the intervening action by DOE of issuing a license for LNG export.[123] The court reasoned that DOE's decision whether to grant an export license acts as a break in the proximate cause analysis and "absolves" FERC from responsibility for analyzing these indirect effects.[124] In turn, the conclusion

116. *Sierra Club*, 827 F.3d at 48.

117. Mid States Coal. for Progress v. Surface Transp. Bd., 345 F.3d 520, 549 (8th Cir. 2003).

118. *Id.* at 533.

119. *Id.* at 549.

120. *Id.*

121. Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 767 (2004).

122. *Id.*

123. Sierra Club v. Fed. Energy Reg. Comm'n, 827 F.3d 36, 48 (D.C. Cir. 2016).

124. *Id.* at 47–48.

of the court would extend to indirect effects questions in similar projects, meaning that these indirect impacts (and those from other projects in similar circumstances) would also not have to be considered as cumulative impacts.

Setting the *Freeport* opinion side by side with the decision of the Eighth Circuit in *Mid States* would seem to signal that it serves an agency well to simply not identify potential indirect effects in the environmental document and instead push the responsibility down the road with the hope that a full analysis will never be required. Not only did the court figuratively let FERC off the hook for the requested indirect effect analysis for the time being, but it also made no indication of whether or not such an analysis would be required by DOE.[125]

Another wrinkle in in the court's decision in the *Sierra Club v. FERC* cases is the potential inconsistency of what is being required of FERC for similar projects in regards to taking the requisite "hard look" at indirect downstream GHG emissions. FERC did not analyze the environmental impacts of indirect air emissions from either the Freeport or Sabine Pass projects, an approach which the court has now endorsed. However, at least one observer has noted that FERC did analyze just such indirect emissions in an EIS prepared for the Mountain Valley pipeline[126]; the Draft EIS was released in September 2016, *after* the *FERC v. Sierra Club* decisions came down from the D.C. Circuit Court.[127] However, the Draft EIS itself still asserts that induced production effects are not reasonably foreseeable.[128]

The obvious outstanding question is whether the court will require an indirect effects analysis of these induced impacts to be conducted by DOE; and if so, will the court consider the fact that

---

125. *Id.* at 45–46 ("We also express no opinion on whether (i) [FERC's] environmental analysis would have been adequate to satisfy [DOE's] own independent NEPA obligation in authorizing Freeport to export natural gas; or (ii) [FERC's] construction authorizations and [DOE's] export authorizations qualified as "connected actions" for purposes of NEPA review, *see* 40 C.F.R. § 1508.25(a)(1). As the Associations acknowledged at oral argument, Tr. of Oral Arg. at 20–21 (Nov. 13, 2015), objections concerning the environmental consequences stemming from the actual export of natural gas from the Freeport terminal, including increased emissions and induced production, are raised in their parallel challenge to [DOE's] order authorizing Freeport to export natural gas to non-free trade countries. Because the Natural Gas Act places export decisions squarely and exclusively within the [DOE's] wheelhouse, any such challenges to the environmental analysis of the export activities themselves must be raised in a petition for review from [DOE's] decision to authorize exports.").

126. Hannah Northey, *EPA to FERC: 'We really need to talk'*, GREENWIRE, (Oct. 24, 2016), http://www.eenews.net/greenwire/stories/1060044726.

127. Mountain Valley Pipeline LLC, Equitrans LP; Notice of Availability of the Draft Environmental Impact Statement for the Proposed Mountain Valley Project and Equitrans Expansion Project, 81 Fed. Reg. 66,268–02 (Sept. 27, 2016).

128. FED. ENERGY REG. COMM'N, FERC/DEIS-D0272, MOUNTAIN VALLEY PROJECT AND EQUITRANS EXPANSION PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT 1-22, 1-23 (2016).

DOE specifically identified the impacts in the Addendum that it prepared, [129] similar to the application the court employed in *Mid States*?[130] It may be key to DOE (and the court) that the agency did not concede that the induced environmental impacts would actually come to fruition but only identified the potential hypothetical impacts as a sort of service to inform the public.[131]

2. Cumulative Impacts Area of Effect

Federal courts have consistently held that an agency cannot evaluate the environmental impacts of a project under NEPA "in a vacuum."[132] Rather, the D.C. Circuit Court stated that a "meaningful" analysis of cumulative impacts under NEPA must include five components: (1) area of effect for a proposed action, (2) impacts within that area expected from the proposed action, (3) other "past, present, and reasonably foreseeable future actions"[133] within the identified area of effect, (4) impacts of those actions within the same area of effect, and (5) the expected aggregate impact of the incremental impacts of the proposed action and other identified actions when considered together.[134]

A federal district court in Michigan held that even impacts that result from a major federal action outside the U.S.'s national boundary must be considered in a NEPA analysis; the area of effect cannot simply be drawn at the geographic boundary.[135] To hold in the contrary would permit the federal government to endorse projects (i.e., by funding them) that could cause significant environmental damage "without any accountability for those actions."[136] However, the D.C. Circuit supported just such a boundary in the *Freeport* decision. FERC simply defined the area of analysis for cumulative impacts in the Freeport project by the county boundary in which the project is located because "the predominance of environmental

129. DOE ADDENDUM, *supra* note 87.

130. Mid States Coal. for Progress v. Surface Transp. Bd., 345 F.3d 520, 549 (8th Cir. 2003).

131. DOE ADDENDUM, *supra* note 87, at 2. To support this assertion, DOE specifically refers to the conclusion stating such in the Sabine Pass EA. *Id.*

132. Grand Canyon Tr. v. Fed. Aviation Admin., 290 F.3d 339, 346 (D.C. Cir. 2002); *see also* Taxpayers of Mich. Against Casinos v. Norton, 433 F.3d 852, 864 (D.C. Cir. 2006) ("[T]he agency 'cannot treat the identified environmental concern in a vacuum.'"); Fund for Animals v. Hall, 448 F. Supp. 2d 127, 133 (D.D.C. 2006) ("[T]he agency's EA must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum."); Dine Citizens Against Ruining Our Env't v. Klein, 747 F. Supp. 2d 1234, 1257 (D. Colo. 2010) ("[A]n EA is not conducted in a vacuum.").

133. Cumulative Impact, 40 C.F.R. § 1508.7 (2016).

134. *Grand Canyon Tr.*, 290 F.3d at 345.

135. Hirt v. Richardson, 127 F. Supp. 2d 833, 845 (W.D. Mich. 1999).

136. *Id.*

impacts occur there."[137] While Sierra Club argued that this area was necessarily too narrow to consider all appropriate cumulative impacts from the project, the court held that "[a] NEPA cumulative-impact analysis need only consider the 'effect of the current project along with any other past, present or likely future actions *in the same geographic area*' as the project under review."[138] Citing *Kleppe v. Sierra Club*,[139] the court defers to the agency and states that determination of the area of analysis for cumulative impacts "'requires a high level of technical expertise,' and thus 'is a task assigned to the special competency of' [FERC]."[140] It remains to be seen what type of "technical expertise" is required to simply elect the county lines as a boundary for environmental analysis.

An arguably better approach than selecting an arbitrary line such as a county boundary would be a natural resource-based approach such as that employed in *Kleppe*, which considers boundaries such as "basin boundaries, drainage areas, areas of common reclamation problems, . . . and other relevant factors."[141] Sierra Club contended just this in their argument, but they may have reached too far in requesting a nationwide cumulative effects analysis.[142] The D.C. Circuit Court has previously held that an agency may consider "practical considerations" in its determination of the geographic boundary for its cumulative effects analysis.[143] In fact, the court cited *Kleppe* in noting practical considerations that may necessitate restriction of the boundaries for a cumulative impact analysis.[144] While the court does not disclose a nationwide boundary for a cumulative effects analysis in some NEPA projects,[145] it does cabin its holding in the practical considerations restriction from *Kleppe*.[146] Because a nationwide analysis is likely not practical for the projects at issue in these two cases, Sierra Club may have had more success with their argument if they had proposed a cumulative effects boundary defined by one or more of the factors listed by the Supreme Court in *Kleppe*.[147]

---

137. FREEPORT EIS, *supra* note 56, at 4-240.

138. Sierra Club v. Fed. Energy Reg. Comm'n, 827 F.3d 36, 50 (D.C. Cir. 2016) (citing Taxpayers of Mich. Against Casinos v. Norton, 433 F.3d 852, 864) (emphasis added); *see also Grand Canyon Tr.*, 290 F.3d at 345 (NEPA "cumulative impacts" applies to "impacts in the same area").

139. Kleppe v. Sierra Club, 427 U.S. 390, 412, 414 (1976) (emphasis added).

140. *Sierra Club*, 827 F.3d at 49.

141. *Kleppe*, 427 U.S. at 411.

142. *Sierra Club*, 827 F.3d at 50.

143. Theodore Roosevelt Conservation P'ship v. Salazar, 744 F. Supp. 2d 151, 163 (D.D.C. 2010); *see also Kleppe*, 427 U.S. at 414.

144. *Sierra Club*, 827 F.3d at 50 (citing *Kleppe*, 427 U.S. at 414).

145. *Id.* (citing Grand Canyon Tr. v. Fed. Aviation Admin., 290 F.3d 339, 345 (D.C. Cir. 2002)).

146. *Sierra Club*, 827 F.3d at 50 (citing *Kleppe*, 427 U.S. at 414).

147. *Kleppe*, 427 U.S. at 411.

V. UNANSWERED QUESTIONS

A. Pending Litigation Against the U.S. Department of Energy

As noted in Section IV, *supra*, the D.C. Circuit Court has pushed several questions regarding NEPA compliance for these projects down the road to be determined in pending litigation against DOE; therefore, "certain contours of the NEPA analysis remain uncertain for LNG projects."[148] These questions will hopefully be answered in the opinions for the DOE cases. The D.C. Circuit Court will likely be forced to address whether DOE will be required to conduct additional indirect and cumulative effects analyses for these projects; but the court may choose to leave open-ended the methodology required for these analyses.

If the court rules wholly in favor of DOE—that is, not requiring DOE to conduct a NEPA analysis for indirect impacts resulting from increased LNG exports (e.g., increased LNG production, increased coal usage)—then essentially DOE is off the hook. With such a holding, DOE would be done with its analysis, and the projects would move forward.

However, if the court holds for Sierra Club and requires DOE to undertake a NEPA analysis of indirect effects, the ramifications of the decision could be far-reaching. At the extreme end of the consequences, DOE would have to look at the potential impacts of indirect effects such as increased LNG production, and potentially increased coal usage as an alternative fuel source for electricity production since the domestic availability of LNG may decrease with increased LNG exports.

But is there a compromise? Maybe. The court could require DOE to undertake a NEPA indirect effects analysis but leave the methodology and limits of that analysis entirely to agency discretion. In this case, we could likely expect to see a lot of agency deference in terms of the methodology and results, and it could be that DOE has already done enough with the documentation provided in the DOE Addendum, Life Cycle Perspective, and Life Cycle Analysis documents.[149]

---

148. Mark R. Haskell, *D.C. Circuit Upholds FERC's NEPA Analysis in Sabine Pass and Freeport LNG Project*, NAT'L L. REV. (June 30, 2016), http://www.natlawreview.com/article/dc-circuit-upholds-ferc-s-nepa-analysis-sabine-pass-and-freeport-lng-projects.

149. DOE ADDENDUM, *supra* note 87; LIFE CYCLE PERSPECTIVE, *supra* note 100; LIFE CYCLE ANALYSIS, *supra* note 101.

B. Meeting with the U.S. Environmental Protection Agency

FERC may be facing pressure from outside the courts to be more diligent in its efforts to consider indirect and cumulative effects resulting from natural gas projects, especially in the realm of climate change considerations.[150] The U.S. Environmental Protection Agency (EPA) has requested "a headquarters-level" conversation with FERC to encourage "more comprehensive climate reviews" of its natural gas pipeline projects.[151] EPA seems to believe that FERC is not doing enough in its NEPA analyses to consider downstream GHG emissions resulting from actions similar to the Freeport and Sabine Pass projects.[152] Additionally, EPA has noted FERC's inconsistencies between projects with its NEPA indirect effect analyses for GHG emissions; FERC has quantified these impacts for some projects and not for others.[153] As of the writing of this Note, FERC has not responded to EPA's request for this policy discussion.[154]

VI. CONCLUSION[155]

The Supreme Court has stated that "[t]he role of the courts is simply to ensure that the agency has adequately considered and disclosed the environmental impact of its actions."[156] The fundamental question then is whether FERC[157] has met its statutory and

150. When NEPA was enacted, some observers believed that external pressure from environmental agencies (who have the expertise to best understand the potential environmental impacts of a proposed project) would force mission-oriented agencies to more seriously consider the environmental consequences of their actions. ROBERT L. GLICKSMAN ET AL., ENVIRONMENTAL PROTECTION: LAW AND POLICY 265 (Erwin Chemerinsky et al. eds., 7th ed. 2015).

151. Northey, *supra* note 126.

152. *Id.* ("The meeting request was spurred by EPA . . . accusing FERC of ignoring its request for a deeper look at downstream greenhouse gas emissions from [a] natural gas pipeline [project].").

153. *Id.* ("FERC, for example, didn't quantify downstream indirect greenhouse gas emissions from the Leach Xpress pipeline but did analyze those emissions in an [EIS] for the Mountain Valley pipeline, which would stretch 300 miles from northwestern West Virginia to southern Virginia.").

154. *Id.*

155. The regulatory climate is currently in flux with respect to issues addressed in this Note, including the standard of judicial review of agency action. *See H.R. Res. 5, 115th Cong. § 202 (2017) (Title II, "Separation of Powers Restoration Act," of the Regulatory Accountability Act would overturn Chevron by "modif[ying] the scope of judicial review of agency actions to authorize courts reviewing agency actions to decide de novo (without giving deference to the agency's interpretation) all relevant questions of law.").* More generally with respect to the evolving landscape, *see*, *e.g.*, Executive Order 13,771, "Reducing Regulation and Controlling Regulatory Costs" (requiring "that for every one new regulation issued, at least two prior regulations be identified for elimination.") Exec. Order 13,771, *unpublished.* It is yet to be seen how the federal policy developments of early 2017 will impact NEPA and the analysis offered in this Note.

156. Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, 462 U.S. 87, 97–98 (1983).

157. And DOE in the pending cases.

regulatory burden for compliance with NEPA by adequately considering and disclosing the environmental impacts from the Freeport and Sabine Pass projects and whether the D.C. Circuit Court has fulfilled its role of ensuring that the agency has done its job to comply. In short, the answer is yes to both parts of the question.

NEPA only requires "a detailed statement" of proposed environmental impacts resulting from major federal actions.[158] FERC is an independent agency that has "voluntarily" agreed to comply with CEQ's implementing regulations.[159] Any additional guidance issued by CEQ is on even more tenuous grounds, such as the new GHG and climate change guidance, which has no legally binding effect on FERC.[160] FERC is also the one that gets to draw the line for crucial questions such as the area of analysis boundary for cumulative impacts, which it has defined narrowly.[161] Considering all of these factors, FERC and the court both appear to have satisfied their obligations under NEPA.

A secondary question for another day then becomes whether the statutory framework of NEPA and the CEQ implementing regulations require enough from FERC and DOE in considering and disclosing the environmental impacts of these projects. In my opinion, probably not. NEPA's purpose may be to protect the environment for future generations,[162] but that purpose is clearly in contradiction with FERC's mission, which is to assist in providing consumers with "reliable, efficient and sustainable energy services at a reasonable cost through appropriate regulatory and market means."[163] It may be in the clashing of these values that the problem lies.[164] The D.C. Circuit Court may begin to answer this question with its ruling on the pending DOE cases. Or maybe the U.S. EPA will begin to force FERC's hand towards more diligent NEPA

---

158. For any federal action with the potential to meet the previously defined threshold of "significantly affecting the quality of the human environment." 42 U.S.C. § 4332(C) (2012).

159. FERC Order 486, *supra* note 45.

160. CEQ MEMO, *supra* note 38, at 2 n.3.

161. Sierra Club v. Fed. Energy Reg. Comm'n, 827 F.3d 36, 49–50 (D.C. Cir. 2016).

162. 42 U.S.C. § 4321 states:

> The purposes of [NEPA] are: To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.

42 U.S.C. § 4321 (2012).

163. *About FERC*, FED. ENERGY REG. COMM'N, https://www.ferc.gov/about/about.asp (last visited Apr. 14, 2017).

164. Some observers believe that the original purpose of NEPA was to reign in the "mission-oriented agencies that carr[ied] out their mandates at the expense of the environment." GLICKSMAN ET AL., *supra* note 150, at 261.

compliance and voluntary[165] substantive environmental protection in its decision-making processes.

Alternatively, it may be that the answer to accounting for and minimizing indirect and cumulative environmental effects from projects such as these does not lie with NEPA. A project-level NEPA analysis may very well not be the proper regulatory mechanism to address regional and national issues of indirect and cumulative environmental impacts, such as GHG emissions. Perhaps the recent fluctuations in the regulatory landscape[166] will reveal an alternative mechanism for dealing with these questions.

165. Any substantive environmental protections provided by agencies would have to occur voluntarily at the hands of agencies because, as discussed in note 5, *supra*, NEPA only requires agencies to comply with process and does not require substantive environmental protection. 42 U.S.C. § 4332(C) (2012).

166. Discussed in note 155, *supra*.