NOT YET SCHEDULED FOR ORAL ARGUMENT

No. 23-60069

IN THE UNITED STATES COURT OF APPEALS

FOR THE FIFTH CIRCUIT

STATE OF TEXAS; TEXAS COMMISSION ON ENVIRONMENTAL QUALITY; LUMINANT GENERATION COMPANY, L.L.C.; COLETO CREEK POWER, L.L.C.; ENNIS POWER COMPANY, L.L.C.; HAYS ENERGY, L.L.C.; MIDLOTHIAN ENERGY, L.L.C.; OAK GROVE MANAGEMENT COMPANY, L.L.C.; WISE COUNTY POWER COMPANY, L.L.C.; ASSOCIATION OF ELECTRIC COMPANIES OF TEXAS; BCCA APPEAL GROUP; TEXAS CHEMICAL COUNCIL; TEXAS OIL & GAS ASSOCIATION; PUBLIC UTILITY COMMISSION OF TEXAS; RAILROAD COMMISSION OF TEXAS; STATE OF MISSISSIPPI; MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY; MISSISSIPPI POWER COMPANY; STATE OF LOUISIANA; LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY; ENTERGY LOUISIANA, L.L.C.; LOUISIANA CHEMICAL ASSOCIATION; MID-CONTINENT OIL AND GAS ASSOCIATION; LOUISIANA ELECTRIC UTILITY ENVIRONMENTAL GROUP, L.L.C.; TEXAS LEHIGH CEMENT COMPANY, LP,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY; MICHAEL S. REGAN, ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

On Petitions for Review of Final Agency Action of the
United States Environmental Protection Agency
88 Fed. Reg. 9336

RESPONSE BRIEF FOR RESPONDENTS

(Counsel listed on inside cover)

TODD KIM
Assistant Attorney General

Of Counsel:

ROSEMARY HAMBRIGHT KABAN
DANIEL P. SCHRAMM
JEANHEE HONG
U.S. Environmental Protection Agency
Office of General Counsel
Washington, D.C.

JIN HYUNG LEE
SARAH IZFAR
JEFFREY HAMMONS
U.S. Department of Justice
Environment and Natural Resources Division
Environmental Defense Section
150 M St., NE
Washington, D.C. 20002

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STATE OF TEXAS, et al., Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al., Respondents.	No. 23-60069

CERTIFICATE OF INTERESTED PERSONS

Under the fourth sentence of Fifth Circuit Rule 28.2.1, Respondents, as governmental parties, need not furnish a certificate of interested persons.

Date: August 15, 2023

/s/ Jin Hyung Lee
Jin Hyung Lee
Sarah Izfar
Jeffrey Hammons

U.S. Department of Justice
Environment & Natural Resources Division
Environmental Defense Section
150 M St., NE
Washington, D.C. 20002

Counsel for Respondents

STATEMENT REGARDING ORAL ARGUMENT

Respondents United States Environmental Protection Agency and its Administrator, Michael S. Regan (collectively, "EPA"), request oral argument. EPA believes that the Court would benefit from argument addressing the application of 42 U.S.C. § 7607(b)(1)'s venue provision to the agency action challenged here.

If the Court reaches the merits, the petitions raise complex legal and record issues. The administrative record includes a significant amount of technical material regarding air pollutant modeling and analyses. Adjudicating the merits of the petitions for review will therefore require the Court to consider many complex issues and a substantial amount of information. EPA therefore believes the Court would benefit from oral argument.

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INTRODUCTION

The Good Neighbor Provision of the Clean Air Act ("Act"), 42 U.S.C. § 7410(a)(2)(D)(i)(I), is designed to ensure that upwind states do not impede the efforts of downwind states to attain federal air-quality standards, which are set to protect public health. Congress set up a regime in which states propose to EPA plans to eliminate their significant contributions to or interference with pollution problems downwind. EPA must ensure that those plans are adequate—and, if not, disapprove them.

The Good Neighbor Provision is particularly important for ozone, which presents a nationwide problem caused, in part, by emissions that can travel hundreds of miles. After EPA strengthened federal ozone standards in 2015, states had to submit plans to meet their Good Neighbor obligations. Upon carefully reviewing the states' submissions with an eye towards national consistency to address this nationwide problem, EPA reasonably disapproved the submissions of 21 states, including Louisiana, Mississippi, and Texas. *See* Disapproval, 88 Fed. Reg. 9336 (Feb. 13, 2023), C.I. EPA-HQ-2021-0663-0020. These states' submissions acknowledged that their emissions impair air quality in downwind states. But, rather than evaluate whether their contributions to impairment were significant and should be prohibited, the states offered only technically

unsupported analyses seeking to minimize their contributions and avoid their Good Neighbor obligations.

Instead of reviewing EPA's Disapproval, this Court should transfer all the petitions for review to the D.C. Circuit, which has exclusive venue under the Act. That is so because the Disapproval is either "nationally applicable" or "based on a determination of nationwide scope or effect" made and published by EPA. 42 U.S.C. § 7607(b)(1). Interstate air pollution is a quintessential national problem, and Congress expressly directed all states to adopt plans that prohibit emissions that contribute significantly to nonattainment or maintenance problems by "any other state." *Id.* § 7410(a)(2)(D)(i). EPA accordingly evaluated each state's submissions using its longstanding framework to ensure national consistency and avoid inequitable results in addressing the nationwide problem of interstate ozone pollution. EPA based the Disapproval on several determinations that have nationwide scope or effect—precisely the types of determinations for which Congress directed centralized review in the D.C. Circuit.

If this Court nonetheless decides the merits itself, it should deny the petitions because EPA reasonably disapproved these state plans for failing to comply with the Good Neighbor Provision. To ensure that states meet their substantive obligations under the Act, and to carry out its own statutory review obligations, EPA carefully evaluated the state plans using its longstanding 4-step framework,

which is moored to the text of the Good Neighbor Provision. EPA's technical review, described in detail herein, aligned with how the Supreme Court and the D.C. Circuit (which, again, has exclusive venue over this and similar EPA actions) have interpreted the Good Neighbor Provision for the past quarter-century. *See EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 497-99, 524 (2014) (explaining this history and upholding EPA's 4-step framework).

In reviewing the state plans here, EPA consistently acknowledged that states have flexibility in how to implement the Good Neighbor Provision, provided that they meet the Provision's objective. But no state used this flexibility to submit a technically supported plan. EPA carefully evaluated the substance of Louisiana's, Mississippi's, and Texas's plans and reasonably determined that none contained technical analyses that supported the states' conclusions that they did not "contribute significantly" to nonattainment or "interfere with maintenance" of federal ozone standards in other states. EPA's own modeling and updated data merely confirmed this conclusion, which followed from the states' own submissions.

Petitioners engage very little with EPA's explanations for its Disapproval. Instead, they deny EPA's statutory obligation under the Act to independently evaluate state plans' compliance with the Good Neighbor Provision. And Petitioners lodge groundless attacks on collateral issues—EPA's memoranda,

updated modeling, and delay in taking final action—none of which affected the outcome of EPA's Disapproval.

Finally, even if the Court were to reach the merits and find fault with each of EPA's independent grounds for the Disapproval, the Court should nevertheless allow the Disapproval to remain in place on remand. The robust administrative record reflects that EPA will likely succeed in further substantiating its Disapproval on remand as necessary. Conversely, vacating the Disapproval would further delay the states' compliance with their Good Neighbor obligations, disrupt implementation of EPA's separately promulgated federal Good Neighbor Plan, and leave downwind areas to suffer continuing poor air quality and inequitable regulatory burdens.

STATEMENT OF JURISDICTION

The challenged EPA action, the Disapproval, constitutes final, reviewable agency action pursuant to 42 U.S.C. § 7607(b)(1), and Petitioners timely filed their petitions for judicial review. But the petitions should be transferred to the D.C. Circuit pursuant to 42 U.S.C. § 7607(b)(1). *See infra* Arg. I.

STATEMENT OF THE ISSUES

1. Whether venue lies in the D.C. Circuit under 42 U.S.C. § 7607(b)(1) as the Disapproval is nationally applicable or, if regionally or locally applicable, is

based on several determinations of nationwide scope or effect made and published by EPA.

2. Whether EPA's technical evaluation and disapproval of Louisiana's state implementation plan submission—a submission that asserted without foundation that Louisiana's emissions do not contribute significantly to nonattainment or interfere with maintenance of downwind states' compliance with federal ozone standards—gave reasonable effect to the Act, case law, and EPA's longstanding practice implementing the Good Neighbor Provision. *Id.* § 7410(a)(2)(D)(i)(I).

3. Whether EPA's technical evaluation and disapproval of Mississippi's state implementation plan submission—a submission that asserted without foundation that Mississippi's emissions do not contribute significantly to nonattainment or interfere with maintenance of downwind states' compliance with federal ozone standards—gave reasonable effect to the Act, case law, and EPA's longstanding practice implementing the Good Neighbor Provision. *Id.*

4. Whether EPA's technical evaluation and disapproval of Texas's state implementation plan submission—a submission that asserted without foundation that Texas's emissions do not contribute significantly to nonattainment or interfere with maintenance of downwind states' compliance with federal ozone standards—

gave reasonable effect to the Act, case law, and EPA's longstanding practice implementing the Good Neighbor Provision. *Id.*

5. Whether, if the Court determines that remand of the Disapproval is appropriate, and with "due account . . . taken of the rule of prejudicial error," 5 U.S.C. § 706, vacatur would be improper because the record reflects that on remand, EPA likely could correct any of the Disapproval's defects that the Court may find and vacating the Disapproval would have disruptive consequences on states' and EPA's compliance with the Good Neighbor Provision.

STATEMENT OF THE CASE

A. Legal background

1. Clean Air Act

The Act, 42 U.S.C. §§ 7401-7671q, seeks "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare," *id.* § 7401(b)(1), and to control air pollution through a system of shared federal and state responsibility, *see Gen. Motors Corp. v. United States*, 496 U.S. 530, 532 (1990). The Act, as amended, "reflect[s] congressional dissatisfaction with the progress of existing air pollution programs and a determination to take a stick to the states in order to guarantee the prompt attainment and maintenance of specified air quality standards." *Union Elec. Co. v. EPA*, 427 U.S. 246, 249 (1976) (quotation omitted). "These Amendments sharply increased federal authority and

responsibility in the continuing effort to combat air pollution." *Train v. NRDC*, 421 U.S. 60, 64 (1975).

a. Ozone National Ambient Air Quality Standards and Attainment Areas

The Act directs EPA to set National Ambient Air Quality Standards ("NAAQS" or "standards") for specific pollutants, including ozone, at levels required to protect public health and welfare. 42 U.S.C. § 7409(b)(1). Within two years of each promulgation or revision of a NAAQS, and considering recommendations from states, EPA designates areas as being in "attainment" or "nonattainment," or "unclassifiable." *Id*. § 7407(d).

Nonattainment areas are subject to attainment deadlines based on their classification. *Id*. § 7511(a). The classifications, which are based on how long nonattainment has persisted and on severity, are from lowest to highest: Marginal, Moderate, Serious, Severe, and Extreme. *Id*. § 7511(a)-(b). Failure to meet attainment deadlines leads to areas being reclassified to higher classifications and increasingly stringent emissions-reduction requirements. *Id*. §§ 7501-15.

Ozone is a pollutant that EPA regulates through the NAAQS. *See Miss. Comm'n on Env't Quality v. EPA* ("*MCEQ*"), 790 F.3d 138, 146-47 (D.C. Cir. 2015). Ozone at ground level (commonly known as smog) is harmful to public health and welfare—it can cause "lung dysfunction, coughing, wheezing, shortness of breath, nausea, respiratory infection" and widely affects "trees, vegetation, and

crops." *Id.* at 147. To sufficiently protect public health and welfare, EPA has strengthened the ozone NAAQS multiple times, most recently in 2015 by setting the ozone NAAQS to 70 parts per billion ("ppb"). 80 Fed. Reg. 65292 (Oct. 26, 2015) ("2015 ozone NAAQS").

EPA has designated many areas of the country as nonattainment for the 2015 ozone NAAQS, and many then-Marginal nonattainment areas have continued to exceed the NAAQS past their relevant attainment date, resulting in reclassification to Moderate. 87 Fed. Reg. 60897 (Oct. 7, 2022).

b. State Implementation Plans

All states, regardless of whether they have nonattainment areas, bear the initial responsibility to adopt state implementation plans ("SIPs") that are adequate to implement, maintain, and enforce the NAAQS. 42 U.S.C. § 7410(a). States must submit SIPs for EPA's review generally within three years of the promulgation or revision of a NAAQS. *Id.* States with nonattainment areas must develop separate, additional plans to bring these areas into attainment by the relevant attainment date. *Id.* §§ 7502, 7511-7511a.

While the Act places "primary responsibility for formulating pollution control strategies" on states, it subjects states "to strict minimum compliance requirements" to attain the NAAQS. *Union Elec.*, 427 U.S. at 256-57. And while other provisions of the Act, such as 42 U.S.C. §§ 7411 or 7412, require EPA to set

technology-based standards for categories of sources of air pollution, the NAAQS-implementation provisions require states to achieve a specific, numerically defined outcome: the attainment and maintenance of a "safe concentration of the pollutant in the ambient air." *West Virginia v. EPA*, 142 S. Ct. 2587, 2615 (2022). The Supreme Court has described the NAAQS attainment deadlines as "the heart" of the Act. *Train*, 421 U.S. at 66.

Once a state submits a SIP, EPA conducts a completeness review. 42 U.S.C. § 7410(k)(1)(B). If EPA is satisfied that the SIP contains all the requisite parts, EPA considers the SIP complete,[1] and then, within one year of that date, EPA must review states' SIP submissions for substantive compliance with the Act. *Id.* § 7410(k)(2). If EPA determines that a SIP meets "all of the applicable requirements" of the Act, EPA "shall" approve the submission. *Id.* § 7410(k)(3). But if EPA determines that a SIP does not meet all the Act's applicable requirements, it cannot approve the SIP and must issue a partial or full disapproval. *See id*.

If approved, the provisions of state law that a state has submitted for adoption into its SIP become enforceable as a matter of federal law and cannot be modified except by EPA's approval of a SIP revision. *Id.* §§ 7410(i), (*l*), 7413. If

[1] A SIP may also be treated as complete "by operation of law." 42 U.S.C. § 7410(k)(1)(B).

EPA finds that a state either failed to submit a complete SIP under Section 7410(k)(1) or disapproves a SIP because it did not meet the Act's applicable requirements under Section 7410(k)(3), EPA must promulgate a federal implementation plan ("FIP"). *Id*. § 7410(c)(1). Unless the Act otherwise specifies, there is generally no requirement for EPA to provide guidance or specifically define the Act's applicable requirements for states. *EME Homer*, 572 U.S. at 510. Nor is EPA required to provide states with opportunities to correct a deficient state plan before issuing a FIP. *Id*. at 509. EPA may promulgate a FIP at any time within two years and need not "postpone its action even a single day." *Id.*[2] However, if a SIP revision submitted to replace a FIP meets the applicable requirements of the Act, EPA must approve it, and will withdraw its FIP. 42 U.S.C. §§ 7410(c)(1), (k)(3).

The actions that EPA must take pursuant to the specified deadlines set forth in Section 7410 may be enforced against EPA through civil district-court lawsuits under 42 U.S.C. § 7604(a)(2). The remedy for EPA's failure to meet a nondiscretionary deadline is a court-ordered deadline requiring EPA to address the relevant obligation. *See BCCA Appeal Grp. v. EPA*, 476 F. App'x 579, 582 (5th

[2] The Act also separately authorizes EPA to require states to submit SIP revisions if it finds a SIP to be "substantially inadequate" by issuing a "SIP Call." *Id.* § 7410(k)(5).

Cir. 2012) (per curiam); *Oklahoma v. EPA*, 723 F.3d 1201, 1223-24 (10th Cir. 2013).

2. Case law upholding EPA's longstanding approach to implementing the Good Neighbor Provision

Congress enacted the Good Neighbor Provision to hold upwind states accountable for their fair share of emissions reductions so that downwind states do not bear the regulatory compliance burden of attaining the NAAQS alone. 42 U.S.C. § 7410(a)(2)(D)(i)(I); *EME Homer*, 572 U.S. at 496-98; *Wisconsin v. EPA*, 938 F.3d 303, 314 (D.C. Cir. 2019); *Maryland v. EPA*, 958 F.3d 1185, 1191 (D.C. Cir. 2020) (per curiam).

The provision is especially relevant for ozone, which travels great distances and is subject to "the vagaries of the wind." *EME Homer*, 572 U.S. at 497. Additionally, ozone is not directly emitted into the atmosphere; rather, ozone forms through a photochemical reaction where emissions of "ozone precursors," including primarily nitrogen oxides (NO_X) and volatile organic compounds, react in the atmosphere in the presence of sunlight. *MCEQ*, 790 F.3d at 147. Ozone and its precursors "travel easily through the atmosphere, which can result in NAAQS violations hundreds of miles away from the source of the ozone precursors." *Id.*

Once EPA promulgates or revises a NAAQS, states must submit SIP submissions that "prohibit[]" through "adequate provisions" in-state emissions from "any source or other type of emissions activity" that "will" "contribute

significantly to nonattainment" or "interfere with maintenance" of the NAAQS in other states. 42 U.S.C. § 7410(a)(2)(D)(i)(I). These two prongs—"contribute significantly to nonattainment" and "interfere with maintenance"—must each be given independent effect. *North Carolina v. EPA*, 531 F.3d 896, 909-10 (D.C. Cir. 2008).

The Act does not otherwise define the terms "contribute significantly" or "interfere with maintenance," though the Act requires that the Good Neighbor Provision be implemented "consistent with the provisions of this subchapter," which is Title I of the Act (42 U.S.C. §§ 7401-7515). *See also Wisconsin*, 938 F.3d at 315-16. Through these separate prongs, Congress was concerned not only with emissions that reach areas failing to attain federal air-quality standards, but also with emissions that reach areas struggling to maintain healthy air. *Id*. at 325-27. Congress has also provided a mechanism in the Act for EPA to directly enforce the Provision's requirements against individual sources or groups of sources upon granting the petition of a downwind jurisdiction. 42 U.S.C. § 7426(b), (c).

a. EPA's past rules related to the Good Neighbor Provision

"Over the past 50 years, Congress has addressed interstate air pollution several times and with increasing rigor." *EME Homer*, 572 U.S. at 497. More specifically, the Good Neighbor Provision evolved from earlier versions that first

relied on states' "cooperation," which proved ineffective, and later required impractical demonstrations that particular sources, by themselves, were the cause of downwind nonattainment. *Id.* at 497-99. In 1990, Congress enacted the current version of the Good Neighbor Provision, which more broadly requires states to prohibit emissions from "any source" that "contributes significantly" to downwind nonattainment and maintenance problems. *Id.* at 499 (quoting 42 U.S.C. § 7410(a)(2)(D)(i)). Notwithstanding this more inclusive and prescriptive provision, many states still failed to submit or adopt plans containing adequate provisions addressing their Good Neighbor obligations, including for ozone, leading to successive rounds of rulemaking and judicial decisions over the last quarter century.

Since 1998, for each ozone NAAQS revision, EPA has promulgated national rules specifically defining and directly implementing Good Neighbor requirements for states and has approved adequate Good Neighbor SIP submissions and disapproved inadequate ones. Generally, these rules provided for, or directly implemented, interstate emissions trading programs for power plants, which are some of the highest emitters of ozone-precursor pollutants. *See, e.g.*, 63 Fed. Reg. 57356 (Oct. 27, 1998) ("NO_X SIP Call" addressing the 1979 ozone NAAQS); 70 Fed. Reg. 25162 (May 12, 2005) ("Clean Air Interstate Rule," addressing the 1997 ozone NAAQS); 76 Fed. Reg. 48208 (Aug. 8, 2011) ("Cross-State Rule"

addressing the 1997 ozone NAAQS); 81 Fed. Reg. 74504 (Oct. 26, 2016) ("Update Rule" addressing the 2008 ozone NAAQS); 83 Fed. Reg. 65878 (Dec. 21, 2018) ("Closeout Rule" for the 2008 ozone NAAQS); 86 Fed. Reg. 23054 (Apr. 30, 2021) ("Revised Update Rule" for the 2008 ozone NAAQS).

These rules defining and directly implementing Good Neighbor obligations have been extensively litigated. The resulting cases have clarified the meaning of key terms in the Good Neighbor Provision, at times setting bounds on the scope of EPA's authority or discretion and at other times holding that EPA must regulate more aggressively.

In 2000, the D.C. Circuit in *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000) (per curiam), generally affirmed EPA's NO_X SIP Call, including the use of cost as part of the determination of significant contribution, and further upheld EPA's ability to set NO_X budgets notwithstanding a state's authority to develop SIP submissions. *See also Appalachian Power Co. v. EPA*, 249 F.3d 1032 (D.C. Cir. 2001) (upholding EPA's grant of petition under 42 U.S.C. § 7426 related to obligations defined in the NO_X SIP Call). The D.C. Circuit, however, invalidated EPA's next national Good Neighbor rule, the Clean Air Interstate Rule, in *North Carolina*, 531 F.3d 896. The court held, among others, that EPA failed to give independent significance to the phrase "interfere with maintenance" in the Good Neighbor Provision. *Id*. at 908-11. The court also held that EPA (and states) must

align Good Neighbor obligations with the attainment dates faced by downwind areas, *id*. at 911-12, 930, and that each state must eliminate its own significant contribution to nonattainment or interference with maintenance regardless of other contributions to the same downwind areas, *id.* at 920-21.

In 2011, EPA replaced the Clean Air Interstate Rule with the Cross-State Rule. 76 Fed. Reg. 48208. In that rule, EPA made error corrections because of *North Carolina,* and converted its earlier approval of 22 state SIPs into disapprovals and promulgated FIPS for those states. *Id.* at 48220-22.

The Cross-State Rule was at first vacated by the D.C. Circuit in part because it held that EPA must first define Good Neighbor obligations and give states the opportunity to submit approvable SIPs before promulgating FIPs. *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7 (D.C. Cir. 2012). But the Supreme Court rejected this holding and reversed. *EME Homer*, 572 U.S. at 496. It held that, through the Good Neighbor Provision, Congress delegated to EPA the authority to determine what constitutes significant contribution to nonattainment or interference with maintenance. *Id*. at 513-20. The Court also held that EPA may promulgate a FIP at any time after it disapproves SIP submissions, and that EPA has no obligation to define Good Neighbor obligations for states before disapproving their submissions. *Id.* at 509-10.

The Supreme Court also upheld as reasonable the "4-step framework" EPA relied on to evaluate Good Neighbor obligations. *Id*. at 520. In particular, the Court upheld EPA's cost-based analysis for defining "significant" contribution across all upwind states as an "efficient and equitable" interpretation of the Good Neighbor Provision. *Id.* at 518-20.

On remand, the D.C. Circuit largely affirmed the Cross-State Rule but remanded to EPA on narrow record-based grounds as to certain states. *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118 (D.C. Cir. 2015). The court otherwise affirmed EPA's authority to make error corrections converting SIP approvals to disapprovals and EPA's approach to eliminating upwind states' "interference with maintenance" of the NAAQS in downwind states to comply with *North Carolina*. *Id.* at 132-37.

During those proceedings, in 2008, EPA revised the ozone NAAQS to 75 ppb, and in 2016, following the decisions in *EME Homer*, EPA promulgated two rules related to remanded obligations and to address Good Neighbor obligations for the 2008 ozone NAAQS: In the Update Rule, EPA promulgated a series of Good Neighbor FIPs for 22 states that EPA characterized as only a partial remedy,[3] 81

[3] Along with its Update Rule rulemaking, and in some cases after that proposal was issued, EPA proposed and then finalized disapprovals of many states' Good Neighbor SIP submissions. *See* Response to Comment Document ("RTC"), C.I. EPA-HQ-OAR-2021-0663-0083, at 445.

Fed. Reg. 74504; and in the Closeout Rule, EPA concluded that states had no additional Good Neighbor obligations for the 2008 ozone NAAQS, 83 Fed. Reg. 65878. The Update Rule was remanded on the narrow grounds that EPA did not properly align upwind emission reductions with downwind attainment dates. *Wisconsin*, 938 F.3d at 312-13, 320. The Closeout Rule was vacated on the same grounds. *New York v. EPA*, 781 F. App'x 4 (D.C. Cir. 2019) (per curiam).

Following *Wisconsin* and *New York*, EPA was subject to deadline suit litigation under 42 U.S.C. § 7604(a), resulting in a court-ordered deadline to resolve the Good Neighbor obligations for certain states for the 2008 ozone NAAQS. *See New Jersey v. Wheeler*, 475 F. Supp. 3d 308 (S.D.N.Y. 2020). Throughout 2020 and 2021, EPA therefore focused on an unexpected rulemaking obligation to address the remand of the Update Rule, resulting in the Revised Update Rule, which fully resolved the Good Neighbor obligations for 21 states for the 2008 ozone NAAQS. *See* 86 Fed. Reg. 23054, *upheld by Midwest Ozone Grp. v. EPA*, 61 F.4th 187 (D.C. Cir. 2023).

While litigation over EPA's Good Neighbor rules has primarily focused on its FIPs and actions defining Good Neighbor obligations, litigation has also addressed EPA's SIP disapprovals. As described above, in *EME Homer*, 795 F.3d at 132-35, the court upheld EPA's error correction of 22 SIP approvals to disapprovals. And in *Westar Energy, Inc. v. EPA*, 608 F. App'x 1 (D.C. Cir. 2015)

(per curiam), the court upheld EPA's disapproval of Kansas's Good Neighbor SIP submission for the 2006 fine particulate matter NAAQS.

b. EPA's 4-step framework for evaluating Good Neighbor SIP obligations

For decades, when evaluating SIPs and formulating FIPs, EPA has consistently applied a 4-step framework to implement the Good Neighbor Provision, including for ozone. *See* Response to Comment Document ("RTC"), C.I. EPA-HQ-OAR-2021-0663-0083, at 431. This framework was developed to give meaning to the critical statutory terms in the provision. *See id.*; 42 U.S.C. § 7410(a)(2)(D)(i)(I). Courts, including the Supreme Court, have consistently upheld this general framework as "permissible, workable, and equitable." *EME Homer* 572 U.S. at 524; *see also, e.g.*, *Midwest Ozone Grp.*, 61 F.4th at 189-90, 193, 198 n.1 (listing other cases); *Westar*, 608 F. App'x at 2-3.

Under this framework,[4] a state, when developing a SIP submission, or EPA, when promulgating a FIP, would:

Step 1: Identify downwind "nonattainment" and "maintenance" receptors, which are monitoring sites that "will" not attain, or will struggle to maintain, the NAAQS in a future year. Disapproval at 9341-42; 42 U.S.C. § 7410(a)(2)(D)(i)(I).

[4] *See generally* 42 U.S.C. § 7410(a)(2)(D)(i)(I); Disapproval at 9338-43; *see also Wisconsin*, 938 F.3d at 310-11 (describing the four steps).

Step 2: Look at the amount of contribution to determine whether upwind-state "emissions" "contribute" to those downwind "nonattainment" and "maintenance" receptors by applying a screening threshold. 42 U.S.C. § 7410(a)(2)(D)(i)(I). An upwind state "contributes" if its share of pollution at a downwind receptor is at or above the screening threshold; those below the threshold are excluded from further consideration. Disapproval at 9342. EPA long has considered states "linked" at Step 2—as in, contributing to a downwind state's air-pollution problem—when an upwind state's emissions contribute 1% or more of the NAAQS at any downwind state receptor.

Step 3: Evaluate the "amounts" of "air pollutant" that "contribute significantly" or "interfere with maintenance."[5] 42 U.S.C. § 7410(a)(2)(D)(i)(I). Because Step 2 identifies "those upwind states that should have responsibility for addressing their contribution to the downwind nonattainment and maintenance

[5] EPA and State Petitioners sometimes use the shorthand "significant" or "significance" to address both the "contribute significantly to nonattainment" and "interfere with maintenance" prongs at Step 3. *See, e.g.*, La./Tex. Proposal at 9831 (stating that EPA at Step 3 has consistently "identif[ied] emissions contributions that the Agency has determined to be 'significant' (contribution to nonattainment or interfere with maintenance)"); Disapproval at 9375 (stating that "States seeking to rely on an alternative approach to defining 'significance' must use an approach that comports with the statute's objectives" and address both prongs); Tex. Submission at 3-50 (defining "significant" to analyze both prongs at Step 3); *see also, e.g.*, *Wisconsin*, 938 F.3d at 309 (stating that the Good Neighbor Provision "requires upwind States to eliminate their significant contributions to air quality problems in downwind States").

problems," EPA evaluates whether a state significantly contributes to nonattainment or interferes with maintenance of the NAAQS through a multifactor analysis of potential emissions-control strategies for "sources" in the states linked at Step 2. Disapproval at 9342; 42 U.S.C. § 7410(a)(2)(D)(i)(I). While the amount of emissions an upwind state contributes is relevant for screening out de minimis contributors at Step 2, at Step 3, EPA does not attribute the phrases "contribute significantly to nonattainment" or "interfere with maintenance" to depend on the specific amount of emissions a state contributes because "the nonattainment of downwind States results from the collective and interwoven contributions of multiple upwind States." *EME Homer*, 572 U.S. at 514. Rather, EPA has evaluated how potential emissions reductions may affect air quality downwind (i.e., the NAAQS). *Id*. at 514-19. Because the Good Neighbor Provision was enacted to ensure that states share in the regulatory burden of air pollution, the factors EPA considers include the cost-effectiveness of potential emissions controls, the total emissions reductions that may be achieved by requiring such controls (if applied across all linked upwind states), and an evaluation of the air-quality impacts such emissions reductions would have on the downwind receptors to which a state is linked. Disapproval at 9342.

Step 4: Ensure that the plan "contain[s] adequate provisions" "prohibiting" those emissions. At this step, EPA or a state would develop permanent and

federally enforceable strategies to achieve the emissions reductions found to be necessary at Step 3 to eliminate significant contribution to nonattainment or interference with maintenance. *Id*. at 9343. This means that the emissions control measure identified as necessary at Step 3 must be included in the SIP so that it is permanent and federally enforceable. *Id*.

While many states generally follow this framework when formulating their SIP submissions, EPA does not require states to do so. *See, e.g*., *id.* at 9338, 9376. And the framework "allow[s] for some methodological variation" within each step. *Id.* at 9338. It "provide[s] a reasonable organization to the analysis of the complex air quality challenge of interstate ozone transport." *Id*. But regardless of the approach a state takes, the state must demonstrate that the proposed SIP does, in fact, prohibit emissions that contribute significantly to downwind nonattainment or maintenance problems, as the statute requires, 42 U.S.C. § 7410(a)(2)(D)(i), and EPA cannot approve the submission unless it determines these statutory requirements are met, *see id.* § 7410(k)(3). The Act obligates EPA to independently evaluate whether a submission contains "adequate provisions" to comply with the Good Neighbor Provision. *Id.* § 7410(a)(2)(D)(i)(I), (k)(3). And given the multistate nature of ozone pollution, EPA evaluates each submission "with an eye to ensuring national consistency and avoiding inconsistent or inequitable results." Disapproval at 9381.

B. Factual background

1. Modeling and other data EPA considers when evaluating Good Neighbor SIP Submissions for ozone NAAQS

Because the Act uses the forward-looking term "will," assessing obligations under the Good Neighbor Provision typically entails modeling to project ozone levels and contributions from upwind-state emissions at a relevant future year, called the analytic year. *See id.* at 9366. Thus, assessing Good Neighbor obligations requires first identifying the proper analytic year and then conducting modeling.

Here, EPA identified 2023 as the appropriate analytic year because, when EPA did the evaluation, it reflected the last year that emissions reductions may be implemented in a full ozone season (May 1 through September 30) before the next attainment date. *Id.* at 9341. The analytic year must align with the attainment schedule in 42 U.S.C. § 7511(a) because the Good Neighbor Provision must be implemented "consistent with the provisions" of Title I of the Act, which includes that schedule. 42 U.S.C. § 7410(a)(2)(D)(i); *see also Wisconsin*, 938 F.3d at 313-20; *Maryland,* 958 F.3d at 1203-04. For the 2015 ozone NAAQS, the attainment schedule is:

Marginal area	August 3, 2021
Moderate area	August 3, 2024
Serious area	August 3, 2027
Severe-15	August 3, 2033

Severe-17	August 3, 2035
Extreme	August 3, 2038

42 U.S.C. § 7511(a); 40 C.F.R. § 51.1303; 83 Fed. Reg. 25776 (June 4, 2018). While EPA had used the Moderate area attainment date to inform the appropriate analytic year, *Wisconsin* and *Maryland* indicated that the Marginal area attainment date was the proper attainment date to consider. *See* Disapproval at 9338; *Maryland,* 958 F.3d at 1203-04. Because the Marginal attainment date passed by the time of EPA's proposed disapprovals and Disapproval, EPA identified 2023 as the appropriate analytic year. Disapproval at 9340-41; RTC at 92-96.

As for modeling, EPA (and State Petitioners) uses the CAMx photochemical grid model to identify downwind nonattainment and maintenance receptors in Step 1 and upwind state contributions to these receptors in Step 2. 2016v2 Air-Quality Modeling Technical Support Document ("2016v2 Air-Quality TSD"), C.I. EPA-HQ-OAR-2021-0663-0017, at 2-3.[6] The modeling for Steps 1 and 2 is based on a "platform" that incorporates a base year (i.e., historic year) of meteorological data and emissions inventories, which include data on emissions from throughout the country for that base year and changes in ozone precursor emissions expected to

[6] As described below, several iterations of this photochemical grid model are applicable for the Disapproval. But they all generally follow the same approach, so for ease of reference, citations are to only the 2016v2 Air-Quality TSD. Differences among the types of modeling are noted in footnotes.

occur in the analytic year (i.e., future year). *Id.* at 3-7. The platform is used in the photochemical grid model to estimate ozone concentration levels and contributions at monitoring sites in the analytic year. *See infra* Background B.2.a-b. Consistent with EPA's modeling guidance, the base year should be recent enough to ensure reasonable accuracy of a photochemical model's prediction of future ozone levels. O3-PM-RH-Modeling Guidance-2018, C.I. EPA-HQ-OAR-2021-0063-0015, at 18.

Ozone concentration levels are represented as regulatory "design values," which are determined by averaging the annual fourth-highest daily maximum 8-hour average over three years.[7] 40 C.F.R. Pt. 50, App. U, 1(c), 4. Put in simpler terms, the design value is the average of the ozone concentration on the day with the fourth-highest ozone concentration in a year over three years, or:

$$\text{2011 Design Value} = \frac{\text{4th high 2009} + \text{4th high 2010} + \text{4th high 2011}}{3}$$

[7] In calculating the design value for a year with already measured ozone concentration levels, these steps are taken: (1) for each day in a year, take the measured ozone concentration for every 8-hour period in a day (e.g., the ozone concentration from 12 – 8 a.m., the concentration from 1 – 9 a.m., etc.), which results in 24 "8-hour averages"; (2) pull out the highest 8-hour average ozone concentration each day—the "maximum 8-hour average"; (3) of all the "maximum 8-hour average" ozone concentrations from one year, find the fourth-highest number—the "fourth-highest daily maximum 8-hour average"; (4) conduct the same analysis for the two years prior, and then take the average of those three numbers. *See* 40 C.F.R. Pt. 50, App. U, 1(c), 4; *see also* 2016v2 Air-Quality TSD at 10.

Thus, in considering a state's Good Neighbor obligations for the 2015 ozone NAAQS, EPA (and the relevant states here) evaluates whether a monitoring site's projected design value for the 2023 analytic year is exceeding the 2015 ozone NAAQS (70 ppb). In other words, NAAQS exceedances, and relatedly, nonattainment and maintenance receptors, are based on the fourth-highest ozone days in the relevant years.

2. EPA's 4-Step Framework

a. Step 1: Identification of Nonattainment and Maintenance "Receptors"

The Good Neighbor Provision does not establish a methodology for how to identify receptors, nor does it even require identifying them. However, the Act requires the prohibition of emissions that either "contribute significantly to nonattainment" or "interfere with maintenance" of the NAAQS. *See EME Homer*, 572 U.S. at 495 (quoting 42 U.S.C. § 7410(a)(2)(D)(i)(I)); *see also North Carolina*, 531 F.3d at 910-11 (requiring that "independent significance" be given to the maintenance "prong"). So states and EPA must figure out the areas that are (a) not attaining healthy air or (b) at risk of not attaining. Thus, as part of Step 1, EPA identifies which air-quality monitors are "nonattainment" receptors and which are "maintenance" receptors. Nonattainment receptors are those monitors that are currently measuring exceedances of the NAAQS and are projected to continue to exceed the NAAQS in the future analytic year. Disapproval at 9348. Maintenance

receptors encompass a broader category of monitors that could exceed the NAAQS in the analytic year in the event of ozone-conducive, meteorological conditions. *Id.*; *see also North Carolina*, 531 F.3d at 909-11.

To identify nonattainment receptors, EPA considers both monitoring (i.e., measured) data and modeling information. To qualify as a nonattainment receptor, the monitor's current design value, i.e., its measured design value based on the most recent year of certified monitoring data,[8] must exceed the NAAQS, and so must its projected average design value for the analytic year.[9] 2016v2 Air-Quality TSD at 9.

To identify maintenance receptors, EPA uses two methods. A monitor could have a projected average design value below the NAAQS but a *maximum* design

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[8] In the 2011-based modeling, the most recent year of certified data was 2015. Air Quality Modeling Technical Support Document for the 2015 Ozone NAAQS Preliminary Interstate Transport Assessment, at 8, available at https://www.epa.gov/interstate-air-pollution-transport/notice-data-availability-preliminary-interstate-ozone-transport ("2011-based Air-Quality TSD"). In the 2016v2 modeling used at the proposed disapprovals, the most recent year was 2020. 2016v2 Air-Quality TSD at 9. In the 2016v3 modeling used at Disapproval, it was 2021. 2016v3 Air-Quality TSD, C.I. EPA-HQ-OAR-2021-0663-0085, at 9.

[9] To generate the projected average design value for identifying nonattainment receptors, EPA starts with the *average* of three design values across a five-year period centered around the base year. 2016v2 Air-Quality TSD at 10. So if the base year is 2011, the three design value periods are from 2009-2011, 2010-2012, and 2011-2013. *Id.* EPA averages those three values and then multiplies it by a number that represents how ozone at a given monitoring site responds to changes in emissions when other variables are constant to calculate the projected design value at a monitoring site in the future analytic year. *Id.*

value above the NAAQS. *Id.* A monitor could also have a projected average design values that exceeds the NAAQS but current measured data that do not exceed the NAAQS. *Id.* This is because maintenance receptors struggle with attainment and so their attainment status is more affected by meteorological variability than nonattainment receptors; they may exceed the NAAQS in a year when the meteorology is conducive to ozone formation, so EPA's method appropriately captures how such a year could affect the monitor's ozone-concentration level. Disapproval at 9341, 9348-49.

b. Step 2: Calculating Contributions to Receptors

After receptors are identified, Step 2 determines which upwind states sufficiently impact a downwind nonattainment or maintenance receptor such that they "contribute" to its air-quality problems. 42 U.S.C. § 7410(a)(2)(D)(i)(I); Disapproval at 9342. To do so, EPA estimates each state's contribution to each identified receptor by averaging daily contribution data for the five to ten days projected to have the highest ozone concentrations in the analytic year, 2023.[10] 2016v2 Air-Quality TSD at 22-23.

If a state's contribution to an identified receptor meets or exceeds a contribution threshold, the state is considered "linked" to that receptor and the

[10] If there are less than five days projected to have maximum daily average 8-hour concentrations at or above 60 ppb at a receptor, then EPA does not calculate contributions to that receptor. 2016v2 Air-Quality TSD at 23.

state's contribution is further evaluated in Step 3 to determine whether its contribution will "contribute significantly to nonattainment" or will "interfere with maintenance" of the NAAQS in other states. Disapproval at 9342; *see also EME Homer*, 572 U.S. at 502-03; *Wisconsin*, 938 F.3d at 310-11; *North Carolina*, 531 F.3d at 914-16. States with contributions below the threshold to all downwind receptors are screened out and are excluded from further consideration. Disapproval at 9342.

EPA has used a screening threshold equal to 1% of the relevant NAAQS since 2011 because the ozone air-quality problem is a collective contribution issue affected by "a great number of geographically dispersed emissions sources" and 1% is "a reasonably small enough value to identify only the greater-than-de minimis contributors" but is not "so large that it unfairly focuses attention for further action only on the largest single or few upwind contributors." *Id.* at 9371; *see also EME Homer*, 572 U.S. at 500. Thus, Step 2 identifies those states that "should have responsibility for addressing their contribution to the downwind nonattainment and maintenance problems to which they collectively contribute." Disapproval at 9342.

c. Step 3: Determine what contribution is "Significant" and Step 4: Adopting adequate provisions

Accordingly, if a state is linked at Step 2, EPA has consistently since 1998 considered emissions-reduction opportunities at Step 3, focusing on an evaluation of which control measures would maximize air-quality improvements in a cost-effective manner. *Id.* at 9342-43. In other words, EPA concludes that if there are cost-effective ways to reduce emissions from sources in states above the screening threshold, then such emissions are significant. *See id.* The Supreme Court has upheld this approach as reasonable. *EME Homer*, 572 U.S. at 514-20.

At Step 4, EPA or states develop permanent and federally enforceable control strategies to achieve the emissions reductions identified at Step 3 to eliminate significant contribution to nonattainment and interference with maintenance of the NAAQS. Disapproval at 9343.

3. Modeling and memoranda issued for the 2015 ozone NAAQS

Of relevance here, EPA presented iterations of its Steps 1 and 2 modeling based on two platforms and issued three memoranda.

a. The 2011-based modeling

The 2011-based modeling used 2011 as the base year. A preliminary iteration was published in January 2017, in which EPA requested comment on the data that had informed the preliminary modeling. 82 Fed. Reg. 1733 (Jan. 6,

2017); *see also* Disapproval at 9338. In October 2017, EPA released a memorandum with updated 2023 design values based on modeling which incorporated changes made in response to comments on the January 2017 publication, to provide information to assist states' efforts to develop Good Neighbor SIP submissions for the 2008 ozone NAAQS. October 2017 Memo, C.I. EPA-HQ-OAR-2021-0663-0002; *see also* Disapproval at 9338.

In March 2018, EPA issued a memorandum ("Modeling Memo") noting that the modeling data included with the October 2017 memorandum could also be useful for preparing Good Neighbor SIP submissions for the 2015 ozone NAAQS. Modeling Memo, C.I. EPA-HQ-OAR-2021-0663-0003, at 1 & n.1; *see also* Disapproval at 9338-39. Based on the same modeled design values in the October 2017 Memo, the Modeling Memo showed which monitoring sites were potential receptors for the 2015 ozone NAAQS for the analytic year 2023, and also included contribution modeling data to "assist[]" states in developing their Good Neighbor submissions for the 2015 ozone NAAQS. Modeling Memo at 2-6, Atts. B, C; Disapproval at 9339. Thus, the potential receptors and contributions identified in the Modeling Memo are called the "2011-based modeling," and many states, including Louisiana and Mississippi, used that modeling in their Good Neighbor SIP submissions for the 2015 ozone NAAQS. *See, e.g.*, La./Tex. Proposal, 87 Fed. Reg. 9798, 9812 (Feb. 22, 2022), C.I. EPA-R06-OAR-2021-0801-0001. EPA

made clear that the information included in the Memo "[wa]s not a final determination regarding states' obligations under the good neighbor provision" and "[a]ny such determination would be made through notice-and-comment rulemaking." Modeling Memo at 2.

a. The 2016-based modeling

As with the 2011-based modeling, the development of the 2016-based modeling was iterative. Each modeling run followed the same basic methodology and was based on emissions inventories built off previous platforms, as EPA continuously refined its modeling, through adjusting its modeling platform and updating emissions inventories and other inputs, to ensure the results were as indicative as possible of air quality in future years. EPA collaborated for years with states (including Texas), multi-jurisdictional organizations, and local agencies, to create a modeling platform ("2016v1 platform") comprised of emissions inventories and related data for a 2016 base year and 2023 analytical year that could be leveraged by EPA and states for regulatory air-quality modeling purposes. *See* Disapproval at 9339; *see also, e.g.*, 2016v1 Emissions TSD, C.I. EPA-HQ-OAR-2021-0663-0007, at 12, 82 (accepting Texas's request to use its dataset for Texas non-road emissions), 183 (adopting Texas's direction on how to estimate future oil and gas emissions from Texas). Using the 2016 emissions inventories and 2016 meteorological data, EPA updated the photochemical

modeling, released the results ("2016v1 modeling") in October 2020, and accepted public comment on that modeling, including from Louisiana and Texas.[11] 85 Fed. Reg. 68964 (Oct. 30, 2020) (releasing the 2016v1 modeling).

EPA subsequently updated the emissions inventories used in the 2016v1 platform to incorporate improved data that became available after the 2016v1 platform. *Compare* 2016v1 Emissions TSD at 15-19 *with* 2016v2 Emissions TSD, C.I. EPA-HQ-OAR-2021-0663-0009, at 3-8. Then, in September 2021, EPA published, solicited, and received additional comments on its revised 2016 emissions inventories. *See* Disapproval at 9339. After incorporating public comment, EPA created the 2016v2 platform, which contained updated, improved emissions inventories. *See id.*; *see also generally* 2016v2 Emissions TSD. The 2016v2 modeling reflected the most current and technically relevant information at the time and was considered in EPA's evaluation of pending SIP submissions for the 2015 ozone NAAQS. *See* Disapproval at 9339.

In response to comments, EPA updated portions of the 2016v2 emissions inventories and model design to construct the 2016v3 platform, which was used to update the air-quality modeling. *Id.* at 9339; *see, e.g.*, *id.* at 9345 (adding NO_X

[11] Comment from La. Dep't of Env't Quality, EPA-HQ-OAR-2020-0272-0110, available at https://www.regulations.gov/comment/EPA-HQ-OAR-2020-0272-0110; Comment from Tex. Comm'n on Env't Quality, EPA-HQ-OAR-2020-0272-0125, available at https://www.regulations.gov/comment/EPA-HQ-OAR-2020-0272-0125.

from lightning strikes and updating biogenic emissions); 2016v3 Emissions TSD, C.I. EPA-HQ-OAR-2021-0663-0029, at 18 (updating airport emissions in Texas in response to comments). The modeling results from the 2016v3 platform (collectively, with the 2016v1 and 2016v2 modeling, the "2016-based modeling") reaffirmed and substantiated EPA's grounds for the Disapproval. Disapproval at 9339; *see also generally* 2016v3 Air-Quality TSD, C.I. EPA-HQ-OAR-2021-0663-0085.

b. 2018 Memoranda

Accompanying the Modeling Memo, EPA included Attachment A. Attachment A listed potential stakeholder ideas for how to address Good Neighbor obligations, which EPA did not expressly endorse but on which EPA invited feedback. Modeling Memo, Att. A. Attachment A also provided a set of "guiding principles" for how EPA and states should approach the obligations, which emphasized the importance of regional consistency and compliance with judicial precedent. *Id.* at A-1.

EPA issued two more memoranda in August and October 2018, respectively, the "1 ppb Memo" and the "Maintenance Memo," (collectively, with the Modeling Memo, the "2018 Memos"), providing other information to states developing Good Neighbor SIP submissions for the 2015 ozone NAAQS. 1 ppb Memo, C.I. EPA-

HQ-OAR-2021-0663-0004; Maintenance Memo, C.I. EPA-HQ-OAR-2021-0663-0005.

The 1 ppb Memo suggested a potential flexibility in Step 2, stating that "it may be reasonable and appropriate for states to use a 1 ppb contribution threshold, as an alternative to a 1 percent [of the NAAQS] threshold." 1 ppb Memo at 4. Given the collective contribution nature of interstate ozone pollution described above, EPA has used a screening threshold of 1% of the NAAQS. Disapproval at 9342, 9374. EPA, in the 1 ppb Memo, noted that a 1 ppb contribution threshold may adequately account for the collective contribution nature of interstate ozone pollution, but EPA emphasized that regulators "should consider whether the recommendations . . . are appropriate for each situation," and "[f]ollowing these recommendations does not ensure" approval. 1 ppb Memo at 1.

The Maintenance Memo suggested that states might be able to demonstrate to EPA that a maintenance receptor is not likely to violate the 2015 ozone NAAQS in a future year—even if EPA's modeling and approach to identifying maintenance receptors described above suggests otherwise—if they satisfy three conditions, including technical analyses showing "ozone concentrations have been trending downward at the site since 2011." Maintenance Memo at 1, 4. Like the other Memos, EPA in the Maintenance Memo reiterated that "[f]ollowing these

recommendations . . . does not ensure that EPA will approve a SIP [submission]." *Id.* at 1.

4. Court-ordered consent decree deadlines to meet lapsed statutory deadlines for Good Neighbor SIP submissions on the 2015 ozone NAAQS

Between 2018 and 2022, EPA conducted several rulemaking actions to approve states' Good Neighbor SIP submissions where the basis for approval was clear because those states did not contribute above 1% of the 2015 ozone NAAQS. *See* Disapproval at 9362 (listing notices of the 24 state Good Neighbor SIPs for the 2015 ozone NAAQS that were approved). However, EPA continued to deliberate on those submissions where the basis for action (whether approval or disapproval) was unclear. The statutory deadlines for EPA to act on these submissions passed, prompting civil lawsuits under 42 U.S.C. § 7604(a)(2), which EPA resolved through consent decrees.

Under these consent decrees, EPA agreed to take final action on SIP submissions from 21 states, including Louisiana, Mississippi, and Texas, by a certain date. *See generally Downwinders at Risk v. Regan*, No. 21-cv-03551 (N.D. Cal.).[12]

[12] EPA reached a similar agreement with respect to subsets of these states through consent decrees in *New York v. Regan*, No. 1:21-CV-00252 (S.D.N.Y.), and *Our Children's Earth Foundation v. EPA*, No. 20-8232 (S.D.N.Y.).

5. States' SIP submissions and EPA's review

Prompted by court-ordered deadlines, on February 22, 2022, EPA proposed to disapprove 19 states' SIP submissions, including Louisiana's, Mississippi's, and Texas's (collectively, "Proposals"). *See* Disapproval at 9337 & n.5.[13] All states covered by the Proposals concluded that they need not include any additional measures in their SIP submissions to reduce emissions because they all found that they were not significantly contributing to nonattainment or interfering with maintenance of the NAAQS in other states. *See id.* at 9375.

In developing the Proposals, EPA considered each state's SIP submission on its own merits. *See id.* at 9366; RTC at 60, 199. EPA evaluated alternative modeling, methodologies, and analyses submitted by states, but assessed them with an eye towards ensuring national consistency to determine whether the alternatives supported the state's conclusion on its Good Neighbor obligations. Disapproval at 9354, 9381. EPA considered both the 2011-based modeling and the more recent 2016-based modeling, as the latter followed the same approach to projecting 2023 air-quality and contribution levels but was based on more recent measured ozone data and emissions inventories and could more accurately predict future ozone levels. *See id*. at 9339, 9354; RTC at 199-200. EPA used this 2016-based

[13] On May 24, 2022, EPA proposed to disapprove four more states' plans. *See* Disapproval at 9337 & n.6.

modeling and the 4-step framework to ensure an efficient and equitable approach to addressing interstate pollution. Disapproval at 9339-43, 9381. EPA also considered the most recent measured data that it had available. *Id.* at 9342, 9349.

Relevant here, in each round of EPA's modeling, Louisiana, Mississippi, and Texas were each consistently linked to at least one receptor in the same nonattainment area. *See infra* Arg. V.B.1. EPA's 2016-based modeling showed that Louisiana's and Mississippi's emissions contribute to elevated ozone levels at receptors in two nonattainment areas in Texas recently reclassified from Marginal to Moderate: Dallas-Fort Worth and Houston-Galveston-Brazoria.[14] 2016v3 Air-Quality TSD at C-2; 87 Fed. Reg. 60897 (Oct. 7, 2022) (reclassifying these areas). EPA's modeling also showed that Texas's emissions contribute to the elevated ozone levels at receptors in several nonattainment areas recently reclassified to Moderate, including Chicago, Illinois-Indiana-Wisconsin; Milwaukee, Wisconsin; and Sheboygan County, Wisconsin.[15] 2016v3 Air-Quality TSD at C-3; 87 Fed. Reg. 60898 (reclassifying these areas).

EPA ultimately disapproved Louisiana's, Mississippi's, and Texas's submission in the Disapproval, the full basis of which is provided in the Proposals,

[14] The counties comprising these areas are provided at 40 C.F.R. § 81.344.

[15] The counties comprising these areas are provided at *id.* §§ 81.314, 81.315, 81.350.

technical support documents in the record, the RTC, and the Disapproval itself. Disapproval at 9354, 9356-57 (Louisiana), 9357-58 (Mississippi), 9359-60 (Texas).

a. Louisiana's SIP submission and EPA's proposed disapproval

Louisiana submitted its state plan for the 2015 ozone standard to EPA in 2019. La. Submission, C.I. EPA-R06-OAR-2021-0801-0004; *see also* La./Tex. Proposal at 9811. Louisiana's submission generally followed EPA's 4-step framework. *See* La. Submission at 11-12. First, Louisiana identified nonattainment and maintenance receptors likely to exist in 2023 using EPA's 2011-based modeling and EPA's methodology described above. *Id.* at 12-14. Then, relying on the 1 ppb Memo, Louisiana applied a 1 ppb threshold instead of a 0.70 ppb threshold (1% of the NAAQS) to identify its contribution to other states; Louisiana identified five projected nonattainment and maintenance receptors in the Dallas-Fort Worth and Houston-Galveston-Brazoria nonattainment areas in Texas to which Louisiana's emissions contribute well above the higher 1 ppb threshold (with its highest contribution at 4.72 ppb). *Id.* at 13. Lastly, at Step 3, Louisiana considered whether its emissions to those receptors were significant. *Id.* It defined "significant" as instances where "there is a persistent and consistent pattern of contribution on several days with elevated ozone" (i.e., whether an upwind state impacts downwind states' air quality on multiple high ozone days in identified

linkages).[16] *Id.* at 12. Louisiana determined that no such pattern existed based on various data Louisiana collected—back trajectories (which estimate the path traveled by a parcel of air using past, observed data),[17] wind rose (i.e., wind direction and speed), and weather patterns—and because its comparative interstate contribution to Texas was less than Texas's contribution to Louisiana.[18] *Id.* at 13-14, 17-18. Louisiana also noted that its in-state ozone emissions and ozone precursor emissions have been trending downward. *Id.* at 8-9.

In evaluating Louisiana's submission, EPA explained that using Louisiana's chosen 2011-based modeling and 1 ppb contribution threshold, Louisiana was linked to downwind receptors in Texas. La./Tex. Proposal at 9813. EPA's 2016-based modeling confirmed again that Louisiana was linked. *Id.* at 9812-14; Disapproval at 9356. Accordingly, like Louisiana, EPA advanced to Step 3. At

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[16] Arkansas and Texas defined "significant" the same way in their submissions. *See* Disapproval at 9355, 9360.

[17] Alabama, Arkansas, Indiana, Kentucky, Texas, and West Virginia also included back trajectories in their submissions to discount the results of photochemical modeling. *See id.* at 9354-60.

[18] Arkansas, California, Indiana, Kentucky, Michigan, Missouri, Ohio, Oklahoma, Texas, and Utah also referenced, in varying degrees of detail, the amount of their contributions relative to contributions from downwind states themselves and other sources to support an argument that they have no Good Neighbor obligations to other states. *See* La/Tex. Proposal at 9805, 9818, 9833 (Arkansas, Oklahoma, Texas); 87 Fed. Reg. 31443, 31460 (May 24, 2022) (California); 87 Fed. Reg. 9838, 9847-48, 9851 (Feb. 22, 2022) (Indiana, Michigan, and Ohio); 87 Fed. Reg. 9498, 9505-06 (Feb. 22, 2022) (Kentucky); 87 Fed. Reg. 9533, 9539 (Feb. 22, 2022) (Missouri); 87 Fed. Reg. 31470, 31476 (May 24, 2022) (Utah).

Step 3, EPA disagreed with Louisiana's conclusion that its emissions were not "significant." EPA explained that Louisiana's Step 2 results already showed that its emissions had a "persistent and consistent" pattern of contributing to linked receptors in Texas on elevated ozone days. La./Tex. Proposal at 9814-15; RTC at 350-54. And EPA found many technical shortcomings in Louisiana's reliance on additional data, none of which credibly invalidated the pattern of contribution that had been identified at Step 2. La./Tex. Proposal at 9814-15; RTC at 363-65. EPA explained that this information did not adequately support Louisiana's conclusion that it has no significant contribution to downwind receptors. La./Tex. Proposal at 9814-16; RTC at 363-65.

Consequently, under Louisiana's chosen 2011-based modeling and contribution threshold, as confirmed by EPA's 2016v2 modeling in the Proposal, EPA proposed to disapprove Louisiana's submission because it did not comply with the Good Neighbor Provision. La./Tex. Proposal at 9816.

b. Mississippi's SIP submission and EPA's proposed disapproval

Mississippi submitted its SIP for review in 2019 and followed EPA's 4-step framework. Miss. Submission, C.I. EPA-R04-OAR-2021-0841-0009. At Steps 1 and 2, Mississippi used EPA's 2011-based modeling and methodologies for identifying receptors to conclude that it would contribute 0.79 ppb (i.e., greater than 1% of the NAAQS) to the Deer Park monitoring site ("Deer Park") in the

Houston-Galveston-Brazoria nonattainment area, which Mississippi identified as a nonattainment and maintenance receptor. *Id.* at 4-5.

Mississippi tried to eliminate Deer Park as a maintenance receptor at Step 1 by citing the Maintenance Memo to argue that trends in ozone levels refuted the 2011-based modeling projection.[19] *Id.* at 6-9; *see* Maintenance Memo at 4. Mississippi also sought to eliminate its linkage to Deer Park at Step 2 by citing the 1 ppb Memo and applying a 1 ppb contribution threshold. Miss. Submission at 4-6. In justifying its use of that threshold, Mississippi referenced EPA guidance for the unrelated Prevention of Significant Deterioration new construction permitting program ("PSD permitting program")[20]—not referenced in the 1 ppb Memo—that recommended that an ozone "significant-impact-level" value of 1 ppb could be appropriate on a "case-by-case" basis with comparable record showing that "the value represents a level below which a proposed source does not cause or contribute to a violation of the NAAQS." Miss. Submission at 4-6; EPA, *Application of Significant Impact Levels in the Air Quality Demonstration for*

[19] Alabama and Missouri also cited the Maintenance Memo in attempting to discount maintenance receptors. *See* Disapproval at 9354, 9358.

[20] 42 U.S.C. § 7475(a)(4).

Prevention of Significant Deterioration Permitting ("SIL Guidance"), at 4 (Apr. 17, 2018).[21]

Consistent with its longstanding practice and Mississippi's approach, EPA evaluated Mississippi's submission using the 4-step framework. Miss. Proposal, 87 Fed. Reg. 9545, 9555 (Feb. 22, 2022), C.I. EPA-R04-OAR-2021-0841-0010. EPA explained that Mississippi had identified Deer Park as a nonattainment receptor and that the Maintenance Memo addressed only maintenance receptors, not nonattainment receptors. *Id.* EPA also explained that the Maintenance Memo contemplated excluding those receptors where emissions were consistently trending downward, but Mississippi had ignored 2018 monitoring data available to Mississippi (and of which, EPA had informed Mississippi) before its submission date, showing ozone levels exceeding the NAAQS at Deer Park. *Id.* at 9556; Miss. Submission at 12.

EPA also found that Mississippi offered no technical justification as contemplated by the 1 ppb Memo for using a 1 ppb contribution threshold instead of 0.70 ppb (1% of the NAAQS). Miss. Proposal at 9557. EPA further explained why the SIL Guidance was not applicable for a Good Neighbor SIP submission.

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[21] Available at https://www.epa.gov/sites/default/files/2018-04/documents/sils_policy_guidance_document_final_signed_4-17-18.pdf. Alabama, Arkansas, Kentucky, Michigan, and Oklahoma also pointed to the SIL Guidance to justify a 1 ppb contribution threshold in their submissions. Disapproval at 9354-59.

Id. Because Mississippi's submission showed that Mississippi was linked to Deer Park but did not "analyze [its] emissions" to "determine whether its contributions were significant," EPA proposed to disapprove Mississippi's submission as technically flawed for not complying with the Good Neighbor Provision. *Id.* at 9558. As with Louisiana's submission, EPA's 2016v2 modeling confirmed the data in Mississippi's submission indicating a linkage, and the updated modeling now identified linkages to three receptors in Texas, all still within the Houston-Galveston-Brazoria nonattainment area and this time with Mississippi linked to certain receptors above even the 1 ppb contribution threshold. *Id.*

c. Texas's SIP submission and EPA's proposed disapproval

Texas submitted its SIP to EPA for review on August 17, 2018. Tex. Submission, C.I. EPA-R06-OAR-2021-0801-0006; *see also* La./Tex. Proposal at 9824. Texas generally followed EPA's 4-step framework. *See* Tex. Submission at 3-2. Texas first, consistent with EPA's framework, identified nonattainment and maintenance receptors for the analytic year 2023. *Id.* at 3-3. However, Texas did so using its own photochemical modeling, which used a base year of 2012.[22] *Id.* Texas identified nonattainment receptors using nearly identical methodology as EPA but identified maintenance receptors using a separate methodology that it had

[22] Oklahoma partially relied on Texas's modeling in its submission. La./Tex. Proposal at 9817.

developed.[23] *Id.* at 3-39. At Step 2, like in EPA's framework, Texas applied a 1% contribution threshold to identify for further review projected nonattainment and maintenance receptors in downwind states impacted by Texas's emissions above that threshold. *Id.* at 3-47 – 3-48. Texas concluded that it was linked to several nonattainment and maintenance receptors, in Colorado among other locations. *Id.* Lastly, at Step 3, Texas considered whether its emissions would contribute significantly to nonattainment or interfere with maintenance at the linked receptors. *Id*. at 3-50. Like Louisiana, it evaluated significant contribution by assessing whether there was "a persistent and consistent pattern of contribution on several days with elevated ozone." *Id*. at 3-50 – 3-51.

For this inquiry, Texas used a "weight-of-evidence" approach, which included several air-quality analyses to determine whether a "persistent and consistent" pattern existed. *Id*. at 3-50 – 3-75. Based on its analysis, Texas concluded that its emissions did not contribute significantly to nonattainment or interfere with maintenance of the 2015 ozone NAAQS at any downwind receptor because there was no "persistent and consistent" pattern, and thus the state did not have to reduce any of its emissions. *Id*. at 3-75 – 3-76.

[23] Oklahoma and Ohio relied on Texas's alternative methodology of identifying maintenance receptors in their submissions. Disapproval at 9359.

EPA carefully evaluated Texas's submission, developing a comprehensive technical support document that considered the modeling and methodologies Texas developed and technical arguments Texas put forward. *See generally* Tex. TSD, C.I. EPA-R06-OAR-2021-0801-0002. Under this evaluation, because Texas's own 2012-based modeling, methodologies, and chosen contribution threshold showed that Texas was linked to several nonattainment and maintenance receptors in Colorado among other locations, EPA proceeded to evaluate Texas's Step 3 analysis. *See* La./Tex. Proposal at 9834. At Step 3, EPA found technical shortcomings with Texas's analyses and explained that those analyses could not scientifically support Texas's conclusion that its contributions to those linked nonattainment receptors were not significant. *Id*. at 9831-34; Tex. TSD at 76-100. Therefore, EPA proposed to disapprove Texas's submission under Texas's own data as failing to comply with the Good Neighbor Provision's statutory requirements. La./Tex. Proposal at 9834. EPA's 2016v2 modeling confirmed EPA's conclusion—that Texas was linked to downwind receptors yet did not properly consider whether its emissions to those receptors would be significant. *Id*.

While not dispositive to EPA's proposed disapproval, EPA documented concerns that Texas's alternative modeling and methodology for identifying maintenance receptors had several flaws. EPA detailed how Texas's 2012-based

modeling likely underestimated 2023 ozone levels (even though it still identified multiple linkages). *Id.* at 9829-30; Tex. TSD at 38-67. EPA further explained how Texas's method for identifying maintenance receptors failed to adequately account for interannual variability in ozone-conducive meteorology, which is a defining feature of the maintenance prong and could push an area sometimes attaining the NAAQS into nonattainment. La./Tex. Proposal at 9826-29; Tex. TSD at 4-69; RTC at 215-16 (Table 6-2), 227-32.

6. EPA's Disapproval

All three State Petitioners commented on the Proposals, but none developed new SIP submissions to address the updated data and modeling that EPA identified in its Proposals, though two other states (Alabama and Missouri) did. *See* Disapproval at 9364. Under consent-decree deadlines, EPA finalized its Disapproval and disapproved 21 SIP submissions all for the same basic reason—for failing, despite at least one confirmed linkage to an out-of-state receptor, to technically justify the state's conclusion that its contributions were not significant and that no additional emissions controls were therefore required. *Id.* at 9343 & n.43.[24] Along with finalizing the reasoning outlined in its Proposals, EPA

[24] Due, in part, to the new 2016v3 modeling, EPA did not take final action on Wyoming and Tennessee's SIP submissions in the Disapproval. *See* Disapproval at 9338. Recently, EPA proposed to approve Wyoming's SIP submission. 88 Fed. Reg. 54998 (Aug. 14, 2023).

addressed many cross-cutting issues common to multiple states raised in comments on the Proposals and explained that none of the objections presented grounds for reversing course on the Proposals and approving the SIP submissions. *Id.* at 9361-79. In response to comments on its 2016v2 modeling, EPA updated its modeling to the 2016v3 modeling. *Id.* at 9339.

Like the 2016v2 modeling, the updated 2016v3 modeling considered in the Disapproval confirmed EPA's proposed conclusions that Louisiana, Mississippi, and Texas were linked to downwind receptors and nonetheless unreasonably concluded that they need not explore potential emissions reductions. *Id.* at 9356, 9357, 9359, 9366. While the 2016v3 modeling sometimes identified new linkages and different contribution amounts, EPA explained that those are immaterial differences when a state's chosen modeling and contribution threshold show that the state is linked to receptors but a state fails to adequately analyze whether that contribution is significant. RTC at 201-03. Therefore, based on each state's SIP submission and EPA's independent evaluation, EPA determined that Louisiana's, Mississippi's, and Texas's submissions did not comply with the statutory requirement of the Good Neighbor Provision to include adequate provisions to eliminate those emissions that significantly contribute to nonattainment in or interfere with the maintenance of NAAQS in downwind states and disapproved them. Disapproval at 9356 (Louisiana), 9357-58 (Mississippi), 9359-60 (Texas).

EPA also considered the most recent measured ozone data (from 2021 and 2022) from air-quality monitors that was available at the time of EPA's Disapproval in response to comments claiming that the 2016v2 modeling underestimated ozone concentration projections for 2023 compared to recently measured ozone levels. *Id.* at 9349. This in turn led EPA to develop a "violating monitor" receptor category to capture those monitors that, despite the modeling's prediction that they would be in attainment, were likely to exceed the NAAQS based on the most recent measured 2021 and 2022 data, which were closer in time to the 2023 analytic year compared to the 2016 base year.[25] *Id.* These violating-monitor receptors served only "as confirmatory of the proposal's identification of receptors" to "strengthen the analytical basis" for EPA's Step 2 determinations on states' SIP submissions because EPA had newly developed the method for identifying these receptors for the Disapproval.[26] *Id.* at 9349-51. EPA found that Louisiana was linked to ten violating-monitor receptors, Mississippi was linked to eight, and Texas was linked to ten, which strengthened (but was not determinative

[25] Violating monitor receptors are those with measured 2021 and 2022 design values and fourth high maximum daily 8-hour average ozone in both 2021 and 2022 that exceed the NAAQS. Disapproval at 9349.

[26] Where a state was found to be linked to only a violating-monitor receptor, EPA did not take final action on that state's submission in the Disapproval. *Id.* at 9349.

of) EPA's conclusion that these states were linked to downwind receptors. *Id.* at 9356-57, 9359.

EPA's Disapproval amended the Code of Federal Regulations. *Id*. at 9381-83; *see also* 40 C.F.R. §§ 52.996(b) (Louisiana), 52.1273(b) (Mississippi), and 52.2275(*o*) (Texas).

7. EPA's FIP

The Disapproval triggered EPA's duty to promulgate a FIP at any time within two years. 42 U.S.C. § 7410(c)(1); *EME Homer*, 572 U.S. at 509 ("EPA is not obliged to wait two years or postpone its action even a single day"). Consistent with EPA's obligation to ensure necessary reductions as expeditiously as practicable and in time for the 2023 ozone season (as aligned with the 2024 Moderate area attainment date), EPA proposed a FIP ("Good Neighbor Plan") shortly after issuing the Proposals but noted that it would only finalize the Good Neighbor Plan if it had statutory authority to do so. 87 Fed. Reg. 20036, 20057, 20149 (Apr. 6, 2022).

The proposed Good Neighbor Plan, consistent with the Act and EPA's longstanding practice, identified many ways that states could take over or replace the FIP and "provide[d] states with as much information as the EPA c[ould] supply . . . to support their ability to submit SIP revisions to achieve the emissions

reductions the EPA believes necessary to eliminate significant contribution." *Id.* at 20040.

After taking final action on certain SIP submissions in the Disapproval and in compliance with a consent-decree deadline, EPA signed and issued the Good Neighbor Plan on March 15, 2023. *See* Consent Decree, *Sierra Club v. Regan*, No. 4:22-cv-1992 (N.D. Cal. Jan. 24, 2023), ECF No. 37. The Good Neighbor Plan promulgated an integrated set of FIP requirements for 23 states, including State Petitioners. 88 Fed. Reg. 36654 (June 5, 2023). In issuing the FIP, EPA reiterated its commitment to approve any SIP submission that satisfies the requirements of the Good Neighbor Provision. *Id.* at 36838-39. The Good Neighbor Plan was published in the *Federal Register* on June 5, 2023, and became effective on August 4, 2023. *Id.* at 36654.

C. Procedural background

Numerous states and interested parties have challenged the Disapproval.[27] Several petitioners in this and other courts moved to stay the Disapproval, and merits briefing is proceeding at different paces.

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[27] *West Virginia v. EPA*, No. 23-1418 (4th Cir.); *Kentucky v. EPA*, No. 23-3216 (6th Cir.); *Ky. Energy & Env't Cabinet v. EPA*, No. 23-3225 (6th Cir.); *Arkansas v. EPA*, No. 23-1320 (8th Cir.); *Sw. Elec. Power Co. v. EPA*, No. 23-1765 (8th Cir.); *Ark. League of Good Neighbors v. EPA*, No. 23-1778 (8th Cir.); *Hybar LLC v. EPA*, No. 23-1777 (8th Cir.); *Missouri v. EPA*, No. 23-1719 (8th Cir.); *Union Elec. Co. v. EPA*, No. 23-1751 (8th Cir.); *City Utils. of Springfield v. EPA*, No. 23-1774 (8th Cir.); *Allete, Inc., v. EPA*, No. 23-1776 (8th Cir.); *Nev. Cement Co. v. EPA*,

Here, Texas and Louisiana Petitioners moved to stay the Disapproval as to their states pending judicial review, and EPA moved to transfer venue to the D.C. Circuit. ECF Nos. 31, 32, 50, 112. A divided motions panel issued a preliminary, unpublished order on May 1, 2023, denying EPA's venue transfer motion and granting the motions to stay the Disapproval as it relates to Texas and Louisiana pending judicial review. ECF No. 269 ("May Order"). The May Order stated that its determinations "do not bind the merits panel." May Order at 24 (quoting *Veasey v. Abbott*, 870 F.3d 387, 392 (5th Cir. 2017)). Mississippi Petitioners then moved to stay the Disapproval as it relates to Mississippi pending judicial review, ECF No. 304, and the same panel issued another preliminary, unpublished order granting the motion, ECF No. 359. To comply with the Court's stay orders issued after EPA had finalized its Good Neighbor Plan, EPA then issued an interim final rule staying the FIP requirements as to sources in Louisiana, Texas, and Mississippi pending further action by EPA. 88 Fed. Reg. 49295 (July 31, 2023).

No. 23-682 (9th Cir.); *Utah v. EPA*, No. 23-9509 (10th Cir); *PacifiCorp v. EPA*, No. 23-9512 (10th Cir.); *Utah Associated Mun. Power Sys. v. EPA*, No. 23-9520 (10th Cir.); *Oklahoma v. EPA*, No. 23-9514 (10th Cir.); *Okla. Gas & Elec. Co.*, No. 23-9521 (10th Cir.); *Tulsa Cement, LLC v. EPA*, No. 23-9533 (10th Cir.); *Wyoming v. EPA*, No. 23-9529 (10th Cir.); *PacifiCorp v. EPA*, No. 23-9531 (10th Cir.); *W. Farmers Elec. Coop. v. EPA*, No. 23-9534 (10th Cir.); *Basin Elec. Power Coop. v. EPA*, No. 23-9537 (10th Cir.); *Alabama v. EPA*, Nos. 23-11173, 23-11196 (11th Cir.) (consol.); *Utah v. EPA*, Nos. 23-1102, *et al.* (D.C. Cir.) (consol.).

The FIP went into effect on August 4, 2023 in the states where neither the FIP nor EPA's authority to promulgate it had been stayed. Notwithstanding this Court's stay orders and EPA's compliance with them, some Petitioners separately petitioned for review of the FIP in this Court and requested a stay of the FIP pending the outcome of this litigation, which request this Court denied as unnecessary. *Texas v. EPA*, Case No. 23-60300, ECF Nos. 125-2, 126-2, 127-2 (5th Cir. July 20, 2023).

SUMMARY OF ARGUMENT

1. The D.C. Circuit is the exclusive venue for petitions for review of the Disapproval because under the Act's venue provision, 42 U.S.C. § 7607(b)(1), the Disapproval is either (a) "nationally applicable," as it applies a nationally consistent 4-step interstate transport framework to disapprove Good Neighbor SIP submissions for the 2015 ozone NAAQS from 21 states spanning eight EPA regions and ten federal judicial circuits, or (b) if locally or regionally applicable is based on multiple determinations of "nationwide scope or effect" made and published by EPA. *Id.* This Court thus should transfer the petitions for review to the D.C. Circuit.

2. If this Court declines to transfer the petitions for review of the Disapproval, it should deny them.

a. EPA lawfully disapproved Louisiana's, Mississippi's, and Texas's SIP submissions. Under the Act's cooperative-federalism framework, EPA exercises a critical oversight role in independently evaluating all SIP submissions to ensure they meet the Act's requirements. Petitioners' cramped interpretation of EPA's SIP review authority generally, and of the Good Neighbor Provision specifically, diverges from the history, text, and structure of the Act; the standard of review under which this Court evaluates EPA's action; decades of binding case law in this Court; other relevant case law; and EPA's longstanding approach to evaluating SIP submissions for compliance with the Act's requirements.

b. EPA lawfully and reasonably evaluated State Petitioners' submissions using EPA's 4-step framework, which each State Petitioner generally adopted of its own accord. EPA independently evaluated the data, methodologies, and analyses states put forward in their submissions to determine whether each state adequately complied with the Act's substantive requirements.

EPA reasonably disapproved State Petitioners' submissions. Each state relied on modeling that showed emissions from its state contributed to receptors in downwind states. However, each state relied on inapplicable or unsupported analyses to then write off those contributions as insignificant, thereby improperly avoiding the statutory obligation to eliminate their contributions to downwind

states. As to both Louisiana and Texas, none of the analyses the states considered refuted their own modeling showing their emissions were impacting downwind receptors on high ozone days. Mississippi likewise failed to refute its chosen modeling's results and instead misapplied the 2018 Memos issued by EPA to justify its conclusion that it need not evaluate potential emissions reductions.

Thus, State Petitioners' submissions did not include technical analyses that could support their claims that their sources have no responsibility to reduce their emissions to meet Good Neighbor obligations for the 2015 ozone NAAQS. EPA's updated modeling and data merely confirmed EPA's assessment of the states' submissions. In sum, EPA exercised its unambiguous statutory obligation to disapprove these submissions for failing to meet the requirements of the Good Neighbor Provision, and the Disapproval is supported by a robust administrative record.

c. EPA's evaluation of the states' SIP submissions was also procedurally proper. Any delay in issuing the Disapproval did not truncate EPA's statutory obligation to act on the submissions and did not prejudice Petitioners. Nor did EPA's discretionary authority to issue a SIP Call relieve EPA of the obligation to act on the submissions.

d. Although not outcome determinative to State Petitioners' submissions, EPA reasonably and lawfully considered updated modeling and data

available at the time it acted. The Good Neighbor Provision is a forward-looking provision that, in requiring states to prohibit emissions that *will* significantly contribute to or interfere with other states' pollution problems, demands consideration of the most recent data for making accurate projections. EPA provided fair notice of both the forward-looking nature of the Good Neighbor Provision and the updated modeling in its Proposals, yet no State Petitioner sought to submit new SIPs in the one year between the Proposals and Disapproval. And, while not dispositive of EPA's Disapproval, the updated modeling confirmed that Mississippi, Louisiana, and Texas were contributing to downwind states' ozone problems and should have analyzed their emissions for potential reductions.

3. If the Court concludes that it should grant any part of the petitions, it should exercise discretion to remand the Disapproval to EPA without vacatur. Petitioners allege primarily procedural defects, which did not prejudice them, or record deficiencies that can be cured on remand. Vacating the Disapproval would further delay the states' compliance with their Good Neighbor obligations and disrupt the implementation of EPA's Good Neighbor Plan.

STANDARD OF REVIEW

The Administrative Procedure Act ("APA") standard of review applies here because Petitioners challenge EPA's Disapproval of their SIP submissions. *BCCA Appeal Grp. v. EPA*, 355 F.3d 817, 824 (5th Cir. 2003) (citing 5 U.S.C. § 706); *see*

also Alaska Dep't of Env't Conservation v. EPA (*ADEC*), 540 U.S. 461, 496 (2004).[28] This standard of review is "narrow." *Citizens to Pres. Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971). EPA's final action must be upheld so long as it is not "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Id.* (quoting 5 U.S.C. § 706(2)(A)). A court may not "substitute its judgment for that of the agency." *Overton Park*, 401 U.S. at 416. The pertinent question is "whether the [agency's] decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quotation omitted). In other words, the Court asks whether the agency's determination was "reasonable." *See BCCA Appeal*, 355 F.3d at 832.

Thus, under this standard of review, the Court reviews the Disapproval—EPA's action on State Petitioners' SIP submissions—for reasonableness. The Court does not review the reasonableness of the states' SIP submissions themselves. *Arizona ex rel. Darwin v. EPA*, 815 F.3d 519, 530-32 (9th Cir. 2016) (rejecting the argument that, in reviewing EPA's disapproval of a SIP, the court

[28] The Act's standard of review, 42 U.S.C. § 7607(d)(9), does not apply to SIP disapprovals. *ADEC*, 540 U.S. at 496 & n.18 (noting that the Act's standard of review applies to only certain actions, and otherwise the default APA standard of review applies). Regardless, the standard of review under both the Act and the APA generally track each other. *Compare* 42 U.S.C. § 7607(d)(9), *with* 5 U.S.C. § 706.

should defer to "the state's expert judgments, not to EPA's"). In evaluating an agency action's reasonableness, this Court's review is "'most deferential' to the agency where . . . its decision is based upon its evaluation of complex scientific data within its technical expertise." *BCCA Appeal*, 355 F.3d at 824 (quoting *Balt. Gas & Elec. Co. v. NRDC, Inc.,* 462 U.S. 87, 103 (1983)). Thus, this Court "defer[s] to the informed discretion of the responsible federal agencies" when the "analysis of the relevant documents requires a high level of technical expertise," *Miss. River Basin All. v. Westphal*, 230 F.3d 170, 175 (5th Cir. 2000) (quotation omitted), including when there are "conflicting technical contentions" among Petitioners, state agencies, and federal agencies, *Sierra Club v. EPA*, 939 F.3d 649, 686 (5th Cir. 2019). Even when an agency explains its decision with "less than ideal clarity," a court will not upset the decision on that account "if the agency's path may reasonably be discerned." *ADEC*, 540 U.S. at 497 (quotation omitted). "An agency's failure to comply with the APA is harmless when the agency's mistake clearly had no bearing on the procedure used or the substance of decision reached." *City of Arlington v. FCC*, 668 F.3d 229, 243-44 (5th Cir. 2012), *aff'd*, 569 U.S. 290 (2013).

This Court evaluates an agency's interpretation of a statute it administers under the analytical framework established in *Chevron, U.S.A., Inc. v. Natural*

Resources Defense Council, Inc., 467 U.S. 837 (1984). *Mex. Gulf Fishing Co. v. U.S. Dep't of Com.*, 60 F.4th 956, 963 (5th Cir. 2023).[29]

Lastly, a motions panel's earlier analysis of the issues before the merits panel is "not binding on the later panel that is assigned the appeal for resolution." *Tex. Democratic Party v. Abbott*, 978 F.3d 168, 176 (5th Cir. 2020). The motions panel's orders and opinions have no precedential value. *See id.*

ARGUMENT

I. The D.C. Circuit, not this Court, is the proper venue.

The Act establishes exclusive venue in the D.C. Circuit to review two categories of EPA actions: those that are "nationally applicable," and those that are "locally or regionally applicable" but "based on a determination of nationwide scope or effect" made and published by EPA. 42 U.S.C. § 7607(b)(1). The Disapproval clearly falls within one or the other of these categories, and for that reason is subject to review only in the D.C. Circuit. The petitions should be transferred there.

[29] This Court's application of *Chevron* deference is bound by its rule of orderliness despite the Supreme Court's granting of certiorari in *Loper Bright Enterprises v. Raimondo*, 143 S. Ct. 2429 (2023), to reconsider *Chevron*. *Hines v. Quillivan*, 982 F.3d 266, 271 (5th Cir. 2020) (holding that the necessary intervening change of authority from the Supreme Court required for one panel to overrule a prior decision requires an "unequivocal" change in law, "not a mere hint of how the [Supreme] Court might rule in the future" (quotation omitted)); *see also Mex. Gulf Fishing*, 60 F.4th at 963 n.3.

A. EPA's disapproval is nationally applicable.

A petition for review that challenges a "nationally applicable" EPA final action under the Act may be filed "*only* in the United States Court of Appeals for the District of Columbia." *Id.* (emphasis added). Whether an action is "nationally applicable" is a narrow inquiry based on "the face of the rulemaking, rather than . . . its practical effects." *Texas v. EPA* (*Texas 2017*), 706 F. App'x 159, 163 (5th Cir. 2017) (per curiam) (quotation omitted); *see also ATK Launch Sys., Inc. v. EPA*, 651 F.3d 1194, 1197 (10th Cir. 2011). The inquiry turns on the nature of the agency action, not the nature of a petitioner's challenge. *Texas 2017*, 706 F. App'x at 163 ("Applicability turns on the legal impact of the action as a whole." (quotation omitted)); *see also ATK Launch*, 651 F.3d at 1197; *S. Ill. Power Coop. v. EPA*, 863 F.3d 666, 670-71 (7th Cir. 2017); *RMS of Ga., LLC v. EPA*, 64 F.4th 1368, 1372-73 (11th Cir. 2023).

On its face, the Disapproval is nationally applicable. The Disapproval applies a "nationally consistent 4-step interstate transport framework" to disapprove Good Neighbor SIP submissions for the 2015 ozone NAAQS from 21 states in eight of the ten EPA regions and ten federal judicial circuits. Disapproval at 9380. Courts have considered similar actions, where EPA addresses multiple states in a single rule, to be nationally applicable. *See, e.g.*, *Texas v. EPA* (*Texas 2011*), No. 10-60961, 2011 WL 710598, at *3 (5th Cir. Feb. 24, 2011) (transferring

challenge to an action requiring 13 "far-flung" states to submit new SIPs because their current SIPs lacked greenhouse gas requirements); *ATK Launch*, 651 F.3d at 1200 (transferring challenge to an action designating portions of 18 states as failing to comply with a fine particulate matter standard because it employed a single uniform regulatory approach across many states nationwide); *S. Ill. Power*, 863 F.3d at 671 (transferring challenge to an action "of broad geographic scope containing air quality attainment designations covering 61 geographic areas across 24 states," which was "promulgated pursuant to a common, nationwide analytical method").

Petitioners have urged the Court to consider each SIP disapproval to be a separate local or regional action because each individual petitioner challenges the Disapproval only as to individual state plans. *See, e.g.*, Tex. Resp. at 9, 11, ECF No. 102. But as courts, including this one, have consistently held, it is the nature of the EPA action, *as a whole*, that dictates the proper venue. *Texas 2017*, 706 F. App'x at 163-64; *Texas v. EPA* (*Texas 2016*), 829 F.3d 405, 419 (5th Cir. 2016); *ATK Launch*, 651 F.3d at 1197; *S. Ill. Power*, 863 F.3d at 671; *RMS*, 64 F.4th at 1373 (holding that the phrase nationally applicable "describes the regulations promulgated, or final action taken, not the nature of the petition for review" (internal quotation marks and citation omitted)). Given the Good Neighbor Provision's mandate that states adopt requirements to address their pollution

contributions to "any other state," 42 U.S.C. § 7410(a)(2)(D)(i)(I), EPA's decision to address the obligations of multiple states and their collective impacts on other states through one nationally applicable action was consistent with prior actions EPA has taken (such as the 22 error corrections done in the Cross-State Rule and the findings as to multiple states made in the NO_X SIP Call) and reasonable. *See supra* Background A.2.a.

This Court previously determined that an EPA action was nationally applicable under circumstances similar to those here. In *Texas 2011*, EPA issued a "SIP Call" informing thirteen states that their SIPs were deficient because their permitting programs failed to regulate greenhouse gases. 2011 WL 710598, at *1. This Court found the action to be nationally applicable based on many considerations, including "the large number of states, spanning most of the country, being regulated, the common core of knowledge and analysis involved in formulating the rule, and the common legal interpretation advanced of . . . the [Act]." *Id*. at *5 (quotation omitted). Other circuits have similarly found EPA actions addressing SIPs from multiple states to be nationally applicable.[30]

[30] For example, the Tenth Circuit relied on *Texas 2011*'s rationale to find that EPA's nonattainment designations under the Act are also nationally applicable. In *ATK Launch*, the challenged action involved a Clean Air Act requirement that EPA evaluate each state's recommended nonattainment designations and promulgate final designations. Like here, EPA did so in one final action that designated 31 areas in 18 states across the country as nonattainment areas. *See ATK Launch*, 651 F.3d at 1197. Petitioner ATK argued that EPA's "case-by-case consideration of

As in *Texas 2011*, in the Disapproval, EPA applied "a uniform legal interpretation and common, nationwide analytical method[]," Disapproval at 9380, and "a consistent set of policy judgments across all states for purposes of evaluating interstate transport obligations," *id.* at 9339. *See also Texas 2011*, 2011 WL 710598, at *5. Even when EPA evaluated an individual state's arguments for the use of alternative approaches or data, it did so "with an eye to ensuring national consistency and avoiding inconsistent or inequitable results among upwind states . . . and between upwind and downwind states." Disapproval at 9381. Because the Disapproval applies a "common core of knowledge and analysis" and "common legal interpretation" to SIP submissions across a "large number of states, spanning most of the country," the rule is nationally applicable. *See Texas 2011,* 2011 WL 710598, at *5. The figure below shows the 21 states whose plans EPA disapproved (colored green) for failing to comply with the Good Neighbor Provision:

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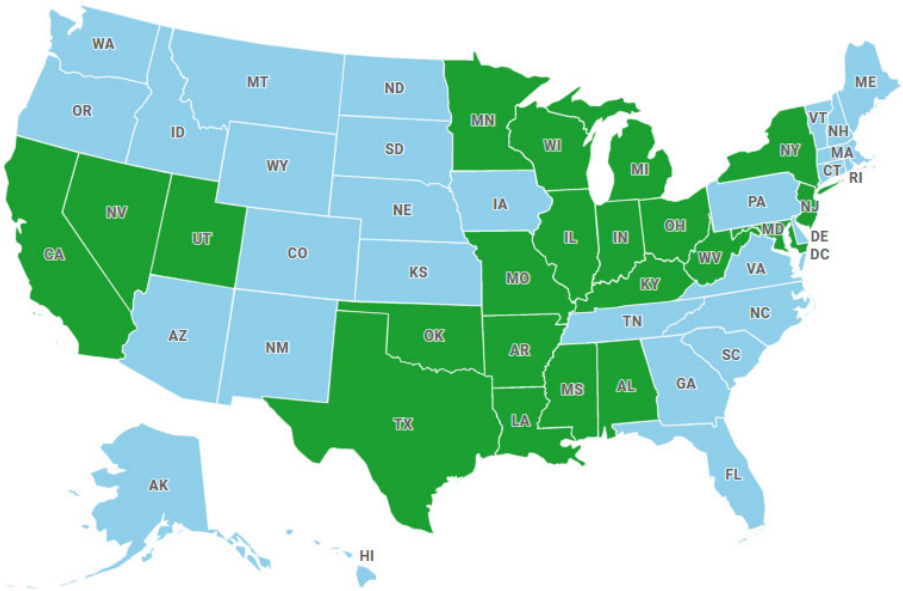
areas and boundaries transforms a national standard to a regional or local rule." *Id.* at 1198. The Tenth Circuit rejected these arguments, noting that "EPA's listing of the designations applied to each locality does not, as ATK suggests, constitute a mere amalgamation of numerous local actions into a single rule" and concluding instead that "EPA's Designations Rule constitutes its national interpretation of Clear Air Act mandates, and any challenge thereto belongs in the D.C. Circuit." *Id.* at 1200. Highlighting the "uniform process and standard" that EPA had applied "across the country," the court noted that "[a]ll of these standards and methodologies are part of EPA's nationwide approach to giving content to the [Act's] mandate that nonattainment designations be assigned to areas that contribute to a nearby NAAQS violation." *Id.* at 1197-98.



It makes no difference that Petitioners purport to challenge the alleged effects of the Disapproval only as applied to their respective states. The question here is whether the action itself is nationally applicable, not whether the nature and scope of the arguments raised or relief sought by a given petitioner are nationally applicable. *See ATK Launch*, 651 F.3d at 1198-99; *RMS*, 64 F.4th at 1372-73. In enacting 42 U.S.C. § 7607(b)(1), Congress crafted an agency action-focused venue provision in the Act, such that EPA's discretionary choices about how to order its docket may determine the appropriate forum for challenges to those actions. *See NAACP v. Fed. Power Comm'n*, 425 U.S. 662, 668 (1976) (reiterating that agencies have discretion to determine how to shape their regulatory actions). Had Congress wanted petitioners to be able to choose where to file, or to determine forum based on the specific issues raised in a petition for review, Congress would have crafted such a system. *See, e.g.*, 28 U.S.C. § 1391(e)(1); 33 U.S.C.

§ 1369(b)(1). Congress did not do so in 42 U.S.C. § 7607(b)(1). A contrary approach for what constitutes an action of "national applicability" would needlessly complicate the venue analysis and create difficult line-drawing problems. *See NRDC, Inc. v. Thomas*, 838 F.2d 1224, 1249 (D.C. Cir. 1988) (rejecting argument that the de facto scope of regulation is controlling for determining venue under 42 U.S.C. § 7607(b)(1) and noting that, otherwise, the "choice of the correct forum might raise complex factual and line-drawing problems," which would be "a complication of the jurisdictional test [that] would waste time and serve little purpose").

The divided motions panel's preliminary May Order on this subject, which found that the Disapproval is not nationally applicable because "[t]he relevant unit of administrative action here is the EPA's individual SIP denials," reached the wrong result. May Order at 9. That nonbinding order conflicts with Section 7607(b)(1)'s text, which bases national applicability on the scope of EPA's final action. Nothing in the Act constrains EPA to act on only one SIP submission in any action. Applying such a requirement "would violate the very basic tenet of administrative law that agencies should be free to fashion their own rules of procedure." *Perez v. Mortg. Bankers Ass'n*, 575 U.S. 92, 102 (2015) (quotation omitted). Indeed, it was reasonable for EPA to combine its actions in the context of evaluating states' emissions contributions to "any other state," as the Act

requires, 42 U.S.C. § 7410(a)(2)(D)(i), where the evidence shows that there are many complex, interwoven, and overlapping linkages between and among states, *EME Homer*, 572 U.S. at 514-16.

The motions panel's decision also conflicts with this Court's holding in *Texas 2011*, in which this Court correctly deemed an EPA SIP Call nationally applicable because it directly applied to 13 "far-flung" states, rather than "one air quality control region." 2011 WL 710598, at *3-4 (quotation omitted); *see also* May Order at 27-28 (Douglas, J., dissenting) (opining that the panel's ruling conflicts with *2011 Texas*). And it conflicts with the Tenth Circuit's holding in *ATK Launch*, as well as with other cases that have addressed the "nationally applicable" provision of 42 U.S.C. § 7607(b)(1). *See supra*; May Order at 25-28 (Douglas, J., dissenting) (opining that the panel's ruling conflicts with other circuits' holdings). Like the SIP Call at issue in *Texas 2011* and the Designations Rule at issue in *ATK Launch*, EPA's Disapproval "applied the same standard to every state" submission to assess each state's obligations under the Good Neighbor Provision for the 2015 ozone standard. *ATK Launch*, 651 F.3d at 1199; *see* Disapproval at 9380. It is therefore nationally applicable.

By filing petitions for review in this Court, Petitioners invite multiple circuits to review concurrently the merits of the same legal interpretation, policy decisions, and analytical methodology that EPA applied in a consistent way, in a

single agency action, to SIPs across the United States. In doing so, courts may well reach inconsistent outcomes on the lawfulness of that action counter to Congress's desire for uniformity. And the need for uniformity is particularly compelling in the context of interstate-pollution obligations where inconsistent treatment of states could lead to significant inequities. *See infra* Arg. I.B. This is precisely the result that Congress sought to avoid in enacting 42 U.S.C. § 7607(b)(1). *See NRDC, Inc. v. EPA*, 512 F.2d 1351, 1357 (D.C. Cir. 1975) (explaining that by vesting the D.C. Circuit with exclusive review of nationally applicable actions, Congress sought "to ensure uniformity in decisions concerning issues of more than purely local or regional impact"); *Texas 2011,* 2011 WL 710598, at *4 ("Centralized review of national issues is preferable to piecemeal review of national issues in the regional circuits, which risks potentially inconsistent results.").

In sum, the Disapproval is nationally applicable and challenges to the rule may be filed only in the D.C. Circuit.

B. EPA properly found and published that its Disapproval is based on a determination of nationwide scope or effect.

Even if this Court determines that the Disapproval is locally or regionally applicable, venue remains proper in the D.C. Circuit because the Disapproval is "based on a determination of nationwide scope or effect," and EPA so found when it published the Disapproval. 42 U.S.C. § 7607(b)(1); Disapproval at 9380-81.

A locally or regionally applicable action may be challenged only in the D.C. Circuit if (1) the action is "based on a determination of nationwide scope or effect" and (2) "the Administrator finds and publishes that such action is based on such a determination." *Texas v. EPA* (*Texas 2020*), 983 F.3d 826, 833 (5th Cir. 2020) (quoting 42 U.S.C. § 7607(b)(1)). No one disputes that EPA satisfied the second prong by deciding to publish the requisite finding, which decision is committed to EPA's unreviewable discretion. *Id*. at 834-35; Disapproval at 9380-81 (finding and publishing that the Disapproval is based on determinations of nationwide scope or effect). So the only question here is whether the "action" being challenged is "based on a determination of nationwide scope or effect." The answer is yes—in fact, it is based on *multiple* determinations of nationwide scope or effect.

As this Court has previously stated, the "action" is "the rule or other final action taken by the agency that the petitioner seeks to prevent or overturn." *Texas 2016*, 829 F.3d at 419. Here, the "action" in question is the Disapproval. This Court has further opined that "determinations" that the challenged action may be "based on" are: (1) "the justifications the agency gives for the action," which "can be found in the agency's explanation of its action," and (2) "those that lie at the core of the agency action," not determinations that are "peripheral or extraneous." *Texas 2016*, 829 F.3d at 419. "Determinations are not of nationwide scope or

effect if they are 'intensely factual determinations' such as those 'related to the particularities of the emissions sources in'" the subject states. *Texas 2017*, 706 F. App'x at 165 (quoting *Texas 2016*, 829 F.3d at 421).

The record shows that the Disapproval is based on multiple determinations of nationwide scope or effect. In the Disapproval, EPA interpreted and applied the Good Neighbor Provision for the 2015 ozone NAAQS "based on a common core of nationwide policy judgments and technical analysis concerning the interstate transport of pollutants throughout the continental U.S." Disapproval at 9380. When states argued for the use of alternative approaches or datasets, EPA evaluated them "with an eye to ensuring national consistency and avoiding inconsistent or inequitable results" among the relevant upwind and downwind states. *Id.* at 9381. Given this analytical framework, EPA found that (1) the Disapproval was "a matter on which national uniformity in judicial resolution of any petitions for review is desirable"; (2) "consolidated review of this action in the D.C. Circuit [would] avoid piecemeal litigation in the regional circuits, further judicial economy, and eliminate the risk of inconsistent results for different states"; and (3) a nationally consistent approach to the [Act's] mandate concerning interstate transport of ozone pollution constitutes the best use of agency resources." *Id.*

More specifically, the Disapproval identifies multiple determinations of nationwide scope or effect that lie at the "core" of EPA's decision to disapprove the SIP submissions. As EPA explained, section V of the preamble to the Disapproval presents consolidated responses to comments on various cross-cutting issues, and "[a]ll of these determinations have nationwide scope or effect." RTC at 392. For example, EPA determined that: (1) the SIL Guidance cannot be used to set the screening threshold at Step 2, Disapproval at 9372;[31] (2) its 1 ppb Memo did not automatically justify use of a 1 ppb screening threshold at Step 2, *id*. at 9372-73;[32] (3) states are not excused from eliminating their significant contribution to downwind receptors simply because international emissions also contribute some amount of pollution to the same receptors to which the state is linked, *id*. at 9378;[33] and (4) 2023 is the appropriate analytic year for determining whether emissions "will" significantly contribute to nonattainment or interfere with maintenance, *id*.

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[31] *See also* Disapproval at 9354-59 (identifying state reliance on the SIL Guidance as basis for disapproving submissions from Alabama, Arkansas, Kentucky, Michigan, Mississippi, Nevada, and Oklahoma).

[32] *See also id.* at 9373 (identifying state failure to support use of alternative contribution threshold as basis for disapproving submissions from Alabama, Arkansas, Illinois, Indiana, Kentucky, Michigan, Mississippi, Missouri, Nevada, and Ohio, Oklahoma, and Utah).

[33] *See also id.* at 9355-60 (identifying erroneous claims about international emissions as basis for disapproving submissions from Arkansas, California, Illinois, Indiana, Kentucky, Michigan, Missouri, Ohio, Utah, West Virginia).

at 9368-69. EPA applied these determinations and many others across all SIP submissions it reviewed.

None of these determinations are "related to the particularities of emissions sources" in specific states. *Texas 2016*, 829 F.3d at 421. To the contrary, these determinations reflect EPA's nationwide policy judgments and analyses on interstate transport of pollution, and EPA applied these determinations uniformly across the covered states to avoid inconsistent or inequitable results among them. These determinations are not "peripheral or extraneous" but instead are justifications that "lie at the core of" the Disapproval and "can be found in the agency's explanation of its action." *Id.* at 419. EPA therefore reasonably found and published that the Disapproval is "based on a determination of nationwide scope or effect." *See id.*

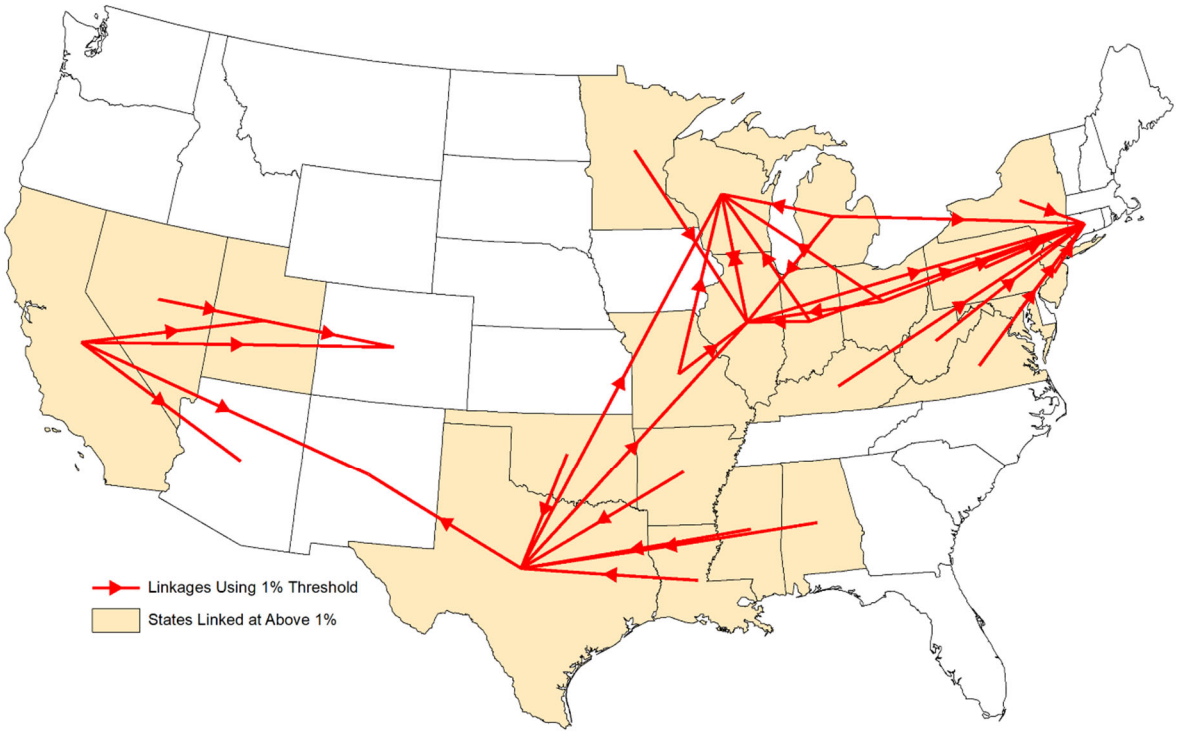
The legislative history of the "nationwide scope or effect" provision evinces clear congressional intent to centralize review of "national" SIP issues in the D.C. Circuit and a recognition that, although SIP actions "usually involve issues peculiar to the affected States, such actions sometimes involve generic determinations of nationwide scope or effect." 41 Fed. Reg. 56767, 56768-69 (Dec. 30, 1976);[34] *see also Texas 2011*, 2011 WL 710598, at *4 (citing same

[34] This Federal Register notice provides the Administrative Conference of the United States' recommendation to Congress to amend 42 U.S.C. § 7607 to clarify venue for categories of Clean Air Act actions. *See* 41 Fed. Reg. at 56767.

legislative history and noting that "[c]entralized review of national issues is preferable to piecemeal review of national issues in the regional circuits, which risks potentially inconsistent results").

Centralized review is particularly important to implementation of the Good Neighbor Provision. To safeguard the health and welfare of millions of people living in areas of unacceptably high ozone throughout this country, rather than being confined to any specific locality or region, the Good Neighbor Provision requires EPA and states to ensure that states' emissions that transcend state borders do not significantly contribute to air-quality problems in other states. *See EME Homer*, 572 U.S. at 495-96. Given the Good Neighbor Provision's interstate focus and the broad geographic scale associated with ozone-pollution transport in particular—which can travel "hundreds or thousands of miles away," Disapproval at 9372, 9381—EPA's evaluation in the Disapproval of states' Good Neighbor submissions for the 2015 ozone NAAQS considered complex, interwoven, and overlapping linkages between and among multiple states across the country, as illustrated below.[35]

[35] EPA, Interstate Pollution Linkages Under the Good Neighbor Plan, *available at* https://www.epa.gov/csapr/good-neighbor-plan-2015-ozone-naaqs#maps. Texas, for example, contributes to downwind air-quality problems in many states that are outside the Fifth Circuit, such as Michigan and Ohio (Sixth Circuit), Illinois and Wisconsin (Seventh Circuit), and New Mexico (Tenth Circuit). 2016v3 Air-Quality TSD, App. C.



The concurrent petitions for review of the Disapproval in eight regional courts of appeals show the potential for inconsistent results if litigation proceeds in all these regional courts. Two examples are illustrative. *First*, Petitioners here argue that EPA's Disapproval should be set aside because it allegedly fails to comply with the Act's "cooperative federalism" framework. *See, e.g.*, Tex. Br. at 21; Miss. Br. at 21, 24; La. Br. at 30. That same cooperative-federalism argument has been raised by other petitioners challenging EPA's Disapproval in the Fourth, Sixth, Eighth, Ninth, Tenth, and Eleventh Circuits.[36] *Second*, Petitioners here

[36] *West Virginia*, No. 23-1418, ECF No. 23-1, at 15 (4th Cir. July 18, 2023); *Kentucky*, No. 23-3216, ECF No. 24-1, at 19 (6th Cir. May 23, 2023); *Hybar*, No. 23-1777, ECF No. 5304480, at 35-40 (8th Cir. Aug. 10, 2023); *Nev. Cement*, No.

argue that EPA's Disapproval should be set aside because EPA's consideration of the nationwide 2016-based modeling was arbitrary and capricious. Tex. Br. at 34; Miss. Br. at 43; La. Br. at 42. That same modeling argument has been raised by other petitioners challenging EPA's Disapproval in the Fourth, Sixth, Eighth, Ninth, Tenth, and Eleventh Circuits.[37]

It is easy to envision a scenario where some upwind states are required to reduce their emissions under the Good Neighbor Provision while others are not, even if those states are contributing the same amount of pollution to the same downwind state or have the same capacity to reduce their emissions cost-effectively. *Cf. EME Homer*, 572 U.S. at 519-20. For example, EPA's modeling shows that Alabama, Arkansas, Louisiana, Mississippi, and Oklahoma all contribute pollution to the air-quality receptor in Galveston County, Texas, and all five of these states have challenged EPA's Disapproval in the regional circuits; if the Fifth, Eighth, Tenth, and Eleventh Circuits were to rule inconsistently on the Disapproval, some of these states might escape pollution controls even as the others were held to account. *See* 2016v3 Air-Quality TSD, App. C. Indeed,

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23-682, ECF No. 9.1 at 12 (9th Cir. May 10, 2023); *Oklahoma*, No. 23-9514, ECF No. 010110888654, at 22-24 (10th Cir. July 14, 2023); *Alabama*, No. 23-11173, ECF No. 18, at 11 (11th Cir. June 13, 2023).

[37] *West Virginia*, No. 23-1418, ECF No. 23-1, at 17; *Kentucky*, No. 23-3216, ECF No. 24-1, at 14; *Arkansas*, No. 23-1320, ECF No. 5304242, at 19-24 (8th Cir. Aug. 10, 2023); *Nev. Cement*, No. 23-682, ECF No. 9.1, at 7; *Oklahoma*, No. 23-9514, ECF No. 010110870116, at 9; *Alabama*, No. 23-11173, ECF No. 18, at 17.

divergent rulings could create inequities within the context of a single state: states like Texas might well receive assistance from their upwind neighbors even as they provide no such assistance to their downwind neighbors in turn (Texas contributes to air-quality problems in Illinois, Michigan, New Mexico, Ohio, and Wisconsin).[38] *See id.* Depending how various courts act, EPA's cohesive national strategy for addressing interstate ozone pollution could be fragmented, and some states may "reap[] the benefits of the economic activity causing the pollution without bearing all the costs," contrary to Congress's intent. *EME Homer*, 572 U.S. at 495. This high risk of inconsistent results on matters that pertain to interstate pollution problems implicating SIPs from 21 states and downwind pollution impacts that span coast to coast bolsters EPA's finding that the Disapproval is based on a determination of nationwide scope or effect.

The reasoning of the motions panel in the May Order—that EPA cannot meet its burden because "the three SIP disapprovals at issue here were plainly based on a number of intensely factual determinations unique to each State," May Order at 11-12 (quotation omitted)—appears to rest on the assumption that 42 U.S.C. § 7607(b)(1) allows EPA to direct challenges to locally or regionally applicable actions to the D.C. Circuit only when they are "based *solely* on" a

[38] New Mexico Environment Department also described how this inequity would affect New Mexico's ability to maintain safe and healthy air quality in its amicus brief. New Mex. Env't Dep't Amicus Br. at 8-10, ECF No. 177.

determination (or determinations) of nationwide scope or effect. But that is not the language of the statute. Where Congress intended such a limitation, it has stated it explicitly. *See, e.g.*, 42 U.S.C. § 7607(b)(1) ("Any petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register, except that if such petition is based *solely* on grounds arising after such sixtieth day, then any petition for review under this subsection shall be filed within sixty days after such grounds arise" (emphasis added)). Congress did not include such narrowing language in Section 7607(b)(1)'s venue provision.

The May Order essentially reads the venue exception in Section 7607(b)(1) entirely out of the statute. All "locally or regionally applicable actions" invariably are based, to some extent, on factual determinations that are unique to the relevant locality. If EPA can never invoke the venue exception when the action is based, even in part, on unique factual determinations, then EPA's finding that a "locally or regionally applicable action" is "based on a determination of nationwide scope or effect" will never suffice to direct challenges to the D.C. Circuit. Insofar as the May Order assumes, and Petitioners argue, that EPA action on SIP submissions can never be based on determinations of nationwide scope or effect, this too contravenes the Act, which provides that "[n]otwithstanding" the provision for locally or regionally applicable actions to be reviewed by the appropriate circuit,

review of "*any* action"—including any SIP action—that qualifies as locally or regionally applicable must be in the D.C. Circuit if it is based on determinations of nationwide scope and effect and EPA has published such finding. *Id.* (emphasis added). Thus, not only does the motions panel's May Order "gut the underlying policy of" Congress to centralize judicial review in the D.C. Circuit on issues of national import, May Order at 29 (Douglas, J., dissenting), it also renders meaningless the discretion Section 7607(b)(1) grants EPA to "find[] and publish[]" that a locally or regionally applicable action is based on a determination of nationwide scope or effect.

In sum, applying the only reasonable construction of the Act's text, purpose, and history, this Court should transfer the petitions for review of the Disapproval to the D.C. Circuit to decide the merits of these petitions.

II. EPA acted within its statutory authority.

Petitioners misconstrue the respective roles of EPA and the states in two ways. *First*, in Petitioners' view, because a state has the authority to develop the plan for how to meet the Act's requirements, EPA cannot second guess a state's assertion that its plan meets applicable requirements. That reasoning is not only circular, but it directly contravenes the plain language of the Act, which expressly tasks EPA with approving a SIP submission *only if* it determines applicable requirements are met. *Second*, the Good Neighbor Provision unambiguously

requires the prohibition of emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS in any other state. All three submissions asserted that the states do not have to adopt *any* additional emissions-control measures to meet this requirement. But *whether* an upwind state has correctly determined that its emissions significantly contribute to nonattainment or interfere with maintenance of the NAAQS in a downwind state is directly in EPA's wheelhouse to assess, as Congress provided.

Congress charged EPA with a critical oversight role to independently evaluate *all* SIP submissions to ensure they meet the Act's requirements. This role is especially relevant in the context of the Good Neighbor Provision because it concerns the complicated question of how some states' emissions affect other states' air-quality problems. To meet its statutory obligation, EPA cannot automatically defer to states' interpretations of the Act or technical conclusions in state submissions.

Since 1998, EPA has evaluated a SIP submission's compliance with the Good Neighbor Provision relying on the same basic 4-step framework that EPA considered here, which the Supreme Court has determined is a reasonable method for assessing Good Neighbor obligations. *See supra* Background A.2.b. EPA followed its longstanding practice and issued the Disapproval because it reasonably concluded that certain states failed to conduct satisfactory Good

Neighbor analyses. *See infra* Arg. III & V. Rather than substantively engage in EPA's careful reasoning, Petitioners instead invent limitations on EPA's statutorily prescribed role that are found nowhere in the Act, cannot be reconciled with the plain language of several other statutory provisions in the Act, and conflict with case law affirming EPA's authority and responsibility to ensure that SIP submissions comply with the Act's requirements.

A. EPA properly interprets the Act to require independent evaluation of Good Neighbor SIP submissions.

1. The Act obligates EPA to determine whether plans meet applicable requirements.

Under the cooperative-federalism scheme, the respective roles of EPA and states are clearly defined. Congress required states to "adopt and submit" SIPs that provide for "the implementation, maintenance, and enforcement" of the NAAQS. 42 U.S.C. § 7410(a)(1). The Act sets forth basic SIP requirements that "[e]ach such plan shall" satisfy. *Id*. § 7410(a)(2); *see also EME Homer*, 572 U.S. at 509 (holding that Section 7410(a)(2) "speaks without reservation" regarding what "components" a SIP "'shall' include"). By using the mandatory "shall," Congress established a framework of mandatory requirements within which states may exercise their discretion to design SIPs to provide for attainment and maintenance

of the NAAQS and to meet other requirements of the Act, including the Good Neighbor Provision.[39]

And Congress charged EPA with ensuring that SIP submissions, including Good Neighbor SIP submissions, meet "*all* of the applicable requirements" of the Act, allowing approval only if the submissions meet such requirements, and otherwise, requiring disapproval, in whole or in part. 42 U.S.C. § 7410(k)(2)-(3) (emphasis added).[40] If a SIP submission is deficient, EPA must so find and then meet the relevant requirements that the state failed to address through a FIP. *See id*. § 7410(c).

Thus, the Act delegates to EPA, not the states, the responsibility to review and evaluate all SIP submissions to ensure that they comply with applicable statutory and regulatory requirements of the Act. *See id.* § 7410(k)(2)-(4), (*l*). For some types of submissions, EPA evaluates whether the states have included "necessary or appropriate" "control measures" to meet other specific requirements. *Id*. § 7410(a)(2)(A). In the context of the Good Neighbor Provision, EPA must

[39] In other sections of the Act, Congress imposed additional, more specific SIP requirements (e.g., requirements states must meet in designated ozone nonattainment areas, depending on the level of classification under 42 U.S.C. § 7511(a)).

[40] Louisiana wrongly asserts that the Disapproval was not a rule. La. Br. at 29-30. The Disapproval followed a notice-and-comment process and amended the Code of Federal Regulations. Disapproval at 9381-84. Thus, the Disapproval is legislative rulemaking by a federal agency within the meaning of 5 U.S.C. § 551. *See BCCA Appeal*, 355 F.3d at 825.

assess whether states have adopted "adequate provisions," i.e., control measures, to "prohibit" significant contribution to nonattainment or interference with maintenance in "any other state." *Id*. § 7410(a)(2)(D)(i)(I). Evaluating whether existing or newly added SIP provisions are "adequate" requires EPA to make several intervening determinations, assessing whether a state's emissions "will contribute" or "will interfere" with other states' attainment and maintenance of the relevant air standards. *See id.*

Petitioners' arguments—that both EPA and the Court must defer to the states' judgments of what the Act requires—conflict with the structure of the Act and write EPA's authority under 42 U.S.C. § 7410(k)(3) out of the Act. To be sure, the Fifth Circuit has characterized EPA's SIP approval authority under Section 7410(k)(3) as a "ministerial" function, insofar as EPA *must* approve a SIP submission *once* EPA has determined it complies with the Act. *Luminant Generation Co. v. EPA*, 714 F.3d 841, 846 (5th Cir. 2013);[41] *see also* May Order at 4; RTC 431. But even under that view, EPA has the authority and obligation to

[41] Other circuits have expressly held that EPA's SIP review role is not "ministerial" in the sense that Petitioners claim. *North Dakota v. EPA*, 730 F.3d 750, 760-61 (8th Cir. 2013) ("Although the [Act] grants states the primary role of determining the appropriate pollution controls within their borders, EPA is left with more than the ministerial task of routinely approving SIP submissions."); *Arizona*, 815 F.3d at 531 ("EPA is not limited to the 'ministerial' role of verifying whether a determination was made; it must 'review the substantive content of the . . . determination.'" (quotation omitted)).

evaluate a state's SIP submission to determine whether it in fact meets applicable requirements. *Luminant*, 714 F.3d at 856-57 (upholding EPA's partial SIP disapproval even while describing EPA's role as "ministerial"). "Congress intended that EPA, not the states alone, ultimately ensure that state determinations . . . comply with the Act, and so authorized EPA to disapprove state 'analysis that is neither reasoned nor moored to the [Act's] provisions.'" *Arizona*, 815 F.3d at 532 (quoting *North Dakota v. EPA*, 730 F.3d 750, 761 (8th Cir. 2013), and rejecting argument that EPA bears the burden of proving a state's determinations are unreasonable).

The Act distinguishes between EPA's more perfunctory responsibility of assessing a SIP submission for administrative completeness under Section 7410(k)(1)(B) and EPA's substantive SIP review obligations under Section 7410(k)(3). But Petitioners' arguments that EPA must defer to states' substantive Good Neighbor analyses collapses these two separate statutory obligations into one, *see, e.g.*, La. Indus. Br. at 15-16, 19, leaving EPA in a box-checking role without regard to its own expert judgment regarding compliance with the Good Neighbor Provision. This interpretation virtually eliminates EPA's delegated authority under Section 7410(k)(3), making it tantamount to a mere completeness review under Section 7410(k)(1)(B). Such a result contravenes the "usual presumption that 'differences in language . . . convey differences in

meaning,'" *Ysleta Del Sur Pueblo v. Texas*, 142 S. Ct. 1929, 1939 (2022) (quotation omitted), and that statutory provisions are read together to produce a "harmonious whole," *Doe v. KPMG, LLP*, 398 F.3d 686, 688 (5th Cir. 2005).

Petitioners' deference arguments also conflict with other provisions in the Act. For example, 42 U.S.C. § 7410(k)(5) empowers EPA to issue a SIP Call upon a determination that an existing approved SIP is substantially inadequate, thereby directing a state to make a corrective SIP submission. Additionally, Section 7410(k)(6) empowers EPA to make corrections when it determines that it erred in approving a SIP submission and authorizes EPA then to disapprove the submission "*without requiring any further submission from the State*" (emphasis added). While Petitioners acknowledge that EPA may issue a SIP Call or require SIP revisions, *see* Tex. Br. at 24; Miss. Br. at 47, they do not explain the logic behind compelling EPA, at the outset, to reflexively defer to the states' determinations of a SIP submission's adequacy in the first instance, when EPA possesses the unambiguous authority to make independent findings of inadequacy or error later, without deferring to the states.

Relatedly, 42 U.S.C. § 7426(b)-(c) empowers EPA to impose federal requirements upon upwind sources or groups of sources, based on petitions from downwind jurisdictions alleging Good Neighbor violations, and that statutory provision expressly incorporates the language of the Good Neighbor Provision,

independent of EPA's SIP review processes under Section 7410(k). *See GenOn REMA LLC v. EPA*, 722 F.3d 513, 520-24 (3d Cir. 2013); *Appalachian Power*, 249 F.2d at 1045-47 (upholding EPA's interpretation of Section 7410(a)(2)(D)(i)(I) as a "functional prohibition" on emissions that "EPA may deploy either singly or in tandem" with Section 7426). Congress would not have granted EPA such authority in response to downwind jurisdictions' petitions under Section 7426(b)-(c) if it had granted EPA no meaningful role in reviewing upwind states' SIP submissions under Section 7410.

Mississippi Petitioners suggest that 42 U.S.C. § 7426(b) demonstrates that upwind states' failure to meet their Good Neighbor obligations does not prejudice downwind states, who may petition EPA to act. Miss. Br. 48. That argument is backwards. That Congress authorized EPA to impose requirements directly on sources when a downwind state demonstrates a violation of the Good Neighbor Provision does not mean EPA has no obligation to evaluate in the first instance whether an upwind state's SIP complies with the Good Neighbor Provision. These Section 7426(b) remedies persist after EPA completes its review of Good Neighbor submissions under Section 7410(k), *see, e.g.*, 83 Fed. Reg. 50444, 50452-54 (Oct. 5, 2018), but the possibility of later corrective action does not entitle—much less compel—EPA to ignore information showing that a state's SIP submission is not meeting the Good Neighbor Provision when EPA evaluates a submission.

Petitioners claim that "federal involvement is impermissible in issues where Congress was wholly silent, such as the Good Neighbor Provision." La. Indus. Br. at 20. But Congress has not been silent. The Act explicitly requires EPA to ensure that SIPs contain "adequate provisions" to provide for attainment and maintenance of the NAAQS, and to meet "all" of the Act's "applicable requirements," including the Good Neighbor Provision. 42 U.S.C. § 7410(a), (k). And the Good Neighbor Provision requires SIPs to "prohibit[]" emissions that "contribute significantly" to downwind nonattainment or "interfere with" maintenance. *Id.* § 7410(a)(2)(D)(i)(I). While Congress has left some details of Good Neighbor implementation for EPA to address, *see EME Homer*, 572 U.S. at 514-15, EPA acts within Congress's express, specific delegation of authority when it disapproves a SIP submission because it does not meet the Good Neighbor Provision's requirements.

2. Courts have recognized EPA's approval authority gives EPA a primary role in determining what Congress's requirements mean and whether they are in fact met.

The Supreme Court and the circuit courts have recognized EPA's general SIP authority and its substantive role in reviewing Good Neighbor SIPs. As the Supreme Court observed when first interpreting the SIP provisions, the Act requires EPA to evaluate SIP submissions for compliance with the Act's requirements and to assess whether the control measures that states adopt are

adequate to actually attain the NAAQS or achieve other real-world results required by the Act. 42 U.S.C. § 7410(k)(3); *Union Elec.*, 427 U.S. at 249 (citing *Train*, 421 U.S. at 64). EPA's failure to do so would be unlawful or arbitrary action. *See Sierra Club v. EPA*, 972 F.3d 290, 301-03 (3d Cir. 2020) (faulting EPA for approving SIP submission that lacked technical justification).

Petitioners' arguments that EPA must defer to states' interpretations of the Act and technical analyses are not only contrary to the Act, but also misapply the applicable APA standard of review. Under that standard, courts do not set aside agency action except under narrow circumstances, 5 U.S.C. § 706(a)(2), and defer to an agency's reasoning, especially when such actions are highly technical judgments by an expert agency. *Balt. Gas*, 462 U.S. at 103. EPA's evaluations of SIP submissions fall precisely into this category. They typically involve complex modeling of future scenarios and technical determinations, to which this Court has regularly deferred.[42] This Court's longstanding precedent of deferring to EPA's

[42] *See, e.g.*, *BCCA Appeal*, 355 F.3d at 832-34 (deferring to EPA's evaluation of Texas's photochemical modeling and approval of Texas's SIP submission because EPA provided a rational explanation for its reliance on the model); *BCCA Appeal Grp.*, 476 F. App'x at 584-86 (explaining how *Florida Power & Light Co. v. Costle*, 650 F.2d 579 (5th Cir. 1981) and *Train* still require EPA to evaluate SIP submissions to ensure compliance with the Act); *Sierra Club*, 939 F.3d at 652-53 (deferring to EPA's "technical expertise" in evaluating Louisiana's SIP submission); *see also Luminant*, 714 F.3d at 859 (upholding EPA's partial SIP disapproval as reasonable because EPA's reasons "conform to minimal standards of rationality" (quotation omitted)); *Texas 2020*, 983 F.3d at 837 (holding that

technical determinations is also consistent with other circuits' precedent.[43] Both the APA standard of review and the presumption of regularity afforded to agency action "place[] a considerable burden on the challenger to overcome the EPA's chosen course of action." *Tex. Oil & Gas Ass'n v. EPA*, 161 F.3d 923, 934 (5th Cir. 1998) (quotation omitted).

Further, as the Supreme Court in *EME Homer* held, the Act delegates EPA with authority to quantify and allocate responsibility for an upwind state's excess downwind pollution, but it does not require EPA to quantify such responsibilities before a state's SIP submission. 572 U.S. at 510, 515-16, 520. This holding recognizes EPA's substantive role in assessing whether emissions significantly

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Congress delegated to EPA the authority to make modifications deemed "necessary" to attainment designations).

[43] *See, e.g.*, *Navistar Int'l Transp. Corp. v. EPA*, 941 F.2d 1339, 1358-59 (6th Cir. 1991) (deferring to EPA's determination on the technical and economic feasibility in a state's SIP submission); *Mich. Dep't of Env't Quality v. Browner*, 230 F.3d 181, 185-86 (6th Cir. 2000) (deferring to EPA's determination that a state's SIP submission failed to offer analysis showing that the state's SIP will not interfere with the attainment and maintenance of the NAAQS); *North Dakota*, 730 F.3d at 760-61 (deferring to EPA's determination that a SIP submission contained methodological flaws and upholding EPA's disapproval of that submission); *Wisconsin*, 938 F.3d at 328 (*citing North Carolina*, 531 F.3d at 925 (affording "substantial deference to EPA's technical expertise")); *Westar*, 608 F. App'x at 3 (agency action "regarding technical matters within its area of expertise warrants particular deference"); *see also, e.g.*, *Ass'n of Irritated Residents v. EPA*, 686 F.3d 668, 677 (9th Cir. 2012) (highlighting EPA's "affirmative duty" to ensure SIPs demonstrate attainment); *Catawba Cnty. v. EPA*, 571 F.3d 20, 41 (D.C. Cir. 2009) (giving an "extreme degree of deference to [EPA] when it is evaluating scientific data within its technical expertise").

contribute to nonattainment or interfere with maintenance of the NAAQS. 42 U.S.C. § 7410(a)(2)(D)(i). While *EME Homer* was decided in the context of a FIP, Petitioners are wrong that the import of the Supreme Court's holdings is limited to FIPs. *See, e.g.*, Tex. Indus. Br. at 32, 36; La. Indus. Br. at 21; Miss. Br. at 32-33 n.5. The question for EPA to consider in either the SIP *or* FIP context is the same—whether the plan "prohibit[s]" emissions that "significantly contribute to nonattainment" or "interfere with maintenance" of the NAAQS in "any other state." 42 U.S.C. § 7410(a)(2)(D)(i). The Supreme Court's holdings were issued without reference to whether EPA was acting on a SIP or promulgating a FIP, and in holding that EPA need not define Good Neighbor obligations before acting on SIPs, the Supreme Court did not thereby grant states unfettered authority to decide unilaterally for themselves what their Good Neighbor obligations should be. *See EME Homer*, 572 U.S. at 513-14. To the contrary, the Court firmly held that Congress delegated to EPA the interpretive authority over the Good Neighbor Provision. *Id.*; *see also, e.g.*, *Michigan,* 213 F.3d at 685-87 (holding, in the context of a SIP Call, that EPA's establishment of a NO_X emissions budget did not intrude upon states' authority to develop SIP submissions); *Westar*, 608 F. App'x at 3 ("EPA acted well within the bounds of its delegated authority when it disapproved of Kansas's proposed [Good Neighbor] SIP."). Indeed, Petitioners fail to explain how EPA would ever *reach* the step of implementing a FIP following a

disapproval, as clearly contemplated in 42 U.S.C. § 7410(c)(1)(B), if EPA must defer to a state's definition of significant contribution or interference with maintenance of the NAAQS.

Petitioners rely almost exclusively on *Luminant Generation Co. v. EPA*, 675 F.3d 917 (5th Cir. 2012) and *Texas 2016*, neither of which is apposite. *See, e.g.*, Tex. Indus. Br. at 30-34; La. Indus. Br. at 19; Miss. Br. at 21-24. In *Luminant*, the Court held that "EPA may consider only the requirements of the [Act] when reviewing SIP submissions" and invalidated EPA's action that reviewed Texas's compliance with *state law*, rather than compliance with the *Act*.[44] 675 F.3d at 925-29. Here, there is no question that the Disapproval rests on the states' noncompliance with the Act itself. Disapproval at 9337-38.

And Petitioners place far too much weight on *Texas 2016*, which was a preliminary ruling on a motion for stay pending review, not a final adjudication on the merits. 829 F.3d at 426. The motions panel's statement that EPA lacks the authority to "question the wisdom of a State's choices of emission limitations if they are part of a plan which satisfies the standards of [Section 7410(a)(2)]," *id.*

[44] Similarly, in *Florida Power & Light*, the Court invalidated an EPA action that rested on Florida's compliance with state law. 650 F.2d at 588-89 ("EPA insists, therefore, on incorporating into Florida's SIP a . . . provision that is irrelevant to state compliance with the Clean Air Act . . . on the basis of a strained interpretation of state law that the State itself has taken great pains to demonstrate as wholly incorrect.").

(quoting *Train*, 421 U.S. at 79), gets Petitioners nowhere. *Train* affirms the principle that if "the ultimate effect of a State's choice of emission limitations is compliance with the national standards," then the state is "at liberty to adopt whatever mix of emission limitations it deems best suited to its particular situation." 421 U.S. at 79. But by conditioning approval only if the SIP submission "satisfies the standards of [Section 7410(a)(2)]," *Train* (and *Texas 2016*) supports EPA's view that state SIP submissions must actually meet applicable requirements of the Act, including the Good Neighbor Provision. *Id.* No court has ever held that *Train* eliminated the substantive role Congress assigned EPA in evaluating SIP submissions for compliance with the Act.

Petitioners' arguments misunderstand what it means for states to "drive the regulatory process" under the Act, and their expansive reading of *Texas 2016* would thwart Congress's mandate that EPA ensure state compliance with all applicable provisions of the Act in SIP submissions. *See, e.g.*, Tex. Br. at 4; Tex. Indus. Br. at 2; La. Br. at 8 (quoting *Texas 2016*, 829 F.3d at 411); *see also* May Order at 21 (quoting the same). For Good Neighbor SIPs, as with all SIPs, the Act's cooperative-federalism approach contemplates an active role for both states and EPA. There is no dispute that states enjoy wide discretion in *formulating regulatory controls* to include in their SIPs, 42 U.S.C. § 7410(a)(2)(A), meaning that they can adopt whatever mix of enforceable control measures they prefer that

will attain and maintain the NAAQS, so long as they meet applicable requirements. And, in general, EPA may not dictate specific control measures for a state. *See Virginia v. EPA*, 108 F.3d 1397, 1415 (D.C. Cir. 1997).

But that does not mean EPA's role is limited to simply setting the NAAQS and then merely conducting a clerical review, without regard to EPA's own expert judgment regarding the legal and technical requirements of the Good Neighbor Provision. The question of whether a plan will adequately prohibit emissions that significantly contribute to nonattainment or interfere with maintenance in other states is at the heart of EPA's role and responsibilities in overseeing implementation of the NAAQS. *Wisconsin*, 938 F.3d at 312, 316.

3. Under EPA's SIP approval authority, EPA may develop technical methodologies for evaluating SIP submissions and reasonably did so here in evaluating Good Neighbor obligations.

EPA's authority to review SIP submissions necessarily requires EPA to independently evaluate the sufficiency of a SIP submission. *See, e.g.*, *Sierra Club*, 939 F.3d at 652-53 (deferring to EPA's technical evaluation of SIP submission). To that end, EPA routinely develops technical methodologies to evaluate SIPs that are tethered, and give meaning, to terms of the Act, and EPA regularly relies on these frameworks to evaluate a SIP's compliance. *See BCCA Appeal*, 355 F.3d at 823, 840-41 (upholding EPA's "exhaustive review" of Texas's SIP submission); *id.* at 844-45 (deferring to EPA's reading of the Act).

EPA's 4-step framework for evaluating the Good Neighbor Provision is similar to EPA's approach for evaluating any other SIP submission, a point that Petitioners acknowledge. *See, e.g.*, La. Indus. Br. at 20-21; *see also EME Homer*, 572 U.S. at 509 ("Nothing in the Act differentiates the Good Neighbor Provision from the several other matters a State must address in its SIP."). EPA's framework both defines the "applicable requirement" SIPs must meet and provides a technical framework for evaluating whether SIPs meet it. *See supra* Background A.2.b.

In the context of reviewing Good Neighbor SIP submissions, because EPA exercised its statutory authority in disapproving the covered states' submissions through a notice-and-comment rulemaking proceeding, EPA's Disapproval, "to the extent [it] involve[s] the reasonable resolution of ambiguities in the [Act], will be afforded *Chevron* deference." *BCCA Appeal*, 355 F.3d at 825. Here, EPA considered the ultimate question of whether a state submission contained "adequate provisions," that will "prohibit[]" emissions that "contribute significantly to nonattainment" or "interfere with maintenance" with respect to the NAAQS—phrases that EPA has interpreted with approval by courts. *See supra* Background A.2.b.; *see also Michigan*, 213 F.3d at 676-77 (rejecting claim that EPA must choose a flat "amount" of contribution to define significance, recognizing ambiguity of the term, and upholding EPA's interpretation because the "term 'significant' does not in itself convey a thought that significance should be

measured in only one dimension—here, in the petitioners' view, health alone"). The question requires EPA to give meaning to the specific terms of the Good Neighbor Provision, on which courts defer. *See Mex. Gulf Fishing*, 60 F.4th at 963. And as addressed *supra* Argument II.A.2., this question often involves highly complex technical determinations and air-quality modeling, on which courts also regularly defer to EPA. EPA is therefore not required to accept at face value a state's interpretation of these requirements in its own SIP submission nor a state's assertion that it has fully satisfied the requirements of the Act.

EPA has developed such frameworks to assess statutory obligations in other contexts, which have not raised federalism concerns. In *BCCA Appeal*, this Court upheld as reasonable a three-part framework that EPA applied to assess the approvability of Texas's proposed SIP, which included enforceable commitments as part of its emissions control strategy. 355 F.3d at 840-42. That three-part test looked at whether (1) a commitment was sufficiently limited; (2) a state could fulfill its commitment; and (3) the commitment was for a reasonable and appropriate period. *Id*. at 840. None of the factors in EPA's three-part test appear expressly in the Act, but they were developed by EPA, based upon the statutory charge, to evaluate Texas's SIP submission's compliance with 42 U.S.C. §§ 7410(a)(2)(A) and 7502(c)(6). *Id*.

EPA has also used similar numerical screening thresholds in evaluating SIP submissions under different provisions of the Act, even though such specific metrics do not appear in the Act. As Petitioners acknowledge (and implicitly endorse), when evaluating "significant impact levels" within the PSD permitting program, EPA recommends a 1 ppb screening threshold, which does not appear in the Act. *See infra* Arg. III.B.2.; Disapproval at 9372; *see also* 42 U.S.C. § 7475(a)(3).[45] Further, Louisiana and Texas assert that "significantly" should mean "persistent and consistent," *see infra* Arg. III.A.1.a., III.C.1.a., a phrase that also does not appear in the Act (and unlike EPA's approach, has not been specifically upheld as reasonable by the Supreme Court). Petitioners provide no reason why states may rely upon "non-statutory" terms when developing SIP submissions[46] but EPA should be barred from doing so when evaluating SIP submissions in accordance with its SIP review authority.

EPA reasonably explained why deferring to state submissions is particularly inappropriate given the plain text of the Good Neighbor Provision, which requires states to prohibit certain emissions within their borders and take on the associated

[45] For reasons explained *infra* Argument III.B.2., EPA disagrees that the 1 ppb value applied in that permitting context is relevant here when evaluating Good Neighbor obligations.

[46] As explained *infra* Argument III.A.1.a., III.C.1.a., Petitioners provide no rationale for why their definition of "significant" as "persistent and consistent" is relevant for *nonattainment*, which may exist due to a few days of elevated ozone.

burdens that entails, not for their own benefit but for the benefit of those living in other states, where such emissions have adverse impacts. Disapproval at 9367. Were EPA to defer to each state's interpretation of "contribute significantly" or "interfere with maintenance," states could simply assert that their contributions are not significant and avoid any implementation of the Good Neighbor Provision.

The history of Good Neighbor implementation reflects that many states have been unable to address the requirement adequately. *See* RTC at 436-37; *supra* Background A.2.a. Air pollution emitted in one state but causing harm in others has long been an issue of national concern. *See EME Homer*, 572 U.S. at 495 (explaining that Congress enacted the Good Neighbor Provision to address this inter-state issue). "Left unregulated, the emitting or upwind State reaps the benefits of the economic activity causing the pollution without bearing all the costs." *Id.* "Conversely, downwind States to which the pollution travels are unable to achieve clean air because of the influx of out-of-state pollution they lack authority to control." *Id*. Deferring to states' determinations of their own Good Neighbor obligations would be akin to binding a party—here, the downwind state—to a contract written by an upwind state that the downwind state had no role in negotiating, while the federal agency charged with policing those issues is sidelined.

Under such circumstances, EPA's reasonable interpretation of the Good Neighbor Provision and its SIP approval authority should be upheld.

B. EPA's evaluation of the submissions was consistent with its SIP approval authority and the Good Neighbor Provision.

EPA's analytical evaluation of the SIP submissions should be upheld as reasonable; EPA's review was consistent with its longstanding practice of independently reviewing SIP submissions generally and of applying its 4-step framework when evaluating Good Neighbor SIP submissions specifically. *See supra* Background A.2.; *EME Homer*, 572 U.S. at 514-15, 518, 524; Disapproval at 9338; RTC at 424.

While recognizing that states are not bound to follow EPA's exact framework, EPA's 4-step framework provided essential clarity, predictability, and consistency among the many affected states regarding how it would evaluate SIP submissions. *See* Disapproval at 9338-43. Accordingly, EPA considered its framework reasonable for evaluating myriad states' Good Neighbor SIP submissions. This was neither improper nor arbitrary and did not mean that EPA imposed the 4-step framework on states.

Petitioners' argument that the Disapproval is invalid because it relies on EPA's framework is wrong. As discussed *infra* Argument III, EPA did not disapprove State Petitioners' submissions for failing to hew to EPA's 4-step framework; it disapproved them for failing to comply with the Act. Put differently,

EPA's 4-step framework does not insert non-statutory requirements into the Good Neighbor Provision. *Cf.* Tex. Br. 25-28; Tex. Indus. Br. 34-44; La. Br. 31-41; La. Indus. Br. 24-26; Miss. Br. 24-40; May Order at 15. As addressed *supra* Background A.2. and Argument II.A.3., Petitioners' argument to the contrary misunderstands the Act, the SIP approval process, and the nature of the inquiry required under the Good Neighbor Provision generally and the 4-step framework specifically. Notably, Petitioners fail to identify *any* aspect of EPA's evaluation that was not directly related to or did not give meaning to the language of the Good Neighbor Provision. Nor do Petitioners identify anything to indicate that EPA relied on factors unintended by Congress. *Cf., e.g.*, *Luminant*, 675 F.3d at 925-27 (holding that EPA is not empowered to consider a SIP's compliance *with state law*).

Indeed, EPA's 4-step framework is firmly rooted in and gives meaning to each critical term in the Good Neighbor Provision, has been used in the context of both evaluating SIPs and implementing FIPs, and has been upheld as reasonable. *EME Homer*, 572 U.S. at 518-20; *Westar*, 608 F. App'x at 3; *see also supra* Background A.2.b.; RTC at 431 (explaining how each step of the 4-step framework relates to the statutory terms). EPA uses its framework to evaluate whether "the state considered the necessary factors in its determination," as supported by the record, and whether "the determination is one that is reasonably moored to the

[Act's] provisions." *North Dakota*, 730 F.3d at 766; *see also id*. at 761 (accepting state's acknowledgment "that EPA would have the authority to disapprove a SIP if the state plainly proceeded without a sufficient factual basis"); *see also Arizona*, 815 F.3d at 531.

Petitioners also contend that (1) EPA's openness to alternative frameworks is "lip service" because EPA required that states technically justify their alternative methodologies, *see, e.g*., La. Br. at 32; La. Indus. Br. at 24; Tex. Indus. Br. at 33; and (2) the Act does not impose a "burden[] of demonstration," *see, e.g.*, La. Br. at 32; *see also* May Order at 16. But EPA's expectation that any alternative approach be technically and legally justified was eminently reasonable and follows from EPA's charge to evaluate SIP submissions for compliance with the Act. If states did not justify their approaches, EPA could not meet its burden under the APA to reasonably explain the bases for its decision (either an approval or a disapproval). *See supra* Arg. II.A.2.; *Sierra Club*, 972 F.3d at 301-03 (3d Cir. 2020) (faulting EPA for approving SIP submission that lacked technical justification).

Because EPA's 4-step framework had been approved as a reasonable method to assess Good Neighbor obligations by the Supreme Court, *EME Homer*, 572 U.S. at 518-20, EPA did not require further technical justification should states opt to apply that framework. However, while states remained free to adopt alternative frameworks, they were required to present baseline technical

justifications and rely upon scientifically acceptable methodologies to demonstrate that their frameworks would comply with the Act—consistent with EPA's longstanding expectation when evaluating any SIP submission. Otherwise, a state could simply assert without any rationale that it does not significantly contribute or interfere with maintenance. *ADEC*, 540 U.S. at 490. ("We fail to see why Congress, having expressly endorsed an expansive surveillance role for the EPA in two independent [Clean Air Act] provisions, would then implicitly preclude the Agency from verifying substantive compliance . . . and, instead, limit EPA's superintendence to the insubstantial question whether the state permitting authority had uttered the key words.").

And true to its word, EPA did not disapprove any SIP submission for failure to follow EPA's 4-step framework, for relying on a particular set of modeling or methodologies, or for failing to adopt the exact control strategies later required by the FIP. Disapproval at 9362, 9366. Rather it disapproved the submissions because no state included in the Disapproval submitted adequate alternative frameworks or considered implementing *any* emissions reductions. *Id*. at 9362, 9376.

Illustrating this, EPA identified a potential alternative framework put forth by one major stakeholder organization. In materials developed for states to consider, EPA suggested to states that they could define "significance" at Step 3

through a "proportional" approach based on calculating each upwind state's responsibility for bringing a downwind receptor into attainment. *Id.* at 9376. This would have been a deviation from EPA's approach at Step 3, but EPA was open to considering it. *Id.* Yet no state adopted this approach, and states that considered it offered inadequate explanations why they declined to implement the emissions reductions called for by the approach. *Id.* at 9376, 9369-70.

And as explained in detail in Argument III, EPA similarly found that the SIP submissions here did not offer approvable alternative approaches. Louisiana and Mississippi Petitioners wrongly contend that EPA disapproved the SIP submissions simply because they did not employ a 1% of the NAAQS contribution threshold at Step 2, La. Br. at 35-37; Miss. Br. at 25-26, 31-32. To the contrary, EPA comprehensively explained why the states' alternative contribution threshold was technically supportable. *See infra* Arg. III.A.2., III.B.2.

Petitioners further assert that the 1% threshold has no explicit statutory support without recognizing that their own preferred methods similarly are not described in the statute. Tex. Indus. Br. at 14-15, 43; La. Indus. Br. at 6-7, 24. Nonetheless, EPA explained that while not the only way to assess Good Neighbor obligations, the 1% screening tool is a reasonable one that provides a robust and reliable understanding of whether upwind emissions are linked to downwind receptors and whether cost-effective emissions reductions could make a difference

in downwind air quality. Disapproval at 9371-72. The reasonableness of using a numerical threshold to screen for "contribution" at Step 2 has a well-developed history over the course of many prior Good Neighbor actions. *See id.* at 9371.

Lastly, contrary to Petitioners' assertions, *see, e.g.*, Miss. Br. at 12, EPA did not issue the Disapproval merely to pursue its own agenda. EPA's concerns with consistency and equity derive directly from the text of the Good Neighbor Provision itself. As addressed above, ozone pollution is a regional-scale pollution problem to which multiple states across the country contribute. *See supra* Arg. I.B. (providing a map of this interstate ozone problem); Disapproval at 9342, 9380. In reviewing EPA's approach to this problem in prior cases, courts have repeatedly recognized the importance of equity and consistency; the more one state declines to eliminate emissions, the more other states—whether downwind or upwind—must implement their own controls to achieve compliance with the NAAQS. *See, e.g.*, *EME Homer*, 572 U.S. at 519 (holding that EPA's approach is an "equitable solution to the allocation problem the Good Neighbor Provision requires the Agency to address"); *Maryland*, 958 F.3d at 1201 (recognizing that a Good Neighbor action "equalize[s] the burdens between upwind and downwind states"); *North Carolina*, 531 F.3d at 921 ("Each state must eliminate its own significant contribution to downwind pollution."). What Petitioners present as EPA's mere policy preference is a nationally consistent approach to reviewing all state

submissions in the context of interstate ozone transport—an approach that gives meaning to the plain language in the Act, while comporting with case law and EPA's longstanding practice.

In sum, EPA acted within its statutory authority in evaluating the state SIP submissions for compliance with the Good Neighbor Provision.

III. EPA reasonably and lawfully disapproved Louisiana, Mississippi, and Texas's SIP submissions on the merits of each submission.

EPA, as the expert federal agency charged by Congress with addressing the nation's air pollution problems, reasonably found that the technical analyses State Petitioners included in their SIP submissions were inadequate to support their conclusions that they do not "contribute significantly to nonattainment in, or interfere with maintenance by, any other state" of the 2015 ozone NAAQS. 42 U.S.C. § 7410(a)(1)(D)(i)(I). EPA fully justified and explained its finding that State Petitioners' submissions were inadequate on their own terms and warranted disapproval.

As detailed further below, State Petitioners generally followed EPA's 4-step framework. At Step 1, each state used photochemical modeling to identify nonattainment and maintenance receptors. La. Submission at 12; Miss. Submission at 3; Tex. Submission at 3-3. At Step 2, each state identified the receptors to which it was linked above a contribution threshold. La. Submission at 12; Miss. Submission at 4, 6; Tex. Submission at 3-47 – 3-48. Mississippi stopped

its analysis here, unreasonably concluding that it was not linked to any receptor at Step 2. Miss. Submission at 5, 9. At Step 3, Texas and Louisiana conducted additional air-quality analyses to try to show that the contributions to their linked receptors were not "significant." La. Submission at 12; Tex. Submission at 3-50 – 3-75. But in weighing the evidence, Texas and Louisiana each reached the unsupportable conclusion that the state need not even evaluate whether emissions control strategies might be appropriate for its sources. La. Submission at 13-14; Tex. Submission at 3-75 – 3-76. In short, each state unreasonably concluded it did not contribute significantly to a downwind state's nonattainment or maintenance problems and did not propose any emissions reductions in its submission for EPA to consider.

As detailed below, EPA carefully reviewed each state's approach on its own terms and comprehensively explained why each failed to ultimately support its conclusion that the state's emissions do not significantly contribute to downwind ozone problems. EPA did not, as Petitioners contend, rigidly impose its 4-step framework. *See* La. Br. at 31-35; La. Indus. Br. at 24-26, 38; Tex. Indus. Br. at 35-37, 42-44. Nor did EPA, as Petitioners erroneously contend, disapprove the state submissions based on the 2016-based modeling, which only confirmed EPA's conclusion. *See* La. Br. at 42, 46-48; La. Indus. Br. at 38-42; Miss. Br. at 43-51; Tex. Br. at 19-20, 34-39. And contrary to Petitioners' argument, EPA did not set

the contribution threshold as determinative for showing "significant contribution." La. Indus. Br. at 42-46; *see also* Tex. Br. at 27. EPA, like all three states, used the contribution threshold simply to assess whether a state should evaluate further whether its contributions are significant. Disapproval at 9371; *see, e.g.*, La. Submission at 13.

As explained *supra* Argument II, EPA's technical determinations on each state's SIP submission warrant substantial deference. Petitioners mount no real challenge to EPA's technical determinations, which were reasonable, not arbitrary or capricious. As EPA comprehensively explained, State Petitioners submitted unsupportable technical analyses for their conclusion that they did not significantly contribute to ozone air-quality problems in downwind states.

A. EPA's reasonable disapproval of Louisiana's submission is well supported by the record.

Louisiana has some of the greatest impacts on another state's air quality of any state in the country with contributions at multiple receptors in Texas in amounts several times over its chosen threshold. Disapproval at 9353-54, Table III.C-1. Yet its SIP submission dramatically failed—on its own terms, to say nothing of the terms of EPA's 4-step framework—to justify why that level of contribution is not "significant." 42 U.S.C. § 7410(a)(2)(D)(i)(I). While Louisiana's chosen modeling and contribution threshold showed that it contributed above its chosen threshold to ozone air-quality problems in Texas, Louisiana

undermined the modeling results with air-quality analyses that could not scientifically support its conclusion that its contributions were not significant. La./Tex. Proposal at 9816. Thus, EPA reasonably disapproved Louisiana's submission. Disapproval at 9356.

Louisiana Petitioners' arguments to the contrary either (a) challenge non-dispositive matters—EPA's 4-step framework, La. Br. at 31-35; La. Indus. Br. at 24-26; EPA's 2016-based modeling, La. Br. at 42, 46-48, 52; La. Indus. Br. at 38-42; and Louisiana's application of the 1 ppb contribution threshold at Step 2, La. Br. at 51, 53-54—none of which was outcome-determinative to EPA's Disapproval;[47] or (b) fail to grapple with EPA's scientific analysis of Louisiana's submission, which showed that the submission had technical flaws that did not support the submission's conclusions, *see* La. Br. at 40-41, 58-69; La. Indus. Br. at 42-49. Relatedly, the Louisiana Public Service Commission's amicus brief argues only against EPA's imposition of emissions-control strategies and emissions budgets in the Good Neighbor Plan (the FIP that EPA promulgated separately after the Disapproval), which is not an action under review in this case and is irrelevant to this Court's evaluation of whether EPA lawfully disapproved Louisiana's

[47] Louisiana Petitioners' argument about EPA's 4-step framework is addressed *supra* Argument II.B., the 2016-based modeling is addressed *infra* Argument V, and the 1 ppb contribution threshold is addressed *infra* Argument III.A.2.

submission.[48] *See generally* La. Pub. Serv. Comm'n Amicus Br., ECF No. 374-1; *Nat'l Parks Conservation Ass'n v. EPA*, 803 F.3d 151, 159 (3d Cir. 2015) (holding that petitioners' arguments against an EPA final action different from the challenged action was outside the court's judicial review under 42 U.S.C. § 7607(b)(1)).

1. EPA reasonably concluded that Louisiana's step 3 analysis was technically flawed.

EPA sufficiently and reasonably explained why Louisiana's significance analysis at Step 3, which amounted to a mere two pages of text, was technically deficient. *See* La. Submission at 13-14, 17-18.

In largely following EPA's 4-step framework at Steps 1 and 2, Louisiana first identified several nonattainment and maintenance receptors using EPA's 2011-based modeling and methodologies for identifying both types of receptors and then selected a higher 1 ppb threshold rather than EPA's longstanding lower threshold of 0.70 ppb (1% of the NAAQS) to eliminate only a few receptors. *Id.* at 11-13. At Step 3, Louisiana evaluated whether its emissions exhibited a "persistent and consistent pattern of contribution on several days with elevated ozone" and used air-quality analyses to attempt to call EPA's modeling into question. *Id.* at 12, 13-14, 17-18.

[48] The Good Neighbor Plan is being challenged separately in this Court in Case No. 23-60300. The cases have not been consolidated.

EPA does not require states to use its exact approach—evaluating emission control opportunities by considering cost—at Step 3. But EPA has consistently used this approach for decades, providing states many examples of how Step 3 may be conducted, and has clarified that any alternative approach must likewise satisfy the statutory objective to prohibit emissions that contribute significantly to or interfere with maintenance of the ozone NAAQS. Disapproval at 9375-76. In doing so, EPA has consistently expected *some* form of emissions reduction analysis at Step 3 and has consistently disapproved Good Neighbor submissions where states are linked through air-quality modeling and yet the state fails to conduct an adequate analysis of emissions-control opportunities. *Id.*

That said, contrary to Louisiana Petitioners' claim that its "SIP disapproval hinge[d] on Louisiana's not having performed EPA's complete step three," La. Br. at 37, and that EPA rigidly imposed its 4-step framework on Louisiana, *see id.* at 31-32, 35-39, EPA did not automatically disapprove Louisiana's submission for failing to follow EPA's framework and specific Step 3 and instead gave full consideration of the submission, as detailed below. Upon evaluating the scientific merits of Louisiana's submission, EPA found Louisiana's Step 3 analysis technically deficient.

To start, Louisiana defined "significant" as a "persistent and consistent" pattern of contribution, but EPA explained that such pattern was already

established under Louisiana's Step 2 analysis because that analysis identified linkages only after accounting for multiple high-ozone days. RTC at 350-53; La./Tex. Proposal at 9814. Even if such pattern was not already established at Step 2, EPA explained that Louisiana provided no metric for when such a pattern would be established. La./Tex. Proposal at 9814. Moreover, the air-quality analyses (back trajectories, wind rose, and weather patterns) and other factors (comparative interstate contributions and declining trends related to ozone in Louisiana) Louisiana evaluated to cast doubt on the pattern established at Step 2 did not scientifically support Louisiana's conclusion that its emissions did not have an impact, much less significant impact, on linked downwind receptors in Texas. *Id.* at 9815. In fact, the back trajectories and other data only confirmed that Louisiana's emissions *do*, in the state's phrasing, "persistently and consistently" impact Texas's ozone levels on high ozone days. *Id.* at 9814-16; Disapproval at 9356.

a. Louisiana's modeling and methodology showed that Louisiana "persistently and consistently" contributed to linked receptors on several days with elevated ozone.

EPA reasonably found that Louisiana's conclusions at Step 2 already showed that its emissions had a "persistent and consistent" pattern of contributing to ozone air-quality problems in Texas on high ozone days. *See* RTC at 350-53. Louisiana's Step 2 analysis, which used EPA's methodologies, *see* La. Submission

at 12-13, was based on an evaluation of data from the five to ten days projected to have the highest ozone concentrations at the receptors (identified at Step 1) in 2023.[49] La./Tex. Proposal at 9814; 2011-based AQM TSD at 15-16; *see also* RTC at 187; *supra* Background B.2.b. That analysis showed that for those projected high-ozone concentration days, Louisiana often contributed well above Louisiana's chosen contribution screening threshold. RTC at 352-53; *id.* at 354, Table 8-2 (copied below).[50]

Table 8-2

AQS SiteID	County	Site Name	Days Greater Than or Equal to 0.70 ppb	Days Greater Than or Equal to 2 ppb	Days Greater Than or Equal to 5 ppb	Days Greater Than or Equal to 10 ppb
482010055	Harris	Houston Bayland Park	8	7	5	2
482010024	Harris	Houston Aldine	8	5	4	1
481210034	Denton	Denton Airport	8	6	2	0
481671034	Galveston	Galveston	8	8	7	5
482011035	Harris	Clinton	9	6	5	2
482011034	Harris	Houston East	9	6	5	2
480391004	Brazoria	Manvel Croix Park	9	7	5	1

[49] Five to ten days is not an insignificant number of days in the context of evaluating whether an upwind state contributes to a downwind ozone pollution problem. Whether a state has an ozone pollution problem depends on the fourth-highest ozone concentration day in a year over a given period. *See supra* Background B.1. So "violations of the ozone standard can be driven by as few as 4 days per year." La./Tex. Proposal at 9815.

[50] The table shows Louisiana's linkages under the 2016v3 modeling, and the receptors to which Louisiana is linked under the 2011-based modeling are highlighted in yellow. Looking even at just those in yellow, the conclusion stands—Louisiana often contributes above its chosen contribution threshold.

In sum, Louisiana's Step 2 analysis "serve[s] to confirm that there is a 'persistent and consistent' pattern of high contributions to receptors in Texas from emissions sources in Louisiana." RTC at 353; *see also* La./Tex. Proposal at 9814-15. Thus, Louisiana unreasonably concluded its emissions were not significant, even under its own Step 3 definition.

And even if such pattern were not established under Louisiana's Step 2 analysis, Louisiana did not provide a standard by which to determine when a "persistent and consistent" pattern would be established—i.e., a way of judging when a contribution meets Louisiana's test. La./Tex. Proposal at 9814. Louisiana merely stated that it had "defined the pattern and ha[d] provided back trajectories on those monitored exceedances for the 2016-2018 ozone seasons, which will show that the definition is applicable to the conclusion." *Id.* (quotation omitted). That is circular reasoning at best. Nor does Louisiana explain how its "persistent and consistent" test should be applied in the context of Good Neighbor obligations for the ozone NAAQS: a state has an ozone nonattainment or maintenance problem when the fourth-highest ozone concentration day in a year over a given period exceeds the standard. In other words, an upwind state's emissions may warrant remediating, even if they impact a receptor on just a small number of high-ozone days. *See supra* n.49.

Moreover, as detailed below, Louisiana's back trajectories show that Louisiana often contributes to ozone problems in Texas.

b. The additional information provided by Louisiana did not establish its contribution to Texas is not significant.

The other information provided by Louisiana in its Step 3 analysis failed to discount its modeling results or show that its contributions to Texas were not significant. None of the factors Louisiana considered can accurately evaluate Louisiana's definition of "significant"—persistent and consistent contribution of ozone on elevated ozone days. Indeed, as EPA explained, the information provided actually confirmed the results of the modeling, *supporting* the conclusion that Louisiana's proposed SIP failed to address clearly "significant" linkages.

Back Trajectories: Louisiana performed back trajectories—an analysis that uses observed data from the past to estimate "the most likely route" a parcel of air at a particular location (e.g., a downwind receptor) traveled from a specified time—to suggest that only some of the ozone at the identified receptors came from Louisiana. *See* La./Tex. Proposal at 9815. A back trajectory analysis shows this most likely route as a line ("centerline") on a map. *See id.* Louisiana's back trajectory analyses showed that of the 99 back trajectories performed for the linked receptors in the Houston and Dallas areas during 2016, 2017, and 2018, approximately 28% of the back trajectories' *centerlines* traveled in or through

Louisiana, and of those 8% originated in Louisiana. La. Submission at 13. From this information, Louisiana concluded that "there is minimal contribution of Louisiana on [the linked receptors in Texas]." *Id.* at 14.

This conclusion was flawed for two reasons.

First, Louisiana's conclusion gives more weight to back trajectory analysis than can be technically justified. As compared to Louisiana's chosen 2011-based photochemical modeling, back trajectories have limited utility in that they cannot quantify an upwind state's contribution to ozone in a downwind state. La./Tex. Proposal at 9815. Back trajectories show only movement of air, not emissions of ozone-precursors or their photochemical transformation into ozone as they transport in the atmosphere. *Id.*; *see also* RTC at 357-58, 363-64. These analyses are inherently limited and cannot evaluate ozone contributions from upwind states to downwind receptors. La./Tex. Proposal at 9815; RTC at 363-64; *see supra* Background A.1.a (explaining how ozone is formed). Further, a back trajectory's *centerline* estimates only "the central path in both the vertical and horizontal planes"; "there are areas on each side horizontally and vertically that also contribute to concentrations at the end point [(i.e., the receptor)]." La./Tex. Proposal at 9815. And these "horizontal and vertical areas that potentially contribute to concentrations at the endpoint grow wider from the centerline the

further back in time the trajectory goes."[51] *Id.* In other words, a "centerline does not have to pass directly over emissions sources or emission source areas but merely relatively near emission source areas for those areas to contribute to concentration at the trajectory endpoint." *Id.* Thus, the mere fact that 28% of the centerlines travel in or through Louisiana or the fact that centerlines do not directly pass over areas in Louisiana where ozone-precursor emissions are prevalent simply do not support Louisiana's conclusion that the state minimally contributes to ozone concentrations to linked receptors in Texas. *Id.*; RTC at 353, 363-64; *cf.* La. Br. at 59-60; La. Indus. Br. at 16, 35-36, 47-48. Many more air parcels likely travel in and through Louisiana if the horizontal areas on either side of the centerline are considered. RTC at 353.

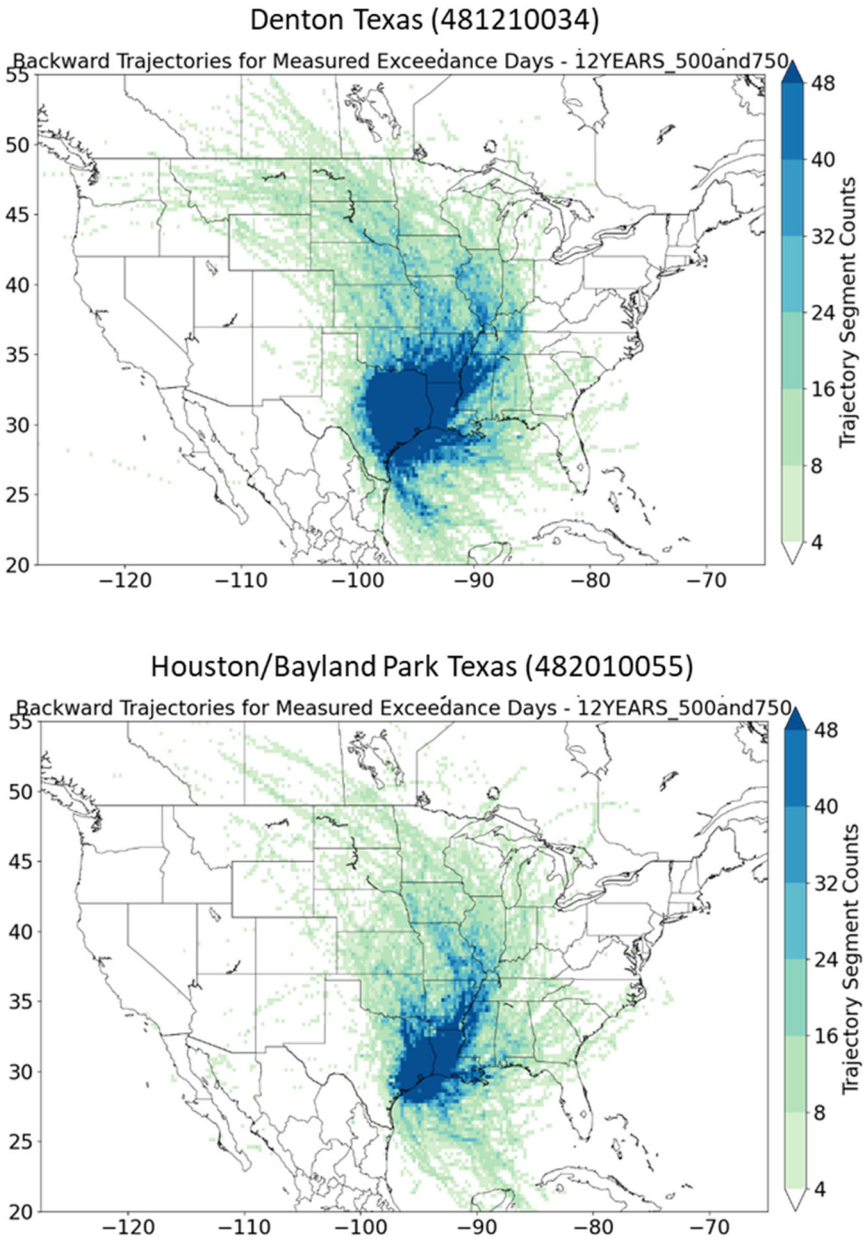
Second, Louisiana's back trajectory analysis only confirmed the photochemical modeling results. As EPA explained, the "back trajectories

[51] Louisiana cites the La./Tex. Proposal to argue that EPA ignored the statutory requirement that states prohibit emissions that "will" contribute significantly by finding only that Louisiana's analysis showed that Louisiana will "potentially contribute to nonattainment or interfere with maintenance." La. Br. at 66-67 (quoting La./Tex. Proposal at 9815). Louisiana mischaracterizes EPA's statement. EPA was not making its regulatory conclusion in this passage but observing that Louisiana's "trajectory analysis confirmed that Louisiana is an upwind area for the receptors in Texas often enough to potentially contribute" because the analysis showed that over 25% of the centerlines pass through Louisiana, so accounting for the horizontal areas, one could assume much more would pass through the state. La./Tex. Proposal at 9815.

occurring over an upwind state 25% of the time represents a relatively large percentage of time" and therefore, "robustly confirms" EPA's photochemical modeling Louisiana used in its Steps 1 and 2 analyses—that Louisiana was linked to receptors in Texas. *Id.*; *cf.* La. Br. at 68 n.10. Indeed, EPA performed its own back trajectories,[52] considering data over a recent 12-year period of ozone exceedances in Dallas and Houston instead of just three years, to further illustrate this determination—that air parcels do indeed often travel east to west (from all throughout Louisiana to Dallas or Houston) and can contribute to Texas's ozone pollution problem on measured high-ozone days.[53] RTC at 363-65; *see also id.* at 364-65 (reproductions below of EPA's back trajectories analyses showing that a high number of trajectories from Dallas and Houston go through Louisiana).

[52] Louisiana refers to EPA's back trajectories as "transport climatology." La. Br. at 67; *see also* 2016v3 Air-Quality TSD at 24.

[53] While Louisiana completed back trajectories for 2016-2018, EPA chose to consider a longer period, 2010-2021, which not only included more (and more recent) years of ozone exceedances in Houston and Dallas but also confirmed there was a long-term "persistent and consistent" pattern of these back trajectories passing through Louisiana. RTC at 364-65. EPA's more extensive back trajectory analysis, based on 12 years of data and longer back trajectories, confirms EPA's photochemical modeling that Louisiana contributes to Texas and undermines Louisiana Petitioners' argument that Louisiana's back trajectory analyses are superior to EPA's photochemical modeling. *See* La. Br. at 64.



EPA thus explained why Louisiana's back trajectory analysis did not support its non-significance conclusion but bolstered the results from Louisiana's chosen photochemical modeling and contradicted Louisiana's interpretation of its own back trajectory analysis. *Id.* at 363-65.

Louisiana's argument that EPA lacked "critical technical commentary" when contrasted with its evaluation of other states' use of back trajectories, such as Arkansas's, is factually incorrect. La. Br. at 60-61. Indeed, EPA provided much of the same explanation on Louisiana's and Arkansas's back trajectories analyses,[54] and EPA provided a coherent and consistent assessment of all states' use of back trajectories in the record of the Disapproval. *See* Disapproval at 9355, 9356; RTC at 350-53, 363-65, 366-67, 369-72. That Arkansas's analysis had further flaws that EPA addressed, RTC at 360-61, does not undermine EPA's sufficient explanation of the flaws with Louisiana's analyses, *id.* at 363-65.

And Louisiana Petitioners' argument that EPA viewed Louisiana's back trajectories on a piece-meal basis and rejected them as irrelevant misrepresents the record, as all EPA did was directly respond to Louisiana's comment on the Proposal. La. Indus. Br. at 47-48. Louisiana commented that its use of back trajectories "to establish that there were no persistent or consistent relationship between the cited Texas receptors and Louisiana air emissions was proper." *See* RTC at 362. Accordingly, because Louisiana's comment concluded that its back trajectories "show no likely impact from Louisiana emissions," EPA appropriately

[54] *Compare* La./Tex. Proposal at 9815 (providing explanation of the flaws with Louisiana's back trajectories) *with id.* at 9809 (providing similar explanation for Arkansas's back trajectories).

responded that back trajectory analyses by itself could not establish significance or non-significance. *Id.* at 363.

Louisiana Petitioners' other arguments in support of the state's use of back trajectory analysis are meritless. They argue that back trajectories can adequately show whether an upwind state contributes significantly to a downwind state's ozone air-quality problems and that even EPA has used back trajectories to determine a state's contribution. La. Br. at 61-66 (citing *MCEQ*, 790 F.3d 138); La. Indus. Br. at 35-36, 46-48. EPA does not dispute that back trajectories have some utility in evaluating where pollution comes from, whether in the context of the Good Neighbor Provision or other Clean Air Act programs. As explained above, EPA did its own back trajectory analysis to illustrate the consistency of that data with its photochemical grid modeling. But unlike Petitioners, EPA fully acknowledged the limitations of back trajectories, describing its use of them as only a "corollary analysis" to examine only "the general plausibility of the photochemical model 'linkages'." La./Tex. Proposal at 9815; *see also* RTC at 363-64 (explaining why back trajectories are not "*sufficient* to determine significant contribution" (emphasis added)).

Nor has EPA contended that back trajectories alone are an "excellent tool" for determining an upwind state's contribution. La. Br. at 62 (quoting *MCEQ*, 790 F.3d at 167). The full text of the quoted phrase from *MCEQ* provides that EPA

stated back trajectories were an "excellent tool that it generally prefers over more basic assessments of wind speed and directions." *MCEQ*, 790 F.3d at 167 (cleaned up). Put differently, EPA was comparing the then-relatively novel use of back trajectories to the more traditional use of only "annualized wind patterns" to assess air movement and found that back trajectories were more useful. *Id.* at 167, 169. Further, in *MCEQ*, EPA had first evaluated source-apportionment modeling (which is the same as the photochemical modeling conducted in the 2011-based modeling and 2016-based modeling) to determine whether Wise County should be included in the Dallas-Fort Worth nonattainment area and then used the back trajectories to confirm that wind from Wise County could transport air on high-ozone days to the monitors which would be used to evaluate whether that nonattainment area was meeting the NAAQS. *Id.* at 169; *see also* EPA Br., *MCEQ*, 2014 WL 1101433, at *123, 128 (D.C. Cir. Mar. 20, 2014) ("EPA did not use [back trajectories] to measure ozone formation" but considered the results of photochemical modeling "with [back trajectories]" in designating a nonattainment area). In other words, despite Louisiana's suggestion, EPA did not find back trajectories to be more useful for analyzing ozone contribution than photochemical modeling—in fact, EPA came to exactly the opposite conclusion.

Thus, EPA has consistently contended that back trajectories can serve as a "corollary analysis" to the results of photochemical modeling. La./Tex. Proposal

at 9815; RTC at 364. Louisiana, however, stretched back trajectories beyond their analytical capabilities—in a failed attempt to nullify the results of its photochemical modeling, when those trajectories served to only bolster the results of that modeling. Accordingly, EPA fully justified and explained why Louisiana's approach was scientifically unsupportable.

Weather Pattern Analysis: Louisiana evaluated large-scale weather patterns "for the 2011 ozone season" and concluded that its emissions are unlikely to transport to Texas because the weather patterns showed that "the air impacting the eastern half of Texas most often came from the Gulf." La. Submission at 17. Louisiana stated that this conclusion was bolstered by its back trajectories from eastern Texas, which showed that during the 2011 ozone season, much of the wind came from the Gulf. *Id.* at 17-18. The problem, however, is that Louisiana's analysis looked only at general weather patterns for the 2011 ozone season compared to other years and did not look at specific days when ozone exceedances were measured in Dallas and Houston. *Id.* at 17. Such broad generalization of seasonal transport patterns "not associated with specific ozone episodes are not generally informative of interstate transport decisions" because the Good Neighbor Provision is tethered to NAAQS compliance, and "violations of the ozone standard can be driven by as few as 4 days per year." La./Tex. Proposal at 9815. Indeed, ozone NAAQS compliance "is evaluated based on the average of the fourth high

value measured each of three consecutive years." *Id.* Louisiana's weather pattern analysis diluted the relevant data on potential ozone travel by incorporating non-elevated ozone days into its data. Consequently, EPA reasonably found Louisiana's weather pattern analysis could not support Louisiana's conclusion that its contributions were not significant on elevated ozone days. *Id.*

Wind Rose Analysis: Louisiana also conducted a wind rose analysis, which evaluated annual wind speed and direction at near ground-level at several areas in Texas and Louisiana over a 30-year period. La. Submission at 277-305. Again, EPA explained that such diluted analysis that does not evaluate high ozone days cannot adequately determine whether an upwind state's contribution is significant. La./Tex. Proposal at 9815. EPA highlighted other problems with this analysis: for example, EPA explained that "[w]ind directions measured at the surface are not necessarily good indicators of wind direction occurring at higher elevations, which tend to have a stronger influence on interstate ozone transport." *Id.*; *see also id.* (identifying three other technical deficiencies); RTC at 357-58 (explaining the limitations of wind rose analysis).

Comparative Interstate Contribution: Louisiana claimed that its contributions to Texas were not significant because Texas contributes more ozone to Louisiana than vice versa. La. Submission at 14. But this argument has no relevance to whether Louisiana's contributions to Texas are significant. The plain

text of the Good Neighbor Provision requires states to prohibit emissions "in amounts which will . . . contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to [the NAAQS.]" 42 U.S.C. § 7410(a)(2)(D)(i)(I). So states that are both upwind and downwind contributors[55] under the Good Neighbor Provision are required to address their own air pollution that significantly contributes to downwind states' inability to attain and maintain the NAAQS even if emissions from those other states also contribute to them or other states. Disapproval at 9378; *Wisconsin*, 938 F.3d at 324 (rejecting theory that "EPA could not require emissions reductions from . . . sources because each of them could point the finger at the others"); *cf.* La. Br. at 47 (erroneously arguing otherwise).

In other words, the Good Neighbor Provision does not excuse an upwind state from statutory requirements if an associated downwind state also happens to contribute to ozone pollution problems in the upwind state. *See EME Homer*, 572 U.S. at 515-19 (holding that the Good Neighbor Provision does not require states to reduce emissions in a proportional manner); *North Carolina*, 531 F.3d at 907-08 (holding that the Good Neighbor Provision requires each state to prohibit sources within its state from contributing significantly to nonattainment or interfering with

[55] For example, Texas receives upwind emissions from Louisiana and Mississippi (and several other upwind states) and contributes emissions to others. *See, e.g.*, 2016v3 AQM TSD, Apps. C, E.

maintenance in any other state). Indeed, the Good Neighbor Provision seeks to prevent this sort of race to the bottom, ensuring that upwind states do not reap "the benefits of the economic activity causing the pollution without bearing all the costs." *EME Homer*, 572 U.S. at 495.

Declining Trends in Ozone Design Values and Ozone Precursors in Louisiana: Louisiana Petitioners argue that allegedly declining trends of air pollution within Louisiana showed that Louisiana is not significantly contributing to ozone problems in Texas. La. Indus. Br. at 32-34, 36. Two problems exist with this argument.

First, *in-state* air quality is irrelevant to determining Good Neighbor obligations, which looks at the effects of one state's emissions in another. Disapproval at 9378. It is entirely possible that a contributing upwind state may have no ozone nonattainment problems within its border. *See* RTC at 319, 341-42.

Second, specific to Louisiana's declining trends, EPA explained that while Louisiana's "*overall*" ozone design value and precursor trends were declining, the modeling showed both "increases and reductions in anthropogenic emissions in Louisiana." *Id.* at 341-42 (emphasis added). Put differently, Louisiana's ozone emissions fluctuate year-to-year, and its overall declining emissions cannot establish that its "continuing emissions . . . are not significantly contributing to nonattainment or interfering with maintenance in other states." *Id.* at 341. This is

particularly so because the interstate ozone transport problem generally "involve[es] many smaller contributors" from multiple upwind states at the same receptor.[56] Disapproval at 9340. Further, EPA's air-quality analysis made clear that whatever trends in emissions reductions may be occurring, they have not been enough to bring receptors into attainment, *id.* at 9370, and reliance on trends data rather than enforceable emissions controls contained in a SIP cannot meet the statutory requirement that states prohibit "significant" interstate emissions contributions, *see id.* at 9376; 42 U.S.C. § 7410(a)(2)(D)(i). Thus, these trends could not, as a scientific matter, negate the findings at Step 2—that Louisiana contributed to ozone air-quality problems in Texas.

As summarized in the table below, the information Louisiana relied upon to discount its own modeling results was not useful for determining whether Louisiana's contributions to identified receptors were significant.

Factor	EPA's rationale
Back Trajectories	**Technically Flawed —** These analyses cannot scientifically support Louisiana's determination of non-significant contribution because (1) back trajectories show only general movement of air; and (2) Louisiana's results confirmed the photochemical modeling results with a high number of back trajectories through Louisiana.

[56] Louisiana Petitioners' unsubstantiated assertion that Louisiana's contributions to Texas are small because it contributes less than 2 to 5 ppb is thus factually unsupported. *See* La. Indus. Br. at 30-31, 37 (providing no justification for why 2 to 5 ppb is small and insignificant)

Weather Pattern	**Technically Flawed —** This analysis cannot scientifically support Louisiana's significant contribution determination because it diluted the relevant data on potential ozone travel by incorporating many non-elevated ozone days into its data and thus could not evaluate whether contribution is significant on elevated ozone days.
Wind Rose	**Technically Flawed —** This analysis had the same technical flaw as the weather pattern analysis as it looked at annual wind data for multiple years, with diluted the relevant data.
Comparative Interstate Contribution	**Irrelevant —** This consideration is not relevant to assessing a state's Good Neighbor obligation because the Good Neighbor Provision does not contemplate excusing an upwind state from statutory requirements if the downwind state contributes to the upwind state's air-quality problem.
Louisiana's declining ozone trends	**Irrelevant —** This consideration is not relevant to assessing a state's Good Neighbor obligation because the Good Neighbor Provision evaluates a state's contributions to another state's ozone air-quality problem, not the state's contributions to its own air quality.

In conclusion, EPA reasonably and lawfully disapproved Louisiana's submission on its own merits. Louisiana's chosen modeling, methodologies, and contribution threshold showed that Louisiana contributed to nonattainment and maintenance receptors in Texas on elevated ozone days. The data Louisiana put forth did not support its conclusion that its contributions were not significant and that therefore Louisiana need not consider further emissions reductions. On the contrary, some data (back trajectories) confirmed that air often moves from Louisiana to receptors in Texas. Consequently, Louisiana's submission failed to adequately evaluate whether its emissions significantly contribute to nonattainment

or interfere with the maintenance of the NAAQS in other states —and EPA lawfully disapproved it.

2. As another ground for EPA's disapproval of Louisiana's submission, EPA reasonably explained why Louisiana's application of the alternative 1 ppb contribution threshold was flawed.

Louisiana Petitioners erroneously argue that EPA disapproved Louisiana's submission for applying the alternative 1 ppb contribution threshold at Step 2. La. Br. at 51, 53-54. As explained above, this argument is irrelevant to EPA's disapproval of Louisiana's submission because Louisiana identified receptors to which it was linked *well above* its chosen 1 ppb contribution threshold.[57] Indeed, EPA made this point abundantly clear: In proposing to disapprove Louisiana's submission, EPA stated that Louisiana's "use of this alternative threshold at Step 2 . . . would not alter [EPA's] review and proposed disapproval." La./Tex. Proposal at 9812. In EPA's discussion of the 1 ppb Memo in its Disapproval, EPA stated that comments pertaining to the 1 ppb contribution threshold and claims that EPA switched its position from the 1 ppb Memo were relevant "to only a handful of states"—those "whose only contributions to any receptor are above 1 percent of the NAAQS but under 1 ppb"—which does not include Louisiana. Disapproval at

[57] Consequently, Louisiana's exclusion of certain receptors because they were below 1 ppb, but above 0.70 ppb (1% of the NAAQS), is also not dispositive to EPA's disapproval of Louisiana's submission. *See* La. Indus. Br. at 30.

9373. By contrast, Louisiana was linked well above even 1 ppb to several receptors in Texas in every iteration of the modeling. *Id.* at 9356; La./Tex. Proposal at 9811-14; La. Submission at 13. Therefore, this Court need not consider the merits of Louisiana Petitioners' arguments on Louisiana's use of the 1 ppb contribution threshold.

But because Louisiana devotes many words to this argument, *see* La. Br. at 53-55, La. Indus. Br. at 29-30, EPA provides its more complete explanation for why Louisiana cannot claim a reliance interest in the 1 ppb Memo. Even if the contribution threshold were relevant—a reliance interest requires a change in agency policy—and here, there was none. *DHS v. Regents of the Univ. of Cal.*, 140 S. Ct. 1891, 1913 (2020) ("When an agency changes course . . . it must be cognizant that longstanding policies may have engendered serious reliance interests that must be taken into account." (quotation omitted)); *see also Texas v. United States*, 40 F.4th 205, 227 (5th Cir. 2022) (per curiam) (quoting the same). For decades, EPA has generally used a 1% contribution threshold and the 1 ppb Memo did not depart from that. And in the Memo, EPA made abundantly clear that it did not endorse the 1 ppb contribution threshold without state-specific justifications. *Cf.* La. Br. at 53-54 (arguing otherwise). The Memo provides:

- "EPA and air agencies should consider whether the recommendations in this guidance are appropriate for each situation,"[58] 1 ppb Memo at 1;

- "Following these recommendations does not ensure that the EPA will approve a SIP revision in all instances where the recommendations are followed, as the guidance may not apply to the facts and circumstances underlying a particular SIP," *id.*;

- "Final decisions by the EPA to approve a particular SIP revision will only be made based on the requirements of the statute and will only be made following an air agency's final submission of the SIP revision to the EPA, and after appropriate notice and opportunity for public review and comment," *id.*; and

- "[I]t *may be* reasonable and appropriate for states to use a 1 ppb contribution threshold," *id.* at 4 (emphasis added).

Given this clear language, EPA made no change from its position, either from its longstanding consideration of a 1% contribution threshold or from the 1 ppb Memo in concluding that no state provided an adequate showing that the use of the 1 ppb contribution threshold was justifiable.[59] Disapproval at 9373; RTC at 299 (explaining that Louisiana's general criticism of a 1% threshold is not a state-specific justification).

[58] "Air agencies" here refer to "State air agencies." *See* 1 ppb Memo at 1 (referring to air agencies in the first instance as "[s]tate air agencies").

[59] For an example of the type of analysis states could have conducted, *see* 85 Fed. Reg. 12232, 12238 (Mar. 2, 2020), where EPA proposed to approve a 1 ppb threshold for Iowa under three state-specific factors. *See also* Disapproval at 9373 (reviewing EPA's experience and finding that constructing this analysis for states is not a good use of agency resources).

The Disapproval's policy-related explanations on the 1 ppb contribution threshold did not change EPA's policy or withdraw the 1 ppb Memo. In soliciting public comment on the potential for rescinding the 1 ppb Memo (which EPA did not do), EPA "share[d] further evaluation" of the use of a 1 ppb contribution threshold and why that threshold will likely be inappropriate for future ozone Good Neighbor SIP submissions.[60] La./Tex. Proposal at 9812-13. In the Disapproval, EPA reiterated this point: It broadly explained that all submissions applying a 1 ppb contribution threshold failed to adequately show that the use of that threshold was justified for that state, and then shared its further "belie[f], as set forth in [its] proposed disapprovals," the policy reasons for why a 1 ppb contribution threshold may likely not comply with the Good Neighbor Provision. Disapproval at 9373-74. Because there was no policy change, Louisiana cannot claim it had a reliance interest. *Regents*, 140 S. Ct. at 1913; *see also Popoca v. Holder*, 320 F. App'x 252, 259-60 (5th Cir. 2009) (per curiam) (holding that petitioner had no reliance interest in a statutory provision that applies to conduct, of which he was not convicted).

[60] Specifically, EPA explained that a 1 ppb contribution threshold will likely be inappropriate because a 1 ppb threshold for the 2015 ozone NAAQS would relax the stringency at Step 2 compared to the threshold EPA used for the less protective 1997 and 2008 ozone NAAQS, which were 0.80 ppb and 0.75 ppb, respectively. *See* Disapproval at 9374 (explaining that the 1 ppb Memo did not support using 1 ppb for every state).

Even if Louisiana could claim a reliance interest in the 1 ppb Memo (and it cannot), EPA did not engender any actual reliance interest because Louisiana incurred no compliance costs. Nor did Louisiana invest any of its own public resources in developing state-specific arguments in support of its use of the 1 ppb contribution threshold, as contemplated under the 1 ppb Memo. *Regents*, 140 S. Ct. at 1914 (holding that recipients had a reliance interest in a program because they "enrolled in degree programs, embarked on careers, started businesses, purchased homes, and even married and had children, all in reliance" on the program); *Encino Motorcars, LLC v. Navarro*, 579 U.S. 211, 222-23 (2016) (holding that the industry had a reliance interest in an agency's decades long federal policy because it applied the policy when negotiating and structuring compensation plans); Disapproval at 9373 (noting that no state incurred any compliance cost based on the 1 ppb Memo or invested much of its own public resources to develop state-specific arguments in support of a 1 ppb threshold).

The only allegation of cost Louisiana incurred is the fact that Louisiana did not include "two receptors linked at a one percent threshold but not at 1 ppb." La. Br. at 54. But as explained above, those two receptors were not dispositive of EPA's disapproval because Louisiana was linked to several other receptors above its chosen 1 ppb threshold. And outside of this one allegation of cost, "unidentified and unproven reliance interests are not a valid basis on which to undo

agency action. Instead, the harm occasioned must be specifically identified, reasonably incurred, and causally tied" to the federal action. *Solenex LLC v. Bernhardt*, 962 F.3d 520, 529 (D.C. Cir. 2020) (rejecting argument that government delay inevitably harmed reliance interests); *Ramos v. Louisiana*, 140 S. Ct. 1390, 1406 (2020) (rejecting states' reliance interest in having to retry the case and noting that states failed to claim "anything like prospective economic, regulatory, or social disruption" typically associated with reliance interests).

In sum, EPA reasonably disapproved Louisiana's SIP submission on its merits, as confirmed by the updated 2016-based modeling discussed *infra* Argument V. Louisiana's application of the 1 ppb contribution threshold based on its alleged reliance on the 1 ppb Memo serves only as another independent reason for EPA's Disapproval, and this argument need not be considered by the Court in evaluating the Disapproval as it relates to Louisiana.

B. EPA's reasonable disapproval of Mississippi's submission is well supported by the record.

Like Louisiana's submission, EPA could not approve Mississippi's submission on its own merits because Mississippi's conclusion that it did not significantly contribute to ozone air-quality problems in Texas was technically flawed and inconsistent with the Good Neighbor Provision. Miss. Proposal at 9558. In following EPA's 4-step framework, Mississippi applied EPA's 2011-based modeling and identified Deer Park, located within the Houston-Brazoria-

Galveston nonattainment area, as a nonattainment and maintenance receptor, to which Mississippi contributed 0.79 ppb (or above 1% of the NAAQS). Miss. Submission at 3-4, 6. Rather than proceed to Step 3 and evaluate whether its contribution to Deer Park was significant, Mississippi presented only technically deficient analyses to alleviate itself from conducting a significance analysis. It first purported to follow the Maintenance Memo, which provided that a maintenance receptor may be excluded if certain criteria, including technical analyses showing that ozone concentrations have been trending downward since 2011, were satisfied to conclude that based on ozone concentration trends except for the most recent year's, Deer Park was not a maintenance receptor at Step 2. *Id.* at 6-9, 12. It also purported to follow the 1 ppb Memo, which contemplated that a 1 ppb contribution threshold may be appropriate if there were state-specific justifications for that threshold amount, to argue that it was not linked to Deer Park at Step 2 by relying on a guidance document from a completely different Clean Air Act program and without providing any state-specific justification. *Id.* at 3-4, 6.

While Mississippi's submission brazenly misapplied the 2018 Memos, EPA reasonably explained that (1) even if the Maintenance Memo were applicable, Mississippi's analysis had technical flaws that did not support its elimination of Deer Park as a maintenance receptor, Miss. Proposal at 9556; RTC at 233-34; and (2) the guidance Mississippi relied upon for its use of the 1 ppb contribution

threshold was inapplicable in the Good Neighbor context, Miss. Proposal at 9557; Disapproval at 9372. EPA thus reasonably and lawfully disapproved Mississippi's submission on technical grounds, as Mississippi's own data showed that Mississippi was linked to the Deer Park receptor under the longstanding 1% contribution threshold of 0.70 ppb, and Mississippi erred in failing to evaluate whether its contribution to Deer Park was significant. Miss. Proposal at 9558; Disapproval at 9357-58.

Mississippi Petitioners present a hodgepodge of meritless arguments in support of their argument that EPA unlawfully disapproved Mississippi's submission. Indeed, many of their positions contradict each other. On one hand, Mississippi Petitioners argue that EPA unlawfully considered the updated 2016-based modeling and disapproved Mississippi's submission on that basis. Miss. Br. at 43-51. On the other hand, Mississippi Petitioners argue that EPA unlawfully rejected Mississippi's analysis that it was not linked to Deer Park because EPA's updated 2016-based modeling projected Deer Park to be in attainment in 2023 (but showed Mississippi linked to multiple other receptors above 1 ppb, Disapproval at 9354). Miss. Br. at 14, 37, 39 n.7. Mississippi Petitioners' kitchen-sink approach highlights the problem with their conclusion: Either they do not agree EPA may consider updated modeling, in which case, based on the information available to Mississippi at the time it submitted its SIP and on Mississippi's submission alone,

EPA reasonably and lawfully disapproved Mississippi's submission; or they *do* agree that EPA may consider updated modeling, in which case EPA reasonably disapproved Mississippi's submission on that basis, *see infra* Arg. V.

In short, Mississippi Petitioners' arguments are internally inconsistent and are refuted by the record and case law.

1. Under the information available to Mississippi, Deer Park was a nonattainment receptor.

In its SIP submission, Mississippi itself identified Deer Park as both a nonattainment and maintenance receptor. Miss. Submission at 4, 6. So Mississippi's application of the Maintenance Memo, which is specific to *maintenance* receptors, serves no basis for eliminating Deer Park as a nonattainment receptor and for not proceeding to Step 2. Miss. Br. at 36 (arguing that Deer Park would not be either type of receptor under the Maintenance Memo); *see also id.* at 10-11, 37-38.

Even if the Maintenance Memo were applicable, Mississippi's exclusion of the Deer Park receptor was technically deficient. *See* Miss. Proposal at 9555-56. The Maintenance Memo allowed for potential exclusion from consideration of a maintenance receptor if a state "demonstrate[ed] technical analyses" showing that (1) "meteorological conditions in the area of the monitoring site were conducive to

ozone formation during the period of clean data";[61] (2) "ozone concentrations have been trending downward"; and (3) "emissions are expected to continue to decline in both upwind and downwind states." Maintenance Memo at 4. To assist states with the recommended analyses, EPA provided information "related to analyzing meteorological conduciveness and ozone and emissions trends," including "current climatological data" of average temperatures across the country, publications providing information on the "relationships between ozone and meteorological conditions," data on ozone concentrations for individual monitoring sites from 2008 to 2017, and data on state-level emissions trends from 2011 to 2017. *Id.* at 4, Att. A. When Mississippi provided EPA a draft version of the submission, upon seeing that Mississippi intended to follow the Maintenance Memo, EPA notified Mississippi in writing that it should incorporate 2018 ozone monitoring data into its analysis. *See* Miss. Proposal at 9556 & n.47; Miss. Submission at 12; RTC 233-34.

EPA reasonably determined that, even if the Maintenance Memo were relevant for the Deer Park receptor, Mississippi did not present sufficient technical support for these three criteria.

[61] "Clean data" are design values that are at or below the NAAQS. *See* Maintenance Memo at 3 & n.7.

Criterion One: Meteorological Conditions

For meteorological conditions, EPA stated in the Maintenance Memo that a state should consider how several meteorological conditions, "including temperature, humidity, winds, solar radiation, and vertical mixing affect the formation and transport of ambient ozone concentrations." Maintenance Memo at A-2. In doing so, EPA supplied temperature data, provided citations to several publications that included data on other meteorological conditions for states to consider, and "encouraged [states] to supplement EPA-provided information with additional data." *Id.* at 5, at A-2 – A-4. Despite this guidance, Mississippi considered only temperature anomalies and "did not discuss or consider how other meteorological factors identified in the [Maintenance Memo] . . . confirm whether conditions affecting the monitor may have been conducive to ozone formation." Miss. Proposal at 9556. Thus, Mississippi Petitioners' argument that EPA unreasonably rejected Mississippi's meteorological-conditions analysis is undercut by EPA's rationale, which was consistent with the Maintenance Memo. *See* Miss. Br. at 37-38.

New York v. EPA, 964 F.3d 1214 (D.C. Cir. 2020), does not support Mississippi's meteorological-conditions position either. *See* Miss. Br. at 38. *New York* regarded different circumstances. There, in the context of EPA's denial of a downwind state's petition alleging that upwind sources were violating the Good

Neighbor Provision under 42 U.S.C. § 7426, EPA had suggested that a downwind petitioner could demonstrate an upwind state's noncompliance with the Good Neighbor Provision at Step 3 through four possible analyses but then (1) reversed its position on the first possible option "without any reasoned explanation," *New York*, 964 F.3d at 1222; and (2) stated that a sufficient analysis may require detailed and technically particularized information on emissions from upwind state's sources, much of which is not typically accessible to the public, including the petitioning, downwind state, *id.* at 1223-24. Consequently, the D.C. Circuit held that EPA arbitrarily and capriciously failed to provide a reasoned decision, provided contradictory messages, and set informational requirements that would be near-impossible for a downwind jurisdiction to meet. *Id.*

Unlike what was at issue in *New York*, EPA's guidance in the Maintenance Memo was not internally inconsistent, nor did it erect an insurmountable informational hurdle for states preparing SIP submissions. EPA has consistently taken the position that there are several meteorological conditions that affect ozone formation and transport and that those should be analyzed under the first criterion in the Maintenance Memo. Maintenance Memo at 4, A-2; *see also id*. at 5 (encouraging states to "supplement EPA-provided information with additional data"); RTC at 220. And EPA provided information for states to review and consider, not solely temperature data, encouraging states to provide their own data

as well. *See supra*. Mississippi had sufficient ability to conduct the kind of analysis EPA suggested. *See* RTC at 60. But Mississippi did not adequately consider the information that EPA had suggested would be relevant, and EPA reasonably explained that Mississippi's meteorological-conditions analysis was technically deficient. Proposal at 9556; RTC at 233-34.

Mississippi Petitioners' citation to *Michigan*, 213 F.3d 663, is similarly unsupportive of their meteorological conditions position. Miss. Br. at 38. There, in a challenge to a Good Neighbor "SIP Call" under 42 U.S.C. § 7410(k)(5), the D.C. Circuit held that EPA acted arbitrarily and capriciously by imposing emissions control obligations in portions of two states that were outside the bounds of the air-quality modeling and thus EPA lacked an adequate record to conclude emissions from those areas constituted "significant contribution." *Michigan*, 213 F.3d at 683. As with *New York*, this holding does not apply. Here, as explained above, EPA did not incorrectly extrapolate from modeling based on only general statements about atmospheric science, but rather analyzed whether a state had successfully demonstrated that a photochemical modeling projection was in error. Because Mississippi's chosen modeling identified Deer Park as a receptor, EPA's guidance suggested that Mississippi should look at a host of meteorological data and analyses, which affect ozone formation and transport, if it sought to discount the photochemical modeling results. *See generally* Maintenance Memo.

In sum, EPA reasonably explained that Mississippi's meteorological-conditions analysis was technically flawed.

Criteria Two and Three: Ozone Concentration and Emissions Trends

EPA similarly provided a reasoned explanation for why Mississippi's ozone concentration trends and emissions trends analyses were technically deficient and did not support the elimination of the Deer Park receptor under the Maintenance Memo. Miss. Proposal at 9556. The Memo provided that states should demonstrate downward trends "since 2011" and encouraged states to "supplement EPA-provided information with additional data (as appropriate)." Maintenance Memo at 4, 5. At the time EPA published the Maintenance Memo, data on ozone concentration measurements at monitors through 2017 were available, so EPA included data from 2011 through 2017. *Id.* at 4. But EPA did not say states could simply rely on that data and ignore any later information. *See id.* And before Mississippi submitted its SIP for review, EPA commented on the draft submission and directly informed Mississippi that the state should consider the then available data from 2018, as that data showed that the Deer Park receptor "[wa]s above the level of the 2015 ozone standard." *See* Miss. Submission at 12. Mississippi ignored EPA's comment, stating that this monitoring information was not "certified" at the time it began its state-level public comment process. *See id.* at 7-8; RTC at 233-34; Miss. Proposal at 9556. However, the date of certification is not

relevant to EPA's evaluation of whether a SIP submission is approvable (as Mississippi still had time to consider that data before submitting its SIP), and EPA had communicated to Mississippi the relevance of the monitoring information before Mississippi's submission. RTC at 233-34.

And specific to Mississippi's emissions trends analysis, EPA found it unacceptably sparse. Rather than present any data, Mississippi provided one conclusory sentence: "Based on national and regional emissions trends, and current regulations on point sources and mobile sources, emissions are expected to continue to decline in the upwind and downwind states." Miss. Submission at 9; *see also* Miss. Proposal at 9556. Thus, EPA reasonably determined that Mississippi did not provide technical analyses showing that ozone concentration and emissions trends were declining, as expected from the Maintenance Memo.

EPA reasonably explained why Mississippi improperly relied upon the Maintenance Memo to exclude Deer Park as a maintenance receptor.

2. Under the information available to Mississippi, Mississippi was linked to Deer Park.

At Step 2, EPA reasonably rejected as technically deficient Mississippi's use of the 1 ppb alternative contribution threshold to conclude that it was not linked to the Deer Park receptor.[62] Like Louisiana, Mississippi applied a 1 ppb contribution

[62] Because Mississippi was linked above 1 ppb to multiple receptors in EPA's 2016-based modeling, *see* Miss. Proposal at 9557-58; Disapproval at 9354, EPA's

threshold, instead of the longstanding 1% contribution threshold (0.70 ppb), pointing to the 1 ppb Memo. *See* Miss. Submission at 4-6. And like Louisiana, Mississippi provided no appropriate technical analysis to support its position, as contemplated by the 1 ppb Memo, which said that "EPA and air agencies should consider whether the recommendations in this guidance are appropriate for each situation." 1 ppb Memo; *see* Miss. Submission at 4-6; Miss. Proposal at 9557; *see also supra* Arg. III.A.2. Instead, Mississippi concluded that a 1 ppb threshold was technically sufficient by misapplying EPA's SIL Guidance from a different part of the Act—the PSD permitting program. Miss. Submission at 4-6. That was the full extent of Mississippi's justification.

In the Disapproval, EPA comprehensively explained why the PSD permitting program materially differs from the statutory requirements of the Good Neighbor Provision, such that the significant-impact-level value is not applicable in the Good Neighbor context. Disapproval at 9372; Miss. Proposal at 9557. That program aims to ensure that areas designated as in attainment remain in attainment even if emissions in that area were to increase from the construction of a new source or major modification of an existing source for which the permit is sought. Disapproval at 9372; *see also* RTC at 330. So the PSD permitting program

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disapproval of its selection of the 1 ppb threshold would be dispositive only if the Court were to separately conclude that EPA is prohibited from considering that more recent air-quality modeling information. *See infra* Arg. V.

considers whether increased emissions from a new source (or an existing source's modification) will "cause or contribute" to an exceedance of the NAAQS, while the Good Neighbor Provision considers how to eliminate upwind states' significant contribution to nonattainment or interference with maintenance of the NAAQS in states that may be hundreds of miles away. Disapproval at 9372. The purposes of the statutory provisions are different. The SIL Guidance was not designed or intended to apply to the Good Neighbor Provision, and EPA has explained (consistently since 2005) two distinguishing features that make applying the SIL Guidance inappropriate for assessing states' Good Neighbor obligations. *Id.*

First, the role the values serve in each program differs. The significant-impact-level value is used to determine whether construction of the new source (or modification) can be authorized *at all*. *See id.*; 42 U.S.C. § 7475(a)(3). Once that showing is made, the source must still go through the permitting process, which includes implementing the "best available control technology" emissions controls. 42 U.S.C. § 7475(a)(4). Thus, while the value used in the PSD permitting program does not relieve a source from having to implement emissions control strategies in the future, in the Good Neighbor context, the contribution screening threshold does—upwind states contributing less than the contribution threshold are screened out from further emissions-control evaluation. *See* Disapproval at 9342, 9372. Because the contribution threshold under the Good Neighbor Provision is more

consequential (in that it relieves a state from considering further emissions-control analysis), it does not necessarily follow, as Mississippi Petitioners contend, that the contribution threshold should be higher than the significant-impact-level value.[63] *See* Miss. Br. at 29-30.

Second, because the purposes of the PSD permitting program and the significant-impact-level value differ, so does the modeling and methodology used. Under the PSD permitting program, to determine whether a covered source's increased emissions will cause or contribute to an exceedance of the NAAQS, the modeling uses only "a single year of meteorology" and evaluates the source's contribution by considering the projected maximum contribution from a single day. Disapproval at 9372. This methodology differs from EPA's contribution methodology at Step 2 (which Mississippi used), which is based on *averaging* contributions across *several* high ozone days in a future year. *Id.*; *see supra* Arg. III.A.1.a (describing Step 2).

[63] Further, Mississippi Petitioners misquote the SIL Guidance. Miss. Br. at 29 (quoting SIL Guidance at 9 n.6). EPA has not "acknowledged that because [the permitting program] uses the term 'contribute,' rather than 'significantly contribute,' *other* provisions of the Act that reference 'significant contributions'—like the Good Neighbor Provision—should be interpreted as 'call[ing] for a higher degree of contribution' than under [the permitting program]." Miss. Br. at 29. The language Mississippi Petitioners used appears nowhere in that guidance. *See generally* SIL Guidance.

If EPA were to apply the PSD permitting program methodology in the Good Neighbor context and consider whether the impact of emissions from a state exceeds 1 ppb on a *single* exceedance day, that would cause *even more* states to be linked as compared to using a 0.70 ppb threshold based on multi-day contributions. Disapproval at 9372. Therefore, even if the significant-impact-level used in the PSD permitting program was appropriate in the Good Neighbor context (and it is not), the application of the whole permitting program methodology would need to be applied to properly use that value. *Id.* Mississippi cherry-picked only one part of the permitting program methodology and ignored the rest. *See* Miss. Submission at 4-6. In fact, applying the entire methodology may well have resulted in more linked receptors. *See* Disapproval at 9372.

In sum, EPA reasonably explained why the significant-impact-level value from the unrelated PSD permitting program was not appropriate in the Good Neighbor context and reasonably determined, consistent with the plain text of the 1 ppb Memo, *see supra* Arg. III.A.2, that Mississippi did not provide a technical analysis to justify the use of a 1 ppb contribution threshold in its submission. Miss. Proposal at 9557. Not only was EPA's explanation reasonable, but it also accorded with EPA's position since 2005. *See* Disapproval at 9372 (citing 70 Fed. Reg. 25162 (May 12, 2005)). And EPA's use of a 1 ppb threshold in the PSD permitting program does not amount to reading "similar terms in a statute

inconsistently," as addressed in *Azar v. Allina Health Services*, 139 S. Ct. 1804, 1812 (2019) or *Hibbs v. Winn*, 542 U.S. 88, 101 (2004). *See* Miss. Br. at 29-30. EPA is not assigning different meanings to the term "significant" but applying the term in a manner most appropriate for each specific program. Here, too, the Good Neighbor Provision and the PSD permitting program are two different statutory provisions, and numerical thresholds relied upon in one program are not necessarily relevant in another.

Mississippi Petitioners' argument that, like in *New York*, EPA unlawfully rejected the state's use of a 1 ppb contribution threshold because EPA did not explain what justifications would be required is misplaced. Miss. Br. at 35-36. Again, the facts in *New York* are inapt. As detailed above, in that case, the court found that EPA had provided internally inconsistent positions and imposed near-impossible informational requirements on downwind jurisdictions petitioning for EPA to find Good Neighbor violations. *See supra* Arg. III.B.1. By contrast, here, EPA reinforced multiple times in the 1 ppb Memo that (1) a state should consider whether its selected contribution threshold is "appropriate" for each situation, and (2) that use of a 1 ppb threshold does not equate to approvability because "the guidance may not apply to the facts and circumstances underlying a particular SIP." 1 ppb Memo at 1; *see also supra* Arg. III.A.2. And EPA provided states an example of what a state-specific analysis could look like when it expended its own

resources to propose for one state (Iowa) a state-specific, multi-factor analysis that might substantiate use of the 1 ppb contribution threshold. *See* RTC at 295; 85 Fed. Reg. 12232, 12238 (Mar. 2, 2020).[64] Mississippi, like Louisiana, provided no such technical analysis or justification, *see* Miss. Submission at 4-6, and EPA reasonably determined that Mississippi did not satisfy the 1 ppb Memo's suggestion that states applying a 1 ppb contribution threshold should provide a state-specific analysis, Miss. Proposal at 9557. Therefore, as with Louisiana Petitioners, Mississippi Petitioners' arguments that EPA rejected Mississippi's 1 ppb threshold for policy reasons and engendered Mississippi's reliance interest in the 1 ppb Memo are factually and legally incorrect. Miss. Proposal at 9557; Miss. Br. at 32-33, 40-41; *see supra* Arg. III.A.2. To the extent Mississippi Petitioners claim that EPA should have provided more guidance on what a state-specific analysis might entail, this too fails. Mississippi Petitioners acknowledge that the Act does not require any guidance by EPA. Miss. Br. at 7 (citing *EME Homer*, 572 U.S. at 509). While EPA endeavored to provide some guidance here, the Act "does not require EPA to furnish upwind States with information of any kind about their good neighbor obligations," and it was lawful for EPA to not provide more than it did. *EME Homer*, 572 U.S. at 509.

[64] EPA ultimately approved Iowa's submission on the basis that the 2016v2 modeling showed that Iowa would contribute less than 1% of the NAAQS to downwind receptors. *See* 87 Fed. Reg. 22463 (Apr. 15, 2022).

Mississippi Petitioners also miss the mark with their argument that EPA arbitrarily and capriciously determined Mississippi to be linked because its 0.79 ppb contribution to Deer Park was within what Mississippi claims is the "margin of error" for EPA's modeling. *See* Miss. Br. at 41-42. This Court has already rejected this sort of attack on air-quality modeling in upholding EPA's approval of a Louisiana regional-haze SIP over petitioners' argument that an alleged "margin of error" there rendered that modeling unreliable. *See Sierra Club*, 939 F.3d at 684-87. There, this Court held that EPA's approval was not arbitrary and capricious because EPA provided a "fulsome" explanation for why petitioners' margin-of-error argument did not establish that modeling was unreliable, and this Court explained that petitioners "have not carried their 'considerable burden' to overcome the 'presumption of regularity' that we afford to 'the EPA's choice of analytical methodology.'" *Id.* at 686-87 (quoting *BCCA Appeal*, 355 F.3d at 832). Indeed, that is all that is required of EPA under the APA standard of review, *see ADEC*, 540 U.S. at 496-97, even for modeling that is far more simplistic than the photochemical modeling used here for developing and evaluating Good Neighbor SIP submissions, *Sierra Club*, 939 F.3d at 680.

Here, too, EPA set forth a "fulsome" explanation why its modeling is reliable. EPA explained that "it is not appropriate to compare the bias/error involved in the estimation of *total* ozone" at a single receptor "to the potential error

in the estimation of the subset of ozone that is contributed by a single state." Disapproval at 9370. While the projected ozone value from modeling may differ by a small amount from the measured ozone value, that discrepancy is "a relatively small percentage of the *total* modeled ozone, which for a receptor of interest would be [somewhere in the 70 ppb range]," so it would be "unrealistic to assign all of [such] discrepancy . . . to the estimated impact from a single state because the [discrepancy] would be the combination of the error from *all sources of ozone that contribute to the total*," not just one upwind state's contribution. *Id.* at 9370-71 (emphasis added).[65] EPA thus reasonably explained why its modeling is reliable.[66]

In sum, under the data Mississippi provided in its SIP submission, Mississippi was linked to the Deer Park receptor, and EPA found Mississippi's reasons for not analyzing that contribution for "significance" technically unacceptable. Accordingly, EPA reasonably and lawfully disapproved Mississippi's submission on the submission's own merits.

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[65] Louisiana Petitioners' margin-of-error argument, while not relevant because Louisiana was linked to other receptors above 1 ppb, also fails for this exact reason. *See* La. Indus. Br. at 30.

[66] EPA also addressed the argument related to 40 C.F.R. Pt. 50, Appx. U, which Mississippi Petitioners refer to in a footnote, as well. *See* Miss. Br. at 41 n.8; Disapproval at 9371.

C. EPA's reasonable disapproval of Texas's submission is well supported by the record.

Texas Petitioners misconstrue EPA's technical analysis of Texas's SIP submission, raising flawed objections to portions of the record that were not dispositive to EPA's action, while failing to contend with EPA's reasoned bases for the disapproval. *See, e.g.*, Tex. Br. at 26-27, 29-34. In evaluating Texas's submission, which employed a multi-step process similar to EPA's 4-step framework, EPA reasonably determined that the submission could not be approved for two distinct reasons. *See* Tex. Submission at 3-2; La./Tex. Proposal at 9828-29, 9834. *First*, assuming there were no technical flaws with Texas's Step 1 and 2 analyses, EPA found Texas's Step 3 analysis could not support Texas's conclusion that it did not contribute significantly to its linked receptors for the same reason Louisiana's Step 3 analysis failed—Texas used the same definition ("persistent and consistent") of "significant" as Louisiana, which was subject to the same issues as Louisiana described above, and Texas's air-quality analyses at Step 3 did not scientifically support the state's non-significance conclusion. La./Tex. Proposal at 9831-34; Tex. TSD at 76-100. *Second*, EPA found that Texas's alternative method for identifying maintenance receptors at Step 2 inaccurately excluded certain maintenance receptors. La./Tex. Proposal at 9826-29; Tex. TSD at 4-37. Thus, EPA reasonably disapproved Texas's submission, Disapproval at 9359-60, and many of Texas Petitioners' arguments against EPA's evaluation of Texas's

submission—EPA's 4-step framework, EPA's 2016-based modeling, alleged rejection of Texas's 2012-based modeling, and Texas's maintenance receptor methodology—are issues inconsequential to EPA's Disapproval, *see* Tex. Br. at 25-38; Tex. Indus. Br. at 34-41, 44-46.[67]

1. EPA reasonably disapproved Texas's submission because its Step 3 significance analysis was technically flawed.

Texas's 2012-based modeling identified Texas as linked to 15 nonattainment receptors in Colorado, Arizona, and California using its chosen 0.70 ppb (1% of the NAAQS) contribution threshold. Tex. Submission at 3-47 – 3-48. Although EPA reasonably concluded that the 2012-based modeling "likely underestimate[es]" predictions of 2023 ozone concentrations, EPA proceeded to evaluate Texas's Step 3 analysis. Tex. TSD at 66, 76-100; *see also* La./Tex. Proposal at 9831-34. Texas's Step 3 analysis was a "weight-of-evidence" analysis that evaluated several air-quality factors to determine whether its contributions to those receptors were significant under its definition, which Texas defined as a "persistent and consistent" pattern of contribution on several days with elevated ozone. Tex. Submission at 3-50 – 3-51. Texas did not offer any quantitative basis

[67] Texas Petitioners' arguments about EPA's 4-step framework are addressed *supra* Argument II.A.3. and B., EPA's consideration of the 2016-based modeling are addressed *infra* Argument V, Texas's 2012-based modeling are addressed *infra* Argument III.C.3., and Texas's maintenance receptor methodology are addressed *infra* Argument III.C.2.

for when this standard might be met, but based on various factors, Texas concluded that its emissions do not significantly contribute to any linked receptor. *Id.* at 3-75 – 3-76. As detailed below, EPA reasonably explained that Texas's Step 3 analysis was flawed: Not only did Texas already establish that its emissions have a "persistent and consistent" pattern of contribution to downwind states, but further, Texas's "weight-of-evidence" analysis and conclusions were not adequately supported by scientific information. EPA lawfully disapproved Texas's submission.

a. Texas's modeling and methodology already determined that Texas "persistently and consistently" contributed to linked receptors on several days with elevated ozone.

EPA found Texas's alternative approach to "significance" at Step 3 was flawed for much the same reasons as Louisiana's, which used the same words to define significance—because a Step 2 analysis that determines linkages already factors in whether the state's contribution exhibits a "persistent and consistent pattern of contribution on several days with elevated ozone days." Tex. Submission at 3-50 – 3-51; La./Tex. Proposal at 9831-33; RTC at 350-51; *see supra* Arg. III.A.1.a.

Texas employed a similar methodology[68] as EPA to determine whether its emissions to identified receptors exceeded the contribution threshold at Step 2. Tex. TSD at 74-75. Thus, like EPA, Texas took *high* ozone concentration days into account in evaluating whether its emissions exceeded the contribution threshold. So, as with Louisiana's analysis (which used EPA's Step 2 method), EPA explained that Texas's Step 2 therefore "appropriate[ly] . . . identified impacts of sufficient persistence to impact a downwind receptor's ability to attain or maintain the [NAAQS]," La./Tex. Proposal at 9832, but that Texas's Step 3 analysis inappropriately "excuse[d] [the] state[] from analysis of emissions control opportunities," RTC at 350. In other words, EPA did not conclude that "linkage alone establishe[d] significance," as Texas Petitioners mistakenly contend, Tex. Br. at 27—as explained above, EPA considers emissions "significant" at Step 3 when they are uncontrolled even though they can be easily and cost-effectively reduced.[69] Rather, under *Texas's* definition of "significant," its Step 2 analysis

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[68] The only difference, which was immaterial to the outcome, was that rather than use the days projected to have the highest ozone concentrations in 2023 to determine contribution, Texas used the days with the highest ozone concentrations *in 2012*. *See* Tex. TSD at 74-75; RTC at 351.

[69] They also mistakenly argue that this Court already rejected EPA's use of the 1% threshold in *Texas 2020*, which simply deferred to, and upheld, EPA's reasoned judgment not to transfer the 1% metric developed in the Good Neighbor context to a different Clean Air Act program. Tex. Indus. Br. at 43 (citing *Texas 2020*, 983 F.3d at 839); *Texas 2020*, 983 F.3d at 839-40.

"confirm[ed] that there is a 'persistent and consistent' pattern of high contributions" to receptors at Step 1. *See* RTC at 353. And even if it had not been established already at Step 2, Texas, like Louisiana, provided no standard for determining when such a pattern would be shown and did not explain why its definition was relevant for addressing Good Neighbor obligations. *See supra* Arg. III.A.1.a.

Regardless, the arguments Texas provided with its "weight-of-evidence" analysis to cast doubt on the "persistent and consistent" pattern established at Step 2 suffered insurmountable technical flaws, as detailed below.

b. Texas's "weight-of-evidence" analysis was technically flawed.

Even though Texas's modeling showed that Texas was linked to several downwind receptors, Texas pointed to other data in an effort to counter its own modeling. But Texas's attempt to discount its contributions' significance with its "weight-of-evidence" analysis was technically flawed or of limited value. EPA reasonably explained that Texas's analysis did not support its conclusions and lawfully disapproved Texas's submission. *See* Tex. TSD at 77.

Texas Petitioners' cursory argument that EPA's rejection of Texas's "weight-of-evidence" analysis was unlawful does not establish either that EPA acted arbitrarily or capriciously or that Texas's analysis was scientifically sound. Tex. Indus. Br. at 42-44, 46-47; *see also id.* at 14-18 (explaining only what Texas

did as part of its "weight-of-evidence" analysis). Texas Petitioners either (1) assume that Texas's analysis was based in sound science or (2) take the unwarranted position that EPA lacks *any* authority in reviewing whether a SIP submission is scientifically supportable. *See supra* Arg. II (explaining that EPA must independently evaluate SIP submissions to determine whether the submission complies with the Act). As explained below, EPA reasonably determined that Texas's "weight-of-evidence" analysis was technically flawed or irrelevant and could not be used to support Texas's evaluation of whether its ozone contributions to linked receptors were significant.

For the linked Colorado receptors, Texas's "weight-of-evidence" analysis considered ozone design value trends, the number of monitored elevated ozone days, back trajectory analyses on elevated ozone days, the average modeled contributions from modeled future elevated ozone days, the collective interstate contribution to the future design values, and the responsiveness to Texas emissions at those monitors. Tex. Submission at 3-51. As EPA comprehensively explained, none of these analyses could support Texas's conclusion that its contributions were not significant.[70] Tex. TSD at 77-78.

[70] Texas had also identified a receptor in Arizona and several in California. Tex. Submission at 3-47 – 3-48. But because EPA's modeling did not identify the Arizona monitor as a receptor and the measured design values at that monitor from 2016 to 2021 were well below the NAAQS, EPA agreed with Texas that the state has no Good Neighbor obligation to Arizona because EPA does not view the

Monitored Design Value Trends: Texas looked at measured design value trends of the linked Colorado receptors from 2007 to 2016 to indicate that the measured ozone concentrations from those receptors were declining over that period. Tex. Submission at 3-51, 3-52. EPA explained that based on the more recent measured 2020 design values, "the long-term trends do not clearly show that the receptors . . . are expected to be below the NAAQS" by 2023, and thus the evidence does not suggest the receptors will no longer be a nonattainment or maintenance receptor in 2023. Tex. TSD at 79.

Monitored Elevated Ozone Days: The monitored elevated ozone days showed that from 2007 to 2016, the identified Colorado receptors' number of elevated ozone days has been decreasing, with the highest number of days observed in 2012. Tex. Submission at 3-52 – 3-53. Based on the trending decline in the number of elevated ozone days at the Colorado receptors, Texas suggested that its contributions to those receptors were not significant. *Id.* But Texas's analysis makes a leap in logic. As explained above, Texas's method for

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monitor to be a receptor at Step 1. Tex. Submission at 3-67; Tex. TSD at 97 & n.42; La./Tex. Proposal at 9833 n.109. And because EPA acknowledged that monitors in California receptors may have unique circumstances, such that they may not have an interstate transport problem, EPA stated that it "need not draw any conclusions" regarding the identified California receptors because it could evaluate and disapprove Texas's submission based on its analysis of the Colorado receptors. La./Tex. Proposal at 9833; *see also* Disapproval at 9379; RTC at 236-37. Thus, although Texas identified receptors in three states, EPA focuses this brief on the submission's analysis of the Colorado receptors.

identifying receptors and determining contribution considered only high ozone concentration days (e.g., elevated ozone days). In other words, through Texas's Step 2 analysis, Texas's modeling showed that enough elevated ozone days in 2023 existed such that (1) the identified receptors were projected to exceed the NAAQS in 2023 and (2) Texas's contributions to those receptors were 0.70 ppb or greater. *See supra* Arg. III.C.1.a. Thus, as EPA explained, a decline in the overall number of elevated ozone days does not refute the fact that Texas's modeling and contribution analysis showed that there would *still* be elevated ozone days in the future, and on those days, its emissions *would* "persistently and consistently" contribute to those receptors. Tex. TSD at 81, 100; La./Tex. Proposal at 9832; *see also* Tex. Submission at 3-50 – 3-51.

Back Trajectories: Texas, like Louisiana and Mississippi, also performed back trajectories and suggested that because only some trajectories from the identified receptors reached Texas, its ozone contributions were not significant. Tex. Submission at 3-53 – 3-58. As with Louisiana's submission, EPA explained that the limited utility of back trajectories could not discount Texas's 2012-based photochemical modeling results. La./Tex. Proposal at 9833; *see supra* Arg. III.A.1.b.

Apart from the technical deficiency in relying on back trajectories to conclude that contributions were not significant, EPA explained that there were two additional technical flaws with Texas's analysis.

First, Texas's truncated analysis excluded potentially relevant back trajectories. Texas ran back trajectories for a 72-hour period and justified that length because some air parcels from Colorado had reached Texas after 72 hours; but doing so excluded potentially relevant back trajectory results. Tex. Submission at 3-53; Tex. TSD at 81-82; RTC at 370 (stating that 72 hours was too short to calculate back trajectories because "some of the trajectories ended before fully transporting over Texas or before potentially entering Texas"). As Texas's back trajectories figures show, "many of the 72-hour trajectories that pass over Texas end before they have fully traversed Texas"—no centerline reached past central Texas—and those trajectories may well have been within Texas's screening analysis had Texas run them for longer than 72 hours. Tex. TSD at 81-85; RTC at 370; *see* Tex. Submission at 3-55 (Figure 3-42, as reproduced below, showing that most lines stopped at central or northern Texas).

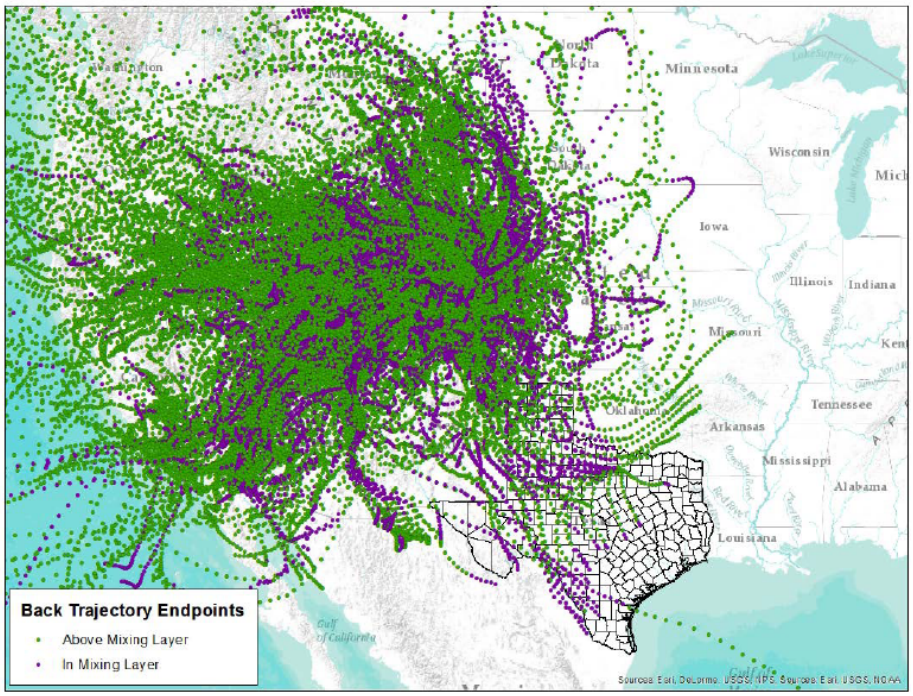

Figure 3-42: HYSPLIT Back Trajectory Endpoints that Meet Filter Criteria from the Tagged Colorado Monitors

Texas's back trajectory analyses therefore were not sufficiently comprehensive because they were not run for enough hours back in time. Tex. TSD at 81-82, 85-86. EPA stated that 120-hour back trajectories should have been completed for a sufficiently comprehensive analysis. *Id.* at 81. Because of Texas's artificial limitation, its analysis did not capture several trajectories for Colorado that could have gone through Texas if a longer trajectory time were used, and thus could not scientifically support Texas' conclusion that it did not contribute significantly to ozone air-quality problems in Colorado.

Second, Texas screened out those back trajectories where the back trajectory centerline started or ended outside the atmospheric "mixing" layer.[71] Tex. Submission at 3-53. However, as explained *supra* Argument III.A.1.b., back trajectories simply "estimate[] the central path in both the vertical and horizontal planes." Tex. TSD at 83. It was thus technically unjustifiable for Texas to screen out back trajectories simply because they were not within the mixing layer, as some of the air parcel may well have been within the bounds of the mixing layer even if the centerline was not. *Id.*

Consequently, Texas's conclusion that its contributions to those receptors are not significant because of the low number of back trajectories reaching Texas is technically unsupportable based on the flawed way Texas performed and screened out its back trajectories. *Id.* at 85.

Projected Average Contribution on 2023 Elevated Ozone Days: Texas considered its average contributions to the identified Colorado receptors in 2023 across all days when the receptors were projected to exceed the NAAQS (i.e., elevated ozone days) in 2023. Tex. Submission at 3-58. Texas showed that its average contribution for those 9 to 11 days at three of the Colorado receptors was

[71] The "mixing" layer is the part of the atmosphere between the surface and the top of the mixing layer (mixing layer boundary) where ozone and other pollutants are vigorously mixed vertically because of the interaction of the Earth's surface and atmosphere (i.e., radiation of heat from the Earth's surface and wind movement during the day). *See* RTC at 357-58.

between 0.77 ppb and 0.89 ppb. *Id.* at 3-58, Table 3-14. Texas concluded this "impact is not significant, since the average contribution is less than one ppb on very few days." *Id.* at 3-59. But EPA explained that this is nearly equivalent to the analysis Texas conducted at Step 2 and did not refute a finding of contribution. *See supra* Arg. III.C.1.a.; Tex. TSD at 89.

Collective Interstate Contribution: "Collective contribution" refers to the total amount of upwind states' contributions to the ozone concentration at the same receptor. RTC at 319-20; *see also* Tex. Submission at 3-59. Texas noted that for the 2008 ozone NAAQS, EPA stated that eastern states had an identified collective contribution problem but that western states "may [have] geographically specific factors to consider." Tex. Submission at 3-59. Because the percentage of total upwind state contribution to receptors in Colorado (out of all contributing sources) was smaller than the percentage of total upwind contribution to eastern states, Texas found that this comparison supported its conclusion that it was not a significant contributor to Colorado's nonattainment or maintenance problems. *Id.* at 3-59 – 3-60, 3-66 – 3-67.

But EPA thoroughly addressed western regional transport in the Disapproval. *Cf.* Tex. Indus. Br. at 47. EPA acknowledged that "in limited circumstances" there were "unique issues associated with addressing ozone transport," namely at California monitors, such that they may not have an interstate

transport problem. Disapproval at 9379; *see also* RTC at 236-37. Yet, California's unique circumstances did not demonstrate fundamental differences between eastern and western ozone transport. Disapproval at 9379. And EPA explained that "receptors in Colorado are heavily impacted by upwind-state contribution," and that EPA has consistently, including for the 2008 ozone NAAQS, considered these Colorado monitors to be interstate-transport receptors. Tex. TSD at 90 (citing 81 Fed. Reg. 9155 (Feb. 3, 2017); 81 Fed. Reg. 71991 (Oct. 19, 2016)); La./Tex. Proposal at 9833. So even if the California monitors could be excluded, the Colorado monitors definitively were receptors, and Texas's analysis did not counter Texas's own photochemical modeling, which showed that Texas contributed to ozone problems in Colorado. Tex. TSD at 90-91; La./Tex. Proposal at 9833.

Ozone Formation Responsiveness: For the Colorado receptors, Texas used a tool (known as the "Direct Decoupled Method" or "DDM"), which estimates the responsiveness of ozone formation to small reductions in emissions of ozone precursors, to estimate the responsiveness of ozone formation to Texas emissions of NO_X (an ozone precursor) at linked Colorado receptors. Tex. Submission at 3-60 – 3-61. As Texas noted (but Texas Petitioners notably omit, *see* Tex. Indus. Br. at 15-16), this tool "assumes a linear response" in ozone formation and is thus "useful for a limited range" only because ozone formation is, in fact, "highly non-

linear." Tex. Submission at 3-60. Accordingly, this tool is "typically used to see what an additional reduction in emissions might yield in ozone reductions." Tex. TSD at 93. However, Texas used this tool outside of its limited utility of estimating small percentage changes in emissions and sought to estimate the impacts from 100% of NO_X emissions in Texas on the ozone concentrations at the linked Colorado receptors. *See id.* Thus, EPA reasonably explained that Texas's use of this tool to evaluate the significance of Texas's contribution to Colorado was of "limited value and not as technically sound as the contribution data based on source apportionment [Texas's 2012-based] modeling." *Id.*; *see also* La./Tex. Proposal at 9833.

As summarized in the table below, Texas's "weight-of-evidence" factors were either irrelevant for evaluating whether its contributions to identified receptors were significant or technically flawed and therefore not useful for Texas's significance determination.

Factors	Colorado Receptors
Design Value Trends	**Technically Flawed —** Neither Texas's design value trends from 2007 to 2016 nor EPA's design value trends from 2011 to 2020 for the 2015 ozone NAAQS show that the linked receptors in Texas's modeling are expected to have design values in 2023 low enough such that those linked receptors will not be nonattainment or maintenance receptors in 2023.
Elevated Ozone Days Trends	**Technically Flawed —** Texas's modeling already showed that on elevated ozone days, Texas's emissions "persistently and consistently" contributed 0.70 ppb or more and resulted in those receptors exceeding the 2015 ozone NAAQS.

Back Trajectories	**Technically Flawed —** Back trajectories cannot quantify how much a state's emissions contribute to another's ozone concentration, and Texas's analyses omitted days when Texas's emissions could have transported to linked receptors.
Average Contribution on 2023 Elevated Ozone Days	**Irrelevant —** EPA did not agree with this analytic approach but the approach did result in average impacts above 0.70 ppb at three of the five receptors.
Collective Interstate Contribution	**Irrelevant —** This consideration is irrelevant because EPA had confirmed that Colorado receptors are heavily impacted by upwind-state contributions.
Ozone Formation Responsiveness	**Technically Flawed —** This analysis was technically flawed because Texas used a tool helpful for evaluating the impact of only small amounts of change on ozone formation to evaluate the impact of 100% of NOx emissions in Texas on the ozone concentrations in Colorado.

Accordingly, EPA reasonably determined that Texas did not conduct an adequate "significance" analysis and disapproved its submission on that basis. Disapproval at 9360. This Court need not evaluate the merits of Texas Petitioners' other arguments and should deny Texas Petitioners' petition for review on Texas's scientifically flawed Step 3 analysis alone.

2. As another reason for EPA's Disapproval, EPA reasonably explained why Texas's method for identifying maintenance receptors was flawed.

Texas's flawed method for identifying maintenance receptors was not a dispositive reason for EPA's Disapproval because Texas's submission undeniably identified *nonattainment* receptors to which the state was linked, Tex. Submission at 3-47, and its Step 3 analysis of those receptors was technically flawed. Thus,

this Court need not reach this issue in upholding EPA's Disapproval. Even so, EPA reasonably explained why Texas's method was technically flawed and was another ground for disapproving Texas's submission.

a. Texas's method does not accurately identify maintenance receptors.

Texas's methodology for identifying maintenance receptors fails to capture all receptors that struggle to maintain the NAAQS. Texas agreed with EPA that maintenance receptors are "those receptors that would have difficulty maintaining the relevant NAAQS in a scenario that accounts for historical variability in air quality at that receptor." Disapproval at 9348; *see also* Tex. Submission at 3-39 – 3-40. This meaning comports with the D.C. Circuit's holding in *North Carolina*—that EPA must give independent effect to the "interfere with maintenance" prong because otherwise "[a]reas that f[ou]nd themselves barely meeting attainment in [the attainment year] due in part to upwind sources interfering with that attainment [would] have no recourse" if ozone were to increase because of interannual meteorological variability that affects ozone formation. 531 F.3d at 910. In that case, the State of North Carolina argued that "even though all of its counties are projected to attain NAAQS for ozone by [the attainment year], several of its counties [we]re at risk of returning to nonattainment due to interference from upwind sources." *Id.* at 909. For example, North Carolina argued that one county had future projected ozone levels below the NAAQS by 2.5 ppb but "could fall

back into nonattainment because of the historic variability in the county's ozone levels," which could vary +/- 3 ppb yearly. *Id.*

In short, maintenance receptors are those that struggle to maintain the NAAQS and are susceptible to the "possibility of failing to maintain the NAAQS in the future, even in the face of current attainment of the NAAQS," if there is a particularly ozone-conducive year. *Wisconsin*, 938 F.3d at 326 (quotation omitted); *see also North Carolina*, 531 F.3d at 909; Disapproval at 9341. Nonattainment receptors, by contrast, are those "that both currently monitor nonattainment and that the EPA projects will be in nonattainment in the future compliance year." Disapproval at 9348. This difference results in there always being a larger class of maintenance receptors than nonattainment ones. *Id.* at 9349.

Despite agreeing that maintenance (and nonattainment) receptors are those described above, Texas's method for identifying maintenance receptors failed to properly account for variability in ozone levels and the relationship between maintenance and nonattainment. To identify nonattainment receptors, Texas used EPA's approach, as detailed *supra* Background B.2.b., and considered ozone concentrations over a five-year period (2010 to 2014), taking into account three ozone design values (2010-2012, 2011-2013, and 2012-2014). *See* La./Tex. Proposal at 9827. However, to identify maintenance receptors (which as explained above should account for interannual ozone variability), Texas took only the most

recent (i.e., 2012-2014) design value.[72] Tex. Submission at 3-39 – 3-40. Texas reasoned that its method accounted for both meteorological conditions and downward trends in ozone concentration levels because it selected the latest in time of the three design values, even if that is the highest of the three design values. *Id.* at 3-39 – 3-42.

Texas's method is not a reasonable way to identify maintenance receptors, and its unrealistic results underscore this. *See generally* RTC at 227-28. Because of a maintenance receptor's high susceptibility to meteorological variations, it is necessary to account for a set of meteorological conditions that capture fluctuations in ozone formation. La./Tex. Proposal at 9827. Indeed, Texas's submission showed that while the identified receptors in Colorado and in California generally had declines in ozone concentrations over a ten-year period, there were annual fluctuations in ozone concentrations. Tex. TSD at 13, 22-24 (citing Tex. Submission at 3-52 (Figure 3-40)), 26-27 (citing Tex. Submission at 3-69 (Figure 3-56)). Texas's method, by considering only one set of data (the design value from

[72] This differed from EPA's approach, which uses the maximum, instead of the most recent, design value out of the three base period design values (i.e., 2009-2011, 2010-2012, and 2011-2013 design values). 2016v2 Air-Quality TSD at 9. So because Texas's base year was 2012, EPA would have selected the maximum design value from 2010-2012, 2011-2013, and 2012-2014 and used that design value to project the receptor's future design value. EPA reasoned that this approach appropriately accounts for variability in ozone-conductive meteorology because the maximum serves as an indicator for how high ozone-concentration levels could reach under ozone-conducive conditions. La./Tex. Proposal at 9827.

2012-2014), necessarily could not account for changes in meteorological conditions that are conducive to ozone formation that may affect whether an area currently in attainment may exceed the NAAQS.[73] RTC at 227. And even if emissions overall might trend downward, this did not mean the latest design value that Texas used (2012-2014) could confidently be relied on to represent ozone-conducive meteorological conditions that reflect what could occur in the future, as 2013 and 2014 were not ozone-conducive in many locations. Tex. TSD at 13 (stating that ozone concentrations that the receptors identified by Texas "sometimes increase by 2 to 4 ppb from one year to the next"); *id.* at 32 (noting that "2013 and especially 2014 were not conducive to ozone formation" in the Midwest); La./Tex. Proposal at 9827.

Moreover, Texas's method for identifying maintenance receptors does not comport with its method for identifying nonattainment receptors. As explained above, a nonattainment receptor is one that is projected to exceed the NAAQS in the analytic year, but a maintenance receptor is one that *may* exceed the NAAQS in the same analytic year. Logically, a receptor identified as a nonattainment receptor should also be identified as a maintenance receptor (as is the case under EPA's approach). Disapproval at 9349. However, Texas's methods for identifying

[73] In other words, EPA did not require Texas to "give primary consideration" to interannual variability, Tex. Indus. Br. at 41, only that it "adequately consider interannual variability," RTC at 227.

maintenance and nonattainment receptors produced an illogical result where the same receptors identified as being in nonattainment in the future were also identified as *not* struggling to maintain the NAAQS in the same year. Tex. TSD at 5-9; La./Tex. Proposal at 9828. EPA thus determined that Texas's method for identifying maintenance receptors was "unreasonable and internally inconsistent." Tex. TSD at 9.

Because Texas's method for identifying maintenance receptors failed to adequately identify maintenance receptors, EPA reasonably determined that Texas's method was technically flawed. La./Tex. Proposal at 9828-29.

Texas Petitioners' other arguments regarding Texas's method for identifying maintenance receptors—that (1) the method accounted for maintenance plans, as required under the Act; and (2) Texas had a reliance interest in the Modeling Memo—are meritless for the reasons stated below.

b. Texas did not take into account maintenance plans in identifying maintenance receptors.

Texas Petitioners contend that Texas honored the Good Neighbor Provision's directive that the "interfere with maintenance" prong is applied "consistent with the provisions of [title I of the Act]," because 42 U.S.C. § 7505a(a) requires states to implement a "maintenance" plan for certain areas that were once in nonattainment, and Texas claimed to consider such maintenance plans in this methodology. Tex. Indus. Br. at 39 (quotations omitted). But *North*

Carolina held that the scope of the "interfere with maintenance" prong is not limited to areas subject to maintenance plans, and regardless, Texas did not actually take them into account in its methodology.

Under 42 U.S.C. 7505a(a), states with a nonattainment area that later attains the NAAQS may submit a maintenance plan if the state seeks to redesignate that area to attainment. But EPA explained that whether an area is under a maintenance plan is not necessarily relevant in determining whether an upwind state "interferes with maintenance" of the NAAQS, particularly so here, as neither Texas nor EPA "take current or presumed future designations of areas into account" when identifying receptors. La./Tex. Proposal at 9828. Indeed, the approach of focusing the "interfere with maintenance" analysis on only areas that were once in nonattainment was exactly what the D.C. Circuit in *North Carolina* rejected. 531 F.3d at 910.

Moreover, EPA explained that it is unclear how Texas accounted for maintenance plans in its approach, as "none of the areas to which Texas is linked in its own modeling has been redesignated to attainment for that NAAQS." La./Tex. Proposal at 9828. Thus, even assuming the maintenance planning requirements of Section 7505a(a) could have some relationship to the "interfere with maintenance" prong, Texas did not actually take them into account.

c. Attachment A to the Modeling Memo does not support Texas's methodology.

Texas Petitioners make several unsubstantiated arguments pertaining to their purported reliance on Attachment A to the Modeling Memo's suggestion that states could use alternative approaches to identify maintenance receptors. *See* Tex. Br. at 30-34 (citing Modeling Memo at A-2). As an initial matter, Texas made clear in its submission that it did not rely on Attachment A when it submitted its SIP to EPA, stating that it developed its submission before the Memos were issued. Tex. Submission at 1-2. So, Texas Petitioners cannot credibly claim they had a reliance interest. *See Regents*, 140 S. Ct. at 1914 (recognizing that a reliance interest requires having taken a specific action *in reliance* of an agency statement).

Further, Texas Petitioners mischaracterize Attachment A. All Attachment A amounted to was "a preliminary list of potential flexibilities that *may* warrant further discussion." Modeling Memo at 3 (emphasis added). EPA made clear that these ideas were not guidance, but ideas on which EPA merely invited "feedback." *Id.* at A-1; *see also* Disapproval at 9369. EPA expressly stated: it "is not at this time making any determination that the ideas [in Attachment A] are consistent with the requirements of the [Act], nor . . . specifically recommending that states use these approaches." Modeling Memo at A-1. In considering these ideas, EPA also listed "guiding principles to consider when evaluating the appropriateness of the concepts" in Attachment A, including "[c]ompliance with statutory requirements

and legal precedent from court decisions interpreting the [Act's] requirements." *Id.* Texas Petitioners ignore this clear language. Nowhere did EPA suggest that states could apply alternative approaches that lacked technical justification or failed to comport with the Act or applicable case law, as Texas's method for identifying maintenance receptors did. EPA stated the opposite. So Texas Petitioners could have no reasonable reliance interest, as EPA "specifically acknowledged" that the ideas in Attachment A's list of ideas have not yet been determined to be consistent with the Act's requirements and that states seeking to apply those ideas would need to consider whether those ideas complied with the statute and relevant case law. *Woodford v. Garceau*, 538 U.S. 202, 213 (2003) (O'Connor, J., concurring).

Texas Petitioners' argument that EPA then made a material change with the Maintenance Memo such that EPA violated Texas's reliance interest in Attachment A to the Modeling Memo is even weaker. Tex. Br. at 30-31. Nowhere in the record did EPA purport to disapprove any portion of Texas's submission based on the Maintenance Memo. *See supra* Arg. III.C.2.a. (explaining that EPA reasonably found that method to be technically flawed for reasons outside the Maintenance Memo). Indeed, Texas Petitioners cite to only general, broad statements EPA made in the Disapproval that have no specific relevance to Texas. *See* Tex. Br. at 30-31 (citing Disapproval at 9364, 9370, which was a general reference to states

that *did* rely on the Maintenance Memo); *compare* RTC at 230-32 (explaining the flaws in Texas's methodology), *with id.* at 233-34 (explaining separately the flaws in states' methodologies that applied the Maintenance Memo).[74] Therefore, Texas Petitioners again cannot claim they had a reliance interest in the Maintenance Memo, as it played no role in EPA's disapproval of Texas's submission. *See Regents*, 140 S. Ct. at 1914. There is also simply no inconsistency between Attachment A and the Maintenance Memo. The former listed three very general ideas for how to identify maintenance receptors, in bullet form, without any analysis, as ideas from outside stakeholders that EPA had not endorsed. Modeling Memo, Att. A. The latter provided more specific criteria that EPA developed as guidance for one way in which an alternative approach may be developed. Maintenance Memo at 1 ("present[ing] information that states may consider as they evaluate the status of monitoring sites . . . identified as potential maintenance receptors"). Setting aside that Texas's approach to maintenance receptors was not

[74] EPA's statements in the Disapproval that states "did not meet the terms of the . . . [Maintenance Memo]" and "no state successfully applied the[] criteria" are more applicable to states like Mississippi, which did attempt to apply the criteria set forth in the Maintenance Memo. Disapproval at 9364, 9370; *see supra* Arg. III.B.1. The May Order also mistakenly cited these broad statements, that are inapplicable to Texas, to preliminarily determine that EPA disapproved Texas's submission for failing to abide by the Maintenance Memo. *See* May Order at 18-19 (citing Disapproval at 9364, 9370).

even a dispositive basis for EPA's disapproval, nothing in EPA's disagreement with that approach contradicted either Memo.

Lastly, Texas Petitioners' argument that the Modeling Memo's guidance on maintenance receptors was not questioned by *Maryland* or *Wisconsin* is irrelevant. Tex. Br. at 33. EPA agrees that neither case specifically precluded alternative approaches for identifying maintenance receptors. But Texas Petitioners' selective reading of EPA's record does nothing but foster confusion. Those cases, which were pending before the D.C. Circuit as states submitted their SIPs for the 2015 ozone NAAQS, "called into question the EPA's use of 2023 as the analytical year in the [Modeling Memo]." Disapproval at 9364. They held that EPA must assess the impact of interstate transport on air quality by the next applicable downwind attainment date, which at the time was in 2021. *Maryland*, 958 F.3d at 1203; *Wisconsin*, 938 F.3d at 315. *Wisconsin* also invalidated at least one idea from Attachment A to the Modeling Memo by holding that discounting international contribution cannot be used to eliminate an upwind state's Good Neighbor obligation. 938 F.3d at 324; *see* Modeling Memo at A-3. Given these developments, in a part of the record unrelated to maintenance receptors, EPA observed that states claiming they should have been given additional time to revise their submissions based on the 2016v3 modeling had not acted to revise their submissions based on legal developments that affected states' Good Neighbor

obligations, as "no state moved to amend or supplement their SIP submissions with analysis of an earlier analytical year or to otherwise bring their analyses into conformance with those decisions (e.g., . . . through treatment of international contribution)." Disapproval at 9364. This brings into full view the irrelevance of Texas Petitioners' argument here: EPA's discussion of *Maryland* and *Wisconsin* in this part of the record was not a reason for EPA's disapproval of Texas's submission, nor related to EPA's consideration of Texas's methodology for identifying maintenance receptors.

Therefore, if the Court considers Texas Petitioners' arguments pertaining to Texas's methodology of identifying maintenance receptors (though it need not), those arguments fall short. EPA reasonably explained the flaws with Texas's methodology, and Texas can claim no reliance interest on the 2018 Memos in its alternative maintenance methodology, since EPA did not need to either rely on or abandon those Memos in explaining why Texas's approach was flawed.

3. Texas's 2012-based modeling was not a reason for EPA's disapproval of Texas's submission.

Lastly, EPA did not disapprove Texas's submission because it used alternative 2012-based modeling, and therefore, this Court need not consider Texas Petitioners' argument regarding Texas's 2012-based modeling. EPA simply documented concerns that the 2012-based modeling "underestimates future ozone levels" and conveyed that this may underestimate the amount of receptors and

linkages. La./Tex. Proposal at 9829, 9833-34; *see* Tex. TSD at 52-67. The modeling nonetheless identified several receptors to which Texas was linked, and EPA did not find Texas's use of alternative modeling a basis for disapproval. *See* La./Tex. Proposal at 9834; Tex. TSD at 66.

Even so, EPA reasonably identified aspects of Texas's chosen modeling as underestimating future ozone levels, Tex. TSD at 51-57, and the so-called "ballpark estimates" that Texas Petitioners erroneously claim were the reason for rejecting Texas's modeling, *see* Tex. Indus. Br. at 44-45, merely illustrated, by appeal to common sense, the magnitude of this underestimation.

EPA's "ballpark estimate" evaluation was two-fold. First, EPA reviewed long-term measured ozone trends provided by Texas and from EPA's ozone monitoring data, which showed that ozone concentrations at nonattainment receptors had decreased, on average, approximately 1 ppb/year. Tex. TSD at 12-31. Second, EPA compared Texas's modeling prediction for 2023 to the then-most recent measured ozone concentration, which was from 2020.[75] *Id.* at 38-51. Based on the long-term measured ozone trends, EPA "ballpark estimate[d]" that over 3 years (from the most recently measured data in 2020 to 2023), ozone concentrations might be expected to decrease by about 3-4 ppb. *Id.* at 40. But

[75] EPA also compared Texas's 2023 prediction to preliminary, measured ozone concentrations from 2021. Tex. TSD at 38.

EPA's comparison showed that to meet Texas's 2023 prediction, ozone concentrations would have to decrease much more than that (~6.83 ppb at the Colorado receptors, and ~12.07 ppb at the California receptors). *Id.* at 50; *see also id.* at 47-51. Yet such large drops in ozone concentration "do not typically occur unless there is an unexpectedly large change in emissions and/or large change in meteorological conduciveness for ozone generation." *Id.* at 41. Texas identified neither, and consequently, EPA reasonably determined that even its "ballpark estimates" (which were actually quite generous to Texas and which EPA acknowledged were of otherwise limited utility, *see id.* at 39-40 & n.23), were sufficient to confirm that Texas's 2012-based modeling resulted in underpredictions of 2023 ozone concentrations. *Id.* at 41.

Texas Petitioners' complaints about EPA's use of "ballpark estimates" cannot serve to invalidate the Disapproval. Even if the "ballpark estimates" were relevant for EPA's Disapproval, EPA provided a reasoned explanation for its use, which is afforded a high level of technical deference. *Miss. River Basin*, 230 F.3d at 175.

* * * * *

In sum, EPA's robust administrative record provides a straightforward case for denying the petitions for review. Petitioners' arguments lack legal and technical merit, and in many cases, they are simply irrelevant or, if accepted,

would not constitute prejudicial error because they concern issues that were not dispositive to the challenged EPA action. As EPA comprehensively explained, State Petitioners submitted technically deficient SIP submissions that contradicted their own modeling, and their conclusions that they need not consider emissions control strategies were unsupportable and unreasonable. Louisiana's and Texas's chosen modeling and methodologies showed that the states were linked to several receptors and their attempts to refute their chosen photochemical modeling results and contribution levels were technically unsound. Relatedly, Mississippi's chosen modeling showed that the state contributed over 1% of the NAAQS at a receptor in Texas, and its attempts to discount that linkage were technically unsound and misapplied the 2018 Memos. EPA therefore could not approve any of State Petitioner's submission, as the Act unambiguously requires states to prohibit emissions that significantly contribute to nonattainment or interfere with maintenance in other states, and no submission demonstrated, in an acceptable scientifically sound manner, that they had done so. Thus, the Act required EPA to disapprove those submissions as inconsistent with the Act's requirements. Thus, EPA lawfully disapproved State Petitioners' submissions.

IV. EPA's evaluation of the submissions was procedurally proper.

As detailed in Argument III, EPA lawfully disapproved State Petitioners' submissions on their own merits, as confirmed by EPA's 2016-based modeling,

which EPA lawfully and reasonably considered, *infra* Argument V. While Petitioners mount procedural attacks regarding EPA's delay and claim that EPA had to first issue a "SIP Call," these are merely unjustified attempts to delay compliance with the Good Neighbor Provision.

A. EPA's timing in acting on the submissions did not alter its substantive review authority.

There is no basis under the Act to invalidate EPA's substantive actions or nullify the authority granted to EPA purely because of its delay in taking action. *See* Disapproval at 9364-65. The Supreme Court has consistently declined to treat a statutory requirement that an agency "'shall' act within a specified time, without more, as a jurisdictional limit precluding action later." *Barnhart v. Peabody Coal Co*., 537 U.S. 149, 158 (2003). When "there are less drastic remedies available for failure to meet a statutory deadline, courts should not assume that Congress intended the agency to lose its power to act." *Brock v. Pierce Cnty*., 476 U.S. 253, 260 (1986).

Petitioners place undue weight on the procedural deadlines by which plans are to be submitted and reviewed, which do not supersede the substantive requirements of the Act, including the Good Neighbor Provision or other relevant provisions with which the Good Neighbor Provision must be consistently implemented. In *Wisconsin*, the D.C. Circuit explained that SIP submission deadlines, unlike attainment deadlines, are "procedural" and therefore not "central

to the regulatory scheme." 938 F.3d at 322 (quotation omitted). The court contrasted those procedural deadlines with the text of the Good Neighbor Provision, which contains a substantive prohibition on upwind states from emitting in amounts "which will" significantly contribute to downwind nonattainment or "which will" interfere with maintenance of the NAAQS. *Id.* (quoting 42 U.S.C. § 7410(a)(2)(D)(i)). *See also Wisconsin*, 938 F.3d at 316 (quoting *Train*, 421 U.S. at 66) (describing the NAAQS's attainment deadlines as the "heart" of the Act); *id.* at 318 ("When EPA determines that a State's SIP is inadequate, EPA presumably must issue a FIP that will bring that State into compliance before upcoming attainment deadlines, *even if the outer limit of the statutory [§ 7410] timeframe gives EPA more time to formulate the FIP*." (emphasis added)); Disapproval at 9361-62 (explaining the same).

Louisiana, in particular, wrongly interprets the Act's statutory review periods as cabining EPA's authority to conduct its own modeling. La. Br. at 44-45. This is pure conjecture. Louisiana cites no legal support for this proposition. In fact, the Act's procedural deadlines were intended to implement the substantive goals of the Act and to be action-forcing. *See Oklahoma*, 723 F.3d at 1223-24. With the Good Neighbor Provision, specifically, Congress sought to prohibit emissions that "will" contribute significantly to nonattainment or "will" interfere with maintenance, and it would be anomalous to conclude that Congress intended

to nullify that plain language because of procedural delay. Indeed, updating EPA's understanding of air quality is foundational to EPA's implementation of and compliance with the Act. *See infra* Arg. V.A. (explaining that EPA lawfully considered updated data); 42 U.S.C. § 7403 (authorizing air-quality research activities).

Moreover, EPA's timeliness under the Act is not for this Court to review, but, as was the situation here, appropriately adjudicated in district court. *See supra* Background B.4. The Act provides only one judicial recourse when there is an alleged failure by EPA to perform a nondiscretionary duty—for EPA to be placed on a court-ordered deadline to address the relevant obligations. 42 U.S.C. § 7604(a)(2); *see also BCCA Appeal*, 476 F. App'x at 582; *Oklahoma*, 723 F.3d at 1223-24; *Mont. Sulphur & Chem. Co. v. EPA*, 666 F.3d 1174, 1190-91 (9th Cir. 2012). Notably, no Petitioner in this litigation sought such relief.

EPA does not dispute that the Act required it to take final action on the State Petitioners' SIP submissions by certain deadlines under 42 U.S.C. § 7410(k) or that those deadlines were missed. Disapproval at 9364. However, Petitioners' claims that EPA "leverage[d]" such delay are false. Tex. Br. at 22-25; *see also* La. Br. at 44-45; Miss. Br. at 43-46. EPA considered new information in a neutral fashion, approving SIP submissions where appropriate. *See, e.g.*, 87 Fed. Reg. 21578 (Apr. 12, 2022) (approving Montana's SIP based on the new 2016-based modeling

results). The Court has no basis to read bad faith or improper motive into the Disapproval, and Petitioners have supplied no evidence to support the claim. *See Biden v. Texas*, 142 S. Ct. 2528, 2546-47 (2022) (holding that a presumption of regularity attends agency action absent a "strong showing of bad faith or improper behavior" (quotation omitted)).

Further, Petitioners suffered no prejudice from such delay. Disapproval at 9364. The belated Disapproval *deferred* implementation of the Good Neighbor Provision—with the effect of affording upwind states a period of reprieve from prohibiting emissions that should have been implemented no later than the Marginal attainment date in 2021, postponing relief owed to downwind states. *Id.* Further, had EPA acted earlier, such action would not have resulted in approval of State Petitioners' submissions because, as explained *supra* Argument III, the submissions did not meet the Good Neighbor Provision's requirements on their own sets of data.

And even if EPA *had* approved the submissions based on information later shown to be incorrect, nothing would have barred EPA from correcting that approval based on later information indicating that its earlier approval was erroneous. *See* Disapproval at 9364; *see also* 42 U.S.C. § 7410(k)(6) (providing EPA the authority to correct SIP actions that later prove to be in error); *supra* Arg. II.A.1. Thus, an earlier approval based on modeling later shown to be flawed

would not have insulated a state from a later disapproval. *See* Disapproval at 9364; *see, e.g.*, 86 Fed. Reg. at 23067-68 (correcting error on Kentucky's approval of its 2008 ozone NAAQS Good Neighbor SIP to a disapproval and promulgating FIP); *see also EME Homer*, 795 F.3d at 132-36, 138 (upholding error correction of 22 Good Neighbor SIP approvals to disapprovals).

EPA explained its reasons for the Disapproval's timing and did not intentionally delay action to disapprove SIP submissions. Disapproval at 9364-65. EPA's workload was affected by its unexpected obligation to address the D.C. Circuit's remand of the Update Rule, EPA's federal plan addressing an earlier ozone standard, and the need to promulgate a new rule on remand, the Revised Update Rule. *See New Jersey*, 475 F. Supp. 3d at 334 (placing EPA on a deadline for that action of March 15, 2021); Disapproval at 9365. Faced with missed deadlines, limited resources, and impending consent-decree obligations, EPA was nonetheless able to review and evaluate the SIP submissions in a coordinated fashion and ultimately acted on all the states' submissions in a consistent manner and in line with applicable case law.

Thus, the mere fact that EPA missed procedural deadlines does not permit this Court to invalidate the Disapproval nor cabin what EPA may consider at the time it acted. There is no legal recourse for delay other than a court-ordered deadline, Petitioners have shown no prejudice from any delay, and granting such

relief would elevate procedural deadlines over substantive ones, and force substantive noncompliance with the Act.

B. The Act does not authorize EPA to issue a SIP Call or allow states additional time to revise their submissions in lieu of EPA taking action on submissions.

As addressed above, any delay did not alter EPA's substantive authority to review SIP submissions. Relatedly, any delay did not require EPA to first issue a SIP Call before disapproving inadequate SIP submissions and issuing a FIP.[76] Tex. Br. at 24 (citing 42 U.S.C. § 7410(k)(5)); Miss. Br. at 47-48. *EME Homer* addressed these arguments and unequivocally rejected them, holding that EPA was not required to give states a second chance or to issue guidance or instructions before disapproving a Good Neighbor SIP submission. 572 U.S. at 508-09. The Supreme Court explained that this principle flowed from the general structure of the SIP approval process under 42 U.S.C. § 7410. *See id.* at 510 (holding that the D.C. Circuit erred by "altering the schedule Congress provided for SIPs and FIPs," "allow[ing] a delay Congress did not order and plac[ing] an information submission obligation on EPA Congress did not impose").

The same principle applies here. As EPA explained, the question whether EPA could or should issue a SIP Call to states under 42 U.S.C. § 7410(k)(5), as a

[76] The merits of EPA's FIP are not the subject of this litigation and are being litigated separately. *See supra* Background C.

discretionary matter, is outside the scope of the Disapproval and is effectively a petition for additional rulemaking. RTC at 395-96. A court is "not free to impose" procedural obligations not required by statute on an agency. *Vt. Yankee Nuclear Power Corp. v. NRDC, Inc*., 435 U.S. 519, 524 (1978). And EPA explained the problem that allowing a SIP revision would pose, by prioritizing "giving states further opportunities to submit an approvable SIP before EPA promulgates a FIP, rather than prioritizing the statutory obligation to eliminate pollution [violating the Good Neighbor Provision] as expeditiously as practicable." RTC at 396.

Nor would allowing Petitioners to revise their SIP submissions or issuing a SIP Call relieve EPA of its statutory deadline to act on the SIP submission. *Id*. EPA issued the Disapproval to act on SIP submissions because it was required to by 42 U.S.C. § 7410(k)(2)-(3). Indeed, EPA was subject to multiple judicially enforceable consent decrees to act on the SIP submissions by a specific date. *See supra* Background B.4. Simply put, EPA lacked authority to decline acting on the SIP submissions that were before it.

Petitioners' suggestion should be viewed for what it is—a transparent attempt for further delay in meeting their statutory obligations, subverting Congress's intent in the Good Neighbor Provision and the larger structure of the Act. Petitioners readily note, and EPA agrees, that states bear primary responsibility for formulating SIP submissions. *See* Disapproval at 9364. States

have had ample opportunity to revise their deficient SIP submissions here—a full year separated EPA's Proposals from its Disapproval. During that time, State Petitioners could have prepared new submissions to address the more accurate 2016-based modeling and more recent monitoring data, as two states, Alabama and Missouri, chose to do. *Id*. at 9358 n.168, 9364. In new SIP submissions, states could have conducted significance analyses, as informed by updated modeling and the proposed FIP. To date, states still possess this opportunity.

Petitioners ignore several key aspects of the proposed FIP in suggesting that EPA had pre-judged its ultimate disapproval of the States' plans by proposing the FIP. Tex. Br. at 14; La. Indus. Br. at 12-13.

First, in the proposed FIP, EPA "provide[d] states with as much information as [it] c[ould] supply at th[at] time to support their ability to submit SIP revisions to achieve the emissions reductions the EPA believes necessary to eliminate significant contribution." 87 Fed. Reg. at 20040; *see also* Disapproval at 9362 (citing similar guidance from prior Good Neighbor rulemakings).

Second, EPA repeatedly emphasized that states have the freedom "*at any time*" (even throughout this litigation) to develop a revised SIP submission and to submit to EPA for approval. 87 Fed. Reg. at 20051, 20052 (emphasis added); Disapproval at 9362. This remains true, even after a disapproval or promulgation

of a FIP. *See* 88 Fed. Reg. at 36658; Disapproval at 9362. Yet no State Petitioner has done so.

Third, EPA committed that it would not finalize a FIP for any state until a final action on the SIP submission and made clear that it would approve SIP submissions that satisfy the Good Neighbor Provision's substantive requirements, 87 Fed. Reg. at 20040, just as it has done before, *see, e.g.*, 82 Fed. Reg. 46674 (Oct. 6, 2017) (approving Alabama's SIP submission replacing an earlier FIP). True to its word, EPA did *not* finalize the Good Neighbor Plan for three states (Delaware, Tennessee, and Wyoming) even though they had been included in the proposed FIP.[77] 88 Fed. Reg. at 36656.

Relatedly, Petitioners read too much into the timing of the proposed FIP, which was well within EPA's authority to issue when it did in the spring of 2022. Disapproval at 9361; *EME Homer*, 572 U.S. at 509. If EPA is authorized by the Act to promulgate a FIP "at any time" within two years after disapproving a SIP and need not "postpone its action even a single day," then it necessarily follows that EPA may *propose* a FIP before taking final action on a SIP. *EME Homer*, 572 U.S. at 509. Nothing in the Act barred EPA from proposing a FIP as a backstop that EPA would finalize only if it ultimately disapproved a SIP submission. *Id.*; Disapproval at 9362. And EPA was subject to court orders calling for alignment of

[77] EPA recently proposed approval of Wyoming's SIP submission. *See supra* n.24.

Good Neighbor actions, if at all possible, with the 2023 ozone season, in time for the 2024 Moderate area attainment date. *See Wisconsin*, 938 F.3d at 318; *Maryland*, 958 F.3d at 1203-04. EPA's approach was therefore at the very least reasonable and indeed necessary to ensure substantive compliance with the Good Neighbor Provision, either by approving a SIP, or where deficient, by issuing a FIP.

V. While not dispositive to EPA's Disapproval, EPA's consideration of the 2016-based modeling was lawful and reasonable.

EPA's consideration of the updated 2016-based modeling was not outcome-determinative of whether EPA lawfully disapproved State Petitioners' SIP submissions. Contrary to Petitioners' claim that EPA moved the goal posts on states' Good Neighbor obligations by relying on updated modeling not available when states prepared their submissions, *see, e.g.*, Miss. Br. at 49 (citing May Order at 20), EPA made clear that it did not disapprove any state's submission based on the state's chosen modeling or evaluate submissions based solely on the 2016-based modeling. Disapproval at 9366; RTC at 60; *see supra* Arg. III. Thus, this Court need not consider the merits of Petitioners' arguments about the 2016-based modeling, which are merely a distraction. Because the updated modeling did not ultimately determine whether EPA lawfully disapproved each state's SIP submission, any error in EPA's use of updated modeling would not be grounds for granting the petitions. *See* 5 U.S.C. § 706 ("[D]ue account shall be taken of the

rule of prejudicial error."); *Sierra Club*, 939 F.3d at 687 (upholding EPA's SIP approval based on state's chosen modeling without reaching merits of EPA's modeling).

Regardless, as detailed below, consideration of the updated modeling was a lawful and reasonable aspect of EPA's independent evaluation of the SIP submissions and simply confirmed EPA's assessment of each state's submission. Petitioners' arguments on the 2016-based modeling are belied by the record.

A. EPA lawfully and reasonably considered the most up-to-date data.

EPA's consideration of the most up-to-date data is supported by the plain text of the Good Neighbor Provision, which is forward-looking, and has been upheld by several courts that have already addressed this issue. EPA provided states with ample notice of its consideration of the updated data and modeling and has consistently taken the position that it would consider the most recent data available. Thus, EPA's consideration of the 2016-based modeling (while not dispositive for its Disapproval) was lawful and reasonable.

1. EPA lawfully considered the most up-to-date data.

EPA was well within its statutory authority to consider the most accurate and up-to-date data available to evaluate states' SIP submissions, as it was required to consider "relevant data" to complying with the Good Neighbor Provision. *State Farm*, 463 U.S. at 43; *see also* Disapproval at 9366. Limiting EPA's review to

exclude updated data risks arbitrariness. *See Sierra Club v. EPA*, 671 F.3d 955, 967-68 (9th Cir. 2012) (holding that EPA acted arbitrarily and capriciously for disregarding newly available data when evaluating SIP submissions). Thus, the data State Petitioners had available *and* the additional data EPA considered were both relevant to this evaluation.

EPA's position is consistent with the plain text of the Good Neighbor Provision, which is forward-looking and requires elimination of emissions that "will" significantly contribute to nonattainment or "will" interfere with maintenance in downwind states. 42 U.S.C. § 7410(a)(2)(D)(i)(I). Certainly nothing in the Act prohibits EPA from considering relevant data available at the time of its action, and EPA has consistently done so. *See, e.g.*, 81 Fed. Reg. 74504, 74507 (Oct. 26, 2016) (addressing *EME Homer*'s remand of part of Cross-State Rule by relying on updated modeling prepared after remand); 82 Fed. Reg. 32673, 326973-74 (July 17, 2017) (proposing to approve Minnesota's Good Neighbor SIP for the 2008 ozone NAAQS based on EPA's modeling developed after receiving submission), *approved on those grounds in* 82 Fed. Reg. 58116 (Dec. 11, 2017); 86 Fed. Reg. 31645, 31648-49, 31654 (June 15, 2021) (proposing to approve Kansas's and Nebraska's Good Neighbor SIPs for the 2010 sulfur dioxide NAAQS based in part on EPA's independent analyses of monitoring data

and publicly available modeling), *approved on those grounds in* 86 Fed. Reg. 43960 (Aug. 11, 2021).

EPA's position also aligns with existing case law. As the D.C. Circuit concluded in *Wisconsin*, it would be "anomalous" for EPA to ignore the most reliable data for making projections, as the Good Neighbor Provision focuses on air-quality conditions in a *future* year, here 2023. 938 F.3d at 321-22; *see also* Disapproval at 9366. Cabining EPA's consideration to only information that states had available at the time of their SIP submission deadlines would elevate the "procedural" deadlines of the Act above the substantive requirements of the Act that are "central to the regulatory scheme." *Sierra Club v. EPA*, 294 F.3d 155, 161 (D.C. Cir. 2002) (invalidating EPA's extension of the attainment deadline notwithstanding missed procedural deadlines). Nothing in the Act requires EPA to make substantive errors in its Good Neighbor analysis and reject more recent refined and high-quality modeling and monitoring data in what should be a forward-looking analysis. *See Bd. of Cnty. Comm'rs of Weld Cnty. v. EPA*, 72 F.4th 284, 290 (D.C. Cir. 2023) (recognizing that EPA generally must base its decisions on the best available data).

Petitioners mistakenly rely on *Sierra Club v. EPA*, 356 F.3d 296 (D.C. Cir. 2004) and EPA's actions in other contexts (not the Good Neighbor Provision) to argue that EPA's "longstanding policy" limits its analysis to modeling available at

the time of SIP development. Tex. Br. at 36 (citing 81 Fed. Reg. 59876 (Aug. 31, 2016)); Miss. Br. at 45-46, 49 (citing 69 Fed. Reg. 21727 (Apr. 22, 2004), 68 Fed. Reg. 19106 (Apr. 17, 2003), and 81 Fed. Reg. 59876). Whatever the circumstances of those prior notices, no such "longstanding policy" exists. *See, e.g.*, 86 Fed. Reg. 67329, 67332 (Nov. 26, 2021) (partially approving and partially disapproving California's attainment plan for the 1997 particulate matter NAAQS because "it would be inappropriate for the EPA to ignore monitoring data that clearly establish, as a factual matter, that the [state's] attainment demonstration failed to provide for attainment").

Further, *Sierra Club*, 356 F.3d at 296, and the EPA actions that Petitioners cite address a different provision of the Act, 42 U.S.C. § 7502, which expressly requires states with nonattainment areas to incorporate a "*current* inventory of *actual* emissions" in their attainment plans, *id.* § 7502(c)(3) (emphasis added), and EPA's implementing regulations, 40 C.F.R. Pt. 51, require states to use the latest model available when developing their plans, RTC at 61 (citing 40 C.F.R. § 51.112(a)(1)). Notwithstanding this plain difference, EPA's approach even in this other context is more nuanced than Petitioners admit. For instance, EPA has stated that consideration of an updated motor vehicle emissions model was not required if the SIP submissions were "*otherwise approvable*." 68 Fed. Reg. 19106, 19121 (Apr. 17, 2003). Regardless, whether EPA requires *states* to incorporate

more up-to-date motor vehicle information to meet this particular requirement, EPA *itself* often considers updated information in assessing attainment plans. *See, e.g.*, 84 Fed. Reg. 24712, 24714 (May 29, 2019) (approving Louisiana's attainment plan based in part on EPA's supplemental modeling); 88 Fed. Reg. 10464, 10465 (Feb. 21, 2023) (approving Illinois's attainment plan based partially on EPA's supplemental modeling to state's modeling).

In *Sierra Club*, EPA allowed Maryland, Virginia, and Washington, D.C. to rely on an older mobile sources' emissions model in their attainment plan despite the regulatory requirement for states to use the latest version of EPA's mobile source emissions model. 356 F.3d at 308. The D.C. Circuit agreed with EPA that the more important concern was getting the Severe nonattainment area into attainment, rather than delaying air-quality improvement action by requiring the plan to be rewritten by the states to incorporate an updated model that had been released one month before the attainment plan was submitted to EPA. *Id.* So, if *Sierra Club* is relevant at all, it underscores that EPA's driving motivation is expeditious attainment of the NAAQS and avoiding delay through redevelopment of certain informational portions of SIP submissions. Petitioners cannot credibly use *Sierra Club* to exclude updated data and support their plea for further delay.

Moreover, while commenters objected to EPA's consideration of updated modeling and data during the rulemaking, none specifically raised that EPA had

deviated from its longstanding policy. Therefore, while EPA disputes that any longstanding policy even exists, Petitioners have waived the right to assert such an argument. *See Tex. Oil & Gas Ass'n*, 161 F.3d at 933 n.7 (finding waiver for failure to raise objection during rulemaking).

In considering the best available data, even data available after the states' submissions, EPA was not jockeying for control of the states' plans. Notably, the updated modeling did not universally confirm disapprovals but was applied neutrally. If the updated data showed that a state would have no Good Neighbor obligation, EPA approved its SIP, as it has done with Connecticut, Delaware, and has proposed to do for Wyoming. *See infra* Arg. V.B.4. (discussing Connecticut's and Delaware's submission); *supra* n.24 (describing Wyoming's proposed approval).

By contrast, it is Petitioners who are leveraging data that they perceive as more favorable to skirt their obligations. If the updated data demonstrated that these states satisfied their Good Neighbor obligations, they presumably would be advocating for such use. Mississippi in fact does so, arguing that EPA must use 2016-based modeling when it indicates one linkage has resolved, but arguing against the use of that modeling when the data indicate another linkage has emerged. Miss. Br. at 14, 37, 39 n.7, 43-51. But even with this leveraging, they fail to demonstrate that their SIP submissions were adequate. The record makes

clear that under each set of modeling, each state was linked to at least one receptor for which the state failed to demonstrate that its contributions were not significant. Disapproval at 9343, 9356-57, 9359; La./Tex. Proposal at 9816, 9831; Miss. Proposal at 9558.

EPA lawfully and reasonably considered updated 2016-based modeling and data to confirm its bases for disapproving Mississippi's, Louisiana's, and Texas's submissions. Its consideration of this data was consistent with the text of the Good Neighbor Provision and existing case law.

2. EPA provided fair notice of its consideration of updated data.

In considering updated modeling, EPA committed no "surprise switcheroo." May Order at 20; Tex. Br. at 19-20, 34-39; La. Br. at 42, 46-52; La. Indus. Br. at 39-41; Miss. Br. at 49-51. EPA's updated modeling was not performed to "move the administrative goalpost" for states but was meant to provide updated emissions projections, which neither the states nor EPA could validly ignore. *Cf., e.g.*, Miss. Br. at 49 (quoting May Order at 20).

Petitioners had fair notice of the 2016v2 modeling, which was published in the Proposals, and wrongly assert that the 2016v3 modeling must have undergone additional notice and comment. Tex. Br. at 36-37; La. Indus. Br. at 38 (citing May Order at 19-20); Miss. Br. at 47-49. Petitioners "need not have an opportunity to comment on every bit of information influencing an agency's decision." *Tex. Off.*

of Pub. Util. Counsel v. FCC, 265 F.3d 313, 326 (5th Cir. 2001) (quotation omitted). To require what Petitioners demand "would lead to the absurdity that the agency can learn from the comments on its proposals only at the peril of starting a new procedural round of commentary." *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 546-47 (D.C. Cir. 1983) (quotation omitted); *see also Chem. Mfrs. Ass'n v. EPA*, 870 F.2d 177, 202 (5th Cir. 1989) (holding that there is no need for additional comment where EPA "did not supplant its economic-impact study, or replace its original data with completely new and different data, but, in response to industry criticisms, updated and expanded one of several data sources"). All that is required is an opportunity to comment on the proposed rule. *Huawei Techs. USA, Inc. v. FCC*, 2 F.4th 421, 447 (5th Cir. 2021). And a proposed action provides adequate notice when the final action is a "logical outgrowth" of the proposed rule, meaning that "the affected party should have anticipated the agency's final course in light of the initial notice." *Id.* (quotation omitted). Further, to show that EPA arbitrarily and capriciously failed to undergo notice and comment on the updated modeling, Petitioners "must show how they were prejudiced by [EPA's] failure to solicit additional comments." *Tex. Off. of Pub. Util. Counsel*, 265 F.3d at 326.

EPA satisfied the necessary notice-and-comment requirement, and Petitioners cannot show that they were prejudiced. The Proposals made clear that

EPA was considering updated modeling, and Petitioners had an opportunity to comment on the 2016v2 modeling. La./Tex. Proposal at 9801; Miss. Proposal at 9548. Updates between the 2016v2 and the 2016v3 modeling were refinements reasonably anticipated, and any changes reflected in the Disapproval were a logical outgrowth of the Proposals, which introduced 2016v2. Disapproval at 9343-48. EPA did not materially change its modeling platform but, in incorporating commenter feedback, made updates to its emissions inventories related to, for example, NO_X emissions from lightning strikes, non-power plant emissions, and point source oil and gas emissions. Disapproval at 9345-48; *compare* 2016v2 Emissions TSD at 4-8 *with* 2016v3 Emissions TSD at 5-8 (updates to some inputs between the 2016v2 and 2016v3 platforms). So no additional notice and opportunity for comment was required for the 2016v3 modeling because EPA "did not supplant its [2016v2-based modeling], or replace its [2016v2-based modeling] with completely new and different data," but "updated and expanded one of several data sources" in response to comments. *Chem. Mfrs. Ass'n*, 870 F.2d at 202; *see also* Disapproval at 9343 ("EPA's final decision to disapprove these states' SIP submittals is based on our evaluation of the entire record[.]"). Indeed, EPA proceeded with finalizing the Disapproval only for those states where the 2016v3 simply confirmed EPA's assessment under 2016v2. *See infra* Arg. V.B.4.

Therefore, Petitioners cannot show they were prejudiced by their inability to comment on 2016v3. *See Tex. Off. of Pub. Util. Counsel*, 265 F.3d at 326.

EPA's consideration of violating-monitor receptors illustrates the role of the public comment process and the importance of updated data. Violating-monitor receptors are not projected in the modeling to exceed the NAAQS in 2023, but in 2021 and 2022, were *measuring* exceedances. Disapproval at 9349. In response to comments pointing out that recent monitoring information showed persistent elevated ozone levels, EPA identified certain "violating monitors" as a new class of receptors in the final Disapproval that it considered "only in a confirmatory way" for states that were already linked in the modeling. *Id*. at 9342. Thus, EPA's consideration of violating-monitor receptors shows how updated data aids in accurately projecting future ozone concentrations and whether upwind states will actually significantly contribute to ozone air-quality problems in downwind states. If the EPA's evaluation of information regarding 2023 projections was arrested at the time of some deadline in the past or with the issuance of some older set of modeling results, then the purpose of notice-and-comment rulemaking would itself be frustrated, because no matter what arguments commenters could make about more recent or current real-world conditions or updated projections regarding 2023, EPA would be forced to ignore them. RTC at 62.

Contrary to Petitioners' characterization that EPA sprung updated modeling upon the states, *see, e.g.*, Tex. Br. at 38, EPA had been working with states to improve the modeling platform for years, publishing a series of data and modeling releases, which could have been used to track how EPA's modeling updates were potentially affecting the list of possible receptors and linkages for the 2015 ozone NAAQS in the 2023 analytic year. *See* Disapproval at 9366; *supra* Background B.3. EPA started working with states to update the 2011-platform to the 2016-platform years before providing 2016 meteorology and boundary conditions (used in the 2016v1 version) in 2020. *See* Disapproval at 9339. Then, EPA, released updated emissions inventory information used in 2016v2 in September 2021, and provided updated 2016v3 modeling results in January 2022. *Id.* at 9366. EPA notified stakeholders of the updated modeling results, and states and other interested parties had multiple opportunities before the Proposals in February 2022 to provide input for EPA to incorporate into the modeling (and in fact, State Petitioners did so)[78] and to consider how modeling updates could affect their Good Neighbor obligations. *Id*.

And of course, once the Proposals were issued, states had the opportunity to consider the updated modeling. Yet only Alabama and Missouri incorporated this

[78] Louisiana and Texas commented on the 2016v1 modeling in 2020. *See supra* n.11.

updated modeling into new submissions after EPA issued its Proposals. *See* Disapproval at 9358 n.168, 9364. Texas Petitioners extensively detail how Texas undertook its own analysis, chose a different base year of 2012, and could conduct its own independent air-quality modeling. Tex. Br. at 10-12. But Texas undertook no effort to ensure that it was using an appropriate future analytic year after the court decisions in *Maryland* and *Wisconsin*, to which it was a party, indicated that looking at air quality in 2023, later in time than the Marginal attainment date in 2021, was inappropriate. *See supra* Background B.1. Texas also undertook no effort to ensure that it was relying upon the most updated data in assessing its Good Neighbor obligations, despite its technical capability, even after EPA notified Texas in the Proposals of the availability of updated data. *See* Disapproval at 9364.

In sum, EPA provided Petitioners with fair notice at each round of modeling and complied with the APA's notice-and-comment requirement.

3. Louisiana has no reliance interest in the 2011-based modeling.

Because the 2016-based modeling served to only confirm EPA's assessment of the states' submissions, *see infra* Arg. V.B.1., and EPA did not change its longstanding policy of evaluating Good Neighbor SIP submissions by considering the most up-to-date data, Louisiana cannot have a cognizable reliance interest in the 2011-based modeling provided in the Modeling Memo. *Regents*, 140 S. Ct. at

1913; *see* La. Br. at 50, 52-53; La. Indus. Br. at 39-41; *contra* May Order at 19-21 (preliminarily finding that EPA likely infringed on reliance interests by considering updated modeling). EPA's longstanding policy is to evaluate Good Neighbor SIP submissions according to its 4-step framework and has long considered the most updated data. *See supra* Background A.2., Arg. V.A.1. The Disapproval did not change that policy, as the Modeling Memo merely provided the most up-to-date modeling results available at the time.

Louisiana has no reasonable reliance interest for the additional reason that the Modeling Memo made clear that the modeling results provided in that Memo were not themselves determinative of whether EPA would approve any SIP. Modeling Memo at 2; *see also* Disapproval at 9368. EPA stated: while states may use "the information in th[e] memorandum and the associated air quality analysis data . . . to inform the development of the[ir] SIPs, the information [wa]s not a final determination regarding states' obligations under the good neighbor provision." Modeling Memo at 2; *see also* La./Tex. Proposal at 9801; Disapproval at 9340. And EPA explained in that Memo that any action on any SIP submission would be subject to notice and comment. Modeling Memo at 2. EPA's clear language in the Modeling Memo invalidates any reliance interest claim Petitioners could allege. *Cf. State v. Biden*, 10 F.4th 538, 553-54 (5th Cir. 2021) (per curiam) (holding that the states could claim a reliance interest because the agency

document at issue had stipulated tangible effects the document would have on the states and acknowledged that the document "establishe[d] a binding and enforceable commitment between [the Agency] and [the state]" (quotation omitted)).

Even if Louisiana could claim a reliance interest (and it cannot), any reliance interest would be particularly feeble. Louisiana's choice to use EPA's 2011-based modeling (which demonstrated multiple linkages just as the later modeling did) is a far cry from the reliance interests found to exist in *Regents*, 140 S. Ct. at 1914, where recipients of a federal program made several life decisions "all in reliance" on the program, or in *Encino*, 579 U.S. at 222-23, in which industry had relied upon an agency's decades-long policy to negotiate and structure compensation plans. Louisiana does not explain how the Modeling Memo changed its course of conduct. Further, Louisiana was not actually harmed by any purported reliance. It did not adopt or implement *any* additional controls in its SIP submission, nor did it expend concrete costs, separate from the administrative costs of developing a SIP that all states must incur, as a result of its claimed reliance on modeling in the Memo. *See* Disapproval at 9373; *see supra* Arg. III.A.2. (explaining that harm from a reliance interest must be specifically identified to the federal action).

Lastly, even if reliance interests were to exist and even if EPA had changed its policy (neither of which is true), EPA provided a rational explanation and

justification for developing and using updated modeling. *See supra* Background B.3., Arg. V.A.1. This is all that is required under *FCC v. Fox Television Stations, Inc*., 556 U.S. 502, 515 (2009).

In sum, Louisiana had no legitimate reliance interest in the 2011-based modeling provided in the Modeling Memo.

B. The 2016-based modeling results confirmed EPA's assessment of each state's SIP submission.

The 2016-based modeling results confirmed EPA's assessment of each state's submission—that the state was linked to at least one receptor for which additional analyses were warranted. *See* Disapproval at 9367; RTC at 201-03. Because no state conducted a technically sound analysis of whether its contribution was significant, EPA lawfully disapproved the submissions in the Disapproval. Disapproval at 9367; RTC at 201-03. Petitioners attack the 2016-based modeling, none of which was dispositive to EPA's Disapproval. Even if it had been, Petitioners' arguments are meritless.[79]

[79] Louisiana Petitioners' argument that the modeling "yielded anomalous results, like higher ozone contributions even as precursors decreased," has already been addressed and is not discussed here. La. Br. at 21; *supra* Arg. III.A.1.b (explaining that ozone air-quality problems may persist even with some reduction in emissions).

1. The 2016-based modeling results confirmed, and did not contradict, the 2011-based modeling results.

The 2016-based modeling used at the Proposals and refined in the Disapproval in response to comments simply reflects the most up-to-date information. That updated data identified State Petitioners as linked to downwind nonattainment and maintenance receptors in 2023 and reinforced EPA's determination that State Petitioners contribute "to nonattainment in, or interfere with maintenance" of the NAAQS in downwind states. 42 U.S.C. § 7410(a)(2)(D)(i)(I); *see* La./Tex. Proposal at 9813-14, 9829-30; Miss. Proposal at 9557; Disapproval at 9367; RTC at 201-03.

Petitioners claim that the 2016v2 and 2016v3 modeling were materially different because they identified new linkages and contribution amounts. Tex. Br. at 35-37; La. Br. at 43; La. Indus. Br. at 39-40; Miss. Br. at 43-48. But that claim misunderstands the function and purpose of identifying linkages. In the context of interstate ozone transport, EPA reasonably focuses on whether upwind states impact *any* receptor at Step 2. *See* Disapproval at 9342 (explaining that EPA proceeds to Step 3 so long as there is a linkage at Step 2); RTC at 201. That is because pollutants from an upwind state do not "uniformly migrate downwind," *EME Homer*, 572 U.S. at 497, and meteorological data shifts from year to year, such that future ozone concentrations projections may well vary depending on which base year data is used for the estimation, Disapproval at 9367 (explaining

that use of "different meteorology," e.g., switching from a 2011-based to 2016-based emissions data, may well result in different linkages); RTC at 202 (recognizing that changes in meteorology can impact modeling results). So EPA reasonably focused on whether an upwind state was linked to a downwind receptor, regardless of location, to determine whether emissions reductions were warranted to eliminate an upwind state's contribution.

Therefore, differences in modeling results (in identifying different receptors or contribution amounts above a contribution threshold) did not change EPA's determination of when a state's chosen modeling and contribution threshold linked a state to receptors and thus warranted further analysis at Step 3. RTC at 201-03; Disapproval at 9367. In fact, EPA noted that consistent identification of linkages at Step 2 under different modeling scenarios confirmed rather than weakened a finding that a state's emissions needed to be evaluated to assess potential emissions reductions. Disapproval at 9367. And as summarized above, this exact scenario played out with Louisiana's, Mississippi's, and Texas's submissions—each state's own submission showed that it was linked to downwind receptors at Step 2 regardless of the modeling used.

The 2016-based modeling simply "*reinforce*[d] the EPA's conclusion that the upwind state is contributing to receptors at Step 2." RTC at 201.[80] And, as shown in the table below, each modeling run showed that each State Petitioner had continuous linkages to receptors in the same nonattainment areas ("Area"): Houston-Brazoria-Galveston, Texas ("HBG") and Milwaukee, Wisconsin ("M").

	2011-based[81]		2016v1[82]		2016v2[83]		2016v3[84]	
	Linked Receptor ID	Area	Linked Receptor ID	Area	Linked Receptor ID	Area	Linked Receptor ID	Area
La.	480391004 482010024 482011039 484392003	HBG	481671034 482010024	HBG	480391004 482010024 482010055 482011034 482011035	HBG	480391004 481671034 482010024 482010055 482011034 482011035	HBG
Miss.	482011039	HBG	481671034	HBG	480391004 482010055	HBG	481671034 482010055	HBG

[80] *See also* La./Tex. Proposal at 9816 (stating that the results from all modeling, including Louisiana's chosen modeling, "indicate[] that Louisiana's emissions were substantial enough to generate linkages at Steps 1 and 2 to at least some set of downwind receptors, under varying assumptions and meteorological conditions, even if the precise set of linkages changed between modeling runs"); Miss. Proposal at 9558 ("EPA's evaluation of Mississippi's submittal, in conjunction with its 2016-based modeling of 2023, indicates that ozone-precursor emissions from Mississippi are linked to downwind air quality problems."); La./Tex. Proposal at 9831 ("[B]ased on the EPA's evaluation of the information submitted by [Texas] and based on the EPA 2016v2 modeling results for 2023, the EPA proposes to find that Texas is linked.").

[81] Modeling Memo, Att. C.

[82] Ozone Design Values and Contributions Revised CSAPR Update, C.I. EPA-HQ-OAR-2021-0663-0008.

[83] La./Tex. Proposal at 9813-14 (Table LA-2), 9829-30 (Table TX-3); Miss. Proposal at 9558 (Table 2).

[84] 2016v3 Air-Quality TSD, App. C.

Tex.[85]	550790085	M	551010020	M	551010020	M	551010020	M

So, contrary to Petitioners' arguments otherwise, the 2016-based modeling was not the catalyst for the Disapproval. *See* La. Br. at 43; La. Indus. Br. at 38-40; Miss. Br. at 44-45. The Court need not evaluate EPA's consideration of the 2016-based modeling in deciding the merits of Petitioners' petitions for review. Even so, State Petitioners' attacks on the 2016-based modeling as it relates to their submissions is unsupported by the record, as addressed in turn below.

2. Under the 2016-based modeling, Mississippi will contribute to unacceptably high ozone levels at receptors in Texas.

EPA explained that Mississippi's submission was not approvable under the 2016-based modeling because Mississippi contributes to unacceptably high ozone levels at receptors in Texas, and Mississippi did not evaluate whether its contributions were significant. *See* Miss. Proposal at 9558; Disapproval at 9357-58.

Mississippi Petitioners' arguments to the contrary have already been addressed above. Their argument that Mississippi showed it was not linked to receptors under the 2016-based modeling because its contributions were within the

[85] Although Texas's 2012-based modeling showed no linkages to receptors in the Milwaukee, WI nonattainment area, EPA explained that may well be because the years of meteorological data that Texas used in its modeling were not conducive to ozone formation in the upper Midwest in those years. Tex. TSD at 33-34.

modeling's "margin of error," Miss. Br. at 52, is not a technically or legally sufficient reason for concluding that a state's contributions are not significant, *see supra* Arg. III.B.2. Their argument that Mississippi's additional analyses (specifically, back trajectories and wind roses) showed that Mississippi does not significantly contribute to ozone air-quality problems in Texas under the 2016-based modeling, Miss. Br. at 52-53, is technically deficient, *see supra* Arg. III.A.1.b.; *see generally* RTC at 357-72 (explaining the limitation of back trajectories for evaluating significant contribution). EPA reiterated the limitations of back trajectories in response to Mississippi's additional analyses, explaining that those corollary analyses confirmed EPA's photochemical modeling results and showed that Mississippi is upwind of the linked Texas receptors on high ozone days. RTC at 366-67. And contrary to Mississippi Petitioners' contention otherwise, EPA reasonably and comprehensively explained why evaluation of air movement at higher altitudes is more relevant for regional ozone transport.[86] *Id.* at 357-58, 360; *see also supra* Arg. III.A.1.b. (explaining that ozone transport is

[86] Specifically, EPA explained that (1) "[v]ariations in wind speed and direction between the ground and the mid-to top of the daytime mixed layer can result in different transport patterns aloft than near the ground"; (2) "pollutants that remain aloft during the day or are emitted aloft overnight above the very shallow nighttime surface layer can be transported long distances" and (3) "wind speed typically increases with height within the mixed layer, because the effects of surface roughness, which reduces wind speed near the ground, diminishes with height." RTC at 357-58. Indeed, Texas also commented that higher altitude back trajectories are more relevant to ozone transport. *See id.* at 369.

strongly influenced by wind directions at higher elevations and changes in wind direction over the path of the back trajectory); *cf.* Miss. Br. at 53.

Therefore, EPA reasonably explained why, even under the 2016-based modeling, Mississippi's submission failed to comply with the Good Neighbor Provision and was not approvable.

3. The 2016-based modeling results for Texas are consistent with EPA's proposed nonattainment designations.

Texas Petitioners' argument regarding EPA's 2016-based modeling lacks merit because it misunderstands the Act and EPA's determinations.

Texas Petitioners contend that the 2016-based modeling's identification of a receptor in Doña Ana County, New Mexico, conflicts with EPA's position in a separate rulemaking proposal, in which EPA proposed to find, pursuant to 42 U.S.C. § 7509a, that the nonattainment area in which Doña Ana County sits would be in attainment of the 2015 ozone NAAQS but for emissions originating from outside the United States. Tex. Br. at 37-38. Texas Petitioners thus claim that EPA unlawfully identified Texas as linked to the Doña Ana receptor because EPA (1) had later taken the position that the nonattainment area would be in attainment but for international emissions and (2) did not notify Texas of EPA's position on how international emissions factor into establishing Good Neighbor obligations. *Id.* at 38-39.

Apart from the fact that Texas's linkage to the New Mexico receptor in the 2016v3 modeling is not its only linkage and so, not the sole cause for EPA's Disapproval, *see* 2016v3 Air-Quality TSD, App. C, Texas Petitioners' arguments lack merit for two reasons.

First, Texas Petitioners misunderstand the relationship between 42 U.S.C. § 7509a determinations and the Good Neighbor Provision. The identification of which individual monitoring sites are "receptors" in the future analytic year at Step 1 of EPA's 4-step framework is not equivalent to EPA's separate determination under 42 U.S.C. § 7511(b)(2) of whether designated nonattainment areas met the ozone NAAQS by the attainment date. *See supra* Background B.2. Further, in EPA's proposed rulemaking assessing the Section 7509a demonstration, EPA plainly reiterated its 2020 guidance that approval of a Section 7509a demonstration "does not relieve [states] from obligations to meet the remaining applicable planning or emission reduction requirements in the [Act]," such as the Good Neighbor Provision.[87] 88 Fed. Reg. 14095, 14097 (Mar. 7, 2023); *see also* RTC at 337-39 (explaining the same). Indeed, in *Wisconsin*, the D.C. Circuit expressly rejected petitioners' argument that monitors should not be identified as receptors

[87] Even if Texas had correctly identified an inconsistency (and it has not), the position attributed to EPA appears only in a proposed rulemaking. As such, it does not represent the culmination of EPA's decision-making process and "currently lacks the force of law." *Weld Cnty*, 72 F.4th at 295; *see also Bennett v. Spear*, 520 U.S. 154, 177-78 (1997).

under the Good Neighbor Provision if a state's air-quality problems "were actually attributable not to upwind-state but to non-U.S. emissions," holding that the "logic incorrectly assumes that an upwind State 'contributes significantly' to downwind nonattainment only when its emissions are the *sole cause* of downwind nonattainment." 938 F.3d at 324 (quotation omitted). As the court noted, many "receptors would *also* attain the NAAQS if all in-state contributions were eliminated, *or* if all upwind contributions were eliminated." *Id.* (quotation omitted).[88] EPA continuously explained the *Wisconsin* holding in its Proposal, Disapproval, and in response to Texas's comment. *See* La./Tex. Proposal at 9810, 9823; Disapproval at 9378; RTC at 337-39. Therefore, Texas Petitioners' argument is legally incorrect. EPA has consistently made clear, in reasoning upheld by several court decisions, that the mere fact that multiple sources—international or domestic—together cause an area's nonattainment status does not relieve an upwind state from the obligation to address its own significant contribution.

[88] *See also Catawba Cnty.*, 571 F.3d at 39 (rejecting the argument "that 'significantly contribute' unambiguously means 'strictly cause' " because there is "no reason why the statute precludes EPA from determining that [an] addition of [pollutant] into the atmosphere is significant even though a nearby county's nonattainment problem would still persist in its absence"); *MCEQ*, 790 F.3d at 163 n.12 (observing that the argument that "there likely would have been no violation at all . . . if it were not for the emissions resulting from [another source]" is "merely a rephrasing of the but-for causation rule that we rejected in *Catawba County*").

Second, Texas Petitioners are plainly wrong in arguing that Texas does not contribute to Doña Ana County's nonattainment problem. EPA's proposed Section 7509a determination was explicitly based on the premise that both international emissions *and* Texas emissions contributed to Doña Ana's nonattainment problem. *See* Technical Support Document, EPA Evaluation of the Clean Air Act Section 179B(b) Demonstration for the El Paso-Las Cruces, Texas-New Mexico Marginal Ozone Nonattainment Area, at 14-15.[89] EPA also issued final agency action designating El Paso County as a contributor to Doña Ana County's nonattainment area problem. Additional Revised Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards: El Paso County, Texas and Weld County, Colorado, 86 Fed. Reg. 67864 (Nov. 30, 2021), *rev'd on other grounds in Weld Cnty.*, 72 F.4th at 296. EPA has consistently taken the position that Texas emissions contribute to Doña Ana County's nonattainment of the 2015 ozone NAAQS. Thus, EPA's 2016-based modeling results are consistent with EPA's proposed Section 7509a determination related to the designation of a nonattainment area in which Doña Ana County sits.

[89] Available at https://www.regulations.gov/document/EPA-R06-OAR-2022-0927-0002.

4. EPA consistently applied the 2016-based modeling when evaluating other states' SIP submissions for the 2015 ozone NAAQS.

EPA's action on the states' submissions here was consistent with EPA's actions on other states' SIP submissions for the 2015 ozone NAAQS. In arguing otherwise, with respect to EPA's action on Arizona's, Connecticut's, Delaware's, Iowa's, Kansas's, and Tennessee's submissions, Louisiana Petitioners mischaracterize EPA's approach to those states. *See* La. Br. at 55-58.

Unlike for the three states here, in some cases (like the states identified by Louisiana Petitioners), the 2016-based modeling results were materially different and cast doubt on the rationale of EPA's previously proposed or finalized Good Neighbor actions. EPA approached these material changes consistently across all states. For Arizona and Tennessee, where the updated 2016-based modeling showed a linkage to a receptor where previously it had not (Arizona), 88 Fed. Reg. at 36656, or a linkage only to a violating-monitor nonattainment receptor (Tennessee), Disapproval at 9349, EPA has not yet taken final action, 88 Fed. Reg. at 36658. For Connecticut, which was linked under 2011-based modeling but no longer linked under each version of the 2016-based modeling, EPA approved its SIP submission. 86 Fed. Reg. 71830 (Dec. 20, 2021). For Delaware, EPA had previously approved its SIP submission because it was not linked under the 2011-based modeling. 85 Fed. Reg. 25307 (May 1, 2020). Delaware continued to not

be linked in the 2016v3 modeling, and so EPA has left its approval of Delaware's SIP in place. 88 Fed. Reg. at 36658. For Iowa and Kansas, EPA had approved their SIP submissions because they were not linked under the 2016v2 modeling. 87 Fed. Reg. 22463 (Apr. 15, 2022) (Iowa); 87 Fed. Reg. 19390 (Apr. 4, 2022) (Kansas). But the 2016v3 modeling suggested that Iowa and Kansas are linked to receptors, and EPA plans to address these states in a subsequent action. 88 Fed. Reg. at 36656.

In short, EPA has been consistent in its interpretation of the Good Neighbor Provision as requiring a forward-looking analysis and in its consideration of the 2016-based modeling. And EPA has revisited its Good Neighbor conclusions when updated information suggests doing so is appropriate. *See* Disapproval at 9366; *supra* Arg. II.A.1., IV.B. But none of this is relevant to Louisiana, Mississippi, or Texas, all of which were linked to out-of-state receptors in each iteration of modeling. There was no inconsistency in EPA's decision-making.

VI. If the Court determines that EPA erred, it should remand but not vacate the Disapproval.

EPA's Disapproval is lawful and should be upheld. But even if the Court finds some flaw with the Disapproval, it should not vacate the action as it relates to State Petitioners' submissions. *Cf., e.g.*, Miss. Br. at 54. Instead, the Court should remand to EPA but allow the Disapproval to remain in place pending prompt completion of remand proceedings.

Remand without vacatur "is generally appropriate when there is at least a serious possibility that the [agency] will be able to substantiate its decision given an opportunity to do so, and when vacating would be disruptive." *Cent. & S. W. Servs., Inc. v. EPA*, 220 F.3d 683, 692 (5th Cir. 2000) (quotation omitted) (remanding without vacatur EPA's decision because it "may well be able to justify its decision," and it "would be disruptive to vacate a rule that applies to other members of the regulated community"); *see also Allied-Signal, Inc. v. Nuclear Regul. Comm'n*, 988 F.2d 146, 150 (D.C. Cir. 1993) (explaining that "[a]n inadequately supported rule . . . need not necessarily be vacated"). In deciding whether to vacate unlawful agency action, this Court considers (1) the likelihood that the agency's action could be sustained on remand and (2) the disruptive consequences that might flow from vacatur of the action. *Cent. & S. W. Servs.*, 220 F.3d at 692. Here, both prongs show that remand without vacatur is proper.

First, Petitioners primarily allege procedural defects and record-based deficiencies that EPA could address and correct on remand. For example, if the Court were to conclude that EPA is limited to considering only data that was available at the time the states submitted their SIPs, EPA could likely still support its Disapproval on remand with a supplemental explanation because EPA disapproved the states' SIP submissions based on their own technical flaws, and EPA's reliance on the updated data and modeling was not dispositive. *See supra*

Arg. III. Similarly, if the Court finds that some aspect of the Disapproval was not a logical outgrowth of the Proposals and thus additional opportunity to comment is needed, this too would not be grounds to automatically vacate the Disapproval. *See Tex. Ass'n of Mfrs. v. U.S. Consumer Prod. Safety Comm'n*, 989 F.3d 368, 389-90 (5th Cir. 2021) (remanding without vacatur agency rule that failed to complete proper notice-and-comment rulemaking). Ultimately, the record reflects that on remand, EPA could further bolster the lawful bases for the Disapproval, and certainly, at that point, nothing would preclude EPA from considering the most up-to-date data. And even if Petitioners could show defects in the Disapproval, they have not, for their part, shown that their SIP submissions substantively comply with the Good Neighbor Provision, such that EPA could not ultimately justify its Disapproval on remand.

Petitioners' views on cooperative federalism, even if credited, do not support vacatur because it would be improper to direct EPA to *approve* the SIP submissions. *See, e.g.*, *Fed. Power Comm'n v. Idaho Power Co.*, 344 U.S. 17, 20 (1952) ("[T]he function of the reviewing court ends when an error of law is laid bare. At that point the matter once more goes to the [agency] for reconsideration."); *Calcutt v. FDIC*, 143 S. Ct. 1317, 1320-21 (2023) ("[T]he proper course, except in rare circumstances, is to remand to the agency for additional investigation or explanation. A reviewing court, accordingly, is not

generally empowered to conduct a de novo inquiry into the matter being reviewed and to reach its own conclusions based on such an inquiry." (cleaned up)).

Second, vacating the Disapproval would further disrupt and impede EPA's compliance with the Act. In particular, vacatur would delay EPA's efforts to implement Congress's mandate to upwind states to prohibit emissions contributing significantly to nonattainment or interfering with maintenance as expeditiously as practicable. *Maryland*, 958 F.3d at 1203-04; *see also Wisconsin*, 938 F.3d at 317. Vacatur would thus leave downwind areas to suffer continuing poor air quality and inequitable regulatory burdens and hinder downwind states' efforts to attain the 2015 ozone NAAQS while permitting upwind states to "reap[] the benefits of the economic activity causing the pollution without bearing all the costs." *EME Homer*, 572 U.S. at 495.

Without the Disapproval, EPA would lack the authority to implement its FIP, the Good Neighbor Plan, for states including State Petitioners. EPA issued the Good Neighbor Plan to address the outstanding Good Neighbor obligations of 23 states and to provide relief (through emissions reductions) that Louisiana and Mississippi owe to Texas, and that Texas owes to Illinois, Michigan, Ohio, New Mexico, and Wisconsin. *See supra* Background B.4. (addressing consent decrees). EPA's Good Neighbor Plan addresses the complex problem of upwind states' emissions exacerbating downwind air-quality problems. *See* 88 Fed. Reg. at 36683

(discussing *EME Homer*, 572 U.S. at 515-17, 519). The Good Neighbor Plan's goal of encouraging better emissions performance from power plants beginning in 2023 and bringing more substantial emissions reductions online by 2026 was designed to relieve regulatory burdens faced by downwind areas throughout the country, including in areas where Louisiana, Mississippi, and Texas contribute emissions: Dallas-Fort Worth; Houston-Brazoria-Galveston; Chicago, Illinois; southeastern New Mexico; and southeastern Wisconsin. *See supra* Background B.5.; Arg. V.B.1. The Good Neighbor Plan was also designed to comply with prior court rulings and deliver air-quality benefits already delayed by several years under the statutory schedule. *See, e.g.*, 88 Fed. Reg. at 36690 (noting Marginal attainment date has already passed).

Without the FIP or approved SIPs that meet the Good Neighbor Provision, there is significant inequity, as sources in the states that are not affected by judicial stays remain subject to the Good Neighbor Plan, and downwind areas continue to obtain no relief from the significant contribution of these three states. Vacating EPA's action as applied to State Petitioners would further disrupt the schedule of cost-effective emissions reductions, *see* 88 Fed. Reg. at 36737-39, and delay "meaningful downwind air quality improvement," *id*. at 36748, that the Good Neighbor Plan is designed to deliver.

Conversely, remanding the Disapproval but ending the stays entered by the motions panel would allow EPA the authority to bring the Good Neighbor Plan into effect for Louisiana, Mississippi, and Texas through appropriate rulemaking action, accounting for any needed adjustments in the schedule or requirements of that rule resulting from this Court's stays.

Out of concerns for public health and the environment, courts have a history of not vacating EPA actions implementing the Good Neighbor Provision, even when remand of some aspect of those actions may be appropriate. *See, e.g.*, *Wisconsin*, 938 F.3d at 336 ("[W]e do not vacate regulations when doing so would risk significant harm to the public health or the environment."); *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008) ("[I]t is appropriate to remand without vacatur in particular occasions where vacatur would at least temporarily defeat . . . the enhanced protection of the environmental values covered by [the EPA rule at issue]." (quotation omitted)). Thus, if this Court determines that remand is proper, EPA asks the Court to remand the Disapproval without vacatur and let its stay orders expire by their own terms.

CONCLUSION

For these reasons, the petitions for review should be transferred to the D.C. Circuit or denied.

Dated: August 15, 2023

Respectfully submitted,

TODD KIM
Assistant Attorney General

/s/ *Jin Hyung Lee*
JIN HYUNG LEE
SARAH IZFAR
JEFFREY HAMMONS

U.S. Department of Justice
Environment and Natural Resources Division
Environmental Defense Section
150 M St., NE
Washington, D.C. 20002

OF COUNSEL:

ROSEMARY HAMBRIGHT KABAN
DANIEL P. SCHRAMM
JEANHEE HONG

U.S. Environmental Protection Agency

CERTIFICATE OF COMPLIANCE

1. This document complies with the volume limit of the Court's order of June 21, 2023, ECF No. 396, because, excluding the parts of the document exempted by Federal Rule of Appellate Procedure 32(f), this document contains 49,346 words.

2. This document complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type-style requirements of Federal Rule of Appellate Procedure 32(a)(6) because this document has been prepared in a proportionally spaced typeface using Microsoft Word 2016 in 14-point Times New Roman font.

/s/ Jin Hyung Lee
Jin Hyung Lee

Counsel for Respondents

CERTIFICATE OF SERVICE

I hereby certify that I served the foregoing EPA's response brief on all registered counsel through the Court's electronic filing system (CM/ECF).

Dated: August 15, 2023

/s/ Jin Hyung Lee
Jin Hyung Lee