DECLARATION OF KATIE McCLINTOCK

I, Katie McClintock, declare and state as follows:

1. I am over 18 years of age, and I am competent to give this declaration. The information in this declaration is based on my personal knowledge, information, and belief.
2. I have a degree in Chemical Engineering from the University of Washington. I worked at the U.S. Environmental Protection Agency ("EPA") for 19 years as an air enforcement officer in Region 10. I specialized in major New Source Review cases for large industrial sources. My case development work led to multiple large national cases and many regional cases. I also managed the Air Enforcement Section in Region 10 for five years. Since early 2024, I've been working as a consultant for the Southern Environmental Law Center.
3. I have reviewed the permitting materials for projects at the following facilities and determined they relied on Project Emissions Accounting to avoid major New Source Review.

Marshall Steam Station (North Carolina)

4. In December 2024, the North Carolina Department of Environmental Quality issued an air permit authorizing Duke Energy Carolinas, LLC ("Duke Energy") to construct two new dual fuel simple-cycle combustion

turbines and ancillary equipment (including an auxiliary boiler, an emergency generator, two fuel heaters, and two fuel storage tanks) near its existing coal-fired power plant at the Marshall Steam Station in Catawba County, North Carolina.[1] The Marshall Steam Station is an existing major source for purposes of New Source Review.[2]

5. Duke Energy's permit application shows that the new units have the potential to emit the following regulated pollutants in amounts that exceed their respective significance thresholds for purposes of triggering major New Source Review as a major modification: nitrogen oxides ("NO_X") (426 tons per year ("tpy")), total particulate matter ("PM") (103 tpy), particulate matter with a diameter of 10 microns or less ("PM_{10}") (36 tpy), particulate matter with a diameter of 2.5 microns or less ("$PM_{2.5}$") (30 tpy), sulfur dioxide ("SO_2") (147 tpy), volatile organic compounds ("VOC") (63 tpy), carbon monoxide ("CO") (316 tpy), sulfuric acid ("H_2SO_4") (8 tpy), and carbon dioxide equivalent ("CO_2e") (5,631,871 tpy).[3] However, Duke

[1] *See* N.C. Dep't of Envtl. Quality, *Air Quality Permit No. 03676T61* (Dec. 19, 2024) (excerpts attached as Exhibit 1). The Marshall Steam Station is located at 8320 East NC Highway 150, Terrell, NC 28682. *See* Ex. 1 at cover page.
[2] *See* Duke Energy Carolinas, LLC, *Minor NSR Permit Application, Marhsall Combustion Turbine Project* at 1-1 (Mar. 2024) (excerpts attached as Exhibit 2); N.C. Dep't of Envtl. Quality, *Application Review* at 2, 9 (Dec. 19, 2024) (excerpts attached as Exhibit 3); N.C. Dep't of Envtl. Quality, *Duke Energy Carolinas, LLC – Marshall Steam Station, Hearing Officer's Report and Recommendations* at 3 (Dec. 18, 2024) (excerpts attached as Exhibit 4).
[3] Ex. 2 at 3-8 tbl.3-1; *see also* Ex. 3 at 12 tbl.2.

Energy proposed offsetting these emission increases with the projected emission decreases from its planned retirement of two of the four coal-fired boilers at the Marshall Steam Station.[4]

6. Because Duke Energy characterized construction of the new turbines as a "project" at the Marshall Steam Station, it relied on Project Emissions Accounting and the "hybrid" applicability test to subtract the projected emission decreases from retirement of the two coal units at Step 1 of the major New Source Review applicability analysis.[5] As a result, construction of the new turbines and ancillary equipment was not subject to major New Source Review.
7. Duke Energy's permit does not require the two coal-fired units to be shut down until "after" the new turbines achieve "commercial operation"; instead, the permit expressly allows the two coal units to continue operating "during construction of the new combustion turbines and during their shakedown period."[6] The agency explained this was because Duke Energy "did not propose the shutdown of the existing coal-fired boilers prior to

[4] *See* Ex. 2 at 3-4 to 3-8; Ex. 3 at 9.
[5] *See* Ex. 2 at 3-4 to 3-8; Ex. 3 at 9–12..
[6] Ex. 1 at 84.

commencement of operation of the first new combustion turbine."[7] As a result, the permit authorizes a period of simultaneous operation.

8. There is no enforceable time limit on how long these old boilers can continue operating, just that the "Permittee shall shutdown the coal-fired boilers (ID Nos. ES-1 and ES-2) *after* commercial operation (i.e., when control of the loading of the generator is turned over to the system dispatcher) of the new combustion turbines (ID Nos. ES-41 and ES-42) has occurred."[8] Compliance with this permit condition can be achieved by shutting down the old boilers one day after the new turbines achieve commercial operation, or five months after, or 75 years after. There is no practically enforceable restriction that ensures the units will ever be shut down. Inclusion of the emissions reductions from their retirement in Step 1 also allowed Duke Energy to avoid the rigor of the Step 2 analysis that would have required them to determine the exact date on which these emissions reductions would be "creditable."
9. Even after the coal units eventually shut down, Duke Energy's emission calculations show there will be a net increase in emissions of total PM (22 tpy), VOC (33 tpy), and CO_2e (3,507,801 tpy).[9]

[7] Ex. 4 at 7.
[8] Ex. 1 at 84 (emphasis added).
[9] Ex. 2 at 3-8 tbl.3-1.

10. If the new units were subject to major New Source Review, then Duke Energy would be required to reduce emissions of NOx, PM, PM_{10}, $PM_{2.5}$, SO_2, VOC, CO, H_2SO_4, and CO_2e from the new units to the maximum degree achievable using the best available control technology, resulting in less emissions of all of these pollutants.

Mill Creek Generating Station (Kentucky)

11. In May 2024, the Louisville Metro Air Pollution Control District issued an air permit authorizing the Louisville Gas & Electric Company ("LG&E") to construct a new methane gas-fired combined-cycle electric generating unit and ancillary equipment (including an auxiliary boiler, an emergency generator, a fuel heater, and fuel storage tanks) at the Mill Creek Generating Station, a coal-fired power plant in Louisville, Kentucky.[10] This facility is an existing major source for purposes of New Source Review.[11]

12. Louisville is designated as a severe nonattainment area for ozone.[12]

13. LG&E's permit application shows that the new units have the potential to emit the following regulated pollutants in amounts that exceed their

[10] *See* Louisville Metro Air Pollution Control Dist., *Title V Construction Permit No. C-0127-22-0046-V* (May 2, 2024) (excerpts attached as Exhibit 5). The Mill Creek Generating Station is located at 14460 Dixie Highway, Louisville, KY 40272. *See* Ex. 5 at cover page.
[11] *See* Louisville Metro Air Pollution Control Dist., *Title V Construction Statement of Basis* at 10 (May 2, 2024) (excerpts attached as Exhibit 6).
[12] *See* Louisville Gas & Elec. Co., *Air Permit Application, New NGCC Combustion Turbine Project* at 1-1, 4-1 (Dec. 15, 2022) (excerpts attached as Exhibit 7); Ex. 6 at 1.

respective significance thresholds for purposes of triggering major New Source Review as a major modification: total PM (104 tpy), PM_{10} (102.9 tpy), $PM_{2.5}$ (102 tpy), NO_X (199.9 tpy), CO (161.4 tpy), VOC (51.6 tpy), H_2SO_4 (8.7 tpy), and CO_2e (2,214,149 tpy).[13] However, LG&E proposed offsetting these emission increases with the projected emission decreases from its planned retirement of two of the four coal-fired boilers at the Mill Creek Generating Station.[14]

14. Because LG&E characterized the coal unit retirement as part of the same "project" as construction of the new turbines, it relied on Project Emissions Accounting and the "hybrid" applicability test to subtract the projected emission decreases at Step 1 of the major New Source Review applicability analysis.[15] As a result, construction of the new turbines and ancillary equipment was not subject to major New Source Review.

15. LG&E's permit does not require the two coal-fired units to be shut down until after the new turbines are constructed and begin their shakedown period.[16] As a result, the permit authorizes a period of up to 180 days of simultaneous operation of the retiring coal units and the new turbines.

[13] Ex. 7 at 3-8 tbl.3-2.
[14] Ex. 7 at 2-11, 4-3, App. B tbl.2.
[15] Ex. 7 at 4-3 to 4-10, App. B tbl.2.
[16] Ex. 5 at 11.

16. Even after the coal units eventually shut down, LG&E's emission calculations show there will be a net increase in emissions of VOC (11 tpy).

17. If the new units were subject to major New Source Review, then LG&E would be required to reduce emissions of NOx and VOC to the lowest achievable emissions rate and secure enforceable emission offsets to eliminate any remaining net increase in emissions of ozone precursors, due to the area's severe nonattainment status for ozone. LG&E would also be required to reduce emissions of PM, PM_{10}, $PM_{2.5}$, CO, H_2SO_4, and CO_2e to the maximum degree achievable using the best available control technology, resulting in less emissions of all of these pollutants.

18. In May 2025, LG&E submitted a permit application seeking authorization to construct a second methane gas-fired combined-cycle electric generating unit and ancillary equipment (including an auxiliary boiler and an emergency generator) at the Mill Creek Generating Station.[17] This application reveals that LG&E is proposing to delay retiring the coal-fired boiler referred to as "Unit 2" by four years, despite having relied on its retirement to offset the increase in emissions from the first new combined-cycle unit.[18] A permit has not yet been issued.

[17] *See* Louisville Gas & Elec. Co., *Air Permit Application, MC6 Combined Cycle Electric Generating Plant Project* at 1-1 (May 5, 2025) (excerpts attached as Exhibit 8).
[18] *See* Ex. 8 at 1-2, 2-1; Ex. 7 at 2-11; Ex. 5 at 11.

Kingston Fossil Plant (Tennessee)

19. In November 2024, the Tennessee Air Pollution Control Board issued an air permit authorizing the Tennessee Valley Authority ("TVA") to construct a new methane gas-fired combined-cycle combustion turbine, sixteen dual fuel simple-cycle combustion turbines, and ancillary equipment (including an auxiliary boiler, an emergency generator, and five fuel heaters) near its existing coal-fired power plant at the Kingston Fossil Plant in Roane County, Tennessee.[19] The Kingston Fossil Plant is an existing major source for purposes of New Source Review.[20]

20. TVA's permit application shows that the new units have the potential to emit the following regulated pollutants in amounts that exceed their respective significance thresholds for purposes of triggering major New Source Review as a major modification: CO (392 tpy), NO_X (1,172 tpy), total PM (163 tpy), PM_{10} (220 tpy), $PM_{2.5}$ (220 tpy), VOC (91 tpy), and CO_2e (4,362,492 tpy).[21] However, TVA proposed offsetting these emission increases with the

[19] *See* Tenn. Air Pollution Control Bd., *Permit to Construct No. 981915* (Nov. 15, 2024) (excerpts attached as Exhibit 9). The Kingston Fossil Plant is located at 714 Swan Pond Rd., Harriman, TN 37748. *See* Ex. 9 at 1.
[20] *See* Tenn. Valley Auth., *Kingston Fossil Plant Combined Cycle Project, Air Permit-to-Construct Application* at 3-1 (Oct. 2024) (excerpts attached as Exhibit 10).
[21] Ex. 10 at 2-4 tbl.2-1.

projected emission decreases from its planned retirement of the nine coal-fired boilers at the Kingston Fossil Plant.[22]

21. Because TVA characterized construction of the new turbines as a "project" at the Kingston Fossil Plant, it relied on Project Emissions Accounting and the "hybrid" applicability test to subtract the projected emission decreases from retirement of the coal units at Step 1 of the major New Source Review applicability analysis.[23] As a result, construction of the new turbines and ancillary equipment was not subject to major New Source Review.

22. TVA's permit does not require the coal-fired units to be shut down until "completion of the shakedown periods" for the new turbines, but no later than December 31, 2027.[24] As a result, the permit authorizes a period of simultaneous operation of the retiring coal units and the new turbines.

23. Even after the coal units eventually shut down, TVA's emission calculations show there will be a net increase in emissions of VOC (36 tpy) and CO_2e (243,908 tpy).[25]

24. If the new turbines and ancillary equipment were subject to major New Source Review, then TVA would be required to reduce emissions of CO,

[22] Ex. 10 at 1-1, 3-1 to 3-2.
[23] Ex. 10 at 3-1 to 3-2; Tenn. Dep't of Env't & Conservation, *Construction Permit Summary Report* at Att.1, 1–3 (Nov. 15, 2024) (excerpts attached as Exhibit 11).
[24] Ex. 9 at 9.
[25] Ex. 10 at 3-2 tbl.3-2.

NO_X, total PM, PM_{10}, $PM_{2.5}$, VOC, and CO_2e from these new units to the maximum degree achievable using the best available control technology, resulting in less emissions of all these pollutants.

Cumberland Fossil Plant (Tennessee)

25. In June 2023, the Tennessee Air Pollution Control Board issued an air permit authorizing the Tennessee Valley Authority ("TVA") to construct two new methane gas-fired combined-cycle combustion turbines and ancillary equipment (including two auxiliary boilers) near its existing coal-fired power plant at the Cumberland Fossil Plant in Stewart County, Tennessee.[26] The Cumberland Fossil Plant is an existing major source for purposes of New Source Review.[27]

26. TVA's permit application shows that the new units have the potential to emit the following regulated pollutants in amounts that exceed their respective significance thresholds for purposes of triggering major New Source Review as a major modification: CO (262 tpy), NO_X (2,371 tpy), total PM (182 tpy), PM_{10} (224 tpy), $PM_{2.5}$ (224 tpy), VOC (114 tpy), H_2SO_4 (14 tpy), and CO_2e

[26] *See* Tenn. Air Pollution Control Bd., *Permit to Construct No. 980891* (June 20, 2023) (excerpts attached as Exhibit 12). The Cumberland Fossil Plant is located at 815 Cumberland City Road, Cumberland City, TN 37050. *See* Ex. 12 at 1.

[27] *See* Tenn. Dep't of Env't & Conservation, *Construction Permit Summary Report* at Att. 1, 1 (Mar. 27, 2025) (excerpts attached as Exhibit 13).

(5,845,347 tpy).[28] However, TVA proposed offsetting these emission increases with the projected emission decreases from its planned retirement of the two coal-fired boilers at the Cumberland Fossil Plant.[29] TVA specifically states: "Actual baseline emissions from the future retirement of [Cumberland Fossil Plant] coal-fired Unit 1 and Unit 2 are being used to net against the potential emissions from the proposed project."[30]

27. Because TVA characterized construction of the new turbines as a "project" at the Cumberland Fossil Plant, it relied on Project Emissions Accounting and the "hybrid" applicability test to subtract the projected emission decreases from retirement of the two coal units at Step 1 of the major New Source Review applicability analysis.[31] As a result, construction of the new turbines and ancillary equipment was not subject to major New Source Review.

28. TVA's 2023 permit did not require the two coal-fired units to be shut down before the new turbines began operating. Instead, the permit merely required that "one of the existing coal-fired boilers shall permanently cease operation upon completion of this project."[32] It provided that Duke Energy would shut down one of the coal units by December 31, 2026, and allowed the other to

[28] Tenn. Valley Auth., *Cumberland Fossil Plant Combined Cycle Facility, Construction Permit Application* at 2-3 tbl.2-1 (Oct. 31, 2022) (excerpts attached as Exhibit 14).
[29] Ex. 14 at 1-1, 3-1 to 3-2.
[30] Ex. 14 at 1-1.
[31] Ex. 14 at 3-1 to 3-2; Ex. 13 at Att. 1, 1–2.
[32] Ex. 12 at 9.

operate until December 31, 2028.[33] TVA's application stated that the new turbines would be installed in "2024-2025."[34] The permit therefore allows years of overlap between the new turbines and the old coal-fired units.

29. These changes are not part of a single project. The company's own language[35] and the history thereafter shows that construction of the new methane-fired units and retirement of the coal-fired units were two separate projects. The use of the "hybrid" applicability test here both eliminated the requirement in Step 2 to assess all contemporaneous increases and decreases in a five-year window and eliminated the need for enforceable reductions to be achieved at or before the time of the project if they were to be included in the analysis. As a result, the permitting agency did not require the new units to go through major New Source Review, as would have been required when it was clear the reductions could not be subtracted under Step 2.

30. If the new units were subject to major New Source Review, then TVA would be required to reduce emissions of CO, NO_X, total PM, PM_{10}, $PM_{2.5}$, VOC, H_2SO_4, and CO_2e to the maximum degree achievable using the best available control technology, resulting in less emissions of all these pollutants.

[33] Ex. 12 at 9.
[34] Ex. 14 at A-11.
[35] Ex. 14 at 1-1 (Actual baseline emissions from the future retirement of [Cumberland Fossil Plant] coal-fired Unit 1 and Unit 2 are being used to net against the potential emissions from the proposed project.").

31. Four months after the 2023 permit was issued, TVA submitted a permit application seeking authorization to "relax the annual operational restrictions" for two auxiliary oil-fired boilers and to construct three new fuel heaters.[36]

32. In December 2024, TVA submitted a revised application for the modified project, showing that even after the coal units eventually shut down, there will be a net increase in emissions of total PM (22 tpy).[37]

33. In March 2025, the Tennessee Air Pollution Control Board issued a revised air permit granting TVA's request to relax the operational limit on the two oil-fired boilers and to construct three new fuel heaters.[38]

34. While the 2023 permit included an enforceable backstop date for retiring the first coal unit ("no later than December 31, 2026"[39]), the 2025 permit relaxed this requirement as well, delaying the backstop retirement date to December 31, 2028 for both units.[40] In doing so, the permitting authority dismantled any argument it may have had that it was reasonable to rely on the "hybrid" applicability test for the 2023 permit.

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[36] Tenn. Valley Auth., *Cumberland Fossil Plant Combined Cycle Facility, Construction Permit Application* at transmittal letter, 1-1, 2-1 (Oct. 13, 2023) (excerpts attached as Exhibit 15).
[37] Tenn. Valley Auth., *Cumberland Fossil Plant Combined Cycle Facility, Construction Permit Application* at 3-2 tbl.3-2 (Dec. 13, 2024) (excerpts attached as Exhibit 16).
[38] Tenn. Air Pollution Control Bd., *Permit to Construct No. 981885* at 2, 36–37 (Mar. 27, 2025) (excerpts attached as Exhibit 17).
[39] Ex. 12 at 9 (.
[40] Ex. 17 at 9–10.

Tesoro Refining (California)

35. In November 2023, the South Coast Air Quality Management District issued an air permit authorizing Tesoro Refining & Marketing Company, LLC ("Tesoro") to construct two new methane gas-fired boilers and an ammonia storage tank as part of a facility upgrade at its petroleum refinery in Wilmington, California.[41] This facility is an existing major source for purposes of New Source Review.[42]

36. The agency's Statement of Basis accompanying the permit shows that the new boilers have the potential to emit the following regulated pollutants in amounts that exceed their respective significance thresholds for purposes of triggering major New Source Review as a major modification: SO_2 (78.84 tpy) and $PM_{10}/PM_{2.5}$ (41.14 tpy).[43] However, Tesoro proposed offsetting these emission increases with the projected emission decreases from its planned removal of several old pieces of equipment.[44]

37. Because Tesoro characterized the equipment removal as part of the same "project" as construction of the new boilers, it relied on Project Emissions

[41] *See* South Coast Air Quality Mgmt. Dist., *Facility Permit to Operate, Tesoro Refining and Marketing Co, LLC* (Nov. 3, 2023) (excerpts attached as Exhibit 18). The Tesoro refinery is located at 2101 East Pacific Coast Highway, Wilmington, CA 90744. *See* Ex. 18 at 1.
[42] *See* South Coast Air Quality Mgmt. Dist., *Statement of Basis Analysis* at 59 (Sept. 14, 2023) (excerpts attached as Exhibit 19).
[43] Ex. 19 at 74
[44] Ex. 19 at 1–2, 22–24, 70–75.

Accounting and the "hybrid" applicability test to subtract the projected emission decreases at Step 1 of the major New Source Review applicability analysis.[45] As a result, construction of the boilers was not subject to major New Source Review for SO_2 or particulate matter.

38. The agency's Statement of Basis accompanying the permit stated that "Tesoro ha[d] not provided a schedule for removal of the equipment from the site."[46] Instead of requiring such a schedule to be provided with the permit application, the agency included a permit condition requiring Tesoro to submit a "retirement plan" 60 days after issuance of the permit.[47] The permit also authorized a 90-day period of simultaneous operation of the retiring equipment and the new boilers.[48]

39. If the new boilers were subject to major New Source Review, then Tesoro would be required to reduce emissions of SO_2, PM_{10}, and $PM_{2.5}$ to the maximum degree achievable using the best available control technology, resulting in less emissions of those pollutants.

Koch Fertilizer (Oklahoma)

[45] Ex. 19 at 55–56, 70–75.
[46] Ex. 19 at 22.
[47] Ex. 18 at Sec. H, 33.
[48] Ex. 18 at Sec. H, 34.

40. In February 2020, the Oklahoma Department of Environmental Quality issued an air permit authorizing Koch Fertilizer Enid, LLC ("Koch") to make a variety of physical and operational changes to increase the production capacity of the urea synthesis plant at its fertilizer manufacturing facility in Garfield County, Oklahoma.[49] This facility is an existing major source for purposes of New Source Review.[50]

41. The project involved constructing a new gas-fired boiler in the urea synthesis plant, retiring a 46-year-old startup boiler in the ammonia plant, and physically or operationally modifying a variety of existing units including a five-year old boiler and several granulators, primary reformers, vents, and storage tanks.[51]

42. Because Koch characterized its planned retirement of the ammonia plant's startup boiler as part of the same "project" to increase the urea plant's production capacity, it relied on Project Emissions Accounting and the "hybrid" applicability test to subtract the projected emission decreases at

[49] *See* Ok. Dep't of Envtl. Quality, *Permit No. 2016-1295-C (M-6)* (Fe. 19, 2020) (excerpts attached as Exhibit 20); Ok. Dep't of Envtl. Quality, *Evaluation of Permit Application No. 2016-1295-C (M-6)* at 1–3 (Feb. 18, 2020) (excerpts attached as Exhibit 21).The Koch fertilizer plant is located at 1619 South 78th Street, Enid, OK 73701. *See* Ex. 20 at cover page.
[50] *See* Ex. 21 at 55.
[51] Ex. 21 at 1–3, 9–11.

Step 1 of the major New Source Review applicability analysis.[52] As a result, construction of the new units was not subject to major New Source Review.

43. The agency's permit application evaluation shows that if the emission decreases from retiring the ammonia plant's startup boiler were not subtracted, then the project's emission increases of the following regulated pollutants would exceed their respective significance thresholds for purposes of triggering major New Source Review as a major modification: NO_X, $PM_{2.5}$, and CO_2e.[53] Koch did not provide a clear project netting calculation, and relying upon the calculations in the permit application we found two separate sets of emissions estimates. While both showed significant increases for NO_X, $PM_{2.5}$, and CO_2e, the specific amounts varied. The numerical errors here are alarming in a major New Source Review avoidance application.

44. Koch's permit did not require the ammonia plant's startup boiler to be shut down before any of the existing unit modifications or before the new boiler in the urea plant began operating and emitting air pollution. Instead, the

[52] Ex. 21 at 33–43.

[53] Ex. 21 at 43 (showing that when the decreases from retiring the old startup boiler are subtracted, the net project emissions increases are 29.50 tons of NO_X per year, 9.21 tons of $PM_{2.5}$ per year, and 154,917 tons of CO_2e per year); Ex. 21 at 37 (showing that the ammonia unit startup boiler's baseline actual emissions were 42.19 tons of NO_X per year, 1.57 tons of $PM_{2.5}$ per year, and 24,701 tons of CO_2e per year).

permit authorized continued operation of the old boiler in the ammonia plant until the new boiler in the urea plant "completed" its shakedown period.[54]

45. If the new boiler and modified units were subject to major New Source Review for NO_X, $PM_{2.5}$, and CO_2e, then Koch would be required to limit their emissions to the maximum degree achievable using the best available control technology, resulting in less emissions of those pollutants.

Atlas Molded Products (Michigan)

46. In November 2024, the Michigan Department of Environment, Great Lakes, and Energy issued an air permit authorizing Atlas Molded Products to replace an old polystyrene block molding machine with a "faster" block molding machine at its insulation manufacturing facility in Kent County, Michigan.[55] This facility is an existing major source for purposes of New Source Review.[56]

47. The permit shows that the agency relied on Project Emissions Accounting and the "hybrid" applicability test to partially offset the increase in VOC emissions from operating the new machine by subtracting the baseline actual emissions for the old machine at Step 1 of the major New Source Review

[54] Ex. 20 at 4.
[55] Mich. Dep't of Env't, Great Lakes, & Energy, *Permit to Install No. 136-24* at 15 (Nov. 27, 2024) (excerpts attached as Exhibit 22). The Atlas Molded Products plant is located at 8240 Byron Center Avenue SW, Byron Center, MI 49315. *See* Ex. 22 at cover page.
[56] Ex. 22 at 12.

applicability analysis.[57] As a result, the project was not subject to major New Source Review.

48. If this new unit was subject to major New Source Review, then Atlas Molded Products would be required to limit its VOC emissions to the maximum degree achievable using the best available control technology, resulting in less emissions of that pollutant.

Graphic Packaging (Georgia)

49. In March 2024, the Georgia Department of Natural Resources issued an air permit authorizing Graphic Packaging International, LLC ("Graphic Packaging") to replace and modify multiple emission units at its pulp and paper mill in Augusta, Georgia.[58] This facility is an existing major source for purposes of New Source Review.[59]

50. Among other things, the project involves replacing a vacuum-drum washer with a displacement drum washer in one of the fiberlines, to "allow for improved washing" of pulp, and replacing a slaker in the causticizing area.[60] Graphic Packaging relied on Project Emissions Accounting and the "hybrid"

[57] Ex. 22 at 15.
[58] *See* Ga. Dep't of Natural Resources, *Permit Amendment No. 2631-245-0006-V-05-1* at 1–2 (Mar. 18, 2024) (excerpts attached as Exhibit 23). The Graphic Packaging facility is located at 4278 Mike Padgett Highway, Augusta, GA 30906. *See* Ex. 23 at cover page.
[59] *See* Ga. Dep't of Natural Resources, *SIP Construction Permit and Title V Significant Modification Application Review* at 2 (undated) (excerpts attached as Exhibit 24).
[60] Ex. 24 at 5, 17.

applicability test to subtract the projected emission decreases from shutting down the old slaker and the old vacuum-drum washer at Step 1 of the major New Source Review applicability analysis.[61] As a result, the project was not subject to major New Source Review.

51. The agency's application review shows that if the emission decreases from shutting down these units were not subtracted, then the project's emission increases of the following regulated pollutants would exceed their respective significance thresholds for purposes of triggering major New Source Review as a major modification: VOC (63.37 tpy), total reduced sulfur compounds ("TRS") (19.69 tpy), and hydrogen sulfide ("H_2S") (19.69 tpy).[62]

52. If the project was subject to major New Source Review, then Graphic Packaging would be required to reduce emissions of VOC, TRS, and H_2S to the maximum degree achievable using the best available control technology, resulting in less emissions of those pollutants.

Heidelberg Materials (Indiana)

53. In December 2024, the Indiana Department of Environmental Management issued an air permit authorizing Heidelberg Materials US Cement, LLC ("Heidelberg") to make a variety of physical and operational changes at its

[61] Ex. 24 at 4–15.
[62] Ex. 24 at 14 tbl.A-4.

cement manufacturing plant in Mitchell, Indiana.[63] This facility is an existing major source for purposes of New Source Review.[64]

54. The project involves modifying two finishing mills; constructing multiple new units including a cement packaging system, a clinker hopper, material storage operations, and material transfer operations; and removing multiple aging units that were built in the 1950s–1970s, including a tertiary crusher, a shale crusher, two raw mills, three kilns, three clinker coolers, and several conveyors.[65]

55. The agency's Technical Support Document shows that the new units have the post-control potential to emit the following regulated pollutants in amounts that exceed their respective significance thresholds for purposes of triggering major New Source Review as a major modification: total PM (369.74 tpy), PM_{10} (297.21 tpy), and $PM_{2.5}$ (214.93 tpy).[66] However, Heidelberg proposed offsetting these emission increases with the projected

[63] *See* Indiana Dep't of Envtl. Mgmt., *Significant Permit Modification No. 093-47798-00002* (Mar. 8, 2023) (excerpts attached as Exhibit 25); Indiana Dep't of Envtl. Mgmt., *Technical Support Document (TSD) for a Part 70 Significant Source Modification and Significant Permit Modification* at 3–13 (undated) (excerpts attached as Exhibit 26). The Heidelberg cement plant is located at 180 North Meridian Road, Mitchell, IN 47446. *See* Ex. 25 at 1.
[64] Ex. 26 at 3.
[65] Ex. 26 at 3–13.
[66] Ex. 26 at 27.

emission decreases from its planned retirement of several old pieces of equipment.[67]

56. Heidelberg relied on Project Emissions Accounting and the "hybrid" applicability test to subtract the projected emission decreases from retiring the old units at Step 1 of the major New Source Review applicability analysis.[68] As a result, construction of the new units was not subject to major New Source Review.

57. Even after the old units are removed, the agency's Technical Support Document shows there will be a net increase in emissions of PM_{10} (12.49 tpy) and $PM_{2.5}$ (8.29 tpy).[69]

58. If the new units were subject to major New Source Review, then Heidelberg would be required to reduce emissions of total PM, PM_{10}, and $PM_{2.5}$ to the maximum degree achievable using the best available control technology, resulting in less emissions of those pollutants.

Phillips 66 Refinery (Oklahoma)

59. In March 2020, the Oklahoma Department of Environmental Quality issued an air permit authorizing Phillips 66 Company ("Phillips 66") to make a variety of physical and operational changes at its refinery in Ponca City,

[67] Ex. 26 at 5–15, 27.
[68] Ex. 26 at 15–16, 26–27.
[69] Ex. 26 at 27.

California.[70] This facility is an existing major source for purposes of New Source Review.[71]

60. The project involved increasing the capacity of several existing units; constructing several new units, including a product pump, a Penex Reactor, booster pumps, and heat exchangers; and replacing multiple aging units, including a hydrotreating reactor, a fluidized catalytic cracking unit converter, a refrigeration system compressor motor, an extraction tower, a heat exchanger, oil feed pumps, recirculation pumps, and gasoline storage tanks.[72] Phillips 66 also claimed that the permanent shutdown of two fuel-gas fired engines was part of the same project.[73]

61. The agency's application evaluation specifically says that it allowed Phillips 66 to include "both emissions increases and decreases" in its "Step 1" calculations.[74] These calculations show that if the emission decreases from shutting down the old units were not subtracted, then the project-related increases in emissions of NO_X (81.6 tpy) and $PM_{2.5}$ (10.4 tpy) would exceed

[70] *See* Ok. Dep't of Envtl. Quality, *Permit No. 2012-704-C (M-3)* (Mar. 31, 2020) (excerpts attached as Exhibit 27); Ok. Dep't of Envtl. Quality, *Evaluation of Permit Application No. 2012-704-C (M-3)* at 8 – 20 (Mar. 31, 2020) (excerpts attached as Exhibit 28). The Phillips 66 refinery is located at 1000 South Pine, Ponca City, CA 74601. *See* Ex. 28 at 1.
[71] Ex. 28 at 1.
[72] Ex. 28 at 8–20.
[73] Ex. 28 at 51.
[74] Ex. 28 at 22, 51.

the applicable significance thresholds for purposes of triggering major New Source Review as a major modification.[75]

62. Even after the old units are removed, the agency's application evaluation shows there will be a net increase in emissions of NO_X (25.9 tpy), CO (74.7 tpy), $PM_{2.5}$ (9.8 tpy), SO_2 (26.8 tpy), and VOC (29.8 tpy).[76]

63. If the new and modified units were subject to major New Source Review, then Phillips 66 would be required to reduce their NOx and $PM_{2.5}$ emissions to the maximum degree achievable using the best available control technology, resulting in less emissions of those pollutants.

Roxboro Steam Electric Plant (North Carolina)

64. In December 2024, the North Carolina Department of Environmental Quality issued an air permit authorizing Duke Energy Progress, LLC ("Duke Energy") to construct four new dual fuel combined-cycle combustion turbines and ancillary equipment (including an auxiliary boiler, four emergency generators, and four fuel heaters) near its existing coal-fired power plant at the Roxboro Steam Electric Plant in Person County, North

[75] Ex. 28 at 51–52.
[76] Ex. 28 at 52.

Carolina.[77] The Roxboro Steam Electric Plant is an existing major source for purposes of New Source Review.[78]

65. Duke Energy's permit application shows that the new units have the potential to emit the following regulated pollutants in amounts that exceed their respective significance thresholds for purposes of triggering major New Source Review as a major modification: NO_X (1,119 tpy), total PM (214.8 tpy), PM_{10} (59.6 tpy), $PM_{2.5}$ (48.6 tpy), SO_2 (258.2 tpy), VOC (720.1 tpy), CO (2,589.7 tpy), H_2SO_4 (19.8 tpy), and CO_2e (12,855,867 tpy).[79] However, Duke Energy proposed offsetting these emission increases with the projected emission decreases from its planned retirement of four of the six coal-fired boilers at the Roxboro Steam Electric Plant.[80]

66. Because Duke Energy characterized construction of the new turbines as a "project" at the Roxboro Steam Electric Plant, it relied on Project Emissions Accounting and the "hybrid" applicability test to subtract the projected emission decreases from retirement of the four coal units at Step 1 of the

[77] *See* N.C. Dep't of Envtl. Quality, *Air Quality Permit No. 01001T60* (Dec. 19, 2024) (excerpts attached as Exhibit 29); N.C. Dep't of Envtl. Quality, *Application Review* at 2, 39 (Dec. 19, 2024) (excerpts attached as Exhibit 30).
[78] Ex. 30 at 39. The Roxboro Steam Electric Plant is located at 1700 Dunnaway Road, Semora, NC 27343. *See* Ex. 29 at cover page.
[79] Duke Energy Progress, LLC, *Minor NSR Permit Application, Combined-Cycle Turbines Project* at 3-11 tbl.3-1 (Mar. 2024) (excerpts attached as Exhibit 31).
[80] Ex. 31 at 3-4 to 3-7, 3-11 tbl.3-1.

major New Source Review applicability analysis.[81] The agency's permit application evaluation states: "[Duke Energy] is specifically using Step 1 for PSD applicability."[82] As a result, construction of the new turbines and ancillary equipment was not subject to major New Source Review.

67. Duke Energy's permit does not include any enforceable requirement for Duke Energy to shut down any of the coal-fired boilers.[83] The agency's permit application evaluation states: "Although [Duke Energy] plans to eventually retire these units, [Duke Energy] has not requested they be removed from the permit at this time. Therefore, ES-Unit 1 through 4 will remain in the list of permitted emission sources."[84] As a result, the permit authorizes an unlimited period of simultaneous operation of the retiring coal units and the new turbines.

68. If the new units were subject to major New Source Review, then Duke Energy would be required to reduce emissions of NO_X, total PM, PM_{10}, $PM_{2.5}$, SO_2, VOC, CO, H_2SO_4, and CO_2e to the maximum degree achievable

[81] Ex. 31 at 3-4 to 3-11; Ex. 30 at 40–42, 52.
[82] Ex. 30 at 52. It also states: "For the proposed project, [Duke Energy] has submitted Step 1 PSD applicability (a.k.a. 'project emissions accounting') for determination of 'significant emissions increase.' Emissions increases of all new emissions units and the baseline actual emissions of the existing units have been included." Ex. 30 at 40.
[83] Ex. 29 at 10–20.
[84] Ex. 30 at 15.

using the best available control technology, resulting in less emissions of all these pollutants.

Domtar Paper (North Carolina)

69. In December 2023, the North Carolina Department of Environmental Quality issued an air permit authorizing Domtar Paper Company, LLC ("Domtar") to make a variety of physical and operational changes at its pulp manufacturing plant in Plymouth, North Carolina.[85] This facility is an existing major source for purposes of New Source Review.[86]

70. The project involved converting the white liquor scrubber from a packed bed system to a spray column system; constructing a new absorption tower; modifying an existing thermal oxidizer; and periodically diverting pulp mill gases and stripper off-gases to the thermal oxidizer in order to minimize ringing in the lime kiln.[87]

71. Domtar relied on Project Emissions Accounting to subtract the projected emission decreases from diverting pulp mill gases and stripper off-gases from the hog boiler and lime kiln to the thermal oxidizer at Step 1 of the

[85] *See* N.C. Dep't of Envtl. Quality, *Air Quality Permit No. 04291T51* (Dec. 1, 2023) (excerpts attached as Exhibit 32); N.C. Dep't of Envtl. Quality, *Application Review* at 2, 8–9 (Dec. 1, 2023) (excerpts attached as Exhibit 33). The Domtar pulp mill is located at NC Highway 149 North, Plymouth, NC 27962. *See* Ex. 32 at cover page.
[86] Ex. 33 at 18.
[87] Domtar Paper Co., LLC, *Minor New Source Review Permit Application, Thermal Oxidizer and White Liquor Scrubber Modification* at 2-4 to 2-6 (Sept. 2022) (excerpts attached as Exhibit 34); Ex. 33 at 2, 8–9.

major New Source Review applicability analysis.[88] As a result, the project was not subject to major New Source Review.

72. Domtar's emission calculations show there will be a net increase in emissions of several regulated pollutants, including VOC (3.61 tpy), total PM (9.41 tpy), PM_{10}, (9.15 tpy), $PM_{2.5}$ (9.01 tpy), NO_X (35.9 tpy), and CO_2e (16,436).[89]

73. If the project was subject to major New Source Review, then Domtar would be required to reduce emissions to the maximum degree achievable using the best available control technology, resulting in less emissions.

Overview of Industry Comments on Impact of Project Emissions Accounting on Major New Source Review Applicability Determinations

74. Comments submitted by industry representatives into various regulatory dockets reveal that they expect Project Emissions Accounting to abbreviate the process for determining major New Source Review applicability to facility changes and ultimately reduce the number of projects that must comply with major New Source Review.

75. For example, in April 2017, the first Trump Administration invited comments identifying "regulations that may be appropriate for repeal, replacement, or modification" in accordance with Executive Order 13,777

[88] Ex. 34 at 3-4 to 3-6, 3-8 to 3-9; Ex. 33 at 11–14.
[89] Ex. 34 at 3-9 tbl.3-1.

"Enforcing the Regulatory Reform Agenda."[90] Multiple comments submitted to that docket asked EPA to allow Project Emissions Accounting—indicating it would significantly ease industry's ability to undertake facility modifications both because they could avoid the cost of a Step 2 contemporaneous netting analysis and because it would ultimately decrease the number of actions that would be subject to major New Source Review.

76. For example, Golder Associates, on behalf of the Florida Sugar Industry, submitted comments stating they "recently supported a client in obtaining a PSD permit in which Step 1 of the PSD applicability analysis exceeded the PSD SER for several pollutants, due to the fact that emissions reductions at certain emissions units could not be counted in Step 1. Then, due to the actual-to-potential emissions test for contemporaneous emissions, PSD review was triggered in Step 2. If project netting had been allowed in Step 1, PSD review would not have been triggered. In all, the client spent over four (4) additional months and an additional $80,000 in obtaining the PSD permit. This was very burdensome and time consuming."[91]

[90] Evaluation of Existing Regulations, 82 Fed. Reg. 17793, 17793 (Apr. 13, 2017).
[91] Comments of Golder Associates Inc. (Golder), on behalf of the Florida Sugar Industry (FSI), on *Evaluation of Existing Regulations*, 82 Fed. Reg. 17793 (Apr. 13, 2017), Docket ID No. EPA-HQ-OA-2017-0190-53674 at 9 (May 15, 2017) (attached as Exhibit 35).

77. This example from Golder highlights the importance of Step 2 because emissions decreases were identified that weren't appropriate to be included when considering the restrictions on creditable emissions reductions in Step 2. Fast-tracking hasty inclusions of reductions in Step 1 without this rigorous analysis would have caused this project to inappropriately avoid major New Source Review. As identified above, there are many projects that have relied on emissions decreases that are not enforceable or creditable but because of a back-of-the-envelope Step 1 calculation, the project avoided major New Source Review.

78. The Class of '85 Regulatory Response Group, a group of electric generating companies, stated: "Allowing sources to account in Step 1 for both increases and decreases in emissions that would result from a proposed project . . . would limit the circumstances under which sources would be required to analyze the project in the complicated Step 2 process."[92] They go on to say: "Without being able to include project emissions decreases in Step 1, the power plant would have to decide if such improvement measures are worth the additional emissions accounting required under Step 2, which, as

[92] Comments of the Class of '85 Regulatory Response Group on *Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR): Project Emissions Accounting*, 84 Fed. Reg. 39244 (Aug. 9, 2019), Docket ID No. EPA-HQ-OAR-2018-0048-0064 at 2 (Oct. 8, 2019) (attached as Exhibit 36).

explained above, often leads to a determination that a project will result in a net (yet artificial) emissions increase and, thus, be subject to NSR preconstruction permitting."[93]

79. The Class of '85 Regulatory Response Group as well as industry commenters identified in Paragraphs 84, 85, 86, and 87 below argue that if emission decreases cannot be counted at Step 1 of the major New Source Review applicability analysis (and instead can only be counted at Step 2), more projects will need to undergo major New Source Review permitting. Such outcome is appropriate; if consideration of all contemporaneous increases and decreases at Step 2 shows a significant net emissions increase from a facility, major New Source Review should apply. Air quality is not adequately protected if the process for determining major New Source Review applicability is limited to reviewing only those hand-picked increases and decreases selected by the company rather than looking comprehensively at all contemporaneous changes impacting source-wide emissions. Step 2 does in fact allow for consideration of offsetting emission decreases, but only if they are contemporaneous and creditable. Class of '85 acknowledged this, saying Step 2 "omits any emissions decrease that is not

[93] Ex. 36 at 3.

enforceable."[94] This is by design. To properly offset a project-related increase and enable a project to avoid major New Source Review, a source must accept enforceable restrictions ensuring that the decrease will actually occur and be permanent.

80. The American Wood Council submitted comments asking EPA to allow Project Emissions Accounting because "[p]roject netting calculations are more straightforward and the resulting regulatory change to explicitly allow project netting would let facilities receive credit for emission reductions that are achieved as part of an overall project, without introducing complexity into the program."[95] They go on to summarize that changing this and the netting test in Step 2 to Actual-to Projected-Actual "would affect a large percentage of permit applicability analyses and reduce the time for development and processing of permit applications. Our members have indicated that changes to netting procedures would result in a significant reduction in permitting burden."[96]

81. The American Wood Council's comments above as well as the comments, or parts of comments, in paragraphs 80, 84, and 87 also focus on the regulatory

[94] Ex. 36 at 2.
[95] Comments of the American Wood Council on *Evaluation of Existing Regulations*, 82 Fed. Reg. 17793 (Apr. 13, 2017), Docket ID No. EPA-HQ-OA-2017-0190-37770 at 2-9 to 2-10 (May 15, 2017) (attached as Exhibit 37).
[96] Ex. 37 at 2-10.

burden of Step 2 analyses. I assume these comments refer to projects that ultimately don't go through major New Source Review, but need to do additional work at the application stage to demonstrate the absence of a significant net emissions increase. For these projects, it is important to remember that without the additional pre-permitting analysis by the company, the permitting authority is unable to determine what restrictions would be necessary to ensure the contemporaneous increases and decreases are properly creditable. This scrutiny isn't just busy work, it is the basis on which an agency can determine the timing and enforceability of restrictions on the potential to emit from recent modifications. As shown by the examples herein, a company's vague promises about shutting down units are often ambiguous or are later revised. With the exception of a few of the examples, the reductions also don't happen at the same time as the project-related increases, and often not until years in the future. A detailed Step 2 analysis by the company would have identified additional information about this timing that could and would have been used by the permitting authority.

82. The Air Permitting Forum, a coalition of companies that advocates on Clean Air Act regulations that impact their businesses, asked EPA to allow Project Emissions Accounting because the failure to do so to date "[left] in place a

more cumbersome analysis that often results in triggering NSR or at least complicating the applicability decision."[97]

83. The National Mining Association submitted comments asking EPA to allow Project Emissions Accounting because EPA's decisions disallowing it "increases the scope of projects that potentially could be subject to NSR permitting requirements thereby subjecting the regulated community to additional regulatory burdens, delay, and costs."[98]

84. Freeport-McMoRan, an American mining company, stated: "Prohibiting project netting increases the scope of projects that potentially could be subject to NSR permitting requirements thereby subjecting the regulated community to additional regulatory burdens, delay, and costs."[99] Freeport goes on to say that that project emissions accounting "would help reduce projects potentially subject to NSR permitting requirements."[100] It also said

[97] Comments of the Air Permitting Forum on *Evaluation of Existing Regulations*, 82 Fed. Reg. 17793 (Apr. 13, 2017), Docket ID No. EPA-HQ-OA-2017-0190-37770 at 14 (May 15, 2017) (attached as Exhibit 38).
[98] Comments of the National Mining Association on *Evaluation of Existing Regulations*, 82 Fed. Reg. 17793 (Apr. 13, 2017), Docket ID No. EPA-HQ-OA-2017-0190-37770 at 3-4 (May 15, 2017) (attached as Exhibit 39).
[99] Comments of Freeport-McMoRan on *Evaluation of Existing Regulations*, 82 Fed. Reg. 17793 (Apr. 13, 2017), Docket ID No. EPA-HQ-OA-2017-0190-35022 at 12 (May 15, 2017) (attached as Exhibit 40).
[100] Ex. 40 at 12.

it would "streamline non-applicability determinations under the NSR permitting program."[101]

85. Commenters on EPA's 2019 proposal on Project Emissions Accounting also advocated for the policy explicitly for the purpose of having fewer projects trigger major New Source Review procedures. Tennessee Valley Authority explained that "if the full scope of emissions changes (increases and decreases) were not considered at Step 1, the regulations would lead to" more projects being subject "to pre-construction review," including solid waste handling projects the Tennessee Valley Authority was planning to undertake.[102]

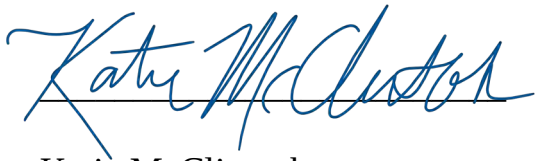
86. These comments reveal that industry representatives in 2019 expected Project Emissions Accounting changes to allow a more favorable company-driven review of project impacts in Step 1 of the New Source Review applicability analysis. They further expected Project Emissions Accounting to impact a large portion of modification projects, decreasing the number of projects required to go on to Step 2 of the applicability analysis, and decreasing the number projects that trigger major New Source Review and

[101] Ex. 40 at 12.
[102] Comments of Tennessee Valley Authority on *Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR): Project Emissions Accounting*, 84 Fed. Reg. 39244 (Aug. 9, 2019), Docket ID No. EPA-HQ-OAR-2018-0048-0044 at 2 (Oct. 8, 2019) (attached as Exhibit 41).

the need to reduce emissions using up-to-date pollution controls. As predicted by industry, this regulatory change did just that, allowing companies a free pass to construct with minimum review and permitting. As the above examples illustrate, Project Emissions Accounting allows cursory Step 1 reviews to enable large projects to evade applicability of major New Source Review—often in less than a few pages of an application. These analyses overlook key known details about emission decreases that are not enforceable as well as unknown details about other contemporaneous emission increases leading to an overall source-wide significant increase in harmful emissions released into the atmosphere.

87. I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on November 13, 2025.



Katie McClintock