162 FERC ¶ 61,240
162 FERC ¶ 61,233
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Kevin J. McIntyre, Chairman;
Cheryl A. LaFleur, Neil Chatterjee,
Robert F. Powelson, and Richard Glick.

Florida Southeast Connection, LLC	Docket Nos. CP14-554-002
Transcontinental Gas Pipe Line Company, LLC	CP15-16-003
Sabal Trail Transmission, LLC	CP15-17-002

ORDER ON REMAND REINSTATING CERTIFICATE AND ABANDONMENT AUTHORIZATION

(Issued March 14, 2018)

1. This case is before the Commission on remand from the United States Court of Appeals for the District of Columbia Circuit.[1] At issue is the Commission's consideration of downstream greenhouse gas (GHG) emissions from gas transported by the three pipelines that make up the Southeast Market Pipelines Project (SMP Project). The court vacated and remanded the Commission's orders in *Florida Southeast Connection, LLC* authorizing construction and operation of the SMP Project[2] and directed the Commission to revise the SMP Project's environmental impact statement (EIS) to provide a quantitative estimate of the project's downstream greenhouse emissions or to explain more specifically why the Commission cannot do so.[3] Further, the court directed the Commission to explain whether the Commission continues to regard the Social Cost of Carbon tool as not useful for NEPA purposes.[4]

2. The Commission issued a draft Supplemental EIS (SEIS) on September 27, 2017, and a final SEIS on February 5, 2018. Commission staff concluded that notwithstanding the additional analysis in the SEIS, it could not reach a finding whether downstream

[1] *Sierra Club v. FERC*, 867 F.3d 1357 (D.C. Cir. 2017) (*Sierra Club*).

[2] *Florida Southeast Connection, LLC*, 154 FERC ¶ 61,080, *order on reh'g*, 156 FERC ¶ 61,160 (2016).

[3] *Sierra Club*, 867 F.3d at 1375.

[4] *Id.*

GHG emissions are significant and that the additional analysis does not alter staff's conclusion in the prior final environmental impact statement that the SMP Project is an environmentally acceptable action. As discussed below, we affirm these conclusions. Accordingly, we reinstate the certificate and abandonment authority for the SMP Project as issued in our earlier orders.

I. Background

A. Environmental Review and Certificate Order

3. From north to south, the three projects that make up the SMP Project are the Hillabee Expansion Project (proposed by Transcontinental Gas Pipe Line Company, LLC, in Docket No. CP15-16-000), the Sabal Trail Project (proposed by Sabal Trail Transmission, LLC, in Docket No. CP15-17-000), and the Florida Southeast Connection Project (proposed by Florida Southeast Connection, LLC, in Docket No. CP14-554-000). Together, the projects will transport approximately 1.1 billion cubic feet (Bcf) of natural gas per day over 685.5 miles of Commission-jurisdictional pipelines from Alabama through Georgia to customers in Florida and the Southeast region. Currently, four power plants have been identified as end-use consumers of the SMP Project volumes: the new Okeechobee Clean Energy Center (owned by Florida Power and Light Company (FPL)), the new Citrus County Combined Cycle Plant (owned by Duke Energy Florida, LLC), and the existing Martin County Power Plant and Riviera Beach Clean Energy Center (both owned by FPL).[5] The shippers, FPL and Duke Energy Florida, LLC, have subscribed to 93.1 percent of the firm transportation service on the SMP Project-created capacity to benefit their power plants.[6]

4. In 2014, the project proponents filed separate applications to construct and operate the three pipeline projects. Commission staff chose to evaluate these applications

[5] That SMP Project-transported natural gas would be used at the Okeechobee Clean Energy Center and Riviera Beach Clean Energy Centers was disclosed in filings made after the SMP Project applications. Specifically, Florida Southeast Connection, LLC, applied to the Commission on June 15, 2017, to construct the Okeechobee Lateral (Docket No. CP17-463-000) to serve the Okeechobee Clean Energy Center. The parent company of FPL, NextEra Energy, Inc., indicated in comments on the draft SEIS that the Riviera Beach Clean Energy Center receives gas from the SMP Project. NextEra Energy, Inc., November 20, 2017 Comments on the Draft SEIS at 4.

[6] *Florida Southeast Connection, LLC*, 145 FERC ¶ 61,080 at PP 23-25. Of the 1,075,000 dekatherms per day of firm transportation service to be available on the SMP Project-created capacity, FPL has subscribed to 600,000 dekatherms per day and Duke Energy Florida has subscribed to 400,000 dekatherms per day.

together as connected actions. On September 4, 2015, Commission staff issued a draft environmental impact statement (DEIS) for the combined SMP Project, in compliance with the National Environmental Policy Act of 1969 (NEPA).[7] Sierra Club[8] filed comments on the DEIS, arguing that the DEIS failed to analyze downstream GHG emissions and therefore did not support the conclusion that there would be no significant cumulative impact from them.

5. On December 18, 2015, Commission staff issued the final environmental impact statement (FEIS).[9] The FEIS quantified the SMP Project's direct construction- and operation-related GHG emissions, but stated that it would be difficult to meaningfully consider downstream end-use effects.[10] Though the FEIS acknowledged that the SMP Project would result in the distribution and consumption of about 1 billion dekatherms per day of natural gas, the FEIS stated that there is no standard methodology to determine how the proposed SMP Project's incremental contribution to GHGs would translate into physical effects of the global environment.[11] The FEIS explained that some of the downstream natural gas power plants to be served would displace coal-fired plants, which have higher total lifecycle GHG emissions.[12] The FEIS also explained that all natural gas-fired power plants would be regulated by federal and state air permitting agencies and would be subject to their regulatory requirements.[13]

6. On February 2, 2016, the Commission granted the necessary authorizations for the project.[14] The Commission found that the applicants had demonstrated a need for the

---

[7] Notice of the DEIS was published in the *Federal Register* on September 11, 2015. 80 Fed. Reg. 54,777.

[8] The Commission's previous orders for the SMP Project referred to Sierra Club as "Kiokee Flint."

[9] Notice of the final EIS was published in the *Federal Register* on December 24, 2015. 80 Fed. Reg. 80,354.

[10] FEIS at 3-297 to 3-298.

[11] *Id*. at 3-297.

[12] *Id*. at 3-297 to 3-298.

[13] *Id*. at 3-297-98

[14] *Florida Southeast Connection, LLC*, 154 FERC ¶ 61,080 (2016) (Certificate Order).

SMP Project and that the SMP Project's benefits would outweigh any adverse economic effects on other pipelines and their captive customers and on landowners and surrounding communities.[15] The Commission also found that the project, as conditioned by the order, would be environmentally acceptable.[16] Consequently, consistent with the criteria discussed in the Commission's Certificate Policy Statement,[17] the Commission found that the public convenience and necessity requires approval of the SMP Project, as conditioned in the order.[18]

B. Rehearing Order

7. Sierra Club requested rehearing, arguing, among other things, that the Commission erred in failing to estimate the downstream GHG emissions from the gas that will be transported by the project and in failing to consider the effects that those emissions will have on climate change. Although the Commission was considering Sierra Club's rehearing request, the Commission authorized the construction of the projects, in August and early September 2016.[19]

8. On September 7, 2016, the Commission denied rehearing, finding that the FEIS sufficiently assessed GHG emissions.[20] The Commission explained that the environmental effects of end-use emissions resulting from natural gas consumption are generally neither caused by a proposed pipeline project nor are they reasonably foreseeable consequences of the Commission's approval of an infrastructure project, as contemplated by CEQ regulations.[21] Further, the Commission explained that, even if

---

[15] *Id.* P 88.

[16] *Id.* P 292.

[17] *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

[18] Certificate Order, 154 FERC ¶ 61,080 at P 88.

[19] The filing of a request for rehearing does not stay a Commission order. *See* 15 U.S.C. § 717r (2012) ("The filing of an application for rehearing . . . shall not, unless specifically ordered by the Commission, operate as a stay of the Commission's order.").

[20] *Florida Southeast Connection, LLC*, 156 FERC ¶ 61,160 (2016) (Rehearing Order).

[21] *Id*. P 63.

there were a causal relationship between the proposed project and end use emissions, there was insufficient information to meaningfully evaluate downstream GHG impacts.[22]

9. In September 2016, Sierra Club, among other parties, appealed the Commission's decision to the U.S. Court of Appeals for the District of Columbia Circuit. In June and July 2017, while the court case was pending, Commission staff authorized the pipelines to commence service on completed facilities.

C. The Court's Remand Order

10. On August 22, 2017, the U.S. Court of Appeals for the D.C. Circuit vacated and remanded the Certificate and Rehearing Orders.[23] The court held that where "all the natural gas that will travel through these pipelines will be going somewhere: specifically, to power plants in Florida,"[24] the downstream greenhouse gas emissions that will result from burning the transported gas "are an indirect effect of authorizing [the SMP] project, which FERC could reasonably foresee, and which [FERC] has legal authority to mitigate."[25] As such, the court held that the Commission's environmental review must consider these effects.[26]

11. The court directed the Commission to quantify and consider the project's downstream GHG emissions or explain in more detail why it cannot do so.[27] In addition, the court required the Commission to explain whether it still adhered to its prior position, accepted by the court in *EarthReports, Inc. v. FERC*,[28] that estimates using the Social Cost of Carbon tool were not useful in performing its NEPA review.[29]

---

[22] *Id.* PP 63, 69.

[23] *Sierra Club*, 867 F.3d 1357.

[24] *Id.* at 1371.

[25] *Id.* at 1374.

[26] *Id.*

[27] *Id.* at 1375.

[28] 828 F.3d 949, 956 (D.C. Cir. 2016) (*Earth Reports*).

[29] *Sierra Club*, 867 F.3d at 1375.

D. Supplemental Environmental Impact Statement

12. On September 27, 2017, the Commission issued a draft SEIS to supplement the information and analyses contained in the December 2015 FEIS for the SMP Project. Notice of the draft SEIS was published in the *Federal Register* on October 4, 2017, for a 45-day comment period.[30]

13. In response, we received comments from Senators Michael F. Bennet and Sheldon Whitehouse; Duke Energy Florida, LLC; the Institute for Policy Integrity at New York University School of Law (Institute for Policy Integrity); NextEra Energy, Inc.; Palm Beach County Environmental Alliance; a group of seven Riverkeeper organizations and the WWALS Watershed Coalition; Sabal Trail Transmission, LLC; the Sabin Center for Climate Change Law at Columbia Law School (Sabin Center); Sierra Club; the U.S. Environmental Protection Agency (EPA); the Teamsters National Pipeline Training Fund; a group filing by Institute for Policy Integrity, Natural Resources Defense Council, Sierra Club, and the Union of Concerned Scientists (Conservation Groups); and several individuals.

14. On February 5, 2018, the Commission issued the final SEIS. Notice of the final SEIS was published in the *Federal Register* on February 14, 2018.[31] All comments are addressed in the final SEIS or in this order, as appropriate. References in this order to the SEIS are to the final SEIS, unless otherwise noted.

15. Although the SEIS quantified the maximum GHG emissions from downstream use of natural gas transported on the SMP Project, Commission staff had no basis for determining the significance of impacts from these emissions. Based on the environmental analysis in the FEIS and the final SEIS, staff concluded that, with respect to the impacts for which staff could assess significance, constructing and operating the SMP Project would result in temporary and permanent impacts on the environment. The SEIS found, however, that these effects would not be significant with the applicants' implementation of their respective impact avoidance, minimization, and mitigation measures, as well as their adherence to the measures list in the FEIS to further avoid, minimize, and mitigate these impacts.[32]

[30] 82 Fed. Reg. 46,233.

[31] 83 Fed. Reg. 6172.

[32] SEIS at 9-10.

II. Discussion

A. Comments Outside the Scope of this Order

16. Commenters raised many issues that are outside the scope of the SEIS and the court's mandate, including: GHG emissions from upstream production of natural gas; project impacts to wetlands, threatened and endangered species, groundwater, and real property; noise; safety of pipelines constructed in karst areas; environmental justice; project need; LNG exports; landowner notification; project's effect on the supply and demand for natural gas and substitute energy sources; and public participation. The Commission will not address these arguments because the Commission already thoroughly considered them in the Certificate and Rehearing Orders and the court either specifically affirmed these arguments or did not remand them to the Commission for further consideration. We address the relevant comments below.

B. Commission Responsibilities Under the NGA and NEPA

17. Before we turn to discussion of the specific issues before us on remand, it may be helpful to take a broader look at the Commission's role in approving the construction and operation of natural gas pipelines. "[T]he public interest that the Commission must protect always includes the interest of consumers in having access to an adequate supply of gas at a reasonable price."[33] In the past, when interstate pipelines were natural gas merchants delivering the commodity to the customer's city gate at a bundled rate, fulfilling the Commission's public interest mandate included both ensuring there was a match between a pipeline's access to supplies at the upstream end and the customer's anticipated demand at the downstream end sufficient to assure the pipeline could meet that demand for the long term and also setting a reasonable rate for the bundled service. It was also the case during that period that natural gas was viewed as a limited resource and both Congress and the Commission imposed restrictions on end uses to ensure that the highest-valued needs could continue to be met. Today, however, natural gas is plentiful as a result of both action by Congress to decontrol the pricing of natural gas and technological advances. Further, the interstate pipeline industry has been restructured to

[33] *Tejas Power Corp. v. FERC*, 908 F.2d 998, 1003 (D.C. Cir. 1990). *See also*, *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 611 (1944) ("[T]he Commission was told by section 7(c) [of the NGA], as originally enacted, that it was 'the intention of Congress that natural gas shall be sold in interstate commerce for resale for ultimate public consumption for domestic, commercial, industrial, or any other use at the lowest possible reasonable rate consistent with the maintenance of adequate service in the public interest.'"); *Atl. Ref. Co. v. Pub. Serv. Comm'n of State of N.Y.*, 360 U.S. 378, 388 (1959) (quoting same, also noting that the 1942 amendments to the NGA, which broadened section 7(c), were not intended to change this declaration of purpose).

one where pipeline companies are solely transporters of natural gas—pipeline customers, both suppliers and consumers, make their commodity arrangements independent of the pipeline companies. This change was designed "to ensure that all shippers have meaningful access to the pipeline transportation grid so that willing buyers and sellers can meet in the competitive national market to transact the most efficient deals possible."[34]

18. The Commission has not historically engaged in planning the development of natural gas capacity.[35] Today, likely influenced by the Commission's current policy prohibiting the subsidization of new construction by a pipeline's existing customers,[36] transportation projects are developed almost exclusively to satisfy the needs of identified shipper-customers, who might be producers, marketers, local distribution companies, or large end-use consumers like industrial customers and electricity generators.[37]

19. Under section 7 of the NGA, the Commission must determine whether a proposed project is or will be required by the present or future public convenience and necessity."[38] The inquiry under section 7 of the NGA encompasses "all factors bearing on the public interest."[39]

---

[34] *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation; and Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 636, FERC Stats. & Regs. ¶ 30,939 at 30,393.

[35] The Commission authority to compel construction of facilities is extremely limited. *See* section 7(a) of the NGA, 15 U.S.C. § 717f(a) (2012).

[36] Certificate Policy Statement, 88 FERC at 61,746-47.

[37] Applications are also filed for authority to construct and operate facilities to enhance or maintain service to existing customers (*e.g.*, to replace obsolete or deteriorating facilities).

[38] 15 U.S.C. § 717f(e) (2012). The Commission interpreted "public convenience and necessity" in *In the Matter of Kansas Pipe Line & Gas Co. & N. Dakota Consumers Gas Co.*, 2 FPC 29, 56 (1939) ("we view the term as meaning a public need or benefit without which the public is inconvenienced to the extent of being handicapped in the pursuit of business or comfort or both-without which the public generally in the area involved is denied to its detriment that which is enjoyed by the public of other areas similarly situated.").

[39] *Atlantic Refining Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 391 (1959).

20. The Commission's consideration of a proposed project's environmental effects is informed by the staff's environmental analysis in the NEPA document (environmental assessment (EA) or EIS). As the court explained in *Sierra Club*, under NEPA an EIS has two purposes: "it forces the agency to take a hard look at the environmental consequences of its actions, including alternatives to its proposed course" and "it ensures that these environmental consequences, and the agency's consideration of them, are disclosed to the public."[40] An EIS is deficient if it does not contain "sufficient discussion of the relevant issues and opposing viewpoints" or if it does not demonstrate "reasoned decisionmaking."[41] An EIS must include, among other content, a discussion of the indirect effects (and their significance) arising from the proposed action and from reasonable alternatives.[42] The agencies must ensure the professional integrity, including scientific integrity, of the discussions and analyses in an EIS and must disclose methodologies used.[43] The adequacy of an EIS is determined by a rule of reason, "whether an EIS's deficiencies are significant enough to undermine informed public comment and informed decisionmaking."[44]

21. Section 7 of the NGA authorizes the Commission to impose "such reasonable terms and conditions as the public convenience and necessity may require."[45] We can and do evaluate a proposed project's direct, indirect, and cumulative impacts as factors bearing on the public interest, and we impose environmental conditions to mitigate a project's environmental impacts.

C. GHG Emissions

22. The SEIS examines a worst-case GHG emissions scenario in which the SMP Project would deliver 100 percent of the natural gas it will be capable of transporting and all of delivered gas would be burned. When fully constructed, the SMP Project will have the potential to increase the flow of natural gas into Florida by 1.1 Bcf per day.[46] The

[40] *Sierra Club*, 867 F.3d at 1367 (internal quotation and citations omitted).

[41] *Id*. at 1368 (internal quotation and citations omitted).

[42] 40 C.F.R. § 1502.16(b), (d) (2017) (Environmental consequences); *id*. § 1502.14 (Alternatives including the proposed action).

[43] *Id*. § 1502.24 (2017) (Methodology and scientific accuracy).

[44] *Id*. (internal citations omitted).

[45] 15 U.S.C. § 717f(e) (2012).

[46] SEIS at 3.

project proponents have identified four power plants as end-use consumers of natural gas transported on the SMP Project; three of these power plants will have new or modified operations.[47] Using publicly available information about these power plants, the SEIS estimates that the SMP Project will indirectly result in annual gross downstream GHG emissions of 14.5 million metric tons (in carbon dioxide-equivalent units (CO_2e)[48]) and annual net downstream GHG emissions of 8.36 million metric tons CO_2e.[49]

23. The gross figure includes the potential-to-emit volumes of GHG emissions from each power plant, as stated in air quality permits before the Florida Department of Environmental Protection.[50] Potential-to-emit volumes are the maximum amount a permitted power plant is allowed to emit, typically representing operations at full capacity around the clock.[51] The gross figure also includes the assumed combustion of approximately 100 million cubic feet per day of natural gas carried on an unsubscribed portion of the SMP Project capacity.[52] The net figure reduces the gross figure to reflect the reductions in GHG emissions that will occur as the identified power plants replace coal-fired units and displace oil as an alternate fuel, as described in the specific air quality permits before the Florida Department of Environmental Protection.[53] The net figure

[47] *Id*. at 3-4. The Riviera Beach Clean Energy Center's potential-to-emit emissions would not change due to the SMP Project, because the project will only serve to provide the existing natural gas-fired plant with access to alternative sources of natural gas. Thus, the SEIS does not include emissions from combustion of gas delivered to this facility in the downstream GHG emissions calculations. *Id*. at 4.

[48] The potential of a greenhouse gas to increase heating in the atmosphere, i.e., its global warming potential (GWP), is typically expressed as a multiple of the heating potential of CO_2 over a specific timeframe. For example, the 100-year GWP of CO_2 is benchmarked at 1, whereas the 100-year GWP of methane (CH4) is 25 and of nitrous oxide (N_2O) is 298. SEIS at 4 n.8.

[49] SEIS at 5 tbl.1.

[50] *Id*. at 4. The Commission's Office of Energy Projects filed a memorandum to record on October 18, 2017, to make these air permits easier to access.

[51] *Id*. at 4 n.7.

[52] *Id*. at 4.

[53] SEIS at 4-5; *id*. App.

uses the best available information, but the offset cannot be determined with accuracy.[54]

24. Setting aside information about the identified end-use consumers in this proceeding, the SEIS also estimates annual full burn downstream GHG emissions of 23.0 million metric tons CO_2e.[55] The full burn figure very conservatively assumes that the SMP Project will transport natural gas at its full capacity around the clock for combustion without displacing any other fuel source.[56] This scenario is also an overestimate, because pipelines only operate at full capacity during limited periods of full demand, but it provides an upper bound of potential downstream GHG emissions.

25. As detailed further below, the conclusions in the SEIS do not rely on any particular emission scenario. The SEIS provides the three scenarios to inform the Commission and the public.[57]

D. Context and Significance

26. To provide context to the downstream GHG estimate as suggested by the court, the SEIS compares the estimated downstream GHG emissions to the GHG emission inventories for Florida and the United States in 2015. The net figure equals a 3.6 percent increase compared to the 2015 Florida inventory and a 0.15 percent increase compared to the 2015 United States inventory. The full burn figure equals a 9.9 percent increase of the Florida inventory and 0.42 percent increase of the United States inventory.[58] The SEIS notes that Commission staff did not find any widely-accepted thresholds for GHG significance or state emissions reduction targets for Florida,[59] so it was not possible to relate the SMP Project's impact to such a target. The national emissions reduction targets expressed in the EPA's Clean Power Plan and the Paris climate accord are pending repeal and withdrawal, respectively. Accordingly, we find there are no appropriate national

[54] *Id.*, App. at 63 (response to comment NGO6-2).

[55] *Id*. at 5-6, 6 tbl.2.

[56] *Id*. at 6; *id*. App. at 14 (response to comment NGO2-4).

[57] Several commenters expressed concern that the draft SEIS did not account for fugitive methane leaks. The final SEIS explains that for the gross and net scenarios, the data from the Florida air quality permits already includes fugitive methane emissions. SEIS at 6. The full burn scenario assumes a conservative (high) 0.26 percent fugitive methane leakage rate from power plants based on a recent study. *Id*.

[58] SEIS at 6 tbl.

[59] *Id*. at 7.

targets to use as benchmarks for comparison.

27. We agree with the conclusion in the SEIS that there is no widely accepted standard to ascribe significance to a given rate or volume of GHG emissions.[60] We are aware of no standard established by international or federal policy, or by a recognized scientific body. Further, we continue to hold the position that "there are no established criteria identifying the monetized values that are to be considered significant for NEPA reviews," including as discussed in section II.E below, for the Social Cost of Carbon tool, which we continue to find "is not appropriate for estimating a specific project's impacts or informing our analysis under NEPA."[61]

28. Sierra Club and other commenters posited that the significance of downstream GHG emissions is "indisputable," for example because the downstream GHG emissions amount to a 9.9 percent increase over the Florida GHG emissions inventory for 2015. However, the fact that one may view a number as large does not necessarily equate to its being significant, and as the SEIS stated, there are no benchmarks to appropriately consider such environmental issues. Looking to local or state GHG emissions inventories as a benchmark for significance for purposes of siting natural gas pipelines is problematic. Any two projects with the same capacity (or multiple smaller projects with an equivalent cumulative capacity), but which are designed to serve end users in different states or multiple states, will contribute identically to global climate change notwithstanding that they might result in widely different percent increases over different states' GHG emissions inventories.[62] Moreover, as noted below, considering GHG emissions would have no effect on our alternatives analysis.

29. In addition, the vast majority of the lifecycle GHG emissions associated with the natural gas delivery chain are a result of the end use of the natural gas, not the construction or operation of the transportation facilities subject to the Commission's jurisdiction. Thus, the downstream GHG emissions associated with a proposed project are primarily a function of a proposed project's incremental transportation capacity, not the facilities, and will not vary regardless of the project's routing or location. There are

[60] *Id.* at 7.

[61] *Id.* at 7-8.

[62] For example, adding the same amount of GHG emissions could result in a relatively small percentage increase in an industrial area, while causing a more substantial increase in a less developed region. Yet, given that emissions are controlled by air quality standards, in neither case would there be a significant impact on the local community.

no conditions the Commission can impose on the construction of jurisdictional facilities that will affect the end-use-related GHG emissions.[63] The only way for the Commission to reflect consideration of the downstream emissions in its decision making would be, as the court observed, to deny the certificate. However, were we to deny a pipeline certificate on the basis of impacts stemming from the end use of the gas transported, that decision would rest on a finding not "that the *pipeline* would be too harmful to the environment,"[64] but rather that the *end use* of the gas would be too harmful to the environment. The Commission believes that it is for Congress or the Executive Branch to decide national policy on the use of natural gas and that the Commission's job is to review applications before it on a case-by-case basis.[65]

E. Social Cost of Carbon

30. The Social Cost of Carbon tool, (as well as the Social Cost of Methane and Nitrous Oxide tools), estimates the monetized climate change damage associated with an incremental increase in CO_2 emissions in a given year. It can also be thought of as the cost today of future climate change damage, represented as a series of annual costs per metric ton of emissions discounted to a present-day value.

31. The court did not conclude that the Commission was required to use the Social Cost of Carbon. Rather, because the Commission did not address the Social Cost of Carbon tool in the FEIS for the SMP Project, the court directed the Commission to explain on remand whether, and why, the Commission holds to the position it took in a past EIS reviewed (and affirmed) by the court in *EarthReports*,[66] that the Social Cost of

[63] Contrast this with the direct project-related impacts, which the Commission has the ability to mitigate through conditions on routing (*e.g.*, changes to avoid sensitive resources), construction methodology (*e.g.*, timing restrictions to lessen impacts on wildlife, requirements to drill under sensitive streams rather than open cut), and operations (*e.g.*, noise restrictions, requiring electric instead of gas compressors in appropriate situations).

[64] *Sierra Club*, 867 F.3d at 1357 (emphasis added).

[65] *See Office of Consumers' Counsel v. FERC*, 655 F.2d 1132, 1147 (D.C. Cir. 1980) ("FERC's authority to consider all factors bearing on the public interest when issuing certificates means authority to look into those factors which reasonably relate to the purpose for which FERC was given certification authority."); *American Gas Association v. FERC*, 912 F.2d 1496, 1510-11 (D.C. Cir. 1990) ("[T]he Commission may not use its [Natural Gas Act] § 7 condition power to do indirectly . . . things that it cannot do at all.").

[66] *EarthReports*, 828 F.3d at 956.

Carbon tool was not useful 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.[67]

32. Both the FEIS and the SEIS acknowledge that fossil fuel GHG emissions are the primary driver of global climate change.[68] Further, the cumulative impacts analysis in the FEIS qualitatively described the potential cumulative impacts of climate change in the SMP Project region, such as increased pathogens and invasive species; decreased agricultural productivity; rising, more acidic oceans; and more destructive weather systems.[69]

33. However, several commenters claim that if a NEPA review only quantifies the proposed action's GHG emissions or only qualitatively discusses the general effects of global climate change, then decision-makers and the public will tend to overly discount that individual action's potential contribution to climate change.[70] Instead, commenters contend that the Commission should use the Social Cost of Carbon tool to demonstrate the relative significance of the volume of downstream GHG emissions and to approximate the resulting physical climate change impacts.[71]

34. Commenters present the Social Cost of Carbon values as the best available science and economics for contextualizing the climate change impacts from GHG emissions. They suggest that the Commission should use the Social Cost of Carbon tool, and explicitly the Social Cost of Methane tool for potential fugitive emissions,[72] as part

[67] *Sierra Club*, 867 F.3d. at 1375.

[68] FEIS at 3-296; SEIS at 6.

[69] *Id*. at 3-296.

[70] *See, e.g., id.* at 13.

[71] Several organizations specifically addressed the Social Cost of Carbon tool in their comment letters, including the Conservation Groups, Institute for Policy Integrity, Sabin Center; Sierra Club, and a number of individual comment letters that echoed the main points made by the environmental and academic entities.

[72] The Conservation Groups and the Sabin Center contend that the Commission should use the Social Cost of Carbon tool in combination with the Social Cost of Methane and Social Cost of Nitrous Oxide tools. Conservation Groups November 20, 2017 Comments at 2; Sabin Center November 17, 2017 Comments at 3. These other gas-specific tools suffer from the same concerns for which we decline to use the Social Cost of Carbon tool.

of a cost-benefit analysis. They contend that this analysis should include emissions associated with the proposed pipeline as well as the sum of upstream and downstream emissions associated with the transported gas. Further, as discussed below, based on potential climate change impacts from downstream GHG emissions, Sierra Club and individual commenters urge that the Commission adopt the No Action Alternative.

35. The SEIS declined to use the Social Cost of Carbon tool, reiterating the Commission's explanation from *EarthReports* (and other proceedings) why the Social Cost of Carbon tool is not appropriate in project-level environmental review under NEPA:

> (1) the U.S. Environmental Protection Agency (EPA) states that "no consensus exists on the appropriate [discount] rate to use for analyses spanning multiple generations" and consequently, significant variation in output can result; (2) the tool does not measure the actual incremental impacts of a project on the environment; and (3) there are no established criteria identifying the monetized values that are to be considered significant for NEPA reviews. The SCC tool may be useful for rulemakings or comparing regulatory alternatives using cost-benefit analyses where the same discount rate is consistently applied; however, it is not appropriate for estimating a specific project's impacts or informing our analysis under NEPA.[73]

The SEIS then states that the comments raised about Social Cost of Carbon are matters of policy more appropriate for consideration in the Commission order.[74]

36. We now take this opportunity to explain more fully why the Social Cost of Carbon tool cannot meaningfully inform the Commission's decisions on natural gas transportation infrastructure projects under the NGA. For the reasons discussed below, absent information persuading us otherwise, we continue to decline to employ the tool in our proceedings. Our decision not to use the tool does not in any way indicate that the Commission is not cognizant of the potentially severe consequences of climate change, does not undermine our hard look at the effects of the SMP Project and our disclosure of these effects to the public, and does not undermine informed public comment or informed agency decision making. Nevertheless, the Commission is committed to monitoring climate science, state and national targets, and climate models that may inform its

[73] SEIS at 8 (internal citations omitted).

[74] *Id*. at 8-9.

decision-making.[75]

1. Social Cost of Carbon is not Meaningful to Project Decisions under the NGA

37. We continue to believe that the Social Cost of Carbon tool is more appropriately used by regulators whose responsibilities are tied more directly to fossil fuel production or consumption. The federal agencies that regulate the fossil fuel production from federal lands—e.g., the Bureau of Land Management, the Office of Surface Mining Reclamation and Enforcement, the Forest Service, the Bureau of Ocean Energy Management—are charged with determining whether to authorize a quantity of coal, oil, or natural gas production from federal lands. The federal and state agencies that regulate fossil fuel consumption—e.g., the National Highway Transportation Safety Board through corporate average fuel economy standards, the U.S. Department of Energy through energy efficiency standards for commercial equipment, state public utility commissions through certificates for proposed power plants—directly control whether some quantity of fossil fuels is burned and thus directly control whether end use GHG emissions occur. Thus, it follows that some of these agencies have chosen to use the Social Cost of Carbon tool to inform their decisions[76] or have been faulted for failing to use it,[77] as noted by

[75] *See also WildEarth Guardians*, 738 F.3d 298, 309 ("Because current science does not allow for the specificity demanded . . . , the BLM was not required to identify specific effects on the climate in order to prepare an adequate EIS.").

[76] *E.g.*, Bureau of Ocean Energy Management, Liberty Development Project: Draft EIS at 4-247 (July 2017) (using Social Cost of Carbon tool to evaluate proposed wells on Alaska's Outer Continental Shelf to produce up to 65,000 barrels of crude oil and 120 million standard cubic feet of natural gas per day for 15 to 20 years), https://www.boem.gov/2016-010-Volume-1-Liberty-EIS/; Office of Surface Mining Reclamation and Enforcement, Final Environmental Impact Statement for the Four Corners Power Plant and Navajo Mine Energy Project at 4.2.26 to 4.2.27 (May 1, 2015) (using Social Cost of Carbon tool to evaluate proposed 5,600-acre coal mining area and proposal to continue operating sole-source coal-fired generating station beyond original approved lifetime), https://www.wrcc.osmre.gov/initiatives/fourCorners/documentLibrary.shtm; *Zero Zone, Inc. v. U.S. Dep't of Energy*, 832 F.3d 654, 679 (7th Cir. 2016) (affirming the Department of Energy's use of the Social Cost of Carbon tool to monetize global benefits of energy efficiency standards for commercial equipment); Peter Fairly, *States are using social cost of carbon in energy decisions*, Inside Climate News, Aug. 14, 2017 (noting that Minnesota, Colorado, Maine, and Nevada regulators use the Social Cost of Carbon tool when evaluating proposals for new power plants).

commenters.

38. However, the Commission's authority under section 7 of the NGA has no direct connection to the production or end use of natural gas,[78] and we continue to find that the Social Cost of Carbon tool is not meaningful for our decision making under the NGA. The Commission does not control the production or consumption of natural gas. Producers, consumers, and their intermediaries respond freely to market signals about location-specific supply and location-specific demand. The Commission oversees proposals to transport natural gas between those locations. For the SMP Project, the GHG emissions from end use under a worst-case full burn scenario (equal to 23 million metric tons CO_2e) represent 93.3 percent of all project-related GHG emissions. Less than 7 percent of GHG emissions arise from the construction and operation of the Commission-jurisdictional SMP Project facilities themselves,[79] and the Commission has been able to consider and thoroughly address those emissions without resorting to the Social Cost of Carbon tool.

---

[77] *E.g.*, *High Country Conservation Advocates v. Forest Serv.*, 52 F. Supp. 3d 1174, 1191 (D. Colo. 2014) (arbitrary and capricious for Forest Service to quantify benefits of proposed mining exploration on federal land but to fail to quantify costs given that Social Cost of Carbon tool was available); *Ctr. for Biological Diversity v. National Highway Transportation Safety Administration*, 538 F.3d 1172, 1217 (9th Cir. 2008) (arbitrary and capricious for agency to monetize uncertain costs of higher vehicle fuel-efficiency standards but not to monetize the benefits of carbon emission reductions using Social Cost of Carbon tool).

[78] Section 1(b) of the NGA specifically excludes production from the Commission's jurisdiction. 15 U.S.C. 717(b) (2012).

[79] This is the quotient of the end use emissions under a full burn scenario (23,000,000 metric tons CO_2e) divided by the sum of construction, operation, and end use emissions under a full burn scenario (338,270 + 1,324,764 + 23,000,000 metric tons CO_2e). The FEIS quantified the construction- and operation-related GHG emissions for the SMP Project facilities themselves. The FEIS estimated construction–related GHG emissions totaling 338,270 metric tons CO_2e. *See* FEIS at 3-250 tbl.3.12.1-5 (Hillabee Expansion Project); *id*. at 3-251 tbl.3.12.1-6 (Sabal Trail Project); *id*. at 3-252 tbl.3.12.1-7 (Florida Southeast Connection Project). The FEIS estimated operation-related GHG emissions totaling 1,324,764 metric tons CO_2e per year. FEIS at 3-253 tbl.3.12.1-9, 3-255 (Hillabee Expansion Project); *id*. at 3-257 tbl.3.12.1-12, 3-260 (Sabal Trail Project); *id*. at 3-260 (Florida Southeast Connection Project). The operation-related figure combines the potential-to-emit volumes for the projects' new or modified above-ground sources with anticipated equipment leaks or blowdowns.

2. The Commission Does Not Use Monetized Cost-Benefit Analysis

39. Commenters urge the Commission to use the Social Cost of Carbon tool as part of a broader cost-benefit analysis for upstream, downstream, and FERC-jurisdictional facilities. They argue that the discussion of monetized benefits in the FEIS (discussed as socioeconomic impacts from the construction of the SMP Project itself) indicated that a cost-benefit analysis was already underway and incomplete without monetized costs associated with the potential upstream and downstream emissions.

40. The Council on Environmental Quality (CEQ) does not require agencies to conduct a monetary cost-benefit analysis for NEPA review and explains, moreover, that agencies "should not" display a monetary cost-benefit analysis when there are important qualitative considerations.[80] "NEPA does not demand that every federal decision be verified by reduction to mathematical absolutes for insertion into a precise formula."[81] Because we agree with this conclusion and because siting infrastructure necessarily involves making qualitative judgments between different resources as to which there is no agreed-upon quantitative value, the Commission does not conduct a monetary cost-benefit analysis in its NEPA review. The FEIS did quantify some of the SMP Projects' direct socioeconomic benefits (e.g., employment and tax payments) because those benefits occur in units of dollars and are directly comprehensible in units of dollars. However, because Commission staff lacked quantified information about all of the costs and benefits of the project, the FEIS did not use the limited available quantified benefits in a cost-benefit analysis to inform Commission staff's comparison of alternatives, choices of mitigation measures, or determination about the significance of the SMP Project's environmental impacts.

---

[80] 40 C.F.R. § 1502.23 (2017) ("For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations."); CEQ, *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* at 32-33 (Aug. 1, 2016) (citing same regulation and adding that "[w]hen an agency determines that a monetized assessment of the impacts of greenhouse gas emissions or a monetary cost-benefit analysis is appropriate and relevant to the choice among different alternatives being considered, such analysis may be incorporated by reference or appended to the NEPA document as an aid in evaluating the environmental consequences.") (internal citations omitted), https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_guidance.pdf (last accessed March 5, 2018).

[81] *Sierra Club v. Lynn*, 502 F.2d 43, 61 (5th Cir. 1974).

41. To appropriately use the Social Cost of Carbon calculation for the SMP Project in our decision making, not only would we need to quantify all of the negative impacts of the project, but we would also need to calculate the project's benefits, including, but not limited to, replacement of coal and oil by natural gas, a task no easier than calculating costs. Without complete information, an analysis using the Social Cost of Carbon calculations would necessarily be based on multiple assumptions, producing misleading results. As the courts have explained, "[m]isleading economic assumptions can defeat the first function of an EIS by impairing the agency's consideration of the adverse environmental effects of a proposed project"[82] and "can also defeat the second function of an EIS by skewing the public's evaluation of a project."[83]

42. The Commission's balancing process to determine whether a proposed natural gas transportation project is required by "the public convenience and necessity" is not skewed by our decision not to use the Social Cost of Carbon tool. Consistent with longstanding precedent, an applicant must show that benefits to be achieved by a proposed project will outweigh the potential adverse effects.[84] For the SMP Project, the court upheld the Commission's determination that the project sponsors had shown market demand for the project because shipper-customers, anticipating their own ability to sell transported natural gas or the electricity generated from it to end users, entered long term binding contracts for transportation service using most of the project's incremental capacity.[85] These long term contracts guarantee revenue to financially support incremental transportation capacity in an area of the interstate transportation grid where the expansion of existing pipelines would not satisfy the identified demand.[86]

43. The Commission may consider evidence in the record of other public benefits beyond meeting unserved demand, such as eliminating bottlenecks, providing access to new supplies, lowering costs to consumers, providing new interconnects that improve the interstate grid, providing competitive alternatives, or increasing electric reliability.[87]

---

[82] *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 446 (4th Cir. 1996) (citing *So. La. Envtl. Council, Inc. v. Sand*, 629 F.2d 1005, 1011-12 (5th Cir. 1980)).

[83] *Id.* at 446.

[84] Certificate Policy Statement, 88 FERC ¶ 61,227 at 61,747.

[85] *Sierra Club*, 867 F.3d at 1378; Certificate Order, 154 FERC ¶ 61,080 at PP 76-88 (discussing need).

[86] *Id.*

[87] Certificate Policy Statement, 88 FERC at 61,748.

These benefits accrue from the proposed project itself, not from the end use of the transported natural gas. The Commission's assessment of benefits is qualitative. The Commission first balances a proposed project's benefits against potential adverse economic effects on the project sponsor's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new project.[88] These adverse economic effects also accrue from the proposed project itself, not from the end use of the transported natural gas. The Commission's assessment of adverse economic effects is qualitative. The balancing is therefore qualitative; we do not monetize benefits or monetize adverse economic effects.

44. Only when the benefits outweigh the adverse effects on economic interests will the Commission then proceed to complete the environmental analysis where other interests are considered.[89] The Commission presents the environmental analysis in the NEPA document. But, as we explained above, the Commission does not use a monetized cost-benefit analysis to determine whether a proposed project's environmental impacts would be significant or to determine whether and how to mitigate identified environmental impacts by imposing conditions on a certificate or denying a certificate. We do not monetize the social benefits of the proposed project itself, which would be necessary to appropriately balance against the Social Cost of Carbon tool's monetized damages for the direct GHG emissions of the proposed project. Further, we do not qualitatively or quantitatively assess the social benefits of the end use of the proposed project's transported natural gas, which would be necessary to appropriately balance against the Social Cost of Carbon tool's monetized damages for end use GHG emissions.

3. Technical challenges associated with the Social Cost of Carbon tool's use in Commission certificate proceedings

45. As noted above, the Social Cost of Carbon tool estimates the monetized climate change damage associated with an incremental increase in CO_2 emissions in a given year. To provide a consistent approach for agencies to quantify damage in dollars from estimated emissions, the Obama Administration created the Interagency Working Group on the Social Cost of Greenhouse Gases (IWG). In 2010, and updated in 2016, the IWG released a methodology for estimating the Social Cost of Carbon values across a range of assumptions about future socioeconomic systems and physical earth systems that

[88] *Id*. at 61,745.

[89] *Id*. at 61,745. This essentially means that it is Commission policy not to authorize a project that does not pass scrutiny on an economic basis, notwithstanding that a project's potential effects on the environment might prove minimal.

incorporated cost estimates based on global damages.[90]

46. On March 28, 2017, the Trump Administration disbanded the IWG and withdrew its reports and supporting documents as no longer representative of government policy.[91] In place of the IWG Social Cost of Carbon methodology, agencies were required to follow the 2003 OMB Circular A-4, which states that when agencies conduct cost-benefit analyses regarding GHG emissions, they should use Social Cost of Carbon values based on domestic, rather than global, damage costs and to use discount rates of 3 and 7 percent.[92] In October 2017, the EPA completed a regulatory impact analysis for its proposal to repeal the Clean Power Plan. In this document, the EPA developed Social Cost of Carbon values based on only the direct impacts of climate change anticipated to occur within U.S. borders. The Social Cost of Carbon values were presented as interim values for use in regulatory analyses until an improved estimate of the impacts of climate change to the U.S. could be developed.

a. Tool Validity

47. Sierra Club and others provided numerous comments in support of the Social Cost of Carbon tool and specifically comment on its development, the value of varying discount rates used to calculate outputs, and other tool-specific inputs and methodology concerns. In response to the statement in the SEIS that the tool does not measure the actual incremental impacts of a project on the environment, commenters assert that the tool does in fact estimate and extrapolate future environmental impacts by using U.S. Dollars (or any other monetary metric) as a metric for the environmental impacts.

48. On further review, we accept that the Social Cost of Carbon methodology does constitute a tool that can be used to estimate incremental physical climate change impacts. The integrated assessment models underlying the Social Cost of Carbon tool were developed to estimate certain global and regional physical climate change impacts due to incremental GHG emissions under specific socioeconomic scenarios. However, although the integrated assessment models could be run through a first phase to estimate global and regional physical climate change impacts from SMP Project-related GHG emissions, we would still have to arbitrarily determine what potential increase in atmospheric GHG concentration, rise in sea level, rise in sea water temperatures, and

[90] Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 - Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, August 2016

[91] Exec. Order No. 13783, 82 Fed. Reg. 16093 (Mar. 28, 2017).

[92] 68 Fed. Reg. 58,366 (Sept. 17, 2003).

other calculated physical impacts would be significant for that particular pipeline project.

49. Moreover, the appropriate discount rate to be used in the Social Cost of Carbon tool calculations remains a contentious issue, as we have previously described: "the U.S. Environmental Protection Agency (EPA) states that "no consensus exists on the appropriate [discount] rate to use for analyses spanning multiple generations" and consequently, significant variation in output can result."[93] Specifically, we continue to believe that the choice between a high discount rate of 7 percent (or higher) or a lower discount rate of 3 percent introduces substantial variation in Social Cost of Carbon tool outputs. Although numerous commenters, especially the Conservation Groups, discussed the appropriate discount rates, geographic scope, and U.S.-only Social Cost of Carbon values, we need not discuss their respective merits because we continue to believe, as discussed herein, that the Social Cost of Carbon tool is not appropriate and meaningful in the context of proceedings like this one.

b. Social Cost of Carbon as an Indicator of Significance

50. Commenters requested that we employ the Social Cost of Carbon tool both to provide context for downstream GHG emissions and to support a significance determination. However, we do not agree that using one number for which there is no established significance to produce another number for which there is similarly no established significance (at least in the context of our examination of the relative impacts associated with a proposed pipeline) enhances our ability to reach a reasoned decision.

51. Nor do we agree with the commenters' assertions that, although there are no established significance criteria for raw volumes of GHG emissions or for the Social Cost of Carbon tool's monetized damages, agencies are required by NEPA to develop methods and procedures on their own to consider such environmental issues.[94] Commission staff is not aware of studies that assess the significance of monetized damages calculated with the Social Cost of Carbon tool. At most, we are able to publish estimated ranges of monetized damages under different assumptions in the Social Cost of Carbon tool. However, because we have no basis to designate a particular dollar figure calculated from the Social Cost of Carbon tool as "significant," such action would be arbitrary and would meaningfully inform neither the Commission's decision making nor the public. Moreover, if we were to calculate the Social Cost of Carbon, any two projects with the

[93] *EarthReports*, 828 F.3d at 956.

[94] *See, e.g.*, Senators Whitehouse and Bennet November 14, 2017 Comments at 3; Sierra Club November 20, 2017 Comments at 14; Sabin Center November 17, 2017 Comments at 4.

same capacity (or multiple smaller projects with an equivalent cumulative capacity), but which are designed to serve end users in different states or multiple states, will contribute identically to global climate change. Accordingly, we conclude that using the Social Cost of Carbon would not assist us in determining whether downstream GHG emissions are significant.

F. Alternatives Analysis

52. Commenters urged the Commission to use the Social Cost of Carbon tool to reject the SMP Project in favor of the No-Action Alternative.

53. In the SMP Project FEIS, Commission staff analyzed numerous Action Alternatives: eight system alternatives, twelve major route alternatives, more than twenty-five route variations, and eleven aboveground facility location alternatives. In each of these analyses, staff considered comparative environmental information to discern whether a potential alternative could provide a significant environmental advantage over the proposed action. The environmental information considered impacts on all potentially affected resources.

54. The SEIS explains that the analysis of downstream GHG emissions does not change Commission staff's prior analysis of reasonable alternatives in the FEIS.[95] Under a full burn scenario, the same downstream GHG emissions would result from each of the Action Alternatives because the project's transportation capacity and end-use combustion of transported natural gas would be the same under these alternatives as under the SMP Project as approved.

55. The SEIS then turns to the No Action Alternative, noting that the FEIS explained that the No Action Alternative would not lead to predictable results. As posited above, denial by the Commission of the proposed SMP Project on the grounds that combustion of the transported gas would result in unacceptable environmental impacts, would not forestall the project shippers' search for alternative means of natural gas transportation. All the power plants that would be served by the SMP had previously obtained state approval, thus Commission staff concluded that the plant owners would likely obtain alternative sources of fuel.[96] Consequently, the No Action Alternative would only

[95] SEIS at 9. *See* FEIS at 4-1 to 4-61 (4.0 Alternatives).

[96] FEIS at 1-4. *See also* Florida Public Service Commission, *Final order granting Duke Energy's petition for determination of need for a combined cycle power plant located in Citrus County*, Docket No. PSC-14-0557-FOF-EI (Oct. 10, 2014); *Florida Power & Light Company, Petition for determination of need for Okeechobee Clean Energy Center Unit 1*, Docket No. 150196-EI (Dec. 23, 2015).

eliminate one potential source of fuel but would not decrease the ultimate consumption of fossil fuel to satisfy demand for electricity or reduce GHG emissions. For example, the project's shippers might seek to transport the same volumes of natural gas by subscribing to other expansions of existing transportation systems or seeking the construction of other new facilities. The SEIS concludes that because the No Action Alternative could result in lesser, equal, or greater GHG emissions (which, because of their speculative nature, we are unable to estimate) than the SMP Project, the Commission cannot use the quantified downstream GHG emissions from the SMP Project to meaningfully compare the two. We accept this conclusion.

G. Mitigation

56. Several commenters call for mitigation measures to address downstream GHG emissions. An environmental impact statement must discuss possible mitigation measures for adverse environmental consequences.[97] The GHG emissions anticipated from the construction and operation of the SMP Project represent approximately 6.7 percent of the upper bound project-related GHG emissions disclosed in the SEIS.[98] The FEIS described in detail the federal and state regulatory regimes that will control the SMP Project's direct emission sources.[99] The FEIS also discussed mitigation measures for construction emissions, such as limiting the idling of engines when construction equipment is not in use,[100] and mitigation measures for operation emissions, such as preventive maintenance to identify leaks and commitments to reduce the frequency of unscheduled maintenance blowdowns,[101] as well as mitigation measures dealing with the full spectrum of environmental resources.[102] The SEIS does not recommend additional

[97] *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351-353 (1989).

[98] This figure represents construction- and operation-related emissions (338,270 + 1,324,764 metric tons CO_2e) divided by combined emissions under a full burn scenario (338,270 + 1,324,764 + 23,000,000 metric tons CO_2e). The FEIS quantified the construction- and operation-related GHG emissions for the SMP Project facilities themselves. *See supra* note 75.

[99] FEIS at 3-241 to 3-249 (including applicable state law in Mississippi, Alabama, Georgia, and Florida).

[100] *E.g.*, *id*. at 3-250 to 3-251.

[101] *E.g.*, *id*. at 3-257.

[102] *Id*. at 5-14 to 5-21 (recommended mitigation).

mitigation measures to be implemented by the project proponents.[103]

57. We do not believe there are any additional mitigation measures the Commission could impose with respect to the GHG emissions analyzed in the SEIS. The Commission lacks jurisdiction to impose mitigation measures on downstream end-use consumers, be they power plants, manufacturers, or others. The SEIS explains that federal and state regulatory agencies, such as the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection, have authority to regulate power plant emissions under the federal Clean Air Act.[104] Authority may also exist under state law.

III. Conclusion

58. In conformance with the court's opinion, the SEIS quantifies the GHG emissions from downstream use of natural gas transported on the SMP Project and provides context for these emissions in comparison to annual state and national GHG emissions. The SEIS explains that there is no way to determine the significance of the SMP Project's downstream GHG emissions using the Social Cost of Carbon tool or other methodologies. The SEIS also notes that the downstream GHG emissions do not alter the analysis of reasonable alternatives in the FEIS and do not justify additional mitigation measures.

59. We also conclude that, for the reasons discussed above, the Social Cost of Carbon tool is not useful in determining whether, and under what conditions, to authorize a proposed natural gas transportation project.

60. After full consideration of the SMP Project's GHG emissions in the SEIS and the analysis contained in the final EIS, we continue to find that the project, as mitigated, is an environmentally acceptable action. Nothing in the SEIS causes us to question our previous findings about benefits of the SMP Project.

61. Because the SMP Project is consistent with the criteria discussed in the Certificate Policy Statement and is an environmentally acceptable action, we find that the public convenience and necessity requires approval of projects, as conditioned in the Certificate Order.

The Commission orders:

---

[103] SEIS at 7.

[104] *Id*. at 7.

The Commission reinstates its authorizations issued to Transcontinental Gas Pipe Line Company, LLC; Sabal Trail Transmission LLC; and Florida Southeast Connection LLC in the Commission's order issued February 2, 2016, in 154 FERC ¶ 61,080 (2016), as amended by the Commission's order on rehearing, 154 FERC ¶ 61,160 (2016).

By the Commission. Commissioner LaFleur is dissenting in part with a separate statement attached.
Commissioner Glick is dissenting with a separate statement attached.

(S E A L)

Kimberly D. Bose,
Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Florida Southeast Connection, LLC	Docket Nos.	CP14-554-002
Transcontinental Gas Pipe Line Company, LLC		CP15-16-003
Sabal Trail Transmission, LLC		CP15-17-002

(Issued March 14, 2018)

LaFLEUR, Commissioner, *dissenting in part*:

Today's order reinstates the certificate authorizations for the Southeast Market Pipelines Project (SMP Project).[1] I still believe that the SMP Project is in the public interest after carefully balancing the need for the project and its environmental impacts. In particular, I find that the SMP Project is needed to deliver gas to four downstream power plant customers.[2]

The U.S. Court of Appeals for the D.C. Circuit (the "Court") vacated and remanded the Commission's authorization of the SMP Project, directing the Commission to address two issues; first, the Commission was directed to both quantify and consider the project's downstream greenhouse gas (GHG) emissions or explain in more detail why it cannot do so; and second, the Commission was directed to explain whether it still adheres to its prior position that the Social Cost of Carbon tool is not useful in performing its NEPA review.[3] I am dissenting in part because I cannot support the Commission's responses to the Court on downstream GHG emissions and the Social Cost of Carbon.

---

[1] *Florida Southeast Connection, LLC*, 162 FERC ¶ 61,233 (2018).

[2] SEIS at 3-4 (identifying four power plants as end-use customers of the SMP Project volumes: the new Florida Power and Light Company (FPL) Okeechobee Clean Energy Center; the Duke Energy Citrus County Combined Cycle Plant; and both the existing FPL Martin County Power Plant and Rivera Beach Clean Energy Center).

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

GHG Emissions

I agree with the Court in *Sierra Club* that the downstream GHG emissions that result from burning the natural gas transported by the SMP Project are an indirect impact of the project.[4] I believe that, even though this Commission does not authorize the construction of power plants to burn the gas transported by the SMP Project, there is still a causal relationship between the SMP Project and the end-use emissions generated from the four downstream power plants and those emissions are reasonably foreseeable.[5] As directed by the Court, in the final Supplemental Environmental Impact Statement (SEIS)[6] Commission staff quantified the gross, net and full burn of downstream GHG emissions.[7] I believe that this analysis is appropriate and consistent with how the Commission should conduct its environmental review of pipeline projects.

While the Commission appropriately calculated the emissions in the SEIS consistent with the Court's directive, I am troubled by the manner in which today's order addresses the significance of the downstream GHG emissions. The order fails to even concede that GHG emissions are an indirect impact that must be quantified in NEPA. More broadly, the order asserts that GHG emissions quantifications cannot "meaningfully inform" our public interest determination. I fundamentally disagree.

NEPA requires us to include discussion of indirect effects and their significance in our environmental review. The order states that Commission staff is unable to determine whether the gross and net estimates of downstream GHG emissions are significant and the order affirms that finding.[8] I reject the contention that the Commission is unable to discern the significance of GHG emissions. We are required by NEPA to reach a determination regarding the significance of all environmental impacts, including

---

[4] *Sierra Club*, 867 F.3d at 1374.

[5] 40 C.F.R. § 1508.8(b) (2017) (Indirect impacts are "*caused by* the action and are later in time or farther removed in distance, bust still are *reasonably foreseeable*." Indirect impacts "may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.").

[6] 83 Fed. Reg. 6172.

[7] SEIS at 4.

[8] 162 FERC ¶ 61,233 at P 27.

downstream GHG emissions. It is our responsibility to use the best information we have to make that determination.

In this case, we can gauge significance by comparing the gross and net GHG emissions of the SMP Project to the total state and national emission inventories to calculate how the SMP Project increases those GHG inventories.[9] Here, I believe that a net increase of 3.6 percent of the Florida inventory for a single pipeline project is significant. Due to the need of the project, I believe that increase is acceptable but should be disclosed and assessed.

Social Cost of Carbon

On the Court's second issue, I cannot support the Commission's response to the Court regarding the Commission's use of the Social Cost of Carbon as part of its pipeline environmental review. In the SEIS, Commission staff explained that the Social Cost of Carbon tool was not appropriate for our NEPA review, and stated that the questions surrounding the Commission's policy on the Social Cost of Carbon were more appropriate for Commission determination. I generally agree that the Social Cost of Carbon as a tool for cost-benefit analysis does not fit neatly within our NEPA review.[10] The Social Cost of Carbon has traditionally been used as a means to monetize the cost impacts of carbon emissions, as part of an overall cost and benefits approach to an agency's consideration of a proposed action or rulemaking. The Commission does not monetize the costs and benefits of a proposed pipeline project, largely, because to date, we have not sought to develop the record with evidence that would that support this type of cost-benefit approach to our pipeline reviews.

However, I cannot accept the Commission's justifications for excluding the Social Cost of Carbon from its consideration of the SMP Project. Today's order generally finds that the Social Cost of Carbon cannot meaningfully inform our decisions on proposed pipeline projects. Further, the order claims that the Social Cost Carbon is not an appropriate tool for evaluating the significance of downstream GHG emissions. I disagree. That is precisely the use for which the Social Cost of Carbon was developed—

[9] While Florida does not have a statewide carbon reduction target, 22 states do, which could be a relevant basis of comparison in pipeline dockets. Further, if the United States were to establish a national carbon reduction policy or rejoin an international carbon reduction agreement, those targets could be relevant to our analysis. *See* https://www.usclimatealliance.org/ and https://www.c2es.org/document/greenhouse-gas-emissions-targets/

[10] 40 C.F.R. § 1502.23 (2017) (Cost-benefit analysis).

it is a scientifically-derived tool to translate tonnage of carbon dioxide or other GHGs to the cost of long-term climate harm.[11] I have drawn the simplistic analogy of human food consumption and diet. It would be convenient for a person to say "I guess it is fine to eat this donut, because there is simply no way to assess if it will make me fat." But there is such a tool, in the form of calories, which have been scientifically derived to translate the consumption of a specific food item to impact on weight gain. Similarly, we are able to estimate what the long-term consequence of a ton of carbon dioxide emissions is likely to be, by use of the Social Cost of Carbon tool.

Today's order recites a number of technical and policy arguments to attack the usefulness of the Social Cost of Carbon. It is true, as the majority asserts, that utilizing gross GHG emissions associated with the gas to be transported through a pipeline would yield the same Social Cost of Carbon calculation for every pipeline of equivalent size. But, if the Commission had information regarding net GHG emissions, I believe we could better account for changes in GHG emissions resulting from the end-use of the transported gas, and calculate a Social Cost of Carbon that accurately reflects the climate change impacts of a particular project.

The majority concedes that those involved in the upstream production and downstream consumption of fossil fuels may meaningfully use the Social Cost of Carbon in assessing their actions, but nonetheless rejects the view that the pipeline that links production and consumption can use that same metric to assess its actions.[12] That distinction is unpersuasive to me.

The majority also contends that there are technical challenges due to the lack of consensus on the appropriate discount rate. However, the Commission could estimate the appropriate discount rate or to use more than one discount rate in our calculations or to provide a range of numbers for consideration.

Looking more broadly at both GHG emission and Social Cost of Carbon, much of the majority's criticism simply reflects the fact that consideration of climate change in our pipeline reviews is difficult. I agree that consideration of climate change is difficult. That is because climate change is broader in scope and scale than other environmental impacts generally considered in our pipeline reviews. However, the nature of the issue does not relieve us of the burden of considering it, but rather makes it more important that we do so.

---

[11] https://www/epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf

[12] 162 FERC ¶ 61,233 at PP 37-38.

I recognize that Commission consensus on the usefulness of the quantification of GHG emissions and the value of the Social Cost of Carbon in our pipeline dockets may be difficult to achieve. I myself have definitely struggled with these questions over the past few years. I appreciate that the Commission has tried to be responsive to increasing comments in our pipeline dockets on GHG emissions and climate change by disclosing progressively more information in our NEPA documents and orders on GHG upstream and downstream emissions.[13] I have strongly supported our doing so. However, we have now had a pipeline certificate vacated for failure to fully consider GHG emissions and Social Cost of Carbon, so we must more squarely address them. Since downstream GHG impacts have been established as an indirect impact of the SMP Project, we must consider them in making a public interest determination, however difficult that may be.

Finally, I believe that the best way to address climate change and the Social Cost of Carbon in pipeline dockets would be for the Commission to develop a more complete record on costs and benefits of the proposed project, including more information on the need for a project, the likely end-uses of the transported gas, and the alternatives. Commissioner Glick states the following in his dissent of the order, "The Commission should not fear adding transparency to its decision-making process. Rather, we should embrace the opportunity to disclose the effects which may not always be adverse." I agree. Such increased openness will enhance public confidence in the Commission's natural gas pipeline certification decision-making process. I am hopeful that the recently announced generic proceeding on pipeline review will allow the Commission and its stakeholders to consider all these issues in a meaningful and comprehensive way.

For all of these reasons, I respectfully dissent in part.

_____

Cheryl A. LaFleur
Commissioner

[13] *See, e.g., Constitution Pipeline Company, LLC*, 154 FERC 61,046 (2016); *Nexus Gas Transmission, LLC*, 160 FERC ¶ 61,022 (2017); *PennEast Pipeline Company, LLC*, 162 FERC ¶ 61,053 (2017); and *Columbia Gas Transmission, LLC*, 161 FERC ¶ 61,314 (2017).

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Florida Southeast Connection, LLC	Docket Nos.	CP14-554-002
Transcontinental Gas Pipe Line Company, LLC		CP15-16-003
Sabal Trail Transmission, LLC		CP15-17-002

ORDER ON REMAND REINSTATING CERTIFICATE AND ABANDONMENT AUTHORIZATION

(Issued March 14, 2018)

GLICK, Commissioner, *dissenting*:

In today's order on remand from the United States Court of Appeals for the District of Columbia Circuit,[1] the Commission once again claims it cannot assess the significance of the downstream GHG emissions in its environmental review of the Southeast Markets Pipelines Project (SMP Project). Vacating the Commission's prior decision granting the Project certificates under section 7 of the Natural Gas Act (NGA), the *Sabal Trail* Court held that FERC erred by failing to "either quantify *and* consider the project's downstream carbon emissions or explain in more detail why it cannot do so."[2] In addition, the Court held that FERC must explain whether using the Social Cost of Carbon is a useful tool for evaluating the environmental impact of GHG emissions pursuant to the National Environmental Policy Act (NEPA).[3] I believe today's order fails to provide a reasoned answer to either inquiry and, as such, does not adequately respond to the Court's mandate.[4]

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

[2] *Sabal Trail*, 867 F.3d at 1375 (emphasis added).

[3] *Id.*; National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 State. 852 (1970).

[4] *See, e.g., Process Gas Consumers Grp. v. FERC*, 292 F.3d 831, 840 (D.C. Cir. 2002) (In proceedings on remand, the court reviews the Commission's determinations to ensure that they are responsive to its mandate.) Furthermore, as with all Commission orders, the Administrative Procedure Act's arbitrary and capricious and reasoned

While the Commission's order includes quantitative estimates, the Commission refuses to actually consider the environmental impact from the GHG emissions.[5] Instead, the Commission hews to the view that these calculations provide "no basis for determining the significance of impacts from these emissions."[6] The Commission argues that because there is no "widely accepted standard to ascribe significance to a given rate or volume" of GHG emissions, it cannot reach a finding. And for similar reasons, the Commission asserts that it is not appropriate to use the Social Cost of Carbon tool to evaluate the Project's environmental impacts. The Commission's refusal to incorporate the Social Cost of Carbon in the environmental review or even to assess the impact GHG emissions from the Project fails to fulfill its responsibilities under the NGA and NEPA.[7] It also belies any assertion in the order that the Commission is actually "cognizant of the potentially severe consequences of climate change."[8]

Climate change is the single most significant threat to humanity, fundamentally threatening our environment, economy, national security and human health.[9] It is

---

decisionmaking standards apply to challenges under the NGA and NEPA. *See Columbia Gas Transmission Corp. v. FERC*, 628 F.2d 578, 593 (D.C. Cir. 1979); *Nevada v. Dep't of Energy*, 457 F.3d 78, 87 (D.C. Cir. 2006).

[5] *Florida Southeast Connection, LLC*, 162 FERC ¶ 61,233, at PP 2, 26 (affirming the conclusion that the Commission cannot "reach a finding whether downstream GHG emissions are significant"). In contrast, the D.C. Circuit in *Sabal Trail* held that the Commission is obligated not only to provide a quantitative estimate but also to discuss the significance of greenhouse-gas emissions. *Sabal Trail*, 867 F.3d at 1373 (citing *Minisink Residents for Envtl. Pres. & Safety v. FERC*, 762 F.3d 97, 101-02 (D.C. Cir. 2014) & *Myersville Citizens for a Rural Cmty. v. FERC*, 783 F.3d 1301, 1309 (D.C. Cir. 2015)) (internal citations omitted).

[6] *Florida Southeast Connection, LLC*, 162 FERC ¶ 61,233 at P 15; *see id.* P 51.

[7] *See Pub. Utils. Comm'n of Cal. v. FERC*, 900 F.2d 269, 281 (D.C. Cir. 1990); *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 763 – 64 (2004). *See also supra* notes 12 – 16 and accompanying text.

[8] *Florida Southeast Connection, LLC*, 162 FERC ¶ 61,233 at P 36.

[9] Xu, Yangyang & Veerabhadran Ramanathan, Proceedings of the National Academy of Sciences, *Well Below 2°C: Mitigation strategies for avoiding dangerous to catastrophic climate changes* (2017), http://www.pnas.org/content/114/39/10315 (Researchers evaluating models of future climate scenarios identify that there is a one-in-20 chance of temperature increase causing catastrophic damage or worse by 2050 and unknown risks imply existential threats to humanity).

difficult to understand how NEPA's demand that an agency take a "hard look"[10] at the environmental impacts of its actions can be satisfied if the impacts of GHG emissions are ignored.

Under both the NGA and NEPA, the Commission is obligated to consider the environmental impacts of its decisions. In enacting the NGA, Congress determined that the "business of transporting and selling natural gas for *ultimate distribution to the public* is affected with the public interest."[11] As such, no entity may transport or sell natural gas interstate or construct or expand interstate natural gas facilities without the Commission first determining the activity is in the public interest. This requires finding, on balance, that the benefits outweigh the harms, including impacts on the environment.[12]

Just as system reliability bears on the public interest in terms of the benefits and need for natural gas pipeline capacity, climate change bears on the public interest in terms of the adverse effects of that same pipeline capacity. It is imperative that the Commission disclose, weigh and balance such critical public interest impacts given our exclusive authority over the siting of interstate natural gas pipelines.

It is axiomatic that the Commission must consider the environmental impacts of its decisions under NEPA.[13] As the D.C. Circuit explains in *Sabal Trail* "[o]ne of the most

---

[10] *See* 42 U.S.C. § 4332(2)(C)(iii); *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983).

[11] 15 U.S.C. § 717 (emphasis added).

[12] The *Sabal Trail* Court explicitly recognized this mandate, explaining that "Congress broadly instructed the agency to consider 'the public convenience and necessity' when evaluating applications to construct and operate interstate pipelines" and that, in doing so, the Commission "will balance 'the public benefits against the adverse effects of the project,' including adverse environmental effects." 867 F.3d 1357, 1373 (citing *Minisink Residents for Envtl. Pres. & Safety v. FERC*, 762 F.3d 97, 101-02 (D.C. Cir. 2014) and *Myersville Citizens for a Rural Cmty. v. FERC*, 783 F.3d 1301, 1309 (D.C. Cir. 2015)) (internal citations omitted); *see also Pub. Utils. Comm'n of Cal. v. FERC*, 900 F.2d 269, 281 (D.C. Cir. 1990) (The public interest standard under the NGA includes factors such as the environment and conservation, particularly as decisions concerning the construction, operation, and transportation of natural gas in interstate commerce "necessarily and typically have dramatic natural resource impacts.").

[13] Congress, through its NEPA requirement, "declares a broad national commitment to protecting and promoting environmental quality," and brings that commitment to bear on federal agency decisionmaking. *Robertson v. Methow Valley*

important procedures NEPA mandates is the preparation, as part of every 'major Federal action[] significantly affecting the quality of the human environment,' of a 'detailed statement' discussing and disclosing the environmental impact of the action."[14] The environmental review has dual purposes: it forces an agency to take a "hard look" at the environmental consequences of its action, and it ensures that these environmental consequences, and the agency's consideration of them, are fully disclosed to the public.[15]

The *Sabal Trail* Court leaves no room to question that "greenhouse-gas emissions are an indirect effect of authorizing this project, which FERC could reasonably foresee, and which the agency has legal authority to mitigate."[16] Nevertheless, the Commission, through today's order, is engaging in a collateral attack on the Court's decision by suggesting that it is not the Commission's "job" to consider whether emissions from "the *end use* of the gas would be too harmful to the environment."[17] I disagree with the

---

Citizens Council, 490 U.S. 332, 348 (1989). As the *Sabal Trail* Court reiterates, NEPA "commands agencies to imbue their decisionmaking, through the use of certain procedures, with our country's commitment to environmental salubrity." 867 F.3d at 1367 (quoting *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 193-94 (D.C. Cir. 1991)).

[14] *Sabal Trail*, 867 F.3d at 1367 (citing *WildEarth Guardians v. Jewell*, 738 F.3d 298, 302 (D.C. Cir. 2013); *id.* (explaining that NEPA is "primarily information-forcing" and does not require agencies to take one type of action or another").

[15] *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) (The statutory requirement that a federal agency contemplating a major action prepare an environmental impact statement serves NEPA's purpose of infusing federal agency decisionmaking with a "broad national commitment to protecting and promoting environmental quality" in two important respects. "It ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the largesr audience that may also play a role in both the decisionmaking process and the implementation of that decision." (citing *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983) & *Weinberger v. Catholic Action of Hawaii/Peace Education Project*, 454 U.S. 139, 143 (1981)*; see also Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 768 (2004).

[16] *Sabal Trail*, 867 F.3d at 1374 (citing the Commission's authority, pursuant to the NGA, to "attach to the issuance of the certificate and to the exercise of the rights granted thereunder such reasonable terms and conditions as the public convenience and necessity may require," 15 U.S.C. 717f(e)).

[17] *Florida Southeast Connection, LLC*, 162 FERC ¶ 61,233 at P 29.

Commission and agree with the court.[18] "What are the 'reasonably foreseeable effects' of authorizing a pipeline that will transport natural gas to Florida power plants?" the Court asks. First, "that the gas will be burned in those power plants" and, second, "that burning natural gas will release into the atmosphere the sorts of carbon compounds that contribute to climate change."[19] Both, the Court concludes, are reasonably foreseeable indirect effects from this project and, as such, the Commission has a duty to conduct a thorough evaluation of the consequent GHG effects pursuant to NEPA.[20]

In other words, the Commission must take a "hard look" at climate change – the ultimate environmental impact. The responsible way to do so today is by converting the GHG emissions estimates to concrete impacts by way of the Social Cost of Carbon. As the *Sabal Trail* Court explained, the Social Cost of Carbon tool values the long-term harm done by each ton of carbon emitted in dollar terms. The D.C. Circuit is not the first court to recognize an agency's obligation to value the climate change impacts of its decisions,[21] and I am confident that it will not be the last.

---

[18] The Commission must fully comply with the court's mandate in an order on remand, and the court "has the power to enforce its mandates, including the power to 'correct any misconception of its mandate by a[n] . . . administrative agency subject to its authority.'" *Atl. City Elec. Co. v. FERC*, 329 F.3d 856 (D.C. Cir. 2003).

[19] *Sabal Trail*, 867 F.3d at 1371-72 (explaining that in this case the end use is not only reasonably foreseeable, but also is "the project's entire purpose."); *id.* at 1372 ("All the natural gas that will travel through these pipelines will be going somewhere: specifically, to power plants in Florida, some of which already exist, others of which are in the planning stages. Those power plants will burn the gas, generating both electricity and carbon dioxide. And once in the atmosphere, that carbon dioxide will add to the greenhouse gas effect, which the EIS describes as 'the primary contributing factor' in global climate change.").

[20] *Id.* at 1374.

[21] *See Montana Envt'l Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1097 (D. Mont. 2017), *amended in part, adhered to in part sub nom. Montana Envtl. Info. Ctr. v. United States Office of Surface Mining*, No. CV 15-106-M-DWM, 2017 WL 5047901 (D. Mont. Nov. 3, 2017); *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1193 (D. Colo. 2014) (requiring agency to use the Social Cost of Carbon protocol when calculating costs and benefits of action that would generate greenhouse gas emissions); *see also Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008) (holding that NEPA requires agencies to analyze the effects of its actions on global climate change).

Quantifying and disclosing downstream GHG emission tonnage is a necessary step to value the environmental impacts of climate change, but does not actually assess the impact. As the courts note, the "the basic thrust of an agency's responsibilities under NEPA is to predict the environmental effects of proposed action before the action is taken and those effects fully known."[22] Thus, inherent in our obligation to consider indirect environmental effects is the obligation to engage in reasonable forecasting and speculation.[23] Therefore, the assessment of the GHG tonnage, using a widely available analytical tool adopted across government agencies delivering a "measure, in dollars, of the long-term damage done by a ton carbon dioxide"[24] provides a meaningful method to convert the data input of GHG emission tonnage into a qualitative output demonstrating impact.

If we are to follow the logic of the Commission's order, that the significance of GHG emissions cannot be assessed because there are no Federal or state emissions limits or goals, no Federal agency would ever be able to evaluate the impact of an agency action on climate change. It is absurd to even contemplate NEPA not applying to the most significant environmental issue of our time.

The Commission should not fear adding such transparency to its decisionmaking process. Rather, we should embrace the opportunity to disclose the effects which may not always be adverse.[25]

---

[22] *City of Davis v. Coleman*, 521 F.2d 661, 677 (9th Cir.1975).

[23] *Id.* (as such "[r]easonable forecasting and speculation is thus implicit in NEPA"); *see also Delaware Riverkeeper*, 753 F.3d 1304, 1310 (D.C. Cir. 2014) (*citing Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973)); *Sierra Club v. U.S. Dep't of Energy*, 867 F.3d 189, 198 (2017) (An agency "need not foresee the unforeseeable, but by the same token neither can it avoid [consideration of environmental impacts] simply because describing the environmental effects of and alternatives to particular agency action involves some degree of forecasting.").

[24] EPA Fact Sheet Social Cost of Carbon, (Dec. 2016) *available at* https://www.epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf.

[25] In some cases a proposed pipeline may reduce downstream greenhouse gas emissions, particularly in cases where expanded access to natural gas supports reducing reliance on other fossil fuel sources with higher greenhouse gas emission rates.

The order also argues against the Social Cost of Carbon based on perceived technical challenges including the presence of assumptions or unknowns, such as discount rate, or absence of widely accepted standards to ascribe significance. However, this does not diminish the Commission's responsibility to provide a qualitative assessment, rather the Commission simply must make a disclosure "so that readers can take the resulting estimates with the appropriate amount of salt."[26] In fact, NEPA reviews often include calculated estimates, modeling, and associated disclosures relevant to the qualitative assessment such as land use impacts and workforce impacts. Further, in cases where the Commission suffers from a lack of information, it is able to use the pre-filing process and subsequent data inquiries to gather critical information. Commissioner LaFleur stated the following in her partial dissent to the order, "the best way to address climate change and the Social Cost of Carbon in pipeline dockets would be for the Commission to develop a more complete record on costs and benefits of the proposed projects, including more information on the needs for a project" and I agree.

The SMP Project final environmental impact statement (EIS) takes this approach even for assessing indirect economic effects relying on a calculation tool and multiple assumptions.[27] While no significance is ascribed to these figures built off of assumptions, the raw values are still provided as an "indicator of the economic impacts of a project,"[28] and as such, part of the qualitative NEPA analysis. Further, the courts have held that where an agency's EIS calculates the benefits of a proposed action, the EIS must use the Social Cost of Carbon to assess the impacts of GHG emissions.[29]

---

[26] *Sabal Trail*, 867 F.3d at 1374-75 ("We understand that 'emission estimates would be largely influenced by assumptions rather than direct parameters about the project. . . but some educated assumptions are inevitable in the NEPA process. . . . And the effects of assumptions on estimates can be checked by disclosing those assumptions. . ."); *id*. ("Nor is FERC excused from making emissions estimates just because the emissions in question might be partially offset by reductions elsewhere."); *see also WildEarth Guardians v. Jewell*, 738 F.3d 298, 309 (D.C. Cir. 2013).

[27] FEIS at 3-187.

[28] *Id.*

[29] *See e.g., Montana Envt'l Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1097 (D. Mont. 2017), *amended in part, adhered to in part sub nom. Montana Envtl. Info. Ctr. v. United States Office of Surface Mining*, No. CV 15-106-M-DWM, 2017 WL 5047901 (D. Mont. Nov. 3, 2017); *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1193 (D. Colo. 2014).

In this same spirit, the output from the Social Cost of Carbon tool can serve as an indicator of the climate change impact, as required in *Sabal Trail*, informing the overall qualitative evaluation under NEPA as well as the public interest balancing under the NGA. Rejecting this tool on the grounds that the Commission has "no basis for determining the significance" of the impact amounts is arbitrary and capricious, given that the Commission relies on similar analysis elsewhere in the EIS.

Willful ignorance of readily available analytical tools to support an enhanced qualitative assessment for the single largest environmental threat in our lifetime will undermine informed public comments and informed decisionmaking. Furthermore, the void in evaluating indirect environmental impacts from GHG emission while simultaneously concluding there is no significant impact means the Commission remains in the unstable position of granting certificates of public convenience and necessity without fully considering the public interest under the NGA.

Public confidence in the Commission's approach to considering applications for interstate gas pipeline certificates of public convenience and necessity continues to wane.[30] I fear that today's order, by limiting analysis of the environmental impacts of a proposed pipeline, will both increase the Commission's litigation risk and contribute further to the cynicism of the pipeline siting process.

For these reasons, I respectfully dissent.

_____

Richard Glick
Commissioner

[30] Masslive, U.S. Sen. Elizabeth Warren pushes bill to boost public access to FERC proceedings (May 2017), http://www.masslive.com/politics/index.ssf/2017/05/us_sens_elizabeth_warren_and_j.html.

Document Content(s)