

PIPELINE PROJECTS—THE EVOLVING ROLE OF GREENHOUSE GAS EMISSIONS ANALYSES UNDER NEPA

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Synopsis: Under the National Environmental Policy Act (NEPA), federal agencies are generally required to evaluate the impact of greenhouse gas (GHG) emissions that directly result from the construction or operation of major federal projects. However, the degree to which NEPA also requires agencies to consider a federal project's indirect GHG emissions—*i.e.*, those emissions resulting from a project's construction or operation, but that occur at a later date or different location—remains deeply contentious. This dispute has been especially contentious in the context of proposed oil and gas pipeline projects, where the indirect GHG emissions from drilling, fracking, and burning oil and gas transported by the pipelines often exceed by several magnitudes the direct emissions from the pipelines' construction and operation.

An inter-branch give-and-take has developed in response to this conundrum, with the Federal Energy Regulatory Commission (FERC, or the Commission) finding itself at odds with federal courts reviewing the pipeline approval process. Prior to 2017, FERC took the position that indirect GHG emissions associated with oil and gas pipeline projects were too speculative to be considered under NEPA. However, in its 2017 *Sabal Trail* decision, the D.C. Circuit clarified that, at minimum, FERC had to take into account certain indirect GHG emissions resulting from a proposed interstate pipeline where the proposed pipeline would transmit oil and/or natural gas to one or more specific power plants, or else explain specifically why the Commission was unable to do so. In subsequent decisions, the D.C. Circuit has criticized FERC for not seeking emissions information needed to evaluate a project's indirect GHG emissions. Following the 2017 *Sabal Trail* decision, FERC, divided along political lines, has taken the position that the D.C. Circuit's ruling is limited to the type of specific indirect GHG emissions contemplated in *Sabal Trail*, and has resisted calls from environmental proponents to consider indirect GHG emissions during other types of pipeline NEPA reviews.

Amidst this back and forth, a number of new events have transpired with the potential to shift the future balance of FERC's obligation to consider GHG in pipeline reviews. In April 2018, FERC announced that it was considering an update to its written policies for reviewing potential pipeline projects and issued a Notice of Inquiry (NOI) to collect public comments on whether and how the Commission should evaluate indirect GHG emissions. However, in the midst of this reevaluation process, the Commission has undergone a dramatic change in composition

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following the passing of FERC Commissioner Kevin McIntyre on January 2, 2019; Commissioner Cheryl LaFleur's decision to step down from the Commission in August 2019; and Commissioner Bernard McNamee's announcement that he intends to step down from the Commission at the end of his term on June 30, 2020. At present, the Senate has confirmed the Trump Administration's nominee of FERC General Counsel James Danly to fill the seat of deceased Commissioner McIntyre. However, nominations have not been made to fill the remaining open seats on the Commission. Finally, on January 10, 2020, the Trump Administration published a Notice of Proposed Rulemaking seeking to update the Council on Environmental Quality's (CEQ) regulations for implementing the procedural provisions of NEPA. The CEQ regulations apply generally to all federal agency NEPA reviews, and the proposed modifications to these regulations would be expected to have a direct impact on FERC's decision-making process. Of course, the potential impact of these recent events must be considered within the context of a growing willingness by federal courts to scrutinize federal agencies for failing to consider indirect GHGs in the context of NEPA reviews. Consequently, the collection of recent events and court decisions have created an uncertain future regarding the scope of indirect emissions that must be considered during proposed pipeline reviews.

I.	Introduction	49
II.	Background	50
	A. NEPA's General Requirements.....	51
	B. EA and EIS Requirements	51
	C. Judicial Review of EIS.....	52
	D. Environmental Impacts That Must Be Considered Under NEPA	52
	1. Review of Environmental Impacts Generally	53
	2. Review of GHG Emissions Generally.....	53
	3. The Environmental Impacts of Pipeline Projects	55
	4. The Indirect Impacts of Pipeline Projects	55
III.	Current Status of the Obligation to Analyze GHG Emissions under NEPA	56
	A. Sabal Trail.....	56
	B. Post-Sabal Trail—FERC's Treatment of Upstream and Downstream GHG Emissions	58
	C. FERC's Use of the SC-CO ₂ After Sabal Trail.....	59
IV.	Future Prognostication—The Fate of FERC's Review of Indirect GHG Emissions under NEPA	60
	A. FERC Continues to Refine its Position on Indirect GHG Emissions	60
	1. FERC's Notice of Inquiry	60
	2. Expected Timeline of FERC's Rulemaking	61
	3. Predicted Outcome of FERC's Rulemaking.....	63
	B. Will Future Courts Accept the Outcome of FERC's Rulemaking?	65
	1. Based on the D.C. Circuit's Recent Decisions and Oral Arguments Before It, We Expect that the D.C. Circuit Will	

	Require that FERC Request Information Regarding Indirect GHG Emissions	66
2.	Based on Recent Court Decisions Reviewing other Agencies' NEPA Analyses, We Expect that the D.C. Circuit May Soon Require that FERC Expand its Consideration of Upstream and Downstream Emissions	67
3.	FERC is Likely to Continue to Be Able to Avoid Calculating the Social Cost of Indirect GHG Emissions (SC-CO ₂)	68
V.	Conclusion	69

I. INTRODUCTION

Whether and how the National Environmental Protection Act (NEPA) requires federal agencies to evaluate greenhouse gas (GHG) impacts of federal projects have long been the subject of significant debate and litigation.¹ This debate has largely been settled for GHG emissions directly attributable to the construction or operation of a federal project, with courts uniformly requiring that federal agencies consider such direct GHG emissions as part of a NEPA review.² Less resolved is whether federal agencies must also consider GHG emissions that result from the existence of the project but that occur at a later date or location other than the site of the project. This issue—i.e., whether the “indirect” emissions of a federal project fall within the scope of an agency’s required NEPA review—is particularly acute in the context of proposed oil and gas pipeline projects.³ The potential indirect GHG emissions associated with oil and gas pipelines (e.g., GHG emissions from drilling, fracking, or combusting the oil and natural gases carried through these pipelines) are often several magnitudes greater than the emissions directly attributable to the pipelines’ construction or operation.⁴ Tension exists between federal courts and FERC—the agency charged with reviewing and approving interstate pipeline projects⁵—as to whether, and to what extent, FERC must consider indirect GHG emissions associated with potential pipeline projects.⁶ In response, FERC issued a Notice of Inquiry (NOI) in April 2018 seeking comments from

1. We note that the *Energy Law Journal* has recently published pieces that touch on these issues, too, although with different overall focuses than this Article. For example, Commissioner Glick and Matthew Christiansen recently published on the effect of FERC’s actions on climate change, which touches on *Sabal Trail* discussed herein. Richard Glick & Matthew Christensen, *FERC and Climate Change*, 40 ENERGY L.J. 1 (2019). Another article dives deep into the political changes and litigation risks that bear upon natural gas pipelines, which, too, touches on *Sabal Trail*. Christine Tezak, *A Policy Analyst’s View on Litigation Risk Facing Natural Gas Pipelines*, 40 ENERGY L.J. 209 (2019). We encourage readers of this Article to also review each of these Articles for additional insights on these issues.

2. Draft Guidance; Request for Comment, *Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions*, 80 Fed. Reg. 30,097 (2019).

3. *Id.*

4. U.S. ENERGY INFO. ADMIN., EMISSIONS OF GREENHOUSE GASES IN THE U.S. (Mar. 2011), https://www.eia.gov/environment/emissions/ghg_report/ghg_overview.php.

5. FED. ENERGY REG. COMM’N, WHAT FERC DOES (Aug. 2018), <https://www.ferc.gov/about/ferc-does.asp>.

6. Jayni Hein, *Pipeline Approvals and Greenhouse Gas Emissions*, INST. FOR POLICY INTEGRITY (April 2019), https://policyintegrity.org/files/publications/Pipeline_Approvals_and_GHG_Emissions.pdf.

stakeholders as to whether FERC should modify its approach for considering indirect GHG emissions.⁷ While FERC's NOI remains pending (some might say it has stalled),⁸ ongoing FERC decisions and reviewing federal circuit court opinions struggle to establish if and when NEPA requires that these indirect GHG emissions be assessed.⁹

We will discuss how FERC's position on indirect GHG emissions has evolved over time, starting with a brief overview of the requirements of NEPA in the context of oil and natural gas pipelines, and how FERC and reviewing federal courts currently view FERC's obligation to consider indirect GHG emissions in its NEPA reviews. Next, we address FERC's pending rulemaking initiative, and how recent changes to the composition of the Commission as well as newly proposed Council on Environmental Quality (CEQ) regulations may potentially impact the outcome of FERC's initiative. Finally, this Article offers a prognostication as to the expected outcome of FERC's rulemaking and whether FERC's final rule is likely to be upheld by reviewing courts in the D.C. Circuit.

II. BACKGROUND

Through the Natural Gas Act (NGA), Congress granted FERC the authority and responsibility to regulate interstate transportation of natural gas within the United States.¹⁰ FERC is charged with approving the construction or expansion of proposed pipeline projects and associated infrastructure.¹¹ When FERC determines there is sufficient need for a particular project, the agency will issue a "certificate[] of public convenience and necessity" that allows the construction of a new pipeline.¹² Because FERC must issue this certificate before construction of a pipeline project can commence, the certificate's issuance triggers the requirements of NEPA.¹³ The size and potential environmental impact of most interstate pipeline projects result in these projects being "Major Federal Actions" under NEPA that require an Environmental Assessment (EA) and Environmental Impact Statement (EIS) before a certificate can be issued.¹⁴

7. Notice of Inquiry, *Certification of New Interstate Natural Gas Facilities*, 163 F.E.R.C. ¶ 61,042 at P 1 (2018).

8. Scott Grover, *Friction Shadows FERC Pipeline Process Review*, AM. BAR ASS'N (Mar. 15, 2019), https://www.americanbar.org/groups/environment_energy_resources/publications/natural_resources_environment/2018-19/winter/friction-shadows-ferc-pipeline-process-review/.

9. Hein, *supra* note 6.

10. 15 U.S.C. § 717(a) (2005); *see also* 15 U.S.C. §§ 717f(c)(e) (2019).

11. FED. ENERGY REG. COMM'N, *supra* note 5.

12. *See generally* 15 U.S.C. § 717f(a), (c) (1988) (Applicants are required to obtain a certificate of public convenience and necessity prior to beginning a new pipeline project under section 7(c) of the Natural Gas Act).

13. ENVTL. PROT. AGENCY, *National Environmental Policy Act Review Process*, <https://www.epa.gov/nepa/national-environmental-policy-act-review-process> (last visited Feb. 4, 2020).

14. *Id.*; *see also* 40 C.F.R. § 1508.18 (for definitions of "major federal actions").

A. NEPA's General Requirements

NEPA is considered “our basic national charter for protection of the environment,”¹⁵ and its enactment “express[ed] a Congressional determination that procrastination on environmental concerns is no longer acceptable.”¹⁶ The statute mandates that the federal government act as a “trustee of the environment” and assure that the nation’s citizens are provided a “safe, healthful, productive, and esthetically and culturally pleasing” environment.¹⁷

To achieve these ambitious objectives, NEPA requires federal agencies to quantify and consider the environmental impacts of any actions “with effects that may be major and which are potentially subject to Federal control and responsibility.”¹⁸ The agency must consider these impacts before “any irreversible and irretrievable commitments of resources” occur.¹⁹ To properly consider the environmental impacts of proposed actions, federal agencies are required “to the fullest extent possible” to prepare “a detailed statement on . . . the environmental impact” of “Major Federal Actions significantly affecting the quality of the human environment.”²⁰

B. EA and EIS Requirements

The first step in the NEPA process is preparation of the EA.²¹ An EA consists of a “concise public document” that “[b]riefly provide[s] sufficient evidence and analysis for determining whether to prepare an [EIS] or a finding of no significant impact.”²² If the agency determines that the action will not have any significant impact on the environment, a Finding of No Significant Impact (FONSI) is issued, which, absent litigation challenging the same, effectively concludes the NEPA process.²³ Alternatively, if the EA concludes that a Federal Action could have a significant impact, the federal agency is obligated to take the next step under NEPA and prepare a detailed EIS that describes and quantifies the action’s environmental impacts.²⁴

In drafting an EIS, an agency is required to evaluate the environmental impacts of the proposed action, any unavoidable adverse environmental effects of the proposed action, the resource commitments involved in the proposed action, and

15. 40 C.F.R. § 1500.1(a) (2019).

16. *Foundation for N. Am. Wild Sheep v. United States Dep’t of Agric.*, 681 F.2d 1172, 1181 (9th Cir. 1982).

17. 42 U.S.C. § 4331(b) (2019).

18. 40 C.F.R. § 1508.18 (2019).

19. 42 U.S.C. § 4332(C)(v) (2019); 40 C.F.R. § 1500.1(b); *see also Foundation for N. Am. Wild Sheep*, 681 F.2d at 1181 (federal agency decisions “to act now and deal with the environmental consequences later . . . [are] plainly inconsistent with the broad mandate of NEPA.”).

20. 42 U.S.C. § 4332(2)(C)(i) (2007); *see also* 40 C.F.R. § 1500.2 (2014).

21. 40 C.F.R. § 1501.4(b) (2019).

22. *Id.* § 1508.9(a)(1).

23. *Id.* § 1501.4(e).

24. 42 U.S.C. § 4332(2)(C)(i). Given the expansive scope of most pipeline projects, an EIS must often be completed prior to the FERC’s issuance of a “certificate of public convenience and necessity.”

alternatives to the proposed action.²⁵ The time and resources required to prepare these documents are significant.²⁶

C. *Judicial Review of EIS*

While NEPA requires that federal agencies consider and quantify environmental impacts associated with the proposed project, it does not require that agencies modify their behavior based on the findings of their review.²⁷ For this reason, a court's review of an EIS is limited to ensuring that an agency complied with the procedural requirements of NEPA, and "[c]ourts may not use their review of an agency's environmental analysis to second-guess substantive decisions committed to the discretion of the agency."²⁸ Instead, the court's review is limited to "insur[ing] that the agency has taken a 'hard look' at the environmental consequences" of proposed federal actions.²⁹ So long as an agency properly quantifies the environmental impacts of a proposed federal action, courts will not overturn an agency's decision to carry out a proposed action based on the results of an EA or EIS.³⁰

D. *Environmental Impacts That Must Be Considered Under NEPA*

CEQ promulgates regulations and guidance for federal agencies' NEPA reviews of proposed federal actions.³¹ Under CEQ's regulations, federal agencies must quantify and consider all of the foreseeable environmental impacts resulting from a federal action.³² This review includes not only the immediate, direct impacts stemming from a proposed project, but also any foreseeable indirect impacts from the same.³³

25. 40 C.F.R. § 1502.14 (2019); *see also* *Kleppe v. Sierra Club*, 427 U.S. 390, 401-02 (1976).

26. U.S. DEP'T OF ENERGY, NATIONAL ENVIRONMENTAL POLICY ACT: LESSONS LEARNED, QUARTERLY REPORT (Sept. 2017), https://www.energy.gov/sites/prod/files/2017/09/f37/LLQR%20Sep_2017.pdf. According to the Department of Energy (DOE), in 2016, the median completion time for EAs and EISs were 21 months and 49 months, respectively. Moreover, the estimated cost of a completed EIS has been estimated at approximately \$4.2 million dollars. These estimates do not include the potential costs of citizen challenges to completed EISs, or the additional costs if further edits to a completed EIS are ordered by a court. Given the large, often highly public nature of Federal Actions that require an EIS, significant public scrutiny and potential challenges to a completed EIS can often be expected.

27. *See, e.g., Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351 (1989) ("NEPA merely prohibits uninformed—rather than unwise—agency action.").

28. *Sierra Club v. United States Dep't of Energy*, 867 F.3d 189, 196 (D.C. Cir. 2017) (quoting *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 377 (1989)).

29. *Kleppe*, 427 U.S. at 410 n.21.

30. *Id.* at 413-15, n.26.

31. 40 C.F.R. §§ 1501.1-1501.8.

32. 40 C.F.R. § 1501.1.

33. Federal agencies must additionally consider the environmental impacts of any other "connected" federal actions as well as the "cumulative" effects of other ongoing projects or events. 40 C.F.R. § 1508.25(a)(1)(i)-(iii). Connected federal actions are separately proposed federal actions which are interlinked to such a degree that NEPA requires their combined environmental impacts be evaluated under a single EIS. *See, e.g., Sierra Club v. Penfold*, 664 F. Supp. 1299 (D. Alaska 1987), *aff'd*, 857 F.2d 1307 (9th Cir. 1988) (BLM required to consider the cumulative impacts of several individual, small-operation gold placer mines located in a single region). While cumulative impacts are "impacts on the environment which results from the incremental impact of the action

1. Review of Environmental Impacts Generally

In conducting a NEPA review, the types of impacts that a federal agency must consider can be divided into roughly two categories: (1) direct impacts associated with the construction and operation of a federal action; and (2) any reasonably foreseeable indirect impacts occurring as a result of the federal action.³⁴ The first category—direct impacts—are environmental consequences caused by a proposed action which “occur at the same time and place” as the proposed action.³⁵ In contrast, indirect effects are environmental impacts “caused by the [project] and are later in time or farther removed in distance.”³⁶ The scope of indirect effects that must be considered by an agency are not unlimited, however, as NEPA only requires that an agency consider the indirect environmental impacts of a federal action that are a “reasonably foreseeable” result of the project.³⁷

The U.S. Court of Appeals for the First Circuit has explained that “reasonably foreseeable” environmental impacts are those that are “sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.”³⁸

In contrast, future environmental impacts of a federal action are not considered “reasonably foreseeable” if the impacts will only occur as a result of another agency’s or third parties’ actions outside of the direct control of the reviewing agency.³⁹

2. Review of GHG Emissions Generally

With respect to GHG emissions, many reviewing courts have found that agencies must not only consider GHG emissions directly resulting from a federal action, but also any future “indirect” GHG emissions which will foreseeably result from the action.⁴⁰ For instance, in *High Country Conservation Advocates*, the

when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” See 40 C.F.R. § 1508.7.

34. *Gulf Restoration Network v. Jewell*, 161 F. Supp. 3d 1119, 1131 (S.D. Ala. 2016) (“An environmental impact statement must consider not only the direct effects of a proposed action but also cumulative impacts and indirect effects of past, present, and reasonably foreseeable future actions.”).

35. 40 C.F.R. § 1508.8(a).

36. *Id.* § 1508.8(b).

37. *EarthReports, Inc. v. FERC*, 828 F.3d 949, 955 (D.C. Cir. 2016).

38. *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992); see also *Delaware Riverkeeper Network v. FERC*, 753 F.3d 1304, 1310 (D.C. Cir. 2016) (“The agency need not foresee the unforeseeable, but by the same token neither can it avoid drafting an impact statement simply because describing the environmental effects of and alternatives to particular agency action involves some degree of forecasting.”) (quoting *Scientists’ Institute for Public Information, Inc. v. Atomic Energy Commission*, 481 F.2d 1079, 1092 (D.C. Cir. 1973)).

39. See, e.g., *Department Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004) (finding that the Federal Motor Carrier Safety Administration’s EIS was not required to consider the additional environmental impacts of a forthcoming executive order lifting the embargo on international truckers from Mexico).

40. See, e.g., *High Country Conserv. Advocates v. United States Forest Serv.*, 52 F. Supp. 3d 1174, 1190 (D. Colo. 2014) (Bureau of Land Management and U.S. Forest Service required to analyze the impacts from the likely release of methane gas from the expanded mining operations associated with a lease modification); *Center for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1224 (9th Cir. 2008) (National Highway Traffic Safety Administration must consider future GHG emissions resulting from its enactment of a final rule setting vehicle fuel efficiency standards); *Mid States Coalition for Progress v. Surface Transp. Board*,

court rejected an EA drafted by the United States Forest Service (USFS) in conjunction with its approval of new coal mining leases on federal lands because the EA failed to take a “hard look” at GHG emissions resulting from the leases.⁴¹ According to the court, the USFS was not only required to quantify direct methane releases resulting from the coal mining operations, but also future CO₂ emissions that necessarily would occur as a result of power plants burning the mined coal.⁴²

In 2016, CEQ modified its guidance to expressly endorse the view that NEPA requires federal agencies to consider both direct and indirect GHG emissions when evaluating the environmental impacts of a proposed action.⁴³ This guidance was subsequently withdrawn by the Trump Administration in 2017,⁴⁴ and in June 2019, CEQ issued a draft guidance that, predictably, lessens agencies’ obligations under NEPA.⁴⁵ In particular, the 2019 CEQ draft guidance counsels agencies to quantify direct and indirect GHG emissions only when the “emissions are ‘substantial enough to warrant quantification’” and “it is practicable to quantify them”; agencies should also consider “whether quantification . . . ‘would be overly speculative.’”⁴⁶ Most recently, on January 10, 2020, the Trump Administration released proposed changes to CEQ’s NEPA regulations.⁴⁷ As further discussed in Section IV, as proposed, the updated CEQ regulations would appear to eliminate the requirement that federal agencies account for GHG emissions to the extent they incrementally contribute to the impacts of climate change. If adopted, the proposed regulations would appear to depart significantly from recent federal court decisions that the cumulative impact on GHG emissions on the global process of climate change must be accounted for in a federal agency’s NEPA review.⁴⁸ As explained further in Section III, the June 2019 draft guidance would perhaps be considered more in line with the position taken by FERC that in most situations,

345 F.3d 520 (8th Cir. 2003) (prior to approving construction of new rail lines, NEPA requires the Surface Transportation Board to consider future GHG emissions from burning coal that will be carried by the rail lines).

41. *High Country Conserv. Advocates*, 52 F. Supp. 3d at 1190.

42. *Id.*

43. COUNCIL ON ENVTL. EQUAL., EXEC. OFF. PRESIDENT, 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 NEPA REVIEW, 13–14, 16 (2016), <https://perma.cc/QP7E-7PUM>.

44. Executive Order No. 13,783, *Promoting Energy Independence and Economic Growth*, 82 Fed. Reg. 16,093 (2017); Notice, *Withdrawal of 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*, 82 Fed. Reg. 16,576 (2017).

45. See generally 80 Fed. Reg. 30,097.

46. Randy Brogdon et al., *A Clear Shift in Policy: CEQ Issues Draft Guidance for Consideration of Greenhouse Gas Emissions under NEPA*, ENVTL. LAW AND POLICY MONITOR (July 3, 2019), <https://www.environmentallawandpolicy.com/2019/07/a-clear-shift-in-policy-ceq-issues-draft-guidance-for-consideration-of-greenhouse-gas-emissions-under-nepa/>.

47. Notice of Proposed Rulemaking, *Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act*, 85 Fed. Reg. 1,684 (2020) (to be codified at 40 C.F.R. pts. 1500-05, 1507-08).

48. See e.g., *San Juan Citizens Alliance v. United States BLM*, 326 F. Supp. 3d 1227 (D.N.M. 2018) (holding that the Bureau of Land Management failed to sufficiently consider the incremental environmental impacts of issuing leases for oil and gas production where increased GHG emissions would incrementally contribute to ongoing effects of climate change).

indirect GHG emissions are too remote or speculative to warrant consideration under NEPA.⁴⁹

3. The Environmental Impacts of Pipeline Projects

There are a number of “direct impacts” that FERC must consider when preparing an EIS during its NEPA review of natural gas and oil pipeline projects. Common direct impacts of pipeline projects include the following issues: potential damage to wildlife in the area surrounding the pipeline, including degradation of wildlife habitat;⁵⁰ potential damages to wetlands or other water resources in the pathway of the pipeline;⁵¹ risks of environmental contamination from pipeline leaks or spills;⁵² adverse impacts to lower socioeconomic populations;⁵³ localized air pollution generated by operation of equipment during construction of the project facilities;⁵⁴ and long-term air pollutant emissions from stationary equipment at pipeline associated facilities.⁵⁵

With respect to GHG emissions specifically, methane gas is directly emitted when pipelines leak and during safety tests, and carbon dioxide is emitted when natural gas is combusted in order to operate compressor stations and other enabling infrastructure.⁵⁶ Because of the localized nature of most environmental impacts from pipelines, these impacts, including effects from GHG emissions or other air pollutants, can generally be quantified and associated with a specific pipeline.⁵⁷

4. The Indirect Impacts of Pipeline Projects

In contrast, the scope of “reasonably foreseeable” indirect impacts of pipeline projects, including effects from GHG emissions, has been subject to greater disagreement. The issue of indirect GHG emissions has particular significance for pipeline projects because of the large volume of GHGs and other air pollutants that will be emitted by the “downstream” combustion of fossil fuels that are conveyed through such pipelines.⁵⁸ As articulated by the D.C. Circuit, “all [of] the natural gas that will travel through [] pipelines will be going somewhere: specifically, to power plants . . . some of which already exist, others of which are in the

49. Brogdon et al., *supra* note 46.

50. See, e.g., FED. ENERGY REG. COMM’N, *FEIS for Northeast Supply Enhancement Project 4-79 to 4-80* (Jan. 2019), <https://www.ferc.gov/industries/gas/enviro/eis/2019/01-25-19-FEIS/part-1.pdf>.

51. See e.g., FED. ENERGY REG. COMM’N, *FEIS for NEXUS Gas Transmission Project and Texas Eastern Appalachian Lease Project 4-63* (Nov. 2016), <https://www.ferc.gov/industries/gas/enviro/eis/2016/11-30-16-eis/FEIS.pdf>.

52. *Id.* at 4-41.

53. *Id.* at 4-180; 4-181.

54. See e.g., FED. ENERGY REG. COMM’N., *FEIS for Venture Global Calcasieu Pass, LLC and TransCameron Pipeline, LLC Calcasieu Pass Project 4-151; 4-154* (Oct. 2018), <https://www.energy.gov/sites/prod/files/2018/10/f57/final-eis-0510-calcasieu-pass-project-v1-2018-10.pdf>.

55. *Id.*

56. Hein, *supra* note 6.

57. *Id.*

58. *South Coast Air Quality Mgmt. Dist. v. FERC*, 621 F.3d 1085, 1093 (9th Cir. 2010) (considering the increased emittance of nitrogen oxides (NOx) from natural gas power plants in analyzing the indirect environmental impacts of a natural gas pipeline).

planning stages.”⁵⁹ Likewise, the construction and operation of a pipeline may arguably result in new indirect “upstream” emissions because they will enable increased gas or oil extraction and hydraulic fracturing.⁶⁰ Because the emissions from these upstream and downstream sources often far exceed the direct emissions from construction or operation of a pipeline, the manner in which FERC considers these indirect emissions is often a critical question in its NEPA reviews.

FERC’s historic position has been that NEPA does not require the agency to consider upstream and downstream emissions of GHGs when reviewing potential pipeline projects. This position stemmed from the agency’s view that “upstream” oil and gas extraction operations and “downstream” power plants would continue to operate regardless of whether the Commission approved a specific pipeline project, and thus future emissions from these operations or power plants need not be considered during the pipeline’s approval.⁶¹ However, recent court opinions have uniformly denounced this “perfect substitution” argument. Specifically, courts have found that FERC must consider increased GHG emissions from downstream power plants only if those emissions are sufficiently connected to the construction and operation of a specific pipeline.⁶²

III. CURRENT STATUS OF THE OBLIGATION TO ANALYZE GHG EMISSIONS UNDER NEPA

In 2017, the D.C. Circuit in *Sabal Trail* clarified for the first time that, at minimum, FERC must account for increased downstream GHG emissions resulting from a proposed interstate pipeline where the proposed pipeline would transmit oil or natural gas to one or more specific power plants.⁶³ However, the applicability of the D.C. Circuit’s opinion to future pipeline reviews has been subject to extensive debate, as the Commission has sought to limit its consideration of downstream GHG’s emissions to situations where a proposed pipeline will serve only a discrete list of power plants.⁶⁴ Furthermore, the Commission has thus far rejected the notion that *Sabal Trail* also requires the Commission to consider “upstream GHG emissions” (i.e. emissions caused by increased drilling or natural gas extraction in areas that will be served by the pipeline). Finally, FERC has rejected calls for the Commission to attempt to quantify the impact of indirect GHG emissions in real dollars.⁶⁵

A. *Sabal Trail*

The manner in which FERC is required to consider indirect GHG emissions was clarified in *Sabal Trail*.⁶⁶ The D.C. Circuit ruled that a pipeline’s transport of natural gas to power plants in Florida had the indirect but reasonably foreseeable

59. *Sierra Club v. FERC*, 867 F.3d 1357, 1371 (D.C. Cir. 2017) [hereinafter *Sabal Trail*].

60. *Dominion Transmission, Inc.*, 163 F.E.R.C. ¶ 61,128 at P 30 (2018).

61. *WildEarth Guardians v. U.S. Forest Service*, 120 F. Supp. 3d 1237, 1276 (D. Wyo. 2015).

62. *Sabal Trail*, 867 F.3d at 1371.

63. *Id.*

64. 163 F.E.R.C. ¶ 61,128 at P 34.

65. *Florida Southeast Connection, LLC*, 162 F.E.R.C. ¶ 61,233 at P 10 (2018).

66. *Sabal Trail*, 867 F.3d at 1371.

effect of releasing downstream GHG emissions from the combustion of the transported natural gas, and that these emissions needed to be quantified and considered as part of the pipeline's NEPA assessment.⁶⁷ In a 2-1 decision, the D.C. Circuit rejected FERC's EIS for the proposed Southeast Market Pipelines Project, a 500-mile natural gas pipeline that would stretch through Alabama, Georgia, and Florida.⁶⁸ The D.C. Circuit disagreed with FERC's conclusion that the pipeline's EIS did not need to consider the downstream GHG emissions emitted by the power plants that were to receive the natural gas transported by the proposed pipeline.⁶⁹ These emissions were, the court said, reasonably foreseeable, given that the entire purpose of authorizing the pipeline was to deliver natural gas to the specified power plants, which would, in turn, burn the natural gas and emit GHGs into the atmosphere.⁷⁰

FERC argued that it was impossible to accurately quantify the GHG emissions resulting from the pipeline's approval because this calculation depended on a number of variables that FERC could not control or accurately predict, including operating decisions made by the individual plants and the region's demand for electricity.⁷¹ However, the court reasoned that because FERC had, in fact, already estimated the quantity of gas that would be sent to the individual power plants, the Commission could "make educated assumptions" about the resulting downstream GHG emissions.⁷²

Given these facts, the D.C. Circuit concluded that FERC "should have either given a quantitative estimate of the downstream [GHG] emissions that will result from burning the natural gas that the pipelines will transport or explain more specifically why it could not have done so."⁷³ The D.C. Circuit clarified, however, that "quantification of [GHG] emissions is not required *every* time those emissions are an indirect effect of an agency action" as "in some cases quantification may not be feasible."⁷⁴

In addition to holding that FERC must quantify downstream emissions from pipeline projects when "feasible," the *Sabal Trail* court questioned, but did not determine, whether the Commission was also required to estimate the economic harm caused by the project's increased GHG emissions through use of the Social Cost of Carbon analysis tool (SC-CO₂).⁷⁵ The SC-CO₂ is an analytical tool that attempts to "value in dollars the long-term harm done by each ton of carbon emitted."⁷⁶ In other words, if one has an estimate of the downstream GHG emissions that will result from a project, one can use the SC-CO₂ to estimate the economic harm from the same. To accomplish this goal, the tool estimates the potential

67. *Id.* at 1370-71.

68. *Id.* at 1363, 1375.

69. *Id.* at 1371.

70. *Id.* at 1371-72.

71. *Sabal Trail*, 867 F.3d at 1373-74.

72. *Id.* at 1374.

73. *Id.*

74. *Id.* at 1375.

75. *Id.*

76. *Sabal Trail*, 867 F.3d at 1375.

effects of the GHGs' contribution to climate change such as "changes in net agricultural productivity, human health, property damages from increased flood risk, and changes in energy system costs."⁷⁷ While the D.C. Circuit did not hold that FERC was required to utilize the SC-CO₂, the court did find that NEPA obligated FERC to either use the tool or provide an explanation as to why the Commission did not believe the tool was useful for decision-making purposes.⁷⁸

B. *Post-Sabal Trail—FERC's Treatment of Upstream and Downstream GHG Emissions*

In response to *Sabal Trail*, the Commission elected to narrowly interpret the court's directive. For example, in *Dominion Transmission, Inc.*, 163 F.E.R.C. ¶ 61,128 (2018) (*Otsego 2000*), a divided FERC concluded that *Sabal Trail* only required the Commission to quantify downstream GHG emissions in situations where a pipeline project would transmit gas or oil to one or more identifiable downstream power plants.⁷⁹ Because *Otsego 2000* involved the construction of support facilities for a segment of the pipeline that did not connect to specific power plants, FERC concluded that it need not evaluate downstream GHG emissions as "the Commission lack[ed] meaningful information about potential future natural gas production."⁸⁰

Just one month later, FERC reaffirmed its narrow interpretation of *Sabal Trail* in *Tennessee Gas Pipeline Co., L.L.C.*, 163 F.E.R.C. ¶ 61,190 (2018) (*Birckhead*).⁸¹ In *Birckhead*, the Commission refused to consider either upstream or downstream GHG emissions during the NEPA review of a pipeline project that was set to deliver natural gas to an existing pipeline grid in the southeast U.S.⁸² With respect to downstream GHG emissions, FERC noted that because the gas transported by the proposed pipeline would be delivered into an existing interstate natural pipeline grid and not to specific end users, the increased downstream emissions associated with the combustion of the natural gas were not quantifiable indirect impacts under NEPA.⁸³ Specifically, FERC noted that there is nothing in the record that identifies any specific end use or new incremental load downstream of the Project, and that "knowledge of these and other facts would [indeed] be necessary in order for the Commission to fully analyze the related effects . . . [to the] consumption of natural gas."⁸⁴

The unique facts of *Birckhead* may have actually provided a stronger argument that FERC should have considered future increases in upstream—as opposed to downstream—emissions resulting from completion of the pipeline. As noted by the petitioners, the proposed pipeline segment would only serve a single natural

77. EPA, FACT SHEET: SOCIAL COST OF CARBON, 1 (Dec. 2016), https://www.epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf.

78. *Sabal Trail*, 867 F.3d at 1375.

79. 163 F.E.R.C. ¶ 61,128 at P 34.

80. *Id.*

81. *Tennessee Gas Pipeline Co.*, 163 F.E.R.C. ¶ 61,190 at PP 58-59 (2018).

82. *Id.* at P 58.

83. *Id.* at PP 61-62.

84. *Id.* at PP 60-62.

gas producer that sought to transport its extracted gas to the southeast U.S. energy market.⁸⁵ Thus, any increased upstream GHG emissions associated with the company's gas extraction operations were arguably foreseeable and quantifiable.

However, FERC rejected the proposition that any upstream GHG emissions resulting from the project fell within the scope of the Commission's required NEPA review.⁸⁶ FERC concluded that there was "no record evidence" that the pipeline would "induce incremental production of natural gas and, even if additional gas [was] induced, the amount, timing, and location of such development activity [would be] speculative."⁸⁷ FERC's majority position was heavily criticized by Commissioners Cheryl LaFleur and Richard Glick, who pointed out that the reason FERC lacked adequate information to estimate the potential incremental increases in natural gas production resulting from the pipeline was because FERC declined to exercise its authority to ask for this information from the natural gas producer served by the pipeline.⁸⁸

Following *Otsego 2000* and *Birckhead*, FERC issued perhaps its strongest language on the topic of indirect GHG emissions in *PennEast Pipeline Company, LLC*, 164 FERC ¶ 61,098 (2018) (*PennEast*).⁸⁹ In *PennEast*, certain petitioners argued that FERC needed to consider the upstream and downstream GHG emissions that were likely to result from the Commission's approval of a new pipeline that would transport natural gas produced from the Marcellus Shale to northeastern Pennsylvania.⁹⁰ In contrast to earlier FERC decisions, the *PennEast* pipeline's EIS provided a rough "upper-bound" calculation of the pipeline's potential upstream and downstream GHG emissions based on an assumption that the pipeline would carry the maximum quantity of natural gas every day and that all gas transported through the pipeline would be used for additional consumption.⁹¹

However, FERC characterized these estimates as "beyond that which is required by NEPA."⁹² The Commission held that it was not required to consider the estimated upstream or downstream GHG emissions in its approval of the pipeline because "the record [did] not show a specific end use of the gas transported by the project" and did not contain "information regarding the number, location, and timing of [production] wells" served by the pipeline.⁹³

C. FERC's Use of the SC-CO₂ After Sabal Trail

Following the D.C. Circuit's remand in *Sabal Trail*, FERC drafted a supplemental EIS that quantified the incremental downstream GHG emissions that would result from the pipeline's completion.⁹⁴ However, FERC declined to utilize SC-

85. *Id.* at P 58.

86. 163 F.E.R.C. ¶ 61,190 at P 58.

87. *Id.*

88. *Id.* (LaFleur, Comm'r, concurring); (Glick, Comm'r, dissenting).

89. *PennEast Pipeline Company, LLC*, 164 F.E.R.C. ¶ 61,098 (2018).

90. *Id.* at P 104.

91. *Id.* at P 111 n.252.

92. *Id.* at P 111.

93. *Id.* at PP 109, 111.

94. 162 F.E.R.C. ¶ 61,233 at P 2.

CO₂ to estimate the economic damages associated with the incremental increases.⁹⁵ To justify this position, FERC maintained that the SC-CO₂ was not a useful tool for the Commission's NEPA evaluation "because several of the components of its methodology are contested and because not every harm it accounts for is necessarily significant within the meaning of NEPA."⁹⁶ FERC went on to question the validity of SC-CO₂ by noting that there was no consensus among federal agencies or commentators as to the appropriate discount rate that should be integrated into the tool when measuring potential damages "spanning multiple generations."⁹⁷ The Commission noted that the application of different discount factors could result in inconsistent measurements of environmental effects across agencies.⁹⁸

IV. FUTURE PROGNOSTICATION—THE FATE OF FERC'S REVIEW OF INDIRECT GHG EMISSIONS UNDER NEPA

A. *FERC Continues to Refine its Position on Indirect GHG Emissions*

In the wake of *Sabal Trail* and the midst of legal battles over the scope of its obligation to consider indirect GHG emissions, FERC elected to solicit public comments on if and how it should update its process for conducting reviews of proposed pipelines under the NGA and NEPA.⁹⁹ However, before FERC could take the additional step of presenting draft updates to its processes, a dramatic change to the Commission's composition and the release of proposed modifications to the CEQ regulations from the Trump Administration have likely fundamentally altered FERC's update process.¹⁰⁰ As such, it is unclear when (if ever) FERC will release its proposed findings from the NOI and how the agency will frame its obligation to consider indirect GHG emissions in future pipeline reviews.

1. FERC's Notice of Inquiry

On April, 19, 2018, FERC issued a Notice of Inquiry asking for "information and stakeholder perspectives to help the Commission explore whether, and if so how, it should revise its approach" to approving pipeline projects under the NGA.¹⁰¹ Specifically, FERC sought comments on: "(1) [t]he reliance on precedent agreements to demonstrate need for a proposed project; (2) the potential exercise of eminent domain and landowner interests; (3) the Commission's evaluation of alternatives and environmental effects under NEPA and the NGA; and (4) the efficiency and effectiveness of the Commission's certificate processes."¹⁰²

95. *Id.* at P 31.

96. *Id.*

97. *Id.* at P 35.

98. *Id.*

99. 162 F.E.R.C. ¶ 61,233 at P 4.

100. *See generally* Press Release, What They Are Saying: CEQ Issues Proposed Rule to Modernize its NEPA Regulations, U.S. Dep't of Interior (Jan. 13, 2020) (on file with author).

101. Notice of Inquiry, *Certification of New Interstate Natural Gas Facilities*, 163 F.E.R.C. ¶ 61,042 at P 1 (2018).

102. *Id.* at P 51 (emphasis added).

FERC issued this NOI in recognition that 19 years had passed since the Commission last released a Policy Statement describing the criteria and analytical steps the Commission uses to assess a pipeline project's benefits and adverse consequences.¹⁰³ In that time, the energy landscape had changed drastically thanks to a "revolution in natural gas production," sparking a heightened interest in how FERC assesses the impact that project-related GHG emissions have on global climate change.¹⁰⁴ Accordingly, FERC's NOI posed a host of climate-related questions to help FERC assess how GHG emissions should be incorporated into the Commission's analysis when weighing whether a proposed pipeline is in the public interest.¹⁰⁵

The questions that FERC posed included:

In conducting an analysis of a project, should the Commission consider calculating the potential GHG emissions from upstream activities (*e.g.*, the drilling of natural gas wells)? What information would be necessary for the Commission to reliably and accurately conduct this calculation? Should the Commission also evaluate the significance of these upstream impacts? If so, what criteria would be used to determine the significance of these impacts?

In conducting an analysis of a project, should the Commission consider calculating the potential GHG emissions from the downstream consumption of the gas? If so, should the Commission base this calculation on total consumption, or some other amount? What information would be necessary for the Commission to reliably and accurately conduct this calculation? Should the Commission also evaluate the significance of these downstream impacts? If so, what criteria would be used to determine the significance of these impacts?

How would additional information related to the GHG impacts upstream or downstream of a proposed project inform the Commission's decision on an application? What topics or criteria should be included in this additional information?

Should the Commission reconsider how it uses the Social Cost of Carbon tool in its environmental review of a proposed project? How could the Commission use the Social Cost of Carbon tool in its weighing of the costs versus benefits of a proposed project? How could the Commission acquire complete information to appropriately quantify all of the monetized costs/negative impacts and monetized benefits of a proposed project?¹⁰⁶

2. Expected Timeline of FERC's Rulemaking

The public comment period on the NOI closed July 25, 2018.¹⁰⁷ At present, FERC has not provided a timeline for concluding its rulemaking proceeding. However, two recent events at FERC have likely delayed any imminent action on the rulemaking.

First, a number of unanticipated changes to the FERC Commissioners makeup has altered the political composition within the Commission. These unexpected changes began with the passing of FERC Commissioner Kevin McIntyre

103. *Id.* at P 2.

104. *Id.*

105. *Id.*

106. 163 F.E.R.C. ¶ 61,042 at P 58 (emphasis added).

107. Order Extending Time for Comments, *Certification of New Interstate Natural Gas Facilities*, 163 F.E.R.C. ¶ 61,138 at P 2 (2018).

on January 2, 2019.¹⁰⁸ Prior to his passing, Commissioner McIntyre, along with Commissioner Bernard McNamee and Chairman Neil Chatterjee, formed the majority block within the Commission.¹⁰⁹ These Commissioners generally pushed for a narrow application of *Sabal Trail* over the dissenting views of Commissioners LaFleur and Glick.¹¹⁰ Commissioner McIntyre's passing therefore appeared to create a brief opportunity during which the dissenting Commissioners could force a deadlock in future NEPA reviews.¹¹¹ However, this opportunity turned out to be short-lived because in late January 2019, Commissioner LaFleur announced she would not seek a third term on the Commission,¹¹² officially vacating her seat at the end of August, 2019.¹¹³ President Trump, in turn, nominated FERC General Counsel James Danly to fill Commissioner McIntyre's open seat in September 2019.¹¹⁴ Notably, the President chose not to nominate a Democrat to fill Commissioner LaFleur's former seat, as is customary.¹¹⁵ After some delay, the Senate confirmed Commissioner Danly on March 12, 2020.¹¹⁶ On January 23, 2020, another member of the majority block, Commissioner McNamee, announced that he intends to step down from FERC at the expiration of his term, on June 30, 2020.¹¹⁷ Mr. McNamee's exit would leave the traditionally five-member FERC with only three commissioners – Chairman Chatterjee, Commissioner Glick and the recently confirmed Chairman Danly.¹¹⁸ In the wake of several Commissioners retiring and at least two likely vacant seats, FERC may elect to delay implementation of any

108. Steven Mufson, *Former FERC Chairman Dies at 58*, THE ROANOKE TIMES (Jan. 4, 2019), https://www.roanoke.com/business/former-ferc-chairman-dies-at/article_be7bead3-b797-5a21-ad9e-bd759346f59f.html.

109. *Id.*

110. *See, e.g.*, 163 F.E.R.C. ¶ 61,128.

111. It is also worth noting that the FERC's actions, including issuance of certificates of necessity, require a majority vote. A 2-2 split decision is the equivalent of a deadlock that would preclude the issuance of a certificate of necessity. Lawrence R. Greenfield, *An Overview of the Federal Energy Regulatory Commission and Federal Regulations of Public Utilities*, FED. ENERGY REG. COMM'N (June 2018), <https://www.ferc.gov/about/ferc-does/ferc101.pdf>.

112. Gavin Bade, *FERC's LaFleur to down after push from Senate Democrats*, UTILITY DIVE (Jan. 31, 2019), <https://www.utilitydive.com/news/breaking-fercs-lafleur-to-step-down/547341/>.

113. *Id.*

114. Eric Beech & Darren Schuettler, *Trump nominates FERC general counsel for commission seat -White House*, CNBC (Sept. 30, 2019), <https://www.cnbc.com/2019/09/30/reuters-america-trump-nominates-ferc-general-counsel-for-commission-seat-white-house.html>.

115. However, it should be noted that officials from the Trump Administration have reportedly met with Allison Clements, a former senior attorney at the Natural Resources Defense Council, who democrats have lobbied to be nominated for FERC. David Bradley, *Process to Fill Empty FERC Seats Reverts Back to Square One*, NAT. GAS INTELLIGENCE (Jan. 9, 2020), <https://www.naturalgasintel.com/articles/120706-process-to-fill-empty-ferc-seats-reverts-back-to-square-one>.

116. FED. ENERGY REG. COMM'N, SENATE VOTES TO CONFIRM DANLY AS FERC COMMISSIONER (Mar. 12, 2020), <https://www.ferc.gov/media/news-releases/2020/2020-1/03-12-20.asp#.XnrKVi2ZPzU>.

117. More specifically, he "plans to stay through the end of the year or until another commissioner is appointed, whichever comes first." Iulia Gheorghiu, *FERC's McNamee not seeking 2nd term as commissioner*, UTILITY DIVE (Jan. 24, 2020), <https://www.utilitydive.com/news/fercs-mcnamee-not-seeking-2nd-term-as-commissioner/571009/>.

118. David Bradley, *Short-Handed FERC to Lose Commissioner McNamee in June*, NAT. GAS INTELLIGENCE (Jan. 25, 2020), <https://www.naturalgasintel.com/articles/120846-short-handed-ferc-to-lose-commissioner-mcnamee-in-june>.

substantive policy updates until the vacant seats have been filed with confirmed nominees.

The timeline for FERC's policy update may be further delayed if the Commission elects to wait for the final outcome of the Trump Administration's proposed update to the CEQ regulations. If enacted, the proposed regulations would mark the first comprehensive update to NEPA's review process in over forty years and bring substantial changes to the requirements imposed on federal agencies.¹¹⁹ Among other changes, the proposed regulations would eliminate the requirement that federal agencies consider "cumulative" environmental consequences when accounting for the environmental impacts of a specific action.¹²⁰ Thus, where a proposed federal project only has the potential to incrementally contribute to climate impacts due to an increase in GHG emissions, the proposed regulations would arguably not require the federal agency to consider or account for these global effects.¹²¹

Given the likelihood that the proposed regulations will be challenged by environmental groups, it is unlikely that the Trump Administration will be able to publish the final CEQ regulations prior to the November 2020 presidential election.¹²² In light of the potential impact of the proposed CEQ regulations, it is possible that FERC will elect to wait and see whether the Trump Administration succeeds in issuing the final regulations and whether the language of the final regulations remain similar to the current proposal before attempting to update the Commission's own policies.

3. Predicted Outcome of FERC's Rulemaking

Despite the turnover of FERC Commissioners, it is anticipated that the replacement commissioners nominated by the Trump Administration should provide a political landscape largely similar to the makeup of the Commission during the 2017 *Sabal Trail* decision and 2018 NOI.¹²³ That is, a Commission that consists of a 3-2 Republican majority that will continue to advance a narrower interpretation of *Sabal Trail*.¹²⁴ In other words, unless a specific end-user can be clearly identified, FERC is likely to continue to conclude that downstream GHG emissions are not reasonably foreseeable indirect effects that fall within the ambit of its NEPA review.¹²⁵ To the extent that the Trump Administration is able to finalize its pro-

119. Press Release, What They Are Saying: CEQ Issues Proposed Rule to Mod. its NEPA Reg., U.S. Dep't of Interior (Jan. 13, 2020) (on file with author).

120. See 85 Fed. Reg. 1,684, at 1,707-08.

121. *Id.*

122. Niina Farah, *NEPA Overhaul Won't Be 'Overnight Game Changer'*, E&E NEWS (Jan. 10, 2020), <https://www.eenews.net/stories/1062039335>.

123. See generally 163 F.E.R.C. ¶ 61,042; *Sierra Club v. FERC*, 867 F.3d 1357, 1363 (D.C. Cir. 2017); Keith Goldberg, *Churn of Commissioners May Hobble FERC's Work*, LAW 360 (Jan. 24, 2020), <https://www.law360.com/articles/1237301/churn-of-commissioners-may-hobble-ferc-s-work>.

124. Federal regulations prevent more than three sitting members of FERC to be from the same political party at a given time. See *Sierra Club v. FERC*, 867 F.3d at 1363 (D.C. Cir. 2017); Commission Members, FED. ENERGY REG. COMM'N, <https://www.ferc.gov/about/com-mem.asp> (last updated Aug. 30, 2019).

125. 163 F.E.R.C. ¶ 61,128 at P 41.

posed CEQ regulations, it would be expected that any subsequent FERC rulemaking would find that the Commission's obligation to consider GHG emissions is even further reduced.

The likely outcome of FERC's rulemaking is perhaps presaged by the Commission's evolving language on the issue in *Otsego 2000*, *Birckhead* and *PennEast*.¹²⁶ In *Otsego 2000*, not only did FERC rebuff the notion that it was required to consider indirect GHG emissions during the approval of a pipeline transfer station, the Commission took the opportunity to announce its broader understanding of FERC's obligation to quantify indirect GHG emissions under NEPA generally.¹²⁷ In order to "avoid confusion as to the scope of [the] FERC's obligations," the Commission announced that it would no longer prepare upper-bound estimates of upstream or downstream effects "where, as here, the upstream production and downstream use of natural gas are not cumulative or indirect impacts of the proposed pipeline project, and consequently are outside the scope of our NEPA analysis."¹²⁸ FERC characterized these estimates as "generic" and "inherently speculative" information which was not useful to FERC's decision-making process.¹²⁹ The decision to announce this "new policy" in an otherwise relatively minor decision is a likely signal that the Commission intended to push back against calls from environmental groups that the Commission adopt a more expansive scope of its obligation to consider GHG emissions during NEPA reviews.¹³⁰

Just one month after *Otsego 2000*, FERC reasserted its position in *Birckhead* by refusing to consider upstream GHG emissions even though the emissions all originated from a single source.¹³¹ By refusing to quantify or consider the upstream emissions under the unique facts of *Birckhead*, the Commission likely signaled its intent to limit the applicability of *Sabal Trail* to downstream GHG emissions only.¹³²

Finally, FERC took the opportunity to reaffirm its *Otsego 2000* and *Birckhead* decisions by refusing to consider upstream or downstream GHG emissions in *PennEast*.¹³³ Despite the fact that the EIS in *PennEast* actually provided upper-bound estimates of the pipeline's potential downstream and upstream emissions, FERC reapplied its finding from *Otsego 2000* that the GHG emission estimates

126. See generally 163 F.E.R.C. ¶ 61,190; 164 F.E.R.C. ¶ 61,098.

127. 163 F.E.R.C. ¶ 61,128 at P 41.

128. *Id.* at P 44.

129. *Id.* at P 41.

130. *Id.* (Glick, Comm'r, dissenting). As an administrative agency, FERC enjoys the latitude to provide policy or rulemaking pronouncements in adjudicative proceedings. It is well settled that an agency may announce "new principles in an adjudicative proceeding and that the choice between rulemaking and adjudication lies in the first instance within the [agency's] discretion." *NLRB v. Bell Aerospace Co.*, 416 U.S. 267, 294 (1974); see also *Shalala v. Guernsey Mem'l Hosp.*, 514 U.S. 87, 96 (1995) ("The Secretary's mode of determining benefits by both rulemaking and adjudication is, in our view, a proper exercise of her statutory mandate."); *Puerto Rico Aqueduct & Sewer Auth. v. United States EPA*, 35 F.3d 600, 607 (1st Cir. 1994) ("It is well established that agencies are free to announce and develop rules in an adjudicatory setting."); *Ka Fung Chan v. INS*, 634 F.2d 248, 257 (5th Cir. 1981) ("An agency is not precluded from announcing new principles in an adjudicative proceeding.") (citations omitted).

131. 163 F.E.R.C. ¶ 61,190 at PP 57-58.

132. Compare 163 F.E.R.C. ¶ 61,190 with *Sabal Trail*, 867 F.3d 1357.

133. 164 F.E.R.C. ¶ 61,098 at P 118.

were speculative and not required by NEPA.¹³⁴ Moreover, FERC applied the rationales from its *Otsego 2000* and *Birckhead* holdings to a complete “end-to-end” pipeline project.¹³⁵ By doing so, FERC signaled that it would not only limit its review of indirect GHG emissions in smaller cases involving pipeline segments or support structures, but that the Commission also planned to limit its review of indirect GHG emissions for larger-scale pipeline projects as well.¹³⁶

FERC is similarly unlikely to revisit its view that SC-CO₂ is not a useful tool to assess the monetary costs of increased GHG emissions.¹³⁷ The reasons for FERC’s view that the SC-CO₂ tool is not helpful or required include the lack of consensus on the proper discount rate to use to analyze the cost across multiple generations, the lack of complete information needed to fully analyze all of the project’s costs and benefits, and the lack of established criteria on what SC-CO₂ figure would count as significant for the purposes of NEPA review.¹³⁸ In addition, the Commission believes that the SC-CO₂ tool has more relevance for regulators who deal with production or consumption of fossil fuels in contrast to FERC’s oversight of fossil fuel transportation.¹³⁹ The D.C. Circuit has allowed FERC to decline using the SC-CO₂ tool because NEPA only requires FERC to give reasons why the Commission does not find the tool useful, as it has done.¹⁴⁰ In light of the D.C. Circuit’s acceptance of FERC’s rationale for refusing to utilize the SC-CO₂, it seems safe to say that FERC will not willingly rely on this tool in NEPA analysis for the foreseeable future.

B. *Will Future Courts Accept the Outcome of FERC’s Rulemaking?*

Following the Commission’s attempt to limit its obligation to consider upstream and downstream GHG emissions in *Otsego 2000* and *Birckhead*, both were appealed to the D.C. Circuit.¹⁴¹ While the court ultimately elected not to overturn either FERC decision, language from the court transcripts and final opinions indicates that the D.C. Circuit does not agree with the Commission’s interpretation of *Sabal Trail*, and the court will likely continue to scrutinize the Commission’s resistance to quantifying indirect GHG emissions.¹⁴²

We make three predictions below.

134. *Id.* at P 108; 163 F.E.R.C. ¶ 61,128 at P 31.

135. 164 F.E.R.C. ¶ 61,098 at P 111.

136. *Id.* at P 118.

137. 162 F.E.R.C. ¶ 61,233 at P 41.

138. *Id.* at PP 35, 40, 49.

139. *Id.* at PP 36-37.

140. *Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199, at *2 (D.C. Cir. Feb. 19, 2019).

141. *Birckhead v. FERC*, 925 F.3d 510 (D.C. Cir. 2019); *Old Dominion Electric Coop. v. FERC*, 892 F.3d 1223 (D.C. Cir. 2018).

142. *Birckhead*, 925 F.3d at 518.

1. Based on the D.C. Circuit's Recent Decisions and Oral Arguments Before It, We Expect that the D.C. Circuit Will Require that FERC Request Information Regarding Indirect GHG Emissions

In the *Birckhead* appeal, FERC continued to minimize the applicability of *Sabal Trail* by asserting that the decision only compelled the Commission to consider downstream emissions in the limited instances where a proposed pipeline would deliver gas or oil to “specifically-identified” power plants.¹⁴³ The D.C. Circuit rejected FERC’s narrow interpretation of its prior decision and instead held that a case-by-case examination of the facts was needed to determine whether upstream or downstream GHG emissions are “reasonably foreseeable.”¹⁴⁴ The D.C. Circuit ultimately did not vacate the Commission’s order because in its view the record did not contain enough information to declare that the pipeline caused reasonably foreseeable upstream or downstream GHG emissions.¹⁴⁵

Despite upholding FERC’s decision to not consider upstream or downstream emissions, the court expressed in dicta its “misgivings regarding the Commission’s decidedly less-than-dogged efforts to obtain the information it says it would need to determine that downstream [GHG] emissions.”¹⁴⁶ In short, the court seems to have hinted that in future cases FERC will not be able to avoid its obligation to quantify reasonably foreseeable upstream or downstream GHGs simply because the Commission failed to collect otherwise available information.¹⁴⁷

Looking forward, the D.C. Circuit’s review of *Birckhead* signals it will require that FERC at least attempt to collect more emissions information from applicants to comply with NEPA.¹⁴⁸ If such data exists, the Commission may also have to make some sort of emissions estimate to satisfy NEPA, given the court’s dicta on the need for reasonable forecasting based on educated assumptions.¹⁴⁹ While the court rebuffed FERC’s broader attempt to limit *Sabal Trail* to its facts, future decisions should clarify what types of emissions estimates, if any, are required if FERC is able to acquire data from the applicant.

Further evidence of the D.C. Circuit’s disagreement with FERC’s interpretation of its duties to quantify indirect GHG emission can be found in the oral argument from *Otsego 2000*.¹⁵⁰ Though the case was ultimately dismissed for lack of standing, the oral argument took place on the same day as that for the *Birckhead* case, and the *Otsego 2000* D.C. Circuit panel took an equally skeptical view of FERC’s handling of project-related emissions.¹⁵¹

143. *Id.* at 519.

144. *Id.* at 518-19.

145. *Id.* at 520.

146. *Id.*

147. *Birckhead*, 925 F.3d at 520.

148. *Id.*

149. *See* Delaware Riverkeeper Network, 753 F.3d 1304 at 1310.

150. Oral Argument, *Otsego 2000 v. FERC*, 767 Fed. Appx. 19 (2019) (No. 18-1188), [https://www.cadc.uscourts.gov/recordings/recordings2018.nsf/8FD7B49A0D3AC0E1852583D900578F02/\\$file/18-1188.mp3](https://www.cadc.uscourts.gov/recordings/recordings2018.nsf/8FD7B49A0D3AC0E1852583D900578F02/$file/18-1188.mp3) [hereinafter *Otsego Oral Argument*].

151. *Compare* *Otsego Oral Argument*, *supra* note 150 with Oral Argument, *Birckhead v. FERC*, 925 F.3d 510 (D.C. Cir. 2019) (No. 18-1218), [https://www.cadc.uscourts.gov/recordings/recordings2018.nsf/567E4BCD682293EB852583D90057BC51/\\$file/18-1218.mp3](https://www.cadc.uscourts.gov/recordings/recordings2018.nsf/567E4BCD682293EB852583D90057BC51/$file/18-1218.mp3).

Again, FERC was asked several times why they did not and could not ask the pipeline's customers for information to help the Commission calculate potential emissions.¹⁵² Judge Tatel alone asked seven times a variation of "whether it's really futile to ask (the applicant) to produce as much information as possible about where and how this gas will be consumed."¹⁵³ Judge Wilkins expressed agreement, asking "why isn't Judge Tatel completely right that there should be at least an obligation to make the record?" given the assumption in the NEPA regulations that the Commission "would make every attempt to get complete information that is available."¹⁵⁴ In addition, Judge Tatel asked why FERC could not estimate emissions given that all of the natural gas contracted "is going to be burned" and "they wouldn't be buying the gas if they weren't going to burn it."¹⁵⁵ The court's questioning suggests its indulgence of FERC's decision to stop providing upper-bound emissions estimates in *Otsego 2000* and *Birckhead* could be temporary as the D.C. Circuit looks to push back against FERC's preferred standard for limited environmental review under NEPA.

The D.C. Circuit's recent decisions evidence a strong skepticism of FERC's claims that upstream and downstream indirect GHG impacts are "unforeseeable" where FERC has "turned a blind eye" and not made any effort to collect the necessary information. With respect to downstream emissions, FERC will likely have to make some attempt to obtain data in order to estimate these emissions or make some affirmative showing that it is unable to do so, even where a proposed pipeline project does not deliver gas or oil directly to power plants. With respect to upstream GHG emissions, again, courts are likely to at least require FERC to inquire as to whether the proposed pipeline project would lead to increased natural gas production, especially when a known upstream supplier has contracted for a known quantity of supply to a pipeline.

2. Based on Recent Court Decisions Reviewing other Agencies' NEPA Analyses, We Expect that the D.C. Circuit May Soon Require that FERC Expand its Consideration of Upstream and Downstream Emissions

Another potential predictor of how the D.C. Circuit may interpret FERC's obligation to consider upstream and downstream GHG emissions is to examine how courts have treated other agencies' review of upstream and downstream GHG emissions. One such line of cases are recent court reviews of oil and gas leases on federal lands granted by the Bureau of Land Management (BLM) Office of Surface Mining Reclamation and Enforcement (OSMRE).¹⁵⁶ In a manner similar to FERC's approval of a pipeline, many environmental groups have argued that NEPA requires the BLM to not only consider the direct GHG effects of drilling

152. Otsego Oral Argument, *supra* note 150, at 26:50.

153. *Id.* at 26:50, 27:26, 28:30, 30:30, 36:20, 37:37, 38:51.

154. *Id.* at 42:13, 42:26.

155. *Id.* at 29:29, 29:54.

156. See generally *San Juan Citizens Alliance*, 326 F. Supp. 3d at 1227; *Western Org. of Res. Councils v. U.S. Bureau of Land Mgmt.*, 2018 WL 1475470 (D. Mont. 2018).

and extracting these natural resources, but also any additional indirect GHG emissions resulting from transport and eventual combustion of these resources.¹⁵⁷ Recent court opinions in this context show that courts are increasingly calling for the BLM to quantify these indirect GHG emissions when approving leases and Resource Management Plans.¹⁵⁸

For example,¹⁵⁹ in *WildEarth Guardians v. Zinke*, the court analyzed whether BLM was required to consider downstream GHG emissions in approving oil and gas mining leases.¹⁶⁰ Drawing a parallel to *Sabal Trail*, the court held that BLM was obligated to consider and report estimates for downstream GHG emissions resulting from the transport and combustion of the mined coal and gas.¹⁶¹ The court did not, however, require BLM to calculate these emissions utilizing SC-CO₂, finding that the BLM had provided reasoned explanations for why the protocol would not result in a reasonably accurate or useful calculation.¹⁶²

3. FERC is Likely to Continue to Be Able to Avoid Calculating the Social Cost of Indirect GHG Emissions (SC-CO₂)

Although some courts have taken the additional step of requiring federal agencies not only to quantify upstream and downstream GHG emissions, but also to provide some calculation of the social costs of these emissions,¹⁶³ this trend does not yet appear to have caught on at FERC. For example, in *Montana Environmental Information Center v. U.S. Office of Surface Mining*, a Montana district court examined whether the OSMRE should have considered the downstream GHG emissions and other environmental impacts of transporting and combusting coal when the agency approved modifications to a federal mining plan that would have largely expanded an already operating mining site.¹⁶⁴ The court held that not only did the OSMRE have to estimate the downstream GHG effects of the proposal, but that the agency also had to “tie[] its [GHG] emissions calculations to the effects of those emissions.”¹⁶⁵ In order to complete this second step, the court

157. See generally *San Juan Citizens Alliance*, 326 F. Supp. 3d at 1227; *Western Org. of Res. Councils*, 2018 WL 1475470.

158. See e.g., *San Juan Citizens Alliance*, 326 F. Supp. 3d at 1244 (Rejecting BLM’s EIS for failure to quantify downstream GHG emissions because “it is erroneous to fail to consider, at the earliest feasible stage, the environmental consequences of the downstream combustion of the coal, oil and gas resources potentially open to development under the proposed agency action.”); *Western Org. of Res. Councils*, 2018 WL 1475470, at *13; *Wilderness Workshop v. United States Bureau of Land Mgmt.*, 342 F.Supp 3d 1145, 1156 (D. Colo. 2018); *Citizens for a Healthy Community v. United States Bureau of Land Mgmt.*, 377 F.Supp.3d 1223, 1237 (D. Colo. 2019).

159. See *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 51 (D.D.C. 2019).

160. *Id.* at 57.

161. *Id.* at 78.

162. *Id.* at 51.

163. *Id.*

164. *Montana Env’tl. Info. Ctr. v. U.S. Off. of Surface Mining*, 274 F.Supp. 3d 1074, 1081 (D. Mont. 2017), *amended in part, adhered to in part sub nom*; *Montana Env’tl. Info. Ctr. v. U.S. Off. of Surface Mining*, No. CV 15-106-M-DWM, 2017 WL 5047901 (D. Mont. Nov. 3, 2017).

165. *Id.* at 1094.

highlighted the SC-CO₂ to estimate the potential climate impact and monetary cost of GHG emissions.¹⁶⁶

However, as noted in *Sabal Trail* and reaffirmed in *Appalachian Voices v. Federal Energy Regulatory Commission*, courts in the D.C. Circuit currently take the position that FERC is not required to use SC-CO₂ so long as the Commission provides an explanation for why it has elected not to do so.¹⁶⁷ While the D.C. Circuit may change its position regarding the use of SC-CO₂, it is unlikely that this change will occur soon in light of the current composition of FERC.

V. CONCLUSION

At a time when many federal agencies have accepted the growing mandate to consider indirect GHG impacts of proposed federal projects under NEPA,¹⁶⁸ FERC's recent decisions and rulemaking efforts make clear that the Commission views its obligation to consider upstream and downstream GHG emissions narrowly.¹⁶⁹ While the replacement of three Commissioners may again change the balance of power in the Commission, it is more likely that the new Commissioners will continue to support FERC's interpretation that *Sabal Trail* only requires the Commission to calculate downstream emissions in limited situations where a proposed pipeline or pipeline segment would transport gas or oil directly to power plants for combustion.¹⁷⁰ Although FERC has been decidedly less clear on what circumstances could obligate the Commission to consider upstream GHG emissions, the Commission will likely continue to resist calls to consider these emissions in cases where it has not been provided detailed information demonstrating the potential impact a pipeline project will have on specific extractions operations.

We believe that the likely outcome of FERC's rulemaking will be to reaffirm the positions taken by the Commission in recent decisions and in litigation before the D.C. Circuit. However, we doubt the D.C. Circuit will continue to uphold FERC's efforts to avoid consideration of indirect GHG emissions. In its review of both *Birckhead* and *Otsego 2000*, the D.C. Circuit openly criticized FERC's litigation positions and appeared to hint that future Commission orders based on NEPA reviews that failed to account for indirect GHG emissions would be vacated and remanded.¹⁷¹ These recent decisions combined with rulings from other federal circuits indicate that FERC's NEPA review process may ultimately expand to include the potential indirect GHG emissions of pipeline projects.

166. *Id.* at 1099.

167. *See generally Sabal Trail*, 867 F.3d 1357.

168. *See e.g.*, *San Juan Citizens Alliance*, 326 F. Supp. 3d at 1244.

169. *See generally Sabal Trail*, 867 F.3d 1357.

170. *Id.*

171. *See generally Birckhead*, 925 F.3d 510; *Otsego 2000*, 767 Fed. Appx. 19 (No. 18-1188).