



# COLUMBIA LAW SCHOOL

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SABIN CENTER FOR CLIMATE CHANGE LAW

November 17, 2017

*Submitted via the FERC eFiling system.*

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

**Re: Southeast Market Pipelines Project, Draft Supplemental Environmental Impact Statement, Docket Nos. CP14-554-002; CP15-16-003; CP15-17-002**

Dear Ms. Bose:

The Sabin Center for Climate Change Law at Columbia Law School submits the following comments on the Federal Energy Regulatory Commission (FERC)'s draft supplemental environmental impact statement (DSEIS) for the Southeast Market Pipelines Project. As discussed in detail below, we recommend that FERC:

- Provide a complete and consolidated inventory of direct and greenhouse gas emissions from the proposed pipeline. This inventory should list all upstream, direct, and downstream emissions in a single location in the final SEIS, and should be accompanied by an explanation of how FERC estimated emissions.
- Revisit its conclusion that the greenhouse gas emissions that would be generated as a result of the proposed pipeline are insignificant.
- Disclose the social cost of greenhouse gas emissions to enable decision-makers and the public to better understand the significance of those emissions.
- Expand the scope of mitigation measures envisioned for greenhouse gas emissions.

**I. FERC Should Provide a Complete and Consolidated Inventory of Direct and Indirect Greenhouse Gas Emissions in the Final SEIS**

FERC's analysis of greenhouse gas emissions from the proposed pipeline is currently split between two documents: the original EIS contains estimates of direct greenhouse gas emissions from pipeline construction and the DSEIS contains estimates of indirect greenhouse gas emissions from combustion of natural gas transported by the proposed pipeline (downstream emissions). Neither document contains estimates of indirect emissions generated from the

production of natural gas that would be transported by the proposed pipeline (upstream emissions).

We urge FERC to provide a complete and consolidated greenhouse gas emissions inventory in the final SEIS which contains all of the information that decision-makers and the public would need to fully understand the emissions impact of the proposed action. Specifically, we recommend FERC add a table which lists its final estimates of all upstream, direct, and downstream emissions on an annual basis as well as over the lifetime of the project. The table should be accompanied by a clear explanation of how FERC estimated emissions – e.g., for combustion emissions, FERC should specify the emissions factor and equation used to convert from BTU to CO<sub>2</sub>e.

An inventory that includes upstream emissions would provide a more complete picture of the emissions impact of this project. The rationale for estimating upstream emissions is the same as the rationale for estimating downstream emissions: the proposed pipeline will allow a certain quantity of natural gas to be transported from production sites to end users and thus it makes sense to treat the production and consumption of the gas transported via this project as indirect consequences of the project. For a more comprehensive overview of the legal and policy rationales for calculating upstream emissions and the tools available for doing so, we refer FERC to the attached law review article (Attachment B: Burger and Wentz, 2017).

## **II. FERC Should Revisit Its Conclusion that the Emissions Impacts of the Proposed Pipeline are Insignificant**

In the DSEIS, FERC concludes that the proposed pipeline will not have a significant impact on the environment. FERC should revisit this conclusion in light of the estimated emissions – particularly combustion emissions – associated with this project. Specifically, FERC anticipates that the combustion of natural gas transported via this pipeline will result in a net increase of 8.36 million tons per year of carbon dioxide (CO<sub>2</sub>) emissions. This is a very large quantity of CO<sub>2</sub> – particularly when considered over the lifetime of the proposed pipeline (at least 25 years).

We recognize that it is difficult to precisely define the significance threshold for greenhouse gas emissions. However, we believe that such a precise definition is unnecessary because 8.36 million tons per year of CO<sub>2</sub> for 25+ years surpasses any reasonable threshold of significance. The following facts support this finding:

- The emissions far surpass the reporting and quantification threshold of 25,000 tons per year of CO<sub>2</sub>e which has previously been used by CEQ and EPA to identify major emitters (as noted by EPA, facilities that surpass this threshold are considered the “largest emitters” in the country).<sup>1</sup> Indeed, the emissions from the combustion of the natural gas transported via this pipeline are 334.4 times larger than the 25,000 tons per year threshold.
- The social cost of these emissions would be roughly \$306 million during the first year of operation and would rise to approximately \$492 million per year by 2040. The total cost

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<sup>1</sup> EPA, *GHG Reporting Program Facts and Figures*, <https://www.epa.gov/ghgreporting/key-facts-and-figures>.

of these emissions over 25 years would be approximately \$9.8 billion. (See the table in Attachment A for a detailed overview of these costs.)

- As FERC has expressly acknowledged, the net increase in emissions constitutes 3.7% of Florida’s annual emissions in 2014. This is a large proportion of an entire state’s greenhouse gas emissions inventory.
- According to EPA’s GHG Equivalencies Calculator, 8.36 million tons of CO<sub>2</sub> per year is equivalent to the emissions from: (i) approximately 1.8 million passenger vehicles driven each year, or (ii) approximately 1.25 million homes’ electricity use for one year.<sup>2</sup> Again, these are very large numbers which would be viewed as significant in other contexts.

In light of these facts, we believe that FERC’s conclusion of no significance is not supported by the record before it and urge FERC to reconsider this conclusion.

### **III. FERC Should Disclose the Social Cost of Emissions in Order to Better Inform Decision-Makers and the Public About the Scale of the Emissions Impact from this Proposal**

FERC should use the social cost of carbon, methane, and nitrous oxide to estimate the social costs of the emissions generated by this project, both an annual basis and over the lifetime of the project. This would provide the public and decision-makers with a better sense of the scale and severity of the emissions impact – something that would otherwise be lacking from FERC’s analysis.

Where there is uncertainty about the precise nature of a project’s environmental effects (which is the case when evaluating the effects of a large quantity of greenhouse gas emissions released over many years), NEPA requires federal agencies to provide a “summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment.”<sup>3</sup> In this case, the social cost of carbon, methane, and nitrous oxide are scientifically credible estimates of the societal costs of greenhouse gas emissions, developed through a lengthy process of interagency consultation and peer review,<sup>4</sup> and that cost is absolutely relevant to assessing the nature and significance of the proposed pipeline’s environmental consequences.

In the DSEIS, FERC has provided three rationales for why it believes the social cost of carbon and similar tools are not appropriate for use in project-level NEPA reviews. We offer the following counter-arguments to these rationales:

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<sup>2</sup> EPA, *GHG Equivalencies Calculator*, <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>.

<sup>3</sup> 40 C.F.R. § 1502.22(b)(1).

<sup>4</sup> See Interagency Working Group on the Social Cost of Greenhouse Gases, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (May 2013, Revised August 2016); Interagency Working Group on the Social Cost of Greenhouse Gases, Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide (Aug. 2016).

1. *EPA has stated “no consensus exists on the appropriate [discount] rate to use for analyses spanning multiple generations” and consequently significant variation in output can result.*

The interagency working group that developed the social cost of carbon recognized that there was no consensus on a single discount rate, but the group did achieve broad consensus on a range of discount rates and recommended that agencies present estimates using this representative range.<sup>5</sup> FERC should adopt the approach recommended by the interagency working group and disclose the social costs of emissions generated by this pipeline as a range of potential costs that correspond with different discount rates.

2. *The tool does not measure the actual incremental impacts of a project on the environment.*

This statement is incorrect. The social cost of carbon, methane and nitrous oxide measure the actual incremental impacts of a project on the physical and human environment by specifying the incremental costs associated with an incremental increase in greenhouse gas emissions. These impacts are expressed as monetary costs rather than specific physical impacts because this is a reasonable and comprehensible way to aggregate many different impacts in a single metric.

3. *There are no established criteria identifying the monetized values that are to be considered significant for NEPA reviews*

This is true for many different types of impacts that are evaluated in NEPA reviews – there are no bright line rules for assessing significance, and agencies typically must use their discretion to determine when impacts pass the threshold of significance. The monetization of climate change impacts, however, is useful in informing significance determinations insofar as it provides a standard metric for comparing different impacts.

Finally, we acknowledge that President Trump has ordered a review of the social cost of carbon, methane, and nitrous oxide, and has rescinded the technical support documents underpinning these metrics as “no longer representative of government policy.”<sup>6</sup> But in that same executive order, President Trump also stated that “it is essential that agencies use estimates of costs and benefits... that are based on the best available science and economics.”<sup>7</sup> The existing estimates were based on the best available science and economics, they were peer-reviewed, and they were developed in consultation with all major federal agencies. Since the administration has not proposed a viable alternative, we believe that these estimates remain the best available metric for monetizing and disclosing the costs of greenhouse gas emissions. Attesting to this is the fact that many states continue to use these estimates in their energy planning activities.<sup>8</sup>

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<sup>5</sup> The social cost of carbon and corresponding discount rates were upheld by the 7<sup>th</sup> Circuit Court of Appeals. *Zero Zone, Inc. v. United States Dep't of Energy*, 832 F.3d 654, 678 (7th Cir. 2016)

<sup>6</sup> Executive Order 13783: Promoting Energy Independence and Economic Growth §5 (2017).

<sup>7</sup> *Id.*

<sup>8</sup> Peter Fairley, *States are Using Social Cost of Carbon in Energy Decisions, Despite Trump's Opposition*, INSIDE CLIMATE NEWS (Aug. 14, 2017).

**IV. FERC Should Expand the Scope of Mitigation Measures Envisioned for this Project**

NEPA requires agencies to discuss measures to mitigate the adverse environmental impacts of proposed actions.<sup>9</sup> The DSEIS contains no discussion of mitigation measures for the large quantity of CO<sub>2</sub> that would be emitted as a result of the proposed pipeline. The no action alternative could itself serve as a mitigation measure for these emissions. FERC should discuss this option in the final SEIS and evaluate its merits in light of the potential costs of the combustion emissions generated as a result of the proposed pipeline.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Wentz', with a long horizontal flourish extending to the right.

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<sup>9</sup> 40 C.F.R. §§ 1502.14(f), 1502.16(h), 1508.14.

## ATTACHMENT A

### Southeast Market Pipeline: Social Costs of CO<sub>2</sub> Emissions from Combustion (8.36 million tons / year for 25+ years)

Year	SCC	Cost
	(3% discount rate)	(million \$)
2018	\$36	\$295
2019	\$36	\$295
2020	\$42	\$344
2021	\$42	\$344
2022	\$42	\$344
2023	\$42	\$344
2024	\$42	\$344
2025	\$46	\$377
2026	\$46	\$377
2027	\$46	\$377
2028	\$46	\$377
2029	\$46	\$377
2030	\$50	\$410
2031	\$50	\$410
2032	\$50	\$410
2033	\$50	\$410
2034	\$50	\$410
2035	\$55	\$451
2036	\$55	\$451
2037	\$55	\$451
2038	\$55	\$451
2039	\$55	\$451
2040	\$60	\$492
2041	\$60	\$492
2042	\$60	\$492
<b>Total cost (25 yrs):</b>		<b>\$9,976</b>