

In the
United States Court of Appeals
For the Seventh Circuit

No. 14-3214

STATE OF INDIANA,

Petitioner,

v.

ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

ARGUED JUNE 5, 2015 — DECIDED AUGUST 7, 2015

Before WOOD, *Chief Judge*, and FLAUM and EASTERBROOK,
Circuit Judges.

FLAUM, *Circuit Judge*. Pursuant to the Clean Air Act (“CAA”), 42 U.S.C. § 7401 *et seq.*, the Environmental Protection Agency sets standards that specify the maximum permissible atmospheric concentrations for certain harmful air pollutants, including ozone. Geographic areas (which do not necessarily respect state borders) are classified by EPA as “attainment” or “nonattainment” depending on whether they meet the standard for a given pollutant. All states are required to draft a State Implementation Plan (“SIP”) for each pollutant, which outlines the state’s plan for how it seeks to achieve or maintain attainment, and which must be

approved by EPA. All SIPs are subject to certain statutory and regulatory requirements; the requirements are more stringent for states with areas in nonattainment. States cannot revise their SIPs without EPA approval.

If an area within a state is in nonattainment for ozone, the state's SIP must include an automobile emissions testing program. States have some leeway in designing their programs, as long as they meet certain performance standards. Prior to 2005, Illinois used an emissions testing program that tested the emissions of vehicles from all model years; that program was included in the state's SIP. In 2005, though, Illinois passed a law which relaxed its emissions testing program by exempting pre-1996 model-year vehicles that met certain standards. That change went into effect in 2007, but Illinois did not seek EPA approval at the time. Finally, in late 2012, Illinois submitted a proposed SIP revision to EPA seeking approval of the changes to its emissions testing program.

After the requisite notice-and-comment period, during which the state of Indiana objected to the proposed change, EPA approved Illinois's SIP revision in 2014. Indiana then filed this petition for review, challenging the EPA approval. Indiana argues, essentially, that the relaxation of Illinois's emissions testing program will decrease the likelihood that the "Chicago area"—which includes two Indiana counties—will achieve attainment with regard to ozone in the near future. As evidence, Indiana points to its own scientific analysis, which suggests that Illinois's (unauthorized) use of a relaxed testing procedure was a but-for cause of a single measured Chicago-area violation of the national ozone standard in 2011. That single violation, in turn, resulted in the Chicago area being classified as nonattainment. In other

words, Indiana argues that, if Illinois had not relaxed its testing program, Chicago's ozone levels would have met the national standard, and the area would now be in attainment. According to Indiana, this evidence demonstrates that the change in Illinois's testing program will impermissibly "interfere with ... attainment," and therefore that the SIP revision should have been disallowed by EPA pursuant to Section 110(l) of the CAA. 42 U.S.C. § 7410(l).

On the preliminary question of whether a justiciable controversy exists, we conclude that Indiana has standing to bring this petition for review. However, because EPA did not act arbitrarily and capriciously in approving the SIP revision, we deny Indiana's petition.

I. Background

A. Regulatory Background

We summarized much of the relevant regulatory background for this case in *Sierra Club v. U.S. EPA*, 774 F.3d 383 (7th Cir. 2014):

The Clean Air Act ("CAA"), 42 U.S.C. § 7401 *et seq.*, establishes a comprehensive program for controlling and improving the nation's air quality through both state and federal regulation. Title I of the CAA charges the Environmental Protection Agency Administrator with identifying air pollutants that endanger public health and welfare and with formulating National Ambient Air Quality Standards ("NAAQS") that specify the maximum permissible concentration of those pollutants in the ambient air. *Id.* §§ 7408–09. Pursuant to the

CAA, EPA designates areas of the country as either “attainment,” “nonattainment,” or “unclassifiable” for specific NAAQS, based on whether the area has attained the standard and/or contributes to a nearby area’s nonattainment. *Id.* § 7407(d).

Primary responsibility for ensuring that ambient air quality satisfies the NAAQS falls to the states. *Id.* § 7407(a). Each state must draft a state implementation plan (“SIP”) for each pollutant, the review of which is conducted by EPA according to the process outlined in section 110(k) of the CAA. *Id.* § 7410(a), (k). Although certain SIP requirements apply to an area regardless of its designation, nonattainment areas are subject to more regulations as compared to attainment areas. *See id.* § 7501–15.1.

Relevant to this case, ozone is among the pollutants that EPA has identified and, consequently, for which EPA has promulgated NAAQS. *See* 40 C.F.R. pt. 50.

Id. at 386–87. At issue in this case is the 2008 ozone standard, which is set to 0.075 parts per million (“ppm”) measured over an eight-hour period. 40 C.F.R. § 50.15.

The purpose of SIPs is to “provide[] for implementation, maintenance, and enforcement of [the NAAQS] in each air quality control region (or portion thereof) within” a state. 42 U.S.C. § 7410(a)(1). The SIP must include “enforceable emission limitations and other control measures, means, or techniques” that will be implemented so that each area in the

state can maintain or achieve attainment for a given pollutant by the area's statutory attainment deadline. *Id.* § 7410(a)(2)(A). States have primary responsibility in formulating and revising the rules in their SIPs, but it is the EPA that must review and approve SIP modifications. *Id.* § 7410(a), (k). If EPA determines that a SIP is complete and meets all applicable requirements, "the Administrator *shall* approve" the SIP. *Id.* § 7410(k)(2)–(3) (emphasis added). However, Section 110(l) of the CAA—the "antibacksliding" provision—states that EPA "shall not approve a revision of a [SIP] if the revision would interfere with any applicable requirement concerning attainment ... or any other applicable requirement" under the Act. 42 U.S.C. § 7410(l). Once it is approved by EPA, a state rule embodied in a SIP becomes enforceable federal law. *See Gen. Motors Corp. v. United States*, 496 U.S. 530, 540 (1990). EPA can enforce existing SIP provisions through a variety of sanctions, 42 U.S.C. §§ 7413, 7509; citizen suits to enforce certain SIP requirements, including vehicle emissions inspection programs, are also authorized. *Id.* § 7604(a)(1).

EPA has interpreted Section 110(l) to allow states to demonstrate that a SIP revision will not "interfere" with attainment in one of two ways: a state may either submit an air quality analysis, or a state may identify "substitute equivalent emissions reductions to compensate for any change to a SIP approved program, as long as actual emissions in the air are not increased." 78 Fed. Reg. 68,378, 68,382 (Nov. 14, 2013). The second option allows a state seeking approval of a SIP revision to provide EPA with (1) an estimate of how much excess pollution will result from the revision and (2) a list of contemporaneous pollution-control measures—such as factory closures—along with estimates of the extent to

which each of these measures is expected to decrease pollution. If the pollution reductions listed in (2) are equal to or greater than the pollution increase described in (1), EPA will conclude that the SIP revision does not “interfere with” NAAQS attainment. *See id.* (defining “equivalent emissions reductions”). The purpose behind this interpretation, according to EPA, is to allow states to pick and choose the manner in which they seek to achieve attainment, as long as they can show that net emissions are decreasing. In order to be considered in this calculus, however, substitute emissions reductions must be permanent, enforceable, and quantifiable. *Id.* They must also be “contemporaneous” with the proposed SIP revision. *Id.* Finally, they must be “surplus,” meaning that they have not been “otherwise relied on to meet air quality attainment requirements in air quality programs related to” the SIP. EPA, *Roadmap for Incorporating Energy Efficiency/Renewable Energy Policies and Programs into State and Tribal Implementation Plans* (2012), available at <http://www.epa.gov/airquality/eere/pdfs/appendixC.pdf>. In other words, a given emissions reduction can only be credited once; that ensures that the same factory closure, for example, cannot be used over and over again by the state as a compensatory offset for multiple emissions increases.

The CAA requires that a state with areas designated as nonattainment for ozone include motor vehicle inspection and maintenance programs (“I/M programs”) in its SIP. 42 U.S.C. § 7511a. I/M programs help to reduce emissions from automobiles, thereby improving air quality. Depending on the severity of an area’s nonattainment (which can be “marginal,” “moderate,” “serious,” “severe,” or “extreme,”), the state must implement either a “Basic” or a more stringent “Enhanced” I/M program. *Id.* EPA has established recom-

mended I/M programs, but states are free to design and implement alternate programs that meet or exceed minimum performance standards. *See* 40 C.F.R. § 51.350–.372.

The “Alternate Low Enhanced” I/M performance standard is available to areas that meet certain emissions requirements. *See id.* § 51.351(g)(7). The model program elements for that standard include testing of vehicles from all model years 1968 and newer. But, a state may exempt certain model years from its program, provided that the state demonstrates that the performance standard will be met. Special model-year exemptions must be included in a state’s SIP revision proposals, along with an estimate of the exemptions’ effect on emissions output.

B. Factual and Procedural Background

Prior to the events at issue in this case, Illinois’s vehicle emissions testing program covered all cars from model years 1968 and newer.¹ That program was part of Illinois’s EPA-approved SIP. In 2005, however, Illinois changed its I/M program to exempt pre-1996 model-year vehicles that met certain idle exhaust and gas cap pressure testing requirements. *See* Vehicle Emissions Inspection Law of 2005, 625 Ill. Comp. Stat. 5/13C. That law took effect in 2007. EPA approval of the change was not initially sought or granted.

¹ Illinois’s I/M program was required by federal law because the Chicago area was classified as nonattainment, first, in the 1990s, under the one-hour federal ozone standard, and then, in 2004, under the 1997 8-hour ozone standard. In 2008, the 8-hour ozone standard was reduced from 0.08 to 0.075 ppm, and, as we describe above, the Chicago area was classified as nonattainment for that standard in 2012. The earlier ozone standards are not at issue in this case.

In the years following the change to Illinois's I/M program, ozone levels in the Chicago areas were consistently measured at levels below the 2008 eight-hour ozone NAAQS; indeed, between 2008 and 2010, no ambient air monitors in the area detected ozone levels exceeding the NAAQS. In 2011, though, that pattern was broken when a monitor located in Zion, Illinois measured an ozone concentration of 0.076 ppm—just slightly (one part per billion) above the permitted maximum. Based largely on that single exceedance, EPA in 2012 designated the Chicago area as “marginal nonattainment” for the 2008 revised eight-hour ozone NAAQS. EPA included two Indiana counties—Lake County and Porter County—in this nonattainment designation based on a finding that those counties “contributed” to the recorded NAAQS violation.² According to Indiana, the Zion exceedance would not have occurred if Illinois had maintained its prior I/M program rather than making the 2007 switch to a more relaxed program.

² EPA's inclusion of Lake and Porter Counties in the Chicago nonattainment area was recently confirmed by the D.C. Circuit. *Miss. Comm'n on Env'tl. Quality v. EPA*, No. 12-1309, *et al.*, 2015 WL 3461262, at *19–20 (D.C. Cir. June 2, 2015). That court found that it was not arbitrary and capricious for EPA to conclude that emissions from those two counties contributed to the violation in Zion. The D.C. Circuit also made clear that “a ‘contributing’ county need not be a but-for cause of a violation in order to warrant a nonattainment designation.” *Id.* at *19. As the D.C. Circuit noted, its holding does not necessarily mean that Indiana's main contention in this case—that Illinois's unauthorized I/M change was a but-for cause of the Zion violation—is factually incorrect. *See id.* at *19 n.12. That claim, the D.C. Circuit explained, was irrelevant to EPA's “contributing” determination: “the Illinois change ... in no way diminished the contribution of the Indiana counties.” *Id.* at *20.

On November 29, 2012, almost six years after switching to an I/M program that was technically not authorized by federal law, Illinois finally submitted to EPA a proposed SIP revision seeking approval of the new program. In its submission, Illinois included modeling demonstrating that the new I/M program complied with the Alternate Low Enhanced I/M performance standard. Illinois also argued that the proposed revision would not interfere with attainment of the NAAQS or any other CAA requirement. It did so by listing substitute emissions reductions that would fully compensate for the expected emissions increase caused by the change to a more lenient I/M program. Specifically, Illinois included a list of permanent shutdowns of facilities that were permitted to emit ozone precursors; the list included over 1,000 facilities that were closed between 2002 and 2012. The emissions reductions from those closures, Illinois concluded, more than outweighed the increased emissions caused by the relaxation of the state's I/M program.

EPA published a proposed approval of the Illinois SIP revision on November 14, 2013. It concluded that the revised I/M program would meet the Alternate Low Enhanced standard, and that the listed substitute emissions reductions were permanent, enforceable, contemporaneous, and surplus, and would more than offset the increased emissions coming from the change to the I/M program.

During the public comment period, Indiana submitted a letter accompanied by a technical analysis. The details of this letter are not overly important to the outcome of this case. Basically, though, Indiana argued that the increased emissions resulting from Illinois's 2007 I/M program changes caused the 2011 Zion ozone exceedance; without those

changes, the Zion violation would not have occurred. Because Illinois's I/M change had, in its opinion, directly caused nonattainment in the recent past, Indiana argued that the change would likely also interfere with attainment in the future, and therefore that EPA should reject the proposed revision. Finally, Indiana argued that, because Illinois's I/M change had been implemented several years before the state sought EPA approval, there was "extensive actual emissions data" from those years, and therefore "any analysis [of the proposed SIP revision's impact on attainment] ... should not be based solely on emissions modelling or speculative results, but supported by actual monitoring data."

Despite Indiana's concerns, EPA approved Illinois's SIP revisions in a Final Rule effective September 12, 2014. In the Final Rule, EPA specifically addressed Indiana's comment. Though EPA now argues that it rejected Indiana's analysis in part on scientific grounds, it did not indicate that in the Final Rule. Indeed, it seemed to accept Indiana's scientific conclusion that, absent Illinois's I/M program changes in 2007, the Zion violation would not have occurred. Rather, EPA rejected Indiana's claim as irrelevant because its analysis was incomplete. EPA explained that the fact that Illinois's change to the I/M program increased ozone levels—and that this increase caused a NAAQS violation—was not determinative under EPA's interpretation of Section 110(l), which considers only whether emissions increases caused by a SIP revision are offset by substitute emissions reductions. Because Indiana's modeling did not take into account Illinois's substitute emissions reductions, EPA concluded that its conclusions were irrelevant to the Section 110(l) analysis.

II. Discussion

A. Standing

We have jurisdiction under 42 U.S.C. § 7607(b)(1) to hear challenges to SIP revisions for geographic areas within the Seventh Circuit. *See e.g., Sierra Club*, 774 F.3d at 388. However, after oral argument, we asked the parties to file supplemental briefs on the question of whether there is a justiciable controversy in this case. We begin, therefore, by addressing the issue of Indiana’s standing to bring this petition.

Article III of the Constitution limits the jurisdiction of federal courts to “Cases” and “Controversies.” U.S. Const. art. III, § 2. No “Case” or “Controversy” exists if the plaintiff lacks standing to challenge the defendant’s alleged misconduct. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992). The plaintiff bears the burden of establishing the required elements of standing. *Kathrein v. City of Evanston, Ill.*, 752 F.3d 680, 690 (7th Cir. 2014). The “irreducible constitutional minimum of standing” requires the plaintiff to show that he has suffered or is imminently threatened with (1) a concrete and particularized “injury in fact” (2) that is fairly traceable to the challenged action of the defendant, and that is (3) likely to be redressed by a favorable judicial decision. *Lujan*, 504 U.S. at 560–61. The traceability element is met only if the plaintiff’s injury was sustained “as a consequence of” the challenged conduct. *Valley Forge Christian Coll. v. Am. United for Separation of Church & State, Inc.*, 454 U.S. 464, 485 (1982).

Indiana’s principal argument is that it has standing because Illinois’s I/M program change allegedly caused the Zion violation, which in turn caused two Indiana counties to be currently classified as nonattainment. That is a judicially

cognizable injury—areas in nonattainment must meet more stringent regulatory requirements—but it’s not traceable to the action challenged in Indiana’s petition (EPA’s approval of the Illinois SIP revision). That’s because the nonattainment classification occurred in 2012, but EPA did not approve Illinois’s SIP revision until 2014.³ The classification of Lake and Porter Counties as nonattainment, therefore, could not have occurred “as a consequence of” the challenged EPA action. Moreover, Indiana has not alleged that the EPA approval has in any way resulted in its counties being denied reclassification into attainment in the time following approval. For example, Indiana has not alleged that EPA has reassessed the attainment status of the Chicago area since September 12, 2014 (the date EPA finally approved Illinois’s SIP revision), and that the area was again classified as nonattainment because of emissions resulting from EPA approval of Illinois’s new I/M program. The fact that Lake and Porter Counties are currently classified as nonattainment therefore does not give Indiana standing to bring this petition.

Indiana next argues that, because EPA approved Illinois’s relaxed I/M program, more ozone will form in the Chicago area, making it less likely that the area—including Lake and Porter counties—will be classified as attainment in the near future. That decreased likelihood of future attainment status has two possible effects, the first of which does not give Indiana standing, but the second of which does. First, Indiana argues that continued nonattainment status will harm businesses within Lake and Porter Counties because they will have to comply with more stringent regulatory require-

³ The SIP revision proposal was not even submitted to EPA until after the 2012 nonattainment classification.

ments. That theory of standing, however, is blocked by the doctrine of *Massachusetts v. Mellon*, 262 U.S. 447 (1923), which held that “a State, as *parens patriae*, may [not] institute judicial proceedings to protect citizens of the United States from the operation of the statutes thereof.” *Id.* at 485–86. In *Michigan v. EPA*, 581 F.3d 524, 529 (7th Cir. 2009), we held that Michigan did not have standing to challenge an EPA rule-making because the new rules did not “affect Michigan directly; rather, they affect emitting sources *within* Michigan that want to construct new facilities or modify existing ones.” Michigan, we held, did have an interest in protecting its own economy; that interest could serve as the basis for the state’s standing against some defendants, but not against the United States due to the *Mellon* doctrine. *Id.*

The decreased likelihood that the Chicago area will achieve attainment in the near future has a second effect, however, that does give Indiana standing to bring this petition: if the Chicago area stays in nonattainment, the state of Indiana *itself* will have to undertake actions to achieve attainment. In other words, because Illinois’s SIP revision will make it more difficult for the Chicago area to achieve attainment, it is more likely that Indiana will be forced by federal law to take increased steps to aid the area in achieving attainment. (Each geographic area has a statutory attainment deadline, and SIPs must be formulated with the goal of meeting that deadline. 42 U.S.C. § 7502(c)(1)–(6). So, if it appears that an area will not achieve attainment by that date, federal law requires states to take more drastic measures to meet the deadline.) For instance, Indiana might have to test the emissions of more of its citizens’ cars, or engage in more rigorous testing of those cars. That is a burden on the state itself, and so the state has standing to sue, not to protect the

rights of its citizens as *parens patriae*, but rather to assert its own rights. See *Massachusetts v. EPA*, 549 U.S. 497, 520 n.17 (2007).⁴

The burden of establishing standing, though, is on the plaintiff, and EPA protests that Indiana has not adequately pled this theory of standing. However, in its supplemental brief, Indiana states: “[T]he failure to test older vehicles in Illinois interferes with the attainment of ambient air quality standards in the Chicago area. The resulting designation of nonattainment increases the regulatory burden that now must be borne in Northwest Indiana.” Given Indiana’s use of the words “in Northwest Indiana” rather than “by Northwest Indiana,” and its subsequent citation to a case noting that businesses in a nonattainment area must meet increased regulatory requirements, it seems possible that Indiana was making a *parens patriae* argument here, not an argument that Indiana itself would have to do more to fight pollution. But the statement can also be fairly read to argue that continued nonattainment will increase the regulatory burden of the government in Northwest Indiana. We therefore conclude that Indiana’s statement is enough to carry its burden of establishing standing.⁵

⁴ Because Indiana’s standing in this case does not depend on the 2012 nonattainment classification of Lake and Porter counties, the D.C. Circuit’s opinion in *Mississippi Commission on Environmental Quality*, 2015 WL 3461262, does not affect our standing analysis. Even if Indiana’s own emissions may make future attainment more difficult, what matters to the standing analysis is that achieving future attainment would be at least marginally easier without the change to Illinois’s I/M program.

⁵ Indiana also argues that it has standing because EPA’s approval of Illinois’s relaxed I/M program will cause diminished air quality in Indiana.

B. EPA's Approval of the Illinois SIP Revision

On the merits, Indiana challenges EPA's approval of the Illinois SIP revision. Pursuant to the Administrative Procedure Act, EPA's approval of a SIP revision must be upheld unless it was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A); *see also Citizens Against Ruining the Env't v. EPA*, 535 F.3d 670, 674 (7th Cir. 2008) (holding that, when the CAA does not provide a standard for reviewing specific EPA decisions, the standard of review is supplied by the Administrative Procedure Act). Two other principles of agency deference are potentially at play in this case. First, when an agency's decision is based on an interpretation of statutory language subject to notice and comment, the agency's interpretation is afforded *Chevron* deference. *See Chevron, U.S.A., Inc. v. NRDC*, 467 U.S.

That would normally give the state standing as *parens patriae*, but not against the United States. *See Mellon*, 262 U.S. at 485–86. States have "special solicitude" to sue the United States, however, if a quasi-sovereign interest of the state is at stake. *See Massachusetts*, 549 U.S. at 520–23 (holding that Massachusetts had standing to sue EPA based on an injury to state-owned coastal lands). EPA, pointing to *Michigan v. EPA*, 581 F.3d at 529, argues that the "special solicitude" analysis does not apply to a suit in which a state's alleged injury is diminished air quality. In that case, though, we noted that "[i]n contrast to [*Massachusetts v. EPA*], in which Massachusetts's coastal lands were threatened by rising sea levels, Michigan's air *can only benefit* from" the challenged agency action. *Michigan*, 581 F.3d at 529 (emphasis added). If anything, that statement suggests that Michigan might have had standing had it alleged that the challenged action would harm its air quality. On the other hand, while Massachusetts actually owns some of its coastal property, Indiana does not own its air; the state sovereign interest, therefore, was much clearer in *Massachusetts* than it is here. Regardless, we need not resolve this issue because we find that Indiana has standing on other grounds.

837 (1984). Under *Chevron*, if “Congress has directly spoken to the precise question at issue ... the court ... must give effect to the unambiguously expressed intent of Congress.” *Id.* at 842–43. If, however, “the statute is silent or ambiguous with respect to the specific issue,” a reviewing court must defer to the agency’s interpretation if it is reasonable. *Id.* at 843–44. Finally, when reviewing an agency’s scientific and technical determinations, “a reviewing court must generally be at its most deferential.” *Balt. Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 103 (1983).

Essentially, Indiana argues that it was arbitrary and capricious for EPA to conclude that Illinois’s SIP revision would not “interfere with” attainment even though Indiana put forth scientific data demonstrating that the conduct embodied in that revision had already caused ozone levels to exceed the NAAQS. Once again though, as with its central standing argument, Indiana overlooks the importance of timing. When deciding whether to approve Illinois’s SIP revision, EPA was required to determine whether the revision would, *going forward*, interfere with attainment. The fact that a policy may have prevented attainment in the past does not necessarily mean that it will do the same in the future. In fact, the circumstances of this case suggest that the Chicago area will soon achieve attainment regardless of the EPA approval. The area is currently classified as nonattainment based solely on a single, vanishingly small violation of the NAAQS. And, because EPA confirmed that Illinois’s I/M change is part of an overall net decrease in ozone precursor emissions, it seems probable that ozone levels will decrease, and the area will reach attainment.

Indiana speaks of the Illinois I/M change as if it is forever and irretrievably cursed due to its illegitimate beginnings and its role in causing Chicago's current nonattainment status. But Illinois's long delay in seeking approval of the change is irrelevant to this case; Indiana has pointed to no authority suggesting that EPA should (or even can) reject a SIP revision due to a state's premature enactment of the change embodied in that revision. Remember: the CAA requires that "the [EPA] *shall* approve" a SIP revision that meets all applicable requirements, and none of those requirements relate to the state's compliance with its current SIP guidelines. 42 U.S.C. § 7410(k) (emphasis added). And by focusing so heavily on the I/M program's past as the cause of current nonattainment, Indiana completely loses sight of the fact that EPA's job was to assess the future. If EPA had been charged with determining whether the proposed Illinois SIP revision had ever "interfered with" NAAQS attainment, Indiana would have a compelling argument. But that was not the relevant issue, and past interference does not necessarily tell us much about what will happen in the future.

Moreover, Indiana's argument overlooks EPA's interpretation of Section 110(l), which allows states to make emissions-increasing SIP revisions if they identify substitute emissions reductions such that net emissions are not increasing. Indiana concedes that it has "no general objection to the use of substitute control measures to demonstrate noninterference with the NAAQS when seeking approval for a prospective SIP change in a nonattainment area." Indeed, all three courts of appeals that have addressed the issue agree that EPA's interpretation of Section 110(l) is reasonable under *Chevron*. See *Ala. Envtl. Council v. EPA*, 711 F.3d 1277, 1292–93 (11th Cir. 2013); *Galveston-Hous. Ass'n for Smog Prevention v.*

EPA, 289 Fed. App'x 745, 754 (5th Cir. 2008); *Ky. Res. Council, Inc. v. EPA*, 467 F.3d 986, 995 (6th Cir. 2006). Indiana argues, however, that this interpretation of Section 110(l) should not apply in a case, such as this one, where measurable emissions data has been generated due to a state's premature implementation of a SIP change.

Indiana misunderstands the nature of *Chevron* deference. When a court defers to an agency's interpretation of an ambiguous statutory word or phrase, it essentially concludes that the agency's interpretation of that word or phrase is reasonable *as a general matter*. It is not simply saying that a certain interpretation is reasonable with respect to the case before the court. Put differently, the court determines that the agency's regulation is "facially" valid, rather than valid "as applied." Viewed this way, it makes little sense to say that an interpretation is, in general, reasonable, but should not be followed in certain circumstances. EPA need not then re-determine for each new situation that arises how best to interpret those words. If anything, it would be arbitrary for EPA to now refrain from applying that definition to Illinois's SIP revision.

Even if Indiana were correct about how *Chevron* deference operates, it has not convinced us that it was unreasonable for EPA to use its substitute emissions reductions analysis in this case. Indiana argues that, because there is data from the Illinois I/M program's pre-approval years, EPA should have required Illinois to base its application on that actual real-world data. (Recall that a state may support its SIP revision application either by identifying substitute emissions reductions or by providing EPA with an air quality analysis reflecting real-world data.) The main piece of da-

ta Indiana points to is its estimate of the increased emissions resulting from the relaxed I/M program. But Indiana's analysis is missing data regarding the other side of the ledger— Illinois's substitute emissions reductions. Indiana concedes that it is reasonable for EPA to consider the net change in emissions when it is *estimating* the future effects of a SIP revision; it does not explain why net emissions are irrelevant when EPA's analysis relies on real-world analysis. The only other data that Indiana points to is the Zion ozone exceedance. EPA addressed that data in its Final Rule when it responded to Indiana's comment by stating, "EPA believes that, had the commenter modeled the ozone impact of the combined increased emissions from the I/M revision and the decrease in emissions from the offsetting emissions reductions, the commenter would have modeled a net decrease in peak downwind ozone concentrations." 79 Fed. Reg. 47,377, 47,379 (Aug. 13, 2014). So, even if Indiana were right that EPA should have looked to real-world data, Indiana has not shown that the agency's conclusion would have been any different.

We conclude, therefore, that EPA did not act arbitrarily and capriciously when it approved Illinois's SIP revision. EPA complied with its concededly reasonable interpretation of Section 110(l) in determining that Illinois's changed I/M program would not interfere with NAAQS attainment. That the program existed for multiple years pre-approval and arguably led to the classification of the Chicago area as nonattainment in the past does not disturb the validity of EPA's determination that, going forward, the increased emissions from the program will be outweighed by other emissions reductions.

Two other points merit brief discussion. First is EPA's determination that Illinois's substitute emissions reductions were "contemporaneous" with the 2007 change to Illinois's I/M program.⁶ Illinois's list of substitute emissions reductions includes factory closures from the ten-year span (2002–2012) surrounding 2007. Indiana contends that this was problematic for two reasons. First, Indiana argues that it is unreasonable to consider that long of a time span as "contemporaneous." Indeed, though EPA has not set a definitive rule regarding how near in time an emissions reduction must be to qualify as "contemporaneous," it has stated that it is reasonable to interpret reductions that occur within one year in either direction of the increase (i.e., a two-year span) as contemporaneous. We agree with Indiana that the use of this ten-year period is troubling: it stretches the meaning of "contemporaneous" to its breaking point. We share Indiana's concern that, "Apparently, ... 'contemporaneous' can be whatever length of time (short or long) it takes to justify EPA's decision (good or bad)."

As it turns out, however, EPA's reliance on the ten-year list of factory shutdowns was harmless in this case. EPA ar-

⁶ Indiana's arguments regarding EPA's contemporaneousness conclusion are likely waived, as it did not raise the issue in its comment letter. See *NRDC v. Jackson*, 650 F.3d 662, 666 (7th Cir. 2011) (rejecting a challenge to SIP revisions raised for the first time in a petition for review because it "was not pointed out to the EPA during the rulemaking and so has not been preserved for judicial review"). We address them briefly, however, to provide necessary clarification.

Indiana's challenge to EPA's conclusion that the substitute emissions reductions were surplus is also likely waived for the same reason. However, because this argument is hardly developed in Indiana's briefs and, as best we can tell, lacks merit, it does not warrant further consideration.

gues, without contradiction by Indiana, that the substitute emissions reductions from just the years 2005 and 2006 were more than sufficient to offset the increases from the I/M program change. Indiana does not attempt to argue that EPA's use of that two-year span for determining contemporaneity is unreasonable.

Indiana also argues that it was unreasonable for EPA to consider substitute emissions reductions occurring after 2007 as "contemporaneous" because those reductions were likely not contemplated by Illinois when it implemented the I/M change, and so likely could not have been relied upon by Illinois had it submitted its SIP revision when it was supposed to, in 2007.

This argument fails for two reasons. First, as we noted previously, Illinois did not need to rely on post-2007 reductions because the reductions from 2005 and 2006 were sufficient to offset any emissions increase caused by the I/M program change. Second, the inclusion of post-2007 reductions was harmless for another reason, though some explanation is necessary to see why. In determining whether Illinois's SIP revision was offset by emissions decreases, EPA calculated year-by-year comparisons of the increased emissions caused by the I/M change and the decreased emissions caused by listed factory closures. When analyzing a specific year, however, EPA did not look only at the factory closures from *that* year. Rather, it aggregated the emissions reductions from all of the previous "contemporaneous" factory closures. For the year 2008, for example, EPA compared the increased emissions caused by the I/M program relaxation that year to the emissions reductions resulting from factory closures in the years 2002–2008. That's because a factory that closed in 2002

remained closed in 2008; a factory closure eliminates emissions from that factory not just in the year that it closes, but for each following year as well.⁷ Also important is that the extra emissions caused Illinois's I/M change are decreasing over time—the increased pollution caused by the relaxed program is expected to be less each year, because there are expected to be fewer exempted vehicles (those from model years 1968–1995) on the road as time goes on. So, because emissions reductions outweighed the emissions increase in 2007—the year in which the increase was the largest—those reductions necessarily also outweigh the increases in each subsequent year, *even if the post-2007 factory closures are ignored*.⁸

Finally, we briefly address EPA's argument that it is owed special deference for certain "scientific determinations" it made in this case. *See Balt. Gas & Elec. Co.*, 462 U.S. at 103. We agree that some of its determinations are due this added deference, but EPA's argument goes too far. For example, EPA argues that its conclusion that Illinois's substitute emissions reductions were contemporaneous was a "technical determination." But, as Indiana points out, EPA has not demonstrated that there is anything scientific or technical about its determination of the length of the contemporaneousness window. EPA says that determining the contemporaneousness time frame is "a case-specific exercise that

⁷ There may be a point at which it becomes unreasonable for EPA to continue considering emissions reductions from the distant past. That possibility is not implicated in this case, however, as EPA's analysis runs only through the year 2025.

⁸ This is true even if the pre-2005 factory closures are omitted as not contemporaneous.

should be tailored to the facts of the particular rulemaking,” but there is no suggestion that this tailoring has anything to do with science—for example, information regarding how long certain pollutants remain in the air or how emissions from different years may interact—rather than policy. In the absence of any sign that the contemporaneousness inquiry is based on science, it is not owed any extra deference.

Relatedly, EPA claims that it rejected Indiana’s modeling of the Zion violation on scientific grounds. But EPA has not pointed to anything that is scientifically wrong with that analysis. Rather, the analysis was rejected because Indiana failed to take into account the effects of Illinois’s substitute emissions reductions, thereby rendering Indiana’s analysis irrelevant to the Section 110(l) inquiry that EPA has—as a matter of *policy*—deemed appropriate. With minor exceptions that are noted in EPA’s briefs (but not in its response to Indiana’s comment in the Final Rule), EPA does not challenge the science behind Indiana’s conclusion that, absent the change to Illinois’s I/M program, the Zion violation would not have occurred. So, EPA’s rejection of Indiana’s conclusions for non-scientific reasons does not merit special deference.⁹ Even without giving added deference to these

⁹ Indiana argues that EPA’s conclusion that Illinois’s substitute emissions reductions outweigh the increased emissions from the I/M program change does not merit special deference either, because EPA only engaged in the “simple arithmetic” of adding up Illinois’s various emissions reductions. However, EPA did not simply accept Illinois’s claims without confirming that Illinois’s emissions estimates were scientifically valid. Rather, it determined that Illinois “used reasonable methods and appropriate models in estimating the emissions effects of the program changes.” 78 Fed. Reg. at 68,382. That is a scientific determination, and therefore EPA’s conclusion that Illinois’s substitute emissions reductions

determinations, however, we hold that EPA did not act arbitrarily and capriciously by approving Illinois's SIP revision.

III. Conclusion

For the foregoing reasons, Indiana's petition for review is DENIED.

outweighed the increased emissions from the I/M program is entitled to receive added deference.