United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued February 20, 2019

Decided September 6, 2019

No. 17-1258

AMERICAN FUEL & PETROCHEMICAL MANUFACTURERS,
PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY, RESPONDENT

SMALL RETAILERS COALITION, ET AL., INTERVENORS

Consolidated with 18-1027, 18-1040, 18-1041

On Petitions for Review of an Action of the United States Environmental Protection Agency

Thomas A. Lorenzen and Samara L. Kline argued the causes for Obligated Petitioners. Suzanne Murray argued the cause for petitioner-intervenor Small Retailers Coalition. With them on the briefs were Julie R. Domike, Michael J. Scanlon, Richard S. Moskowitz, Robert J. Meyers, Elizabeth B. Dawson, Megan H. Berge, Lisa M. Jaeger, Brittany M. Pemberton, and Clara Poffenberger. Evan A. Young entered an appearance.

Bryan M. Killian argued the cause for petitioner National Biodiesel Board. With him on the briefs was Douglas A. Hastings.

Devorah Ancel argued the cause for Environmental Petitioners. With her on the briefs was *Eric Huber*.

Benjamin R. Carlisle, Attorney, and Michael R. Eitel, Senior Trial Attorney, U.S. Department of Justice, argued the causes for respondent. With them on the brief were Jeffrey H. Wood, Acting Assistant Attorney General, Jonathan D. Brightbill, Deputy Assistant Attorney General, and David P.W. Orlin, Attorney, U.S. Environmental Protection Agency.

Thomas Allen Lorenzen argued the cause for intervenors in support of respondent responding to National Biodiesel Board. With him on the brief were Robert A. Long Jr., Kevin King, Stacy Linden, Richard S. Moskowitz, Robert J. Meyers, and Elizabeth B. Dawson. David Y. Chung and John P. Wagner entered appearances.

Seth P. Waxman, David M. Lehn, Saurabh Sanghvi, Claire H. Chung, Robert A. Long, Jr., Kevin King, Matthew W. Morrison, Bryan M. Stockton, Bryan M. Killian, and Douglas A. Hastings were on the brief for intervenors Growth Energy, et al. in support of respondent.

Matthew W. Morrison, Bryan M. Stockman, Seth P. Waxman, David M. Lehn, Saurabh Sanghvi, Claire H. Chung, Bryan M. Killian, and Douglas A. Hastings were on the brief for intervenors Renewable Fuels Association, et al. in support of respondent.

Before: HENDERSON, TATEL, and GRIFFITH, Circuit Judges.

Opinion for the Court filed PER CURIAM.

PER CURIAM: The Clean Air Act's Renewable Fuel Program mandates that certain amounts of renewable fuel must be introduced into the U.S. fuel supply each year. In late 2017, the EPA promulgated its final 2018 Rule, which, as in previous years, established overall targets for the fuel market and imposed individual compliance obligations on fuel refineries and importers. These consolidated cases concern various challenges to the 2018 Rule. Several petitioners maintain it is too strict, others allege it is too lax, and still others argue that the EPA failed to follow proper procedures in its promulgation. We conclude that all these challenges lack merit, except for one: that the EPA violated its obligations under the Endangered Species Act by failing to determine whether the 2018 Rule may affect endangered species or critical habitat. We therefore grant the petition for review filed by the Gulf Restoration Network and Sierra Club and remand the 2018 Rule without vacatur for the EPA to comply with the Endangered Species Act. We deny all other petitions for review.

I. Background

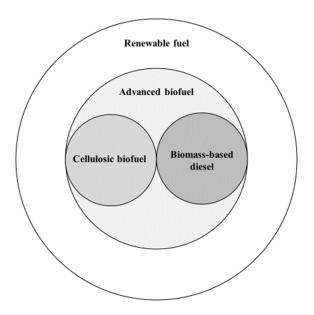
A. The Renewable Fuel Program

Enacted in 2005 and amended in 2007, the Renewable Fuel Program (the "Program" or "RFS Program"), alternatively called the Renewable Fuel Standard, was designed "[t]o move the United States toward greater energy independence and security" and "to increase the production of clean renewable fuels." Energy Independence and Security Act of 2007, Pub. L. No. 110-140, pmbl., 121 Stat. 1492, 1492; *see also id.* §§ 201–210 (amending the Program); Energy Policy Act of 2005, Pub. L. No. 109-58, § 1501, 119 Stat. 594, 1067–76 (enacting the Program). To accomplish these goals, the Program regulates

suppliers through "applicable volume[s]"—mandatory and annually increasing quantities of renewable fuels that must be "introduced into commerce in the United States" each year and tasks the EPA Administrator with "ensur[ing]" that those annual targets are met. 42 U.S.C. § 7545(o)(2)(A)(i). As we explained in Americans for Clean Energy v. EPA, "[b]y requiring upstream market participants ... to introduce increasing volumes of renewable fuel into the transportation fuel supply, Congress intended the Renewable Fuel Program to be a 'market forcing policy' that would create 'demand pressure to increase consumption' of renewable fuel." 864 F.3d 691, 705 (D.C. Cir. 2017) (first quoting Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017, 80 Fed. Reg. 77,420, 77,423 (Dec. 14, 2015); then quoting Monroe Energy, LLC v. EPA, 750 F.3d 909, 917 (D.C. Cir. 2014)).

The Program specifies annual fuel-volume requirements for four overlapping categories of fuel. The first and broadest category, "renewable fuel," includes any "fuel that is produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in" either "a transportation fuel," 42 U.S.C. § 7545(o)(1)(J), or "home heating oil or jet fuel," id. § 7545(o)(1)(A); see also Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 75 Fed. Reg. 14,670, 14,687 (Mar. 26, 2010) (including "home heating oil" and "jet fuel" within the definition of "renewable fuel"). Next are "advanced biofuel[s]," a subset of the renewable-fuel category defined as any "renewable fuel, other than ethanol derived from corn starch, that has lifecycle greenhouse gas emissions . . . at least 50 percent less than" "the average lifecycle greenhouse gas emissions . . . for gasoline or diesel" as of 2005. 42 U.S.C. § 7545(o)(1)(B)(i), (C). Lastly, of the fuels falling under the advanced-biofuel umbrella, the Program singles out two in particular: "cellulosic biofuel," a

fuel derived from the fibrous parts of plants, *see id.* § 7545(o)(1)(E), and "biomass-based diesel," a renewable substitute for conventional diesel, *see id.* §§ 7545(o)(1)(D), 13220(f). Because the definitions of these four fuel categories are "nested," so, too, are their applicable volumes. *Ams. for Clean Energy*, 864 F.3d at 731. As depicted below, the Program will double- or even triple-count the more specialized fuels, such that one gallon of advanced biofuel simultaneously counts as one gallon of renewable fuel, and one gallon of either cellulosic biofuel or biomass-based diesel also counts as one gallon of both advanced biofuel and renewable fuel.



The Program lists calendar years and corresponding applicable volumes for each type of fuel. These tables run through 2022 for renewable fuel, advanced biofuel, and cellulosic biofuel; for 2018, the statute mandates applicable volumes of 26, 11, and 7 billion gallons, respectively. See 42 U.S.C. § 7545(o)(2)(B)(i)(I)—(III). In contrast, the Program

provides applicable volumes for biomass-based diesel through only 2012. See id. § 7545(o)(2)(B)(i)(IV). For all later years, the statute sets a floor of 1 billion gallons, see id. § 7545(o)(B)(i)(IV), (v), and directs the Administrator to establish, "no later than 14 months" before the relevant year, an applicable volume "based on a review of the implementation of the program during" previous years and "an analysis of" six other broad factors such as the fuel's effect on "the environment," "energy security," and "cost to consumers," id. § 7545(o)(B)(ii).

Although the statutory tables initially appear to admit no exception, their applicable volumes in fact provide only starting points. Under certain circumstances, the Program grants the Administrator authority to exercise so-called waivers to reduce applicable volumes below statutory levels. Three waivers are relevant to this case.

The first waiver is mandatory. The Program requires that if in any year "the projected volume of cellulosic biofuel production is less than the minimum applicable volume" set by statute, then "the Administrator shall reduce the applicable volume of cellulosic biofuel . . . to the projected volume available during that calendar year." *Id.* § 7545(o)(7)(D)(i). Put simply, regardless of the applicable volume Congress established in the Program, the EPA may require by regulation no more cellulosic biofuel than the market is projected to provide in any given year.

The second waiver flows from the first. For any year in which the EPA reduces the applicable volume of cellulosic biofuel based on a projected shortfall, "the Administrator may also reduce the applicable volume of renewable fuel and advanced biofuels . . . by the same or a lesser volume." *Id.* Unlike its mandatory cousin, this "cellulosic waiver" is

discretionary: if cellulosic biofuel is projected to underperform statutory levels, the Administrator may reduce renewable fuel and advanced biofuel volumes by the entire cellulosic deficit, by some percentage of the shortfall, or by nothing at all. *See id.*; *see also* Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 49,794, 49,810 (Aug. 15, 2013) (interpreting the cellulosic waiver provision "as authorizing [the] EPA to reduce both total renewable fuel and advanced biofuel, by the same amounts, if [the] EPA reduces the volume of cellulosic biofuel"). Because cellulosic biofuel is nested within advanced biofuel, if the Administrator exercises anything less than a full cellulosic waiver, other advanced biofuels will need to make up for the difference.

The last waiver, the so-called general waiver, is also discretionary. It permits the Administrator to "reduc[e] the national quantity of renewable fuel required" by the Program "based on a determination" that any of three circumstances exist: first, "that implementation of the requirement would severely harm the economy . . . of a State, a region, or the United States," 42 U.S.C. § 7545(o)(7)(A)(i); second, "that implementation of the requirement would severely harm the . . . environment of a State, a region, or the United States," id.; or third, "that there is an inadequate domestic supply," id. § 7545(o)(7)(A)(ii). The Administrator may exercise the general waiver in response to a petition by a state or regulated party or "on his own motion." Id. § 7545(o)(7)(A).

After exercising any waivers and finalizing an applicable volume for each type of fuel, the EPA must by November 30 of each year calculate and promulgate "renewable fuel obligation[s] that" will "ensure[] that the [Program's] requirements . . . are met" in the upcoming year. *Id.* § 7545(o)(3)(B)(i). In broad strokes, this task requires the EPA to identify the entities responsible for collectively achieving

applicable volumes, quantify each entity's individual obligation, and ensure those entities' successful compliance.

To begin with, there is the threshold question of who, exactly, must satisfy renewable fuel obligations—that is, who are the "obligated parties"? Although the statute states that "[t]he renewable fuel obligation determined for a calendar year ... shall ... be applicable to refineries, blenders, and importers, as appropriate," id. § 7545(o)(3)(B)(ii)(I), the EPA has since the Program's inception declined to include blenders—defined as "part[ies] that simply blend[] renewable fuel into gasoline or diesel fuel," 40 C.F.R. § 80.1406(a)(1) within the definition of "obligated party," see Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program, 72 Fed. Reg. 23,900, 23,924 (May 1, 2007) (designating obligated parties); Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 75 Fed. Reg. at 14,721–22 (same). Instead, the EPA defines an obligated party as "any refiner that produces gasoline or diesel fuel within the 48 contiguous states or Hawaii, or any importer that imports gasoline or diesel fuel into the 48 contiguous states or Hawaii during a compliance period." 40 C.F.R. § 80.1406(a)(1). The Program does, however, permit "small refiner[ies]" to receive exemptions from renewable fuel obligations if they demonstrate that compliance would inflict "disproportionate economic hardship." 42 U.S.C. § 7545(o)(9)(B).

Next, each year the EPA must transform its aggregate, fuel-sector-wide applicable volumes into individual compliance obligations that sum to the requisite whole. To do this, the Program instructs the EPA to translate the applicable volumes into "percentage[s] of transportation fuel sold or introduced into commerce in the United States." *Id.* § 7545(o)(3)(B)(ii)(II). By dividing the applicable volumes for each fuel type by an estimate of the total gasoline and diesel

volume that will be used in the coming year (subject to some adjustments), the EPA generates "percentage standards" which then "inform each obligated party of how much renewable fuel it must introduce into U.S. commerce based on the volumes of fossil-based gasoline or diesel it imports or produces." *Ams. for Clean Energy*, 864 F.3d at 699; *see also* 40 C.F.R. § 80.1405(c) (setting out the percentage-standard formula). In other words, the EPA estimates what percentage of the overall fuel supply each renewable-fuel type should constitute and then requires each obligated party to replicate those percentages on an individual basis.

Although the nuances of the percentage standard are mostly beyond the scope of this case, one feature requires mention. When calculating percentage standards for any given year, the EPA accounts for any small refineries that have received exemptions by requiring non-exempt obligated parties to produce proportionally more. See Regulation of Fuels and Fuel Additives: 2011 Renewable Fuel Standards, 75 Fed. Reg. 76,790, 76,805 (Dec. 9, 2010) (explaining that small-refinery exemptions "result in a proportionally higher percentage standard for remaining obligated parties"). The problem is that while the EPA must promulgate annual percentage standards by November 30 each year, refineries may petition for an exemption "at any time," 42 U.S.C. § 7545(o)(9)(B)(i), and the EPA has no mechanism to adjust renewable fuel obligations to account for exemptions granted after each year's percentage standards are finalized. As a result, because the EPA cannot ensure that non-exempt obligated parties compensate for the renewable-fuel shortfall created by belated exemptions, those gallons of renewable fuel simply go unproduced.

Finally, after the obligated parties have been identified and their percentage standards have been set, there remains the matter of compliance. The Program does not require each obligated party to produce precisely the right mix of fuel itself. See id. § 7545(o)(5) (directing the EPA to establish a "[c]redit program"). Instead, for every gallon of renewable fuel entering the U.S. market, producers and importers may generate a set of "Renewable Identification Numbers" (RINs). See 40 C.F.R. §§ 80.1426, 80.1429(b) (describing how RINs are "generated" and then "separated" from their fuel); Ams. for Clean Energy, 864 F.3d at 699 (same). Each year, obligated parties must generate or purchase enough RINs to meet their renewable fuel obligations, which the obligated parties then satisfy by "retir[ing]" RINs at an annual compliance demonstration. 40 C.F.R. § 80.1427. To prevent fuel that ultimately leaves the U.S. market from satisfying obligated parties' renewable fuel obligations, the EPA also requires exporters to retire any RINs (or an equivalent number of RINs) that were generated by exported fuel. See 40 C.F.R. § 80.1430 (listing requirements for renewable-fuel exporters). An obligated party lacking enough RINs may, under certain circumstances, carry forward a deficit, while an obligated party possessing excess RINs may save those RINs for the following year. See 42 U.S.C. § 7545(o)(5)(B), (D) (addressing the transfer of RINs and the ability to carry forward a RIN deficit); 40 C.F.R. § 80.1427(b) (addressing "[d]eficit carryovers"); § 80.1428(c) id. (addressing "RIN expiration").

B. The 2018 Rule

To fulfill its annual rulemaking obligation under 42 U.S.C. section 7545(o)(3)(B)(i), the EPA proposed a rule in July 2017 to set renewable fuel applicable volumes and percentage standards for 2018 and a biomass-based diesel applicable volume for 2019. Renewable Fuel Standard Program: Standards for 2018 and Biomass-Based Diesel Volume for 2019 ("Proposed Rule"), 82 Fed. Reg. 34,206 (proposed July 21, 2017). The Proposed Rule explained that "[r]eal-world challenges, such as the slower-than-expected development of

the cellulosic biofuel industry, . . . have made the volume targets established by Congress for 2018 beyond reach for all fuel categories other than [biomass-based diesel]." *Id.* at 34,207. The EPA thus proposed reducing the cellulosic biofuel applicable volume to match the projected volume of cellulosic biofuel available in 2018 and exercising its discretionary cellulosic waiver authority to reduce the applicable volumes for advanced biofuel and total renewable fuel a corresponding amount. *Id.* at 34,208–10. It determined that the market for biomass-based diesel, however, outproduced the minimum requirements of the Program and therefore proposed maintaining for 2019 its applicable volume for biomass-based diesel set for 2018. *Id.* at 34,210–11.

The Proposed Rule further solicited comment on three other issues. First, although the EPA initially concluded that it should not exercise its general waiver authority to reduce applicable volumes further, it solicited comment on whether it should exercise that authority due to either severe economic harm or inadequate domestic supply. *Id.* at 34,213. Second, it solicited comment on how it should account for small refinery exemptions when translating the 2018 applicable volumes into percentage standards. *Id.* at 34,241–42. And third, it solicited comment on the current RIN trading market. *Id.* at 34,211. It clarified, however, that it was "not soliciting comment on any aspect of the current RFS regulatory program other than those specifically related to RIN trading . . . and the proposed annual standards for 2018 and biomass-based diesel applicable volume for 2019." *Id.*

During the comment period, the EPA published supplemental information regarding its proposal and requested further comment on aspects of the Proposed Rule. *See* Renewable Fuel Standard Program: Standards for 2018 and Biomass-Based Diesel Volume for 2019; Availability of

Supplemental Information and Request for Further Comment ("Supplemental Information"), 82 Fed. Reg. 46,174 (Oct. 4, 2017). In particular, in response to this court's intervening decision in *Americans for Clean Energy*, 864 F.3d 691, the EPA solicited comment on the meaning of the phrases "inadequate domestic supply" and "severe economic harm" in the general waiver provision, 42 U.S.C. section 7545(o)(7)(A). *See* Supplemental Information, 82 Fed. Reg. at 46,177–79.

Over 235,000 comments later, the EPA promulgated its final 2018 Rule in December 2017. See Renewable Fuel Standard Program: Standards for 2018 and Biomass-Based Diesel Volume for 2019 ("2018 Rule"), 82 Fed. Reg. 58,486, 58,487 (Dec. 12, 2017). The 2018 Rule tracked the Proposed Rule with only slight modifications. The EPA reduced the applicable volume for cellulosic biofuel to match the agency's updated projection of the amount of cellulosic biofuel that would be produced in 2018. Id. at 58,487. It also exercised its full cellulosic waiver authority to reduce the applicable volumes for advanced biofuel and renewable fuel by an equal amount. Id. And as anticipated in the Proposed Rule, the EPA declined to exercise its general waiver authority to reduce applicable volumes further due to inadequate domestic supply or severe economic harm. Id. The EPA adopted the following final applicable volumes and percentage standards:

2018 RULE: APPLICABLE VOLUMES & PERCENTAGE STANDARDS

	Applicable Volume	Percentage
	(billions of gallons)	Standard
Cellulosic Biofuel	0.288	0.159%
Biomass-Based Diesel	2.1 (2019)	1.74%
Advanced Biofuel	4.29	2.37%
Total Renewable Fuel	19.29	10.67%

Id. at 58,487, 58,491. The EPA further explained that it calculated the percentage standards without prospectively adjusting for potential small refinery exemptions and that it did not intend to adjust retroactively the fuel percentage standards to account for exemptions it subsequently granted. Id. at 58,523. The EPA also declined to address as "beyond the scope of this rulemaking" comments asking it to reconsider its RIN policy for renewable fuel exports and its definition of obligated parties. Assessment and Standards Div., Office of Transp. and Air Quality, EPA, EPA-420-R-17-007, Renewable Fuel Standard Program – Standards for 2018 and Biomass-Based Diesel Volume for 2019: Response to Comments 223 (December 2017) ("Response to Comments"), Joint Appendix (J.A.) 1446.

C. Procedural History

After the EPA promulgated its final rule, four groups of interested parties petitioned for review in this court. American Fuel & Petrochemical Manufacturers, a national trade association of U.S. refineries and petrochemical manufacturers, and Valero Energy Corporation, a Texas-based energy company that refines transportation fuels, produces biofuels, and sells them in the United States (together, the "Obligated Parties"), both filed petitions for review challenging the 2018 Rule as setting applicable volumes and percentage standards too high. On the other hand, the National Biodiesel Board, a biodiesel industry trade association, petitioned for review of the 2018 Rule on the ground that the Rule set applicable volumes and percentage standards too low. Independently, the Sierra Club and Gulf Restoration Network, nonprofit environmental two groups (together, "Environmental Petitioners"), filed a joint petition for review of the 2018 Rule, claiming that the EPA violated the Endangered Species Act, 16 U.S.C. §§ 1531–1544, by failing to consult with the U.S. Fish and Wildlife Service and the

National Marine Fisheries Service regarding whether the 2018 Rule would adversely affect threatened or endangered species. Several other parties intervened, including the Small Retailers Coalition, a national trade association of small gasoline and diesel retailers, which intervened on behalf of the Obligated Parties and now argues that the EPA violated the Regulatory Flexibility Act, 5 U.S.C. §§ 601–612, by failing to assess the 2018 Rule's potential effects on small fuel retailers.

While the petitions before us were pending, another panel of this court resolved several petitions challenging the EPA's final rule setting applicable volumes and percentage standards for 2017 and the applicable volume for biomass-based diesel for 2018. See Alon Ref. Krotz Springs, Inc. v. EPA, No. 16-1052, slip op. at 6–7 (D.C. Cir. Aug. 30, 2019) (deciding related case Coffeyville Res. Ref. & Mktg., LLC v. EPA, No. 17-1044 (D.C. Cir. filed Feb. 9, 2017)).

II. Jurisdiction and Standards of Review

We have jurisdiction of a timely petition for review of the EPA's regulations implementing the Program. 42 U.S.C. § 7607(b)(1). We may reverse the EPA's actions under the Program if we find them to be "arbitrary, capricious, [or] an abuse of discretion." Id. § 7607(d)(9)(A). We will sustain the EPA's actions, however, so long as the agency "consider[ed] all of the relevant factors and demonstrate[d] a reasonable connection between the facts on the record and the resulting policy choice." Sierra Club v. Costle, 657 F.2d 298, 323 (D.C. Cir. 1981). In conducting our review, we "give an 'extreme degree of deference' to the EPA's evaluation of 'scientific data within its technical expertise,' especially where, as here, we review the 'EPA's administration of the complicated provisions of the Clean Air Act." Miss. Comm'n on Envtl. Quality v. EPA, 790 F.3d 138, 150 (D.C. Cir. 2015) (per curiam) (citation omitted) (first and second quoting City of Waukesha v. EPA, 320 F.3d 228, 247 (D.C. Cir. 2003) (per curiam); then quoting Catawba Cty. v. EPA, 571 F.3d 20, 41 (D.C. Cir. 2009) (per curiam)).

We also may reverse an EPA action under the Program if we determine that it is "otherwise not in accordance with law" or "in excess of statutory jurisdiction, authority, or limitations, or short of statutory right." 42 U.S.C. § 7607(d)(9)(A), (C). The court reviews the EPA's interpretation of the Clean Air Act under the familiar two-step framework formulated in *Chevron*, U.S.A., Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984). Under Chevron, the court defers to the EPA's interpretation if the statutory text is ambiguous and the EPA's interpretation is reasonable. See id. at 842–45.

We proceed to apply these standards of review to each of the claims raised in these consolidated cases. In Part III we address arguments regarding the 2018 Rule's applicable volumes, including claims that the EPA erred both in exercising its full cellulosic waiver authority and in declining to exercise its general waiver authority. Next, in Part IV we discuss challenges to the ways in which the EPA translates applicable volumes into compliance obligations, specifically its treatment of RINs generated by renewable fuel exports, its definition of "obligated parties," and its method for accounting for small refinery exemptions when calculating percentage standards. In Part V we deal with the claim that the EPA violated the Regulatory Flexibility Act in promulgating the 2018 Rule. And finally, in Part VI we consider whether the EPA violated the Endangered Species Act by failing to engage in interagency consultation before issuing the 2018 Rule.

III. Applicable Volumes

We begin with the 2018 Rule's applicable volumes. To arrive at those requirements, the EPA proceeded through a

series of interlocking steps. It began by projecting 288 million gallons of cellulosic biofuel production in 2018—6.71 billion gallons short of the Program's 7-billion-gallon statutory target—and exercised its mandatory waiver accordingly. *See* 2018 Rule, 82 Fed. Reg. at 58,492, 58,495–504. Next, after estimating "reasonably attainable" volumes of other advanced biofuels and considering "the costs and benefits associated with" achieving those volumes, the EPA decided to exercise its full cellulosic waiver authority to reduce advanced biofuel and renewable fuel applicable volumes to 4.29 and 19.29 billion gallons, respectively. *Id.* at 58,513. And finally, the EPA considered but rejected using its general waiver authority, concluding that neither "severe economic harm" nor "inadequate domestic supply" warranted further reductions in applicable volumes. *Id.* at 58,516–18.

Petitioners find fault in each of these steps. First, the Obligated Parties argue that the EPA miscalculated its projection of cellulosic biofuel production. Second, the National Biodiesel Board contends that the EPA impermissibly considered financial costs when deciding to set applicable volumes of advanced biofuels below reasonably attainable levels. And third, the Obligated Parties argue that, for various reasons, the EPA unreasonably interpreted and refused to exercise its general waiver authority. None of these challenges has merit.

A. Liquid Cellulosic Biofuel Projection

In the 2018 Rule, the EPA projected that 288 million gallons of cellulosic biofuel would be produced in 2018: the sum of 274 million gallons of liquefied and compressed natural gas and 14 million additional gallons of liquid cellulosic biofuel. *See* 2018 Rule, 82 Fed. Reg. at 58,503 tbl.III.D.3-1. Only this latter liquid estimate is at issue in this case.

To arrive at its liquid cellulosic projection, the EPA "use[d] the same general approach as . . . in previous years." Id. at 58,498. It began by sorting potential producers according whether they had previously "achieved consistent commercial scale production" of liquid cellulosic biofuel. Id. Then it defined two ranges "of likely production volumes for 2018," one "for each group of companies." *Id.* It set the low end of each range at last year's "actual RIN generation" (for consistent producers) or zero (for new producers) and estimated the high end of each range (for both groups) by considering "a variety of factors," including each facility's "expected start-up date," "ramp-up period," and "capacity." Id. at 58,499. And finally, the EPA selected what it calls a "percentile value"—in simplified terms, a number somewhere between the endpoints of each range—to extract "from the established range[s] a single projected production volume for each group of companies." Id. at 58,498–99. The lower the percentile value, the lower the resulting projection.

The Obligated Parties complain that by relying on this percentile method, which has produced overestimations in the past, the 2018 Rule "failed to correct chronic errors" in the EPA's liquid cellulosic biofuel projections. Obligated Parties Br. 41. But the record reveals just the opposite. Recognizing that its "estimates for liquid cellulosic biofuel exceeded actual production of liquid cellulosic biofuel" in previous years, the EPA adjusted its percentile values downward in the 2018 Rule to "the percentile values that would have resulted in accurate production projections" in 2016 and 2017. 2018 Rule, 82 Fed. Reg. at 58,499–500. The result was the 10th percentile for new producers and the 12th percentile for consistent producers, down from the 25th and 50th percentiles, respectively, that the EPA had used in 2016 and 2017. See id. at 58,500-01. The 2018 Rule, then, hardly presents "a situation in which [the] EPA has arbitrarily refused to reconsider a projection methodology that has proven unsuccessful in the past." *Ams. for Clean Energy*, 864 F.3d at 728.

Given that the Obligated Parties offer no other grounds to doubt the EPA's liquid cellulosic biofuel projection methodology, we conclude that the EPA's estimate, as required, "took a 'neutral aim at accuracy' and was otherwise reasonable and reasonably explained." *Id.* at 729 (quoting *Am. Petroleum Inst. v. EPA*, 706 F.3d 474, 476 (D.C. Cir. 2013)).

B. Cellulosic Waiver

Having projected that only 288 million gallons of cellulosic biofuel would be produced in 2018, the EPA did as the Program requires and "reduce[d] the applicable volume of cellulosic biofuel" from 7 billion gallons "to [that] projected volume." 42 U.S.C. § 7545(o)(7)(D)(i); see also 2018 Rule, 82 Fed. Reg. at 58,492 (explaining that the EPA was "setting the cellulosic biofuel volume requirement at a level lower than the statutory applicable volume"). The EPA then confronted the question of whether to exercise its discretionary cellulosic waiver. Put another way, given the absence of 6.71 billion gallons of cellulosic biofuel that Congress had predicted would help satisfy the Program's overall 11-billion-gallon advanced biofuel requirement, the EPA needed to decide whether to "reduce the applicable volume" of the latter fuel type "by the same or a lesser volume" as it had reduced the former. 42 U.S.C. § 7545(o)(7)(D)(i). The EPA analyzed this question in two stages.

It began by considering what volumes of advanced biofuels would be "reasonably attainable in 2018," excluding volumes whose attainment would result in the "diversion of advanced feedstocks from other uses or diversion of advanced biofuels from foreign sources." 2018 Rule, 82 Fed. Reg. at 58,505. Based on an extensive analysis of various advanced

biofuels (primarily imported sugarcane ethanol and advanced biodiesel and renewable diesel), the EPA projected that in addition to 288 million gallons of cellulosic biofuel, about 4.11 billion gallons of *non-cellulosic* advanced biofuels were reasonably attainable. *See id.* at 58,513. Although less than the statute's 11-billion-gallon target, the EPA's combined 4.4-billion projection, in a sense, exceeded statutory expectations: while the Program implicitly requires 4 billion gallons of non-cellulosic advanced biofuel (11 billion minus 7 billion), the EPA estimated that up to 4.11 billion gallons could, in fact, be made available (110 million gallons above the 4-billion-gallon floor).

Next, the EPA had to decide whether to require those 110 million gallons of non-cellulosic advanced biofuels "to partially backfill for"—i.e., compensate for—"missing cellulosic volumes." Id. at 58,505. Acknowledging that it had mandated such backfilling in previous years, the EPA nonetheless explained that, "as a result of a stronger policy focus on the economic impacts of the RFS program," it had adopted in the 2018 Rule a "new approach to balancing relevant considerations" that "plac[ed] a greater emphasis on cost considerations." Id. at 58,504, 58,513. The EPA "present[ed] illustrative cost projections for ... the two advanced biofuels ... most likely to provide the marginal increase in volumes," "sugarcane ethanol and soybean biodiesel," and estimated per-gallon marginal cost increases ranging from \$0.61 to \$1.56 for the former (compared to gasoline) and \$0.95 to \$1.30 for the latter (compared to diesel). Id. at 58,513. "In light of these comparative costs," the EPA concluded, "it is reasonable to forgo the marginal benefit that might be achieved by establishing the advanced biofuel standard to require an additional 110 million gallons." Id. In the end, then, the EPA decided to exercise its full cellulosic waiver authority to reduce the advanced biofuel applicable

volume—and, by extension, the renewable fuel applicable volume—by 6.71 billion gallons. *See id.* (explaining that the EPA interprets "the cellulosic waiver provision . . . to provide equal reductions in advanced biofuel and total renewable fuel").

The National Biodiesel Board argues that by taking cost considerations into account, the EPA erred in exercising its full cellulosic waiver. We disagree.

The Board first argues that the EPA "waive[d] the advanced-biofuel volume solely to save obligated parties money," NBB Br. 23, and that in so doing, the 2018 Rule "strayed too far" from the Program's "market forcing" purpose, id. at 21 (quoting Ams. for Clean Energy, 864 F.3d at 710). Neither proposition is correct. To begin with, the EPA hardly "[s]et[] the advanced-biofuel volume based entirely on costs." Id. To the contrary, in calculating the reasonably attainable volume of advanced biofuels, the EPA analyzed many factors, all of which justified a 6.6-billion-gallon reduction—and only then did it rely on cost considerations to support an additional 110-million-gallon decrease. And the EPA's decision to consider costs fell well within its discretion. As this court observed in Americans for Clean Energy, because "the text of the cellulosic waiver provision does not direct [the] EPA to 'consider particular factors," the "EPA enjoys broad discretion" "to consider 'a range of factors' in determining whether to exercise its cellulosic waiver authority." 864 F.3d at 734 (quoting Monroe Energy, 750 F.3d at 915-16). The Board offers no persuasive reason to conclude that those factors must exclude costs.

The Board next contends that the EPA failed to justify its decision to abandon its former practice of requiring noncellulosic advanced biofuels to backfill for cellulosic deficits

reasonably attainable levels. Under up normal circumstances, the 2018 Rule's explanation would have been perfectly sufficient: the EPA both "display[ed] awareness that it [was] changing position" and offered "good reasons for the new policy." FCC v. Fox Television Stations, Inc., 556 U.S. 502, 515 (2009). The Board, however, argues that this is not the typical case. Because the EPA's prior practice of requiring all reasonably attainable levels to be produced "engendered serious reliance interests," says the Board, the 2018 Rule was required to "provide 'a more detailed justification" than usual. NBB Br. 24 (quoting Fox Television Stations, 556 U.S. at 515)). According to the Board, the EPA failed to satisfy this heightened requirement.

Again, we disagree. First, it is far from obvious that renewable fuel producers possess the sort of reliance interests that merit special consideration. Neither the statute nor the EPA ever suggested that the Program's statutory applicable volumes would be enforced without modification. To the contrary, as the EPA argues, annual volumes are "always dependent on a variety of considerations," including the "EPA's projection of the volume of cellulosic biofuel," its "calculation of reasonably attainable volumes," and its decision regarding whether to "exercise[] its other waiver authorities." EPA Br. 28. And second, even where "serious reliance interests" do exist, what is required is not better reasons but rather more tailored reasons. "[I]t is not that further justification is demanded by the mere fact of policy change; but that a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy." Fox Television Stations, 556 U.S. at 515–16. The EPA did just that in its 2018 Rule, which explains that the EPA declined to require backfilling because, in its view, any "marginal benefit" generated by the additional 110 million gallons of advanced biofuel would be outweighed by their steep substitution costs.

2018 Rule, 82 Fed. Reg. at 58,513. No further explanation was required.

Finally, the Board suggests that the non-delegation doctrine prohibits any interpretation of the EPA's cellulosic waiver authority broad enough to permit the EPA to consider costs. This argument we easily reject. To satisfy the constitutional requirement that "[a]ll legislative Powers ... shall be vested in . . . Congress," U.S. Const. art. I, § 1, all that is required "when Congress confers decisionmaking authority upon agencies" is that it "lay down by legislative act an intelligible principle to which the person or body authorized to [act] is directed to conform," Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 472 (2001) (alteration in original) (quoting *J.W.* Hampton, Jr., & Co. v. United States, 276 U.S. 394, 409 (1928)). "Or in a related formulation, the Court has stated that a delegation is permissible if Congress has made clear to the delegee 'the general policy' he must pursue and the 'boundaries of [his] authority." Gundy v. United States, 139 S. Ct. 2116, 2129 (2019) (alteration in original) (quoting *Am*. Power & Light Co. v. SEC, 329 U.S. 90, 105 (1946)). Congress provided more than enough direction in the Program's cellulosic waiver provision, which constrains both when and to what extent the EPA may reduce statutory applicable volumes: only after projecting a cellulosic biofuel deficit and only by an amount less than or equal to that projected shortfall. See 42 U.S.C. § 7545(o)(7)(D)(i) (stating that "[f]or any calendar year in which the Administrator makes ... a reduction" in the applicable volume for cellulosic biofuel based on a projected shortfall, "the Administrator may also reduce the applicable volume of renewable fuel and advanced biofuels requirement established under paragraph (2)(B) by the same or a lesser volume").

C. General Waiver

After reducing applicable volumes of cellulosic biofuel, advanced biofuel, and renewable fuel by the amount of the cellulosic shortfall, the EPA then considered whether "severe[] harm [to] the economy or environment" or "an inadequate domestic supply" existed such that further reductions were justified. 42 U.S.C. § 7545(o)(7)(A). Answering those inquiries in the negative, the EPA declined to exercise its general waiver. The Obligated Parties now raise various challenges to that decision, and we consider each in turn.

1. Sequencing the Cellulosic and General Waivers

Before addressing the particulars of the EPA's general waiver determination, the Obligated Parties make an antecedent argument: that the EPA began its analysis at the wrong baseline. They ground their contention in the Program's general waiver provision, which states that the EPA "may waive the requirements of paragraph (2)"—that is, the statutory applicable volumes—"by reducing the national quantity of renewable fuel required under paragraph (2)." 42 U.S.C. § 7545(o)(7)(A). According to the Obligated Parties, this language requires the "EPA to consider whether domestic supply would be inadequate to meet statutorily-specified volumes . . . and whether meeting those volume requirements would trigger severe economic harm." Obligated Parties Br. 22. In other words, the Obligated Parties argue that instead of considering whether to "further reduc[e]" applicable volumes after exercising its cellulosic waiver, 2018 Rule, 82 Fed. Reg. at 58,516, the EPA should have conducted its general waiver analysis as if the cellulosic waiver had never happened.

The Obligated Parties ask too much. As an initial matter, the statute is at least ambiguous when it comes to sequencing the cellulosic and general waivers. Both provisions grant the EPA authority to "waive" or "reduce" the applicable volumes established by "paragraph (2)," but neither provision indicates what the EPA should do if, as here, it has already decided to reduce those volumes. 42 U.S.C. § 7545(o)(7)(A) (the EPA may use the general waiver to "waive the requirements of paragraph (2) ... by reducing the national quantity of renewable fuel required under paragraph (2)"); *id.* § 7545(o)(7)(D) (the EPA may use the cellulosic waiver to "reduce the applicable volume of renewable fuel and advanced biofuels requirement established under paragraph (2)(B)").

Consequently, because "Congress has not directly addressed the precise question at issue," we need determine only "whether the agency's answer is based on a permissible construction of the statute." *Chevron*, 467 U.S. at 843. And indeed it is. Not only is it reasonable to interpret one waiver authority as reducing paragraph (2)'s volumes for purposes of the other waiver authority, but, as the EPA points out, "[t]here is no logical reason why [the agency] should base its waiver decision" on hypothetical volumes "that will not actually be implemented . . . because they have been reduced." EPA Br. 37. We have no basis, therefore, for overriding the EPA's reasonable interpretation of the Program's text with a requirement—cumbersome at best and absurd at worst—that the EPA conduct counterfactual analyses of scenarios it has already rejected.

2. Severe Economic Harm

We turn, then, to the EPA's examination of whether the 2018 Rule's applicable volumes as reduced by the cellulosic waiver "would severely harm the economy . . . of a State, a region, or the United States." 42 U.S.C. § 7545(o)(7)(A)(i). The EPA concluded no, and the Obligated Parties now raise two objections: one interpretive, the other analytical.

The Obligated Parties first take issue with the EPA's interpretation of the requisite causal link between applicable volumes, on the one hand, and severe harm to the economy, on the other. The EPA interprets the general waiver provision "as requiring a demonstration that implementation of the RFS Program itself would cause severe economic harm (as opposed to allowing a waiver if severe economic harm were demonstrated for any reason, or if the RFS merely contributed to severe harm)." Memorandum from David Korotney, Office of Transp. and Air Quality, EPA, to Docket EPA-HQ-OAR-2017-0091, Assessment of Waivers for Severe Economic Harm or BBD Prices for 2018, at 15 (Nov. 30, 2017) ("Assessment of Waivers"), J.A. 1051. The Obligated Parties argue that by "requir[ing] proof that a single market factor—RFS volume requirements—is the sole cause of the harm," the EPA has ensured that its test will almost never be met. Obligated Parties Br. 25.

The EPA has set a high bar, to be sure, but we disagree with the Obligated Parties' assertion that the bar is so high as to be unreasonable. At bottom, this dispute comes down to an interpretation of the phrase "would severely harm the economy." 42 U.S.C. § 7545(o)(7)(A)(i). The degree of causation required by that text is an open question, and although "agencies must operate within the bounds of reasonable interpretation" of even ambiguous statutory phrases, Util. Air Regulatory Grp. v. EPA, 573 U.S. 302, 321 (2014) (internal quotation marks omitted), courts, by the same token, "may not substitute [their] own construction of a statutory provision for a reasonable interpretation made by the administrator of an agency," Chevron, 467 U.S. at 844. The EPA argues that in the Program, Congress intentionally "set a high threshold" for an economic-harm determination by "requiring ... direct causation and a high degree of confidence." EPA Br. 41. And indeed, this court has previously

observed that "Congress intended the ... Program to be ... market forcing." *Ams. for Clean Energy*, 864 F.3d at 705 (internal quotation marks omitted). Accordingly, we cannot now fault the EPA for declining to reduce applicable volumes below statutory levels absent some clearly and causally demonstrable harm. That EPA's interpretation is stringent hardly makes it unreasonable.

As to the Obligated Parties' analytical objection, they question whether the EPA provided adequate reasons for its determination that "further reductions" of applicable volumes "on the basis of severe economic harm" were not "warranted." 2018 Rule, 82 Fed. Reg. at 58,518. To reach this conclusion, the EPA first acknowledged various comments regarding the 2018 Rule's financial "impacts on specific companies" but explained that "statements generally claiming financial difficulties, potential for closure, and the high cost of RIN purchases alone" failed to support a determination "that severe economic harm to a State, a region, or the United States [was] occurring." Assessment of Waivers 5, J.A. 1041. Then, observing "that the 2018 volumes generated through the maximum reduction permitted under the cellulosic waiver authority are nearly the same as the volume requirements for 2017," the EPA explained that it would, in effect, use 2017 as a test case by considering both "[w]hether severe economic harm ha[d] occurred . . . in 2017, and . . . whether the economic conditions in 2018 might be expected to be substantially different than those in 2017." 2018 Rule, 82 Fed. Reg. at 58,518. Based on its assessment of "market overcompliance, retail fuel prices, fuel supply, crop prices, and refinery closures" in recent years along with "crop-based feedstock futures prices" and "projected gasoline demand" for 2018, the EPA concluded that the 2017 requirements had not "caus[ed] severe economic harm to a State, a region, or the United States" and that "market conditions in 2018" were unlikely "to cause

compliance with the applicable standards to have a higher potential for severe economic harm than in 2017." Assessment of Waivers 14–15, J.A. 1050–51.

With this analysis, the EPA sufficiently "examine[d] the relevant data and articulate[d] a satisfactory explanation for its action." Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). Although the EPA declined to conduct a state-by-state or region-by-region analysis, "an agency need not-indeed cannot-base its every action upon empirical data; depending upon the nature of the problem, an agency may be 'entitled to conduct . . . a general analysis based on informed conjecture." Chamber of Commerce v. SEC, 412 F.3d 133, 142 (D.C. Cir. 2005) (alteration in original) (quoting Melcher v. FCC, 134 F.3d 1143, 1158 (D.C. Cir. 1998)). Here, based on "the limited time available" to conduct its analysis, "the lack of clear evidence of severe economic harm provided in comments," and its ability to "grant waivers . . . during the compliance year should sufficient evidence become available," the EPA reasonably elected to begin with "a high-level investigation of a number of broad economic indicators" to see if they "provide[d] evidence of possible severe economic harm that would justify further EPA investigation." Assessment of Waivers 7, J.A. 1043. The EPA then reasonably concluded that they did not. See id.

The Obligated Parties nonetheless argue that the EPA erred by "ignor[ing] actual data regarding state and regional economic jeopardy." Obligated Parties Br. 29 (emphasis omitted). For this claim, they cite two facts: first, that "the largest refiner on the East Coast" declared bankruptcy after the 2018 Rule went into effect, portending, in the Obligated Parties' view, additional "refinery shutdowns," Obligated Parties Reply Br. 12, 15; and second, that RIN costs are

"escalating" and, in the Obligated Parties' estimation, not easily passed on to consumers, Obligated Parties Br. 29.

But the EPA did, in fact, address this purported evidence of economic harm. As to threatened refinery closures, the EPA noted that the commenting refineries lacked "any concrete evidence that their financial difficulties are caused primarily or even significantly by the RFS program." Assessment of Waivers 5, J.A. 1041. And as to compliance costs, the EPA explained that the refineries had failed to show "why they cannot recoup the cost of RINs through higher prices of their products." 2018 Rule, 82 Fed. Reg. at 58,517. Although the Obligated Parties may disagree with the EPA's analysis, they have fallen far short of showing that the EPA either "entirely failed to consider an important aspect of the problem" or "offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Motor Vehicle Mfrs. Ass'n, 463 U.S. at 43. Mindful that we may not "substitute [our] judgment for that of the agency," id., we conclude that the EPA did not act arbitrarily and capriciously in declining to exercise the economic-harm prong of its general waiver authority.

3. Inadequate Domestic Supply

The Obligated Parties also take issue with the EPA's failure to exercise the general waiver "based on a determination... that there is an inadequate domestic supply." 42 U.S.C. § 7545(o)(7)(A)(ii). The dispute turns on the meaning of the phrase "domestic supply": the Obligated Parties argue that it includes only fuel *produced* domestically, while the EPA, at least until the 2018 Rule, had interpreted the term to include any fuel *available* domestically, including imports. *See* Supplemental Information, 82 Fed. Reg. at 46,177 (noting that the EPA had previously considered "biofuel imports as

part of the domestic supply"). But recently the EPA's enthusiasm for its imports-inclusive interpretation has turned tepid. In its October 2017 Supplemental Information, the EPA sought comments on whether to adopt a production-only interpretation under which the agency would continue to "consider the availability of imports . . . in determining whether to exercise its discretion to use the waiver authority," but only after "ma[king] the threshold finding that there was an inadequate domestic supply" of fuel produced in the United States and, even then, only "as one factor among others." *Id.* at 46,178.

After dipping its toe into the water, however, the EPA waded no further. Instead, the final 2018 Rule analyzed each category of fuel under both a production-only and an imports-inclusive interpretation of "domestic supply." Concluding that "a waiver is not warranted" "[u]nder either approach," the EPA adopted neither definition—in effect, deciding not to decide. 2018 Rule, 82 Fed. Reg. at 58,516. Its analysis proceeded as follows.

The EPA began by discussing the supply of "non-advanced" renewable fuel—primarily corn ethanol—that could fill the 15-billion-gallon gap between the Program's requirement of 11 billion gallons of advanced biofuel (4.29 after the cellulosic waiver) and 26 billion gallons of total renewable fuel (19.29 after the cellulosic waiver). 2018 Rule, 82 Fed. Reg. at 58,516–17. Explaining that "the total domestic production capacity of corn ethanol in the [United States] is about 16 billion gallons" and that "total production . . . in 2016 exceeded 15 billion gallons," the EPA concluded the market could supply sufficient "conventional renewable fuel" with or without imports. *Id.* at 58,517.

Turning next to cellulosic biofuel, the EPA explained that 286 million gallons of its 288-million-gallon projection was "expected to come from domestic sources" and that pre-2018 "carryover cellulosic biofuel RINs" were available to facilitate "additional compliance flexibility." *Id.* "Given the importance that Congress placed on the growth of cellulosic biofuel volumes" and the 2018 Rule's "projection that compliance with a 288 million gallon requirement is feasible," the EPA decided it "would not exercise its discretion to lower the 288 million gallon projected cellulosic biofuel volume by 2 million gallons even if [it] were to interpret the term 'domestic supply' to exclude imported volumes." *Id.*

That left only non-cellulosic advanced biofuel. Having already determined that 4.11 billion gallons (4.4 billion minus 288 million) was "reasonably attainable," the EPA dismissed any concern that there would be an "inadequate domestic supply" of advanced biofuel under an imports-inclusive interpretation. See id. at 58,516. But, as the EPA acknowledged, a production-only interpretation presented a closer question. The EPA observed that "a significant portion of the advanced biofuel available in previous years has been from imported biofuels," and it noted comments "suggest[ing] that, without imported volumes, the domestic industry could not ramp up production quickly enough to compensate for the exclusion of imports from our analysis." Id. at 58,517. The 2018 Rule, however, also highlighted comments to the contrary. "Some commenters pointed to total domestic production capacity and feedstock availability," the EPA explained, "to argue that domestic producers are capable of compensating for volumes that would not be provided through imports." Id. Faced with this "uncertainty," the EPA concluded that based on "the distinct possibility that the domestic industry could compensate for exclusion of imports" and "the availability of imported volumes and carryover RINs," it "would not choose to exercise its authority to grant a waiver on the basis of inadequate domestic supply for 2018 even if it interpreted the term 'domestic supply' to exclude imports." *Id.*

This belt-and-suspenders approach, though perhaps not maximally efficient, relieved the EPA of any obligation to choose conclusively one interpretation of "domestic supply" over the other. To be sure, "an agency rule would be arbitrary and capricious if the agency . . . entirely failed to consider an important aspect of the problem." Motor Vehicle Mfrs. Ass'n, 463 U.S. at 43. But by explaining that it would decline to exercise its general waiver under either a production-only or imports-inclusive interpretation, the EPA made that choice itself unimportant. And because the EPA sufficiently "acknowledge[d] factual uncertainties and identif[ied] the considerations it found persuasive" with respect to each of its alternative analyses, we find no fault in the substance of the 2018 Rule's "predictive judgments" about the adequacy of domestic supply. Rural Cellular Ass'n v. FCC, 588 F.3d 1095, 1105 (D.C. Cir. 2009).

Nor are we persuaded by the Obligated Parties' contention that the imports-inclusive option would have "impermissibly twisted the [Program's] statutory language." Obligated Parties Br. 32. Implied by the Obligated Parties' interpretive argument is a bold assertion: that the EPA could have acted arbitrarily and capriciously by merely contemplating, without adopting, an erroneous interpretation of the statutory text. But even assuming that premise, we conclude that the EPA permissibly considered what would have been a reasonable interpretation of an ambiguous statutory phrase. Indeed, this court has previously offered "import capacity" as an example of the sorts of "supply-side factors" that the "inadequate domestic supply provision authorizes [the] EPA to consider" when "examining whether the supply of renewable fuel is adequate." *Ams. for*

Clean Energy, 864 F.3d at 710. We can hardly blame the EPA for permitting itself to consider whether this court spoke accurately. See Supplemental Notice, at 46,178 & n.19 (explaining the EPA's view that "the court's statements," while "dicta," "may indicate the scope of permissible, but not required, interpretations").

In conclusion, even though the EPA declined to interpret "inadequate domestic supply," its refusal to exercise the domestic-supply prong of its general waiver authority was nonetheless "the product of reasoned decisionmaking." *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 52. We reject the Obligated Parties' contrary arguments.

4. Ethanol Projection

Before moving away from the EPA's general waiver analysis, we must address one final point: the Obligated Parties' argument that the EPA failed to produce a well-reasoned estimate of attainable ethanol production, thus making "its final volume determinations . . . arbitrary and capricious." Obligated Parties Br. 41; see also Oral Arg. Tr. 8–9 (conceding that any errors in the EPA's ethanol projection could affect only the general waiver, as the EPA exercised in full its cellulosic waiver).

The Obligated Parties misapprehend the EPA's ultimate task. The Program imposes no free-floating obligation on the EPA to estimate "the reasonably attainable supply of ethanol." Obligated Parties Br. 37. Nor does it permit, much less require, the EPA to craft applicable volumes of any fuel from scratch. Instead, the *statute* establishes applicable volumes—in 2018, 26 billion gallons of renewable fuel, no more than 15 gallons of it "non-advanced," *see* 42 U.S.C. § 7545(o)(2)(B)(i)—and permits the EPA to "waive [those] requirements" only if the Administrator determines that the statutory mandates "would

severely harm the economy or environment" or "that there is an inadequate domestic supply," *id.* § 7545(o)(7)(A). As we have explained before, "[n]othing in the text of ... the [Program] plainly requires [the] EPA to support its decision" against exercising the general waiver "with specific numerical projections." *Am. Petroleum Inst.*, 706 F.3d at 481. "Certainly [the] EPA must provide a reasoned explanation for its actions, but rationality does not always imply a high degree of quantitative specificity." *Id.*

The 2018 Rule's explanation is more than satisfactory. Citing the Renewable Fuels Association's "2017 Ethanol Industry Outlook," the EPA explained that the U.S. market had the capacity to produce "about 16 billion gallons" of corn ethanol and had in fact produced some 15.25 billion gallons in 2016. 2018 Rule, 82 Fed. Reg. at 58,517 & n.135. The EPA further supplied a lengthy memorandum analyzing "various conditions and constraints in the marketplace . . . for the two prominent biofuels. ethanol and Memorandum from David Korotney, Office of Transp. and Air Quality, EPA, to Docket EPA-HQ-OAR-2017-0091, Market Impacts of Biofuels 1 (Nov. 27, 2017), J.A. 1180. "[B]ased both on levels achieved in the past and" predictions regarding "how the market might respond to the applicable standards," the EPA offered "a range of possible outcomes with varying levels of [ethanol blends], imported sugarcane ethanol, advanced biodiesel and renewable diesel, and conventional biodiesel and renewable diesel," all of which would satisfy the (post-cellulosic waiver) "total renewable fuel and advanced biofuel volume requirements of 19.29 and 4.29 billion gallons, respectively." Id. at 11, J.A. 1190. This analysis provided more than enough support for the EPA's determination that neither inadequate supply nor economic harm warranted use of the general waiver.

D. 2019 Biomass-Based Diesel Applicable Volume

In addition to establishing renewable fuel obligations for cellulosic biofuel, advanced biofuel, and renewable fuel for calendar year 2018, the 2018 Rule also finalized the biomassbased diesel applicable volume for 2019—a year for which the Program lists no statutory applicable volume. See 2018 Rule, 82 Fed. Reg. at 58,518–22. Following the same "approach [it used] in setting the final [biomass-based diesel] volume requirement for 2018," the EPA decided to maintain the biomass-based diesel requirement at 2.1 billion gallons, the same as in 2018. Id. at 58,522. Central to the EPA's analysis was its assessment that because "RIN generation data has consistently demonstrated that the advanced biofuel volume requirement ... [is] capable of incentivizing the supply of [biomass-based diesel] above and beyond the [biomass-based diesel] volume requirement," "the 2019 advanced volume requirement"—not the biomass-based diesel requirement would drive "the level of [biomass-based diesel] production and imports that occur in 2019." Id. at 58,521–22. In other words, the EPA determined that while its biomass-based diesel requirement might set a floor on production, it would hardly impose a ceiling. The EPA therefore concluded that a 2.1-billion-gallon requirement would "strike[] the appropriate balance between" "maintaining support for the [biomass-based diesel] industry" and "providing a market environment where the development of other advanced biofuels is incentivized." Id.

The National Biodiesel Board argues that by considering "the future, then-not-set 2019 advanced-biofuel volume," the EPA impermissibly "bas[ed] the 2019 [biomass-based diesel] volume on a factor" absent from the statute's enumerated list. NBB Br. 28; see also 42 U.S.C. § 7545(o)(2)(B)(ii), (v) (requiring that applicable volumes should be established "based on a review of the implementation of the program

during" previous years and on "an analysis of" six other factors). We need not, however, linger long on this argument, as it has been resolved by this court's decision in *Alon Refining*. *See* slip op. at 65. Therefore, we deny the Board's petition.

IV. Other Facets of the Program

The Obligated Parties and the National Biodiesel Board also challenge three of the EPA's regulations implementing the Program. The Obligated Parties contend that the EPA, as part of the 2018 rulemaking process, should have reconsidered both its RIN policy for renewable fuel exports and its definition of "obligated party." The National Biodiesel Board, in turn, argues that the EPA should have accounted for retroactively granted small refinery exemptions in calculating percentage standards. As explained below, the Obligated Parties' challenges are untimely and the National Biodiesel Board's challenge was not preserved.

A. The EPA's RIN Policy for Renewable Fuel Exports

Under the EPA's current regulations, obligated parties cannot use RINs generated from renewable fuel that is later exported from the United States to satisfy their renewable fuel obligations under the Program. See 40 C.F.R. § 80.1430. Instead, exporters must use those RINs to offset their own Exporter Renewable Volume Obligation. Id. During the 2018 rulemaking process, several parties submitted comments asking the EPA to remove the Exporter Renewable Volume Obligation. Rather than address the substance of these comments, the EPA stated: "These comments are all beyond the scope of this rulemaking as EPA did not propose any changes to the overall structure of the RFS program or otherwise seek comment on these issues." Response to Comments 223, J.A. 1446. The Obligated Parties now argue that the EPA acted arbitrarily and capriciously in refusing to

engage with comments regarding renewable fuel exports for two reasons: first, because those comments were within the scope of the EPA's Proposed Rule and Supplemental Information and second, because the EPA's obligation to make a reasoned decision required it to reevaluate its RIN policy for renewable fuel exports as part of the 2018 rulemaking.

The EPA correctly dismissed comments regarding its RIN policy for renewable fuel exports as outside the scope of the 2018 Rule. In the Proposed Rule, the EPA delineated those issues for which it was—and was not—soliciting comment: "EPA is not soliciting comment on any aspect of the current RFS regulatory program other than those specifically related to RIN trading . . . and the proposed annual standards for 2018 and biomass-based diesel applicable volume for 2019." Proposed Rule, 82 Fed. Reg. at 34,211. The Obligated Parties do not dispute that the EPA's RIN policy for renewable fuel exports falls outside these enumerated subjects for comment. Instead, the Obligated Parties point to five other statements in the Proposed Rule and Supplemental Information that they argue brought the EPA's RIN policy for renewable fuel exports within the scope of the rulemaking: (1) the EPA's acknowledgment that "[r]eal-world challenges" have rendered unattainable congressional goals for the production of most categories of renewable fuel, id. at 34,207; (2) the EPA's observation that the variable volume of annual renewable fuel imports and exports "affect[s] the price of renewable fuel," Supplemental Information, 82 Fed. Reg. at 46,176; (3) the EPA's concern that increasing reliance on renewable fuel imports may jeopardize energy independence and security, Proposed Rule, 82 Fed. Reg. at 34,212; (4) the EPA's affirmance of the importance of maintaining the liquidity of the RIN market by maintaining an "adequate RIN bank," id. at 34,213; and (5) the EPA's requests for comments "on all aspects of this proposal" and "any aspect of this rulemaking,"

id. at 34,242. It is not clear that these statements, on their face, open the EPA's RIN policy for renewable fuel exports for comment. Whatever the potential meaning of these statements in isolation, the Proposed Rule's express limitation of the subjects on which the EPA was soliciting comment unambiguously communicates its decision not to solicit comment on its RIN policy for renewable fuel exports. Accordingly, we find no error in the EPA's treatment of comments requesting that it reconsider its RIN policy for renewable fuel exports as outside the scope of the 2018 rulemaking.

Because comments regarding the EPA's RIN policy for exported renewable fuel were outside the scope of the 2018 rulemaking, we lack jurisdiction to consider the Obligated Parties' instant challenge to the policy. Generally, "[a] petition for review of action of [the EPA] in promulgating ... any control or prohibition under [the Program] ... shall be filed within sixty days from the date notice of such promulgation. approval, or action appears in the Federal Register." 42 U.S.C. § 7607(b)(1). Section 7607(b)(1)'s sixty-day filing deadline is jurisdictional. See Sierra Club v. EPA, 895 F.3d 1, 16 (D.C. Cir. 2018). Here, the EPA promulgated its current version of its regulation governing renewable fuel exports in 2014. See RFS Renewable Identification Number (RIN) Quality Assurance Program, 79 Fed. Reg. 42,078, 42,115 (July 18, 2014). The Obligated Parties filed their first petition in this case more than three years later—well outside the statutory sixtyday filing period. Although a party may file an otherwise untimely petition challenging a regulation if the promulgating agency subsequently expressly or constructively "reopens" the issue, Nat. Res. Def. Council v. EPA, 571 F.3d 1245, 1265 (D.C. Cir. 2009) (per curiam), our conclusion that comments regarding the EPA's RIN policy for renewable fuel exports were outside the scope of the 2018 rulemaking forecloses the

claim that the EPA reopened the issue. We therefore lack jurisdiction to consider the Obligated Parties' challenge to the EPA's current rule preventing refineries and importers of renewable fuel from using RINs from renewable fuel later exported to discharge their renewable fuel obligations.

In an apparent attempt avoid the sixty-day filing period, the Obligated Parties argue that the EPA acted arbitrarily and capriciously by failing even to reconsider its RIN policy for renewable fuel exports. According to the Obligated Parties, altering that policy is a significant alternative that the EPA should have considered when settling on the 2018 Rule's applicable volumes and percentage standards. Although an agency must consider comments "relevant to the agency's decision and which, if adopted, would require a change in an agency's proposed rule," it "does not have to 'make progress on every front before it can make progress on any front." Nat'l Mining Ass'n v. MSHA, 116 F.3d 520, 549 (D.C. Cir. 1997) (per curiam) (first quoting Home Box Office, Inc. v. FCC, 567 F.2d 9, 35 n.58 (D.C. Cir. 1977) (per curiam); then quoting Pers. Watercraft Indus. Ass'n v. Dep't of Commerce, 48 F.3d 540, 544 (D.C. Cir. 1995)). Here, the Obligated Parties have not explained how a change in the EPA's RIN policy for renewable fuel exports would have required the agency also to change its proposed applicable volumes and percentage standards. Therefore, the EPA could, without acting arbitrarily and capriciously, take the discrete action of establishing annual applicable volumes and percentage standards under the Program while declining to reconsider its RIN policy for renewable fuel exports.

B. The EPA's Definition of "Obligated Party"

The Clean Air Act gives the EPA some leeway in determining which parties in the transportation fuel industry must comply with the Program's percentage standards. The Act

provides that renewable fuel obligations "shall ... be applicable to refineries, blenders, and importers, as appropriate." 42 U.S.C. § 7545(o)(3)(B)(ii)(I) (emphasis added). Exercising its discretion under the statute, the EPA has long declined to obligate blenders. See 40 C.F.R. § 80.1406(a)(1). Refineries and importers have repeatedly objected to the EPA's decision not to require blenders to help shoulder the Program's regulatory burden, including in comments to the 2018 Rule. The EPA, however, dismissed those comments as outside the scope of the rulemaking.

There is no doubt that the EPA is correct that comments regarding the agency's "obligated party" definition fell outside the scope of the 2018 rulemaking. In the Proposed Rule, the EPA expressly declared that it was not reopening the issue: "EPA is not re-opening for public comment in this rulemaking the current definition of 'obligated party." Proposed Rule, 82 Fed. Reg. at 34,211. Because the EPA did not reopen the issue, the Obligated Parties' challenge to the EPA's rule is untimely by over seven years, *see* Regulation of Fuels and Fuel Additives: Modifications to Renewable Fuel Standard Program, 75 Fed. Reg. 26,026, 26,037 (May 10, 2010), and we therefore lack jurisdiction to review the limited reach of the EPA's regulations obligating only refineries and importers of transportation fuel, *see Sierra Club*, 895 F.3d at 16.

The Obligated Parties, however, again attempt to side-step the sixty-day filing requirement by arguing that the EPA acted contrary to the Clean Air Act as well as arbitrarily and capriciously by declining to reconsider its definition of "obligated party" in promulgating the annual applicable volumes and percentage standards in the 2018 Rule. We need not consider this argument because this court's recent decision in *Alon Refining* resolves the issue. *See* slip op. at 53.

C. The EPA's Method of Accounting for Small Refinery Exemptions

After establishing the applicable volumes for a particular year, the EPA translates those volumes into percentage standards by dividing the applicable renewable fuel volumes by the total volume of transportation fuel expected to be sold in the United States in that year. See 42 U.S.C. § 7545(o)(3)(B)(ii)(II); 40 C.F.R. § 80.1405(c). Thus, if every obligated party incorporates the required percentage of renewable fuel into the gasoline and diesel it sells, the transportation fuel industry as a whole will achieve the established applicable volumes. As noted above, however, the Program requires the EPA to exempt from compliance small refineries experiencing disproportionate economic hardship in complying with their renewable fuel obligations. 42 U.S.C. § 7545(o)(9). By permitting some obligated parties to incorporate less renewable fuel into the gasoline and diesel they sell, small refinery exemptions can impede attainment of overall applicable volumes. To avoid such a shortfall, the EPA raises the percentage standard for non-exempt parties in a given year by subtracting from its calculations the transportation fuel contributions of small refineries that were granted exemptions before the EPA established the percentage standard for that year. See 40 C.F.R. § 80.1405(c).

This solution, however, is only partial: the EPA does not currently account for small refinery exemptions granted *after* it promulgates percentage standards for that year—so-called retroactive exemptions. To address any deficiency in its current approach, the EPA solicited comment on how it should account for small refinery exemptions in its calculation of the 2018 percentage standards. Proposed Rule, 82 Fed. Reg. at 34,241–42. The EPA ultimately maintained its previous policy of adjusting fuel percentages for exemptions granted before the percentage standards are promulgated but not for exemptions

granted after. 2018 Rule, 82 Fed. Reg. at 58,523.

The National Biodiesel Board challenges the EPA's decision to retain its policy of disregarding retroactive small refinery exemptions as failing to "ensure[]" that obligated parties' renewable fuel contributions achieve total applicable volumes pursuant to 42 U.S.C. section 7545(o)(3)(B)(i). The Board argues that the EPA should have adopted a policy whereby it (1) adjusts the final percentage standards *ex ante* to account "for small-refinery exemptions [the EPA] is reasonably likely to grant after promulgating the standards" and (2) corrects any deficiencies resulting from exemptions actually granted *ex post* by "increasing later years' standards." NBB Br. 18.

The Board, however, did not make its current challenge during the 2018 rulemaking. Under the Clean Air Act, "[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment . . . may be raised during judicial review." 42 § 7607(d)(7)(B). "The court enforces this provision 'strictly' to ensure that [the] EPA has an opportunity to respond to every challenge" and so that "the court enjoys the benefit of the agency's expertise and possibly avoids addressing some of the challenges unnecessarily." Motor & Equip. Mfrs. Ass'n v. Nichols, 142 F.3d 449, 462 (D.C. Cir. 1998) (citation omitted) (quoting Nat. Res. Def. Council v. Thomas, 805 F.2d 410, 427 (D.C. Cir. 1986)). "[A]lthough we allow commenters 'some leeway in developing their argument before this court,' the comment must have provided 'adequate notification of the general substance of the complaint." Nat. Res. Def. Council, 571 F.3d at 1259 (quoting S. Coast Air Quality Mgmt. Dist. v. EPA, 472 F.3d 882, 891 (D.C. Cir. 2006)).

The Board identifies two sets of comments it claims

preserved its current challenge, but both failed to give "adequate notification of the general substance" of the Board's current proposal. Id. In one set of comments, the American Petroleum Institute suggested that the EPA cease granting retroactive exemptions altogether. In a similar vein, the other set of comments by BP Products of North America asked the EPA to cease granting retroactive exemptions or, in the alternative, to adjust applicable volumes after the standards are promulgated to account for any retroactive exemptions. The Board's offered solutions are significantly different from these proposals—the Board does not ask the EPA to cease granting retroactive exemptions or to adjust the applicable volumes for the same year in which the retroactive exemptions are later granted. Rather, the Board suggests that the EPA should *project* the number of retroactive exemptions it expects to grant when calculating percentage standards or should adjust the following year's applicable volumes to account for any shortfall resulting from the grant of retroactive exemptions. The comments submitted to the EPA therefore did not raise the Board's current proposals with "reasonable specificity," 42 U.S.C. § 7607(d)(7)(B), leaving the EPA no opportunity to respond to the Board's challenge and burdening this court with potentially unnecessary challenges, see Motor & Equip. Mfrs. Ass'n, 142 F.3d at 462.

At oral argument, the Board acknowledged that neither of its proposals "specifically was in front of the Agency" but claimed that they are merely "alternative proposals" and that the Board "d[oes] not have a specific proposal" that the EPA must adopt. Oral Arg. Tr. 64, 66. Instead, the Board argued that "the Court should tell EPA that its duty to ensure requires it to do something, and then send [the 2018 Rule] back to the Agency for the Agency to decide what that something is." Oral Arg. Tr. 65–66. Regardless whether we can vacate the 2018 Rule due to the EPA's failure to do an unspecified

"something," the Board did not make this argument in its briefs and has therefore forfeited the issue. *See Elec. Privacy Info. Ctr. v. Presidential Advisory Comm'n on Election Integrity*, 878 F.3d 371, 379 n.6 (D.C. Cir. 2017).

As a fallback, the Board argues that the EPA's policy regarding small refinery exemptions is a "vital assumption" underlying the 2018 Rule and therefore no comment was necessary to preserve its current challenge. Under the "key assumption" doctrine, an agency has the "duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a non-arbitrary, non-capricious rule' and therefore ... 'must justify that assumption even if no one objects to it during the comment period." Okla. Dep't of Envtl. Quality v. EPA, 740 F.3d 185, 192 (D.C. Cir. 2014) (alteration in original) (quoting Appalachian Power Co. v. EPA, 135 F.3d 791, 818 (D.C. Cir. 1998) (per curiam)). But the key assumption doctrine applies to aspects of a rule that are foundational to its existence, such as assumptions regarding the agency's statutory authority, see Nat. Res. Def. Council v. EPA, 755 F.3d 1010, 1023 (D.C. Cir. 2014) ("[T]hat EPA had statutory authority ... to exempt some hazardous-wastederived fuels from regulation was a 'key assumption' underlying EPA's exercise of its discretion " (internal quotation mark omitted)), or those pertaining to the agency's analytical methodology, see Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 535 (D.C. Cir. 1983) ("[A]ggregate analysis is a vital assumption underlying the [EPA's] model. Thus, EPA must justify that assumption even if no one objects to it during the comment period "). How the EPA accounts for exemptions granted to a subset of a subset of a subset of obligated parties (small fuel refineries experiencing disproportionate economic hardship) is hardly an assumption undergirding the entire 2018 Rule. In any event, the EPA examined its policy regarding retroactive exemptions,

solicited comment on the issue, and reasonably rejected the proposals it received. *See* Proposed Rule, 82 Fed. Reg. at 34,241–42; 2018 Rule, 82 Fed. Reg. at 58,523. Thus, to the extent the EPA's method of accounting for retroactive exemptions in its percentage standard calculations is a "key assumption," the EPA has carried its "affirmative burden . . . [to] justify that assumption." *Okla. Dep't of Envtl. Quality*, 740 F.3d at 192 (quoting *Appalachian Power Co.*, 135 F.3d at 818).

V. Regulatory Flexibility Act

The Regulatory Flexibility Act requires an agency to perform a regulatory flexibility analysis when conducting a rulemaking. 5 U.S.C. §§ 603(a), 604(a). As part of that analysis, the agency must assess any potential effects its proposed rule may have on small entities and must consider alternatives that would "minimize any significant economic impact" on small entities to which the rule will apply. *Id.* § 603(b)(3), (c); *accord id.* § 604(a)(4), (6). Intervenor Small Retailers Coalition argues that the court should vacate the 2018 Rule because the EPA failed to perform a regulatory flexibility analysis assessing the potential impact of the 2018 Rule on small fuel retailers. Although the Regulatory Flexibility Act argument was articulated in a joint brief filed by the Obligated Parties and the Coalition, the parties agree that only the Coalition raises the argument.

We decline to exercise our discretion to hear this argument brought only by an intervenor and not by any of the petitioners. By failing to file a timely petition for review, the Coalition forfeited any guarantee to judicial review of its claim. See E. Ky. Power Coop., Inc. v. FERC, 489 F.3d 1299, 1305 (D.C. Cir. 2007). Generally, "[i]ntervenors may only argue issues that have been raised by the principal parties." Nat'l Ass'n of Regulatory Util. Comm'rs v. ICC, 41 F.3d 721, 729 (D.C. Cir. 1994). "[O]nly in 'extraordinary cases' will we depart from our

general rule." *Id.* at 730 (quoting *Lamprecht v. FCC*, 958 F.2d 382, 389 (D.C. Cir. 1992)). For example, we will consider an intervenor-only argument that raises "an essential' predicate" to the issues raised by the petitioners—that is, if the argument has been "fully litigated in the agency proceedings and [is] potentially determinative of the outcome of judicial review." *Synovus Fin. Corp. v. Bd. of Governors*, 952 F.2d 426, 433–34 (D.C. Cir. 1991). But we are reticent to consider an intervenor-only argument if the intervenor "had every incentive to petition for review of the administrative decision and its failure to do so was without excuse." *Id.* at 434.

The Coalition's challenge does not constitute an extraordinary case. Instead of demonstrating that its argument presents an "essential predicate" to the issues the petitioners raise or is otherwise of unusual importance, the Coalition emphasizes (1) that the EPA did not object to its motion to intervene, (2) that the Regulatory Flexibility Act argument raises a pure question of law, and (3) that the Coalition has a history of challenging the EPA's definition of obligated parties. The Coalition points to no case, and we are aware of none, in which we have relied on similar facts to justify considering an intervenor-only argument.

On the other hand, we believe this case is indistinguishable from *Time Warner Entertainment Co. v. FCC*, 56 F.3d 151 (D.C. Cir. 1995). In *Time Warner*, we declined to consider an argument under the Regulatory Flexibility Act made only by the intervenor, the Small Cable Business Association. *Id.* at 202–03. In doing so, we observed that the Association had "participated in the agency proceedings and had the opportunity to file an independent petition for review of the Commission's alleged rejection of the Association's . . . [Regulatory Flexibility Act] claim[]." *Id.* at 202. Just so here. The Coalition submitted comments on the Proposed Rule

asking the EPA to conduct a regulatory flexibility analysis, and the EPA's alleged failure to conduct the requested analysis gave the Coalition every incentive to file its own petition for review of the final 2018 Rule. The Coalition has offered no excuse for its failure to do so. We therefore decline to exercise our discretion to consider the Coalition's arguments under the Regulatory Flexibility Act.

VI. Endangered Species Act

Finally, the Environmental Petitioners argue that the EPA failed to comply with its obligations under the Endangered Species Act (ESA), 16 U.S.C. §§ 1531-1544. The ESA requires agencies to determine whether certain proposed actions may affect endangered and threatened species, known as "listed species," and their critical habitat. Generally, unless an agency determines that an action will not affect these species and habitat, the agency must consult with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the "Services"). The Environmental Petitioners contend that the EPA disregarded these obligations by failing to determine whether the 2018 Rule may affect listed species and critical habitat. This challenge clears several threshold hurdles: we have jurisdiction, the Environmental Petitioners have standing, and the Environmental Petitioners preserved their challenge. On the merits, we agree with the Environmental Petitioners that the EPA did not comply with the ESA.

A. Jurisdiction

We have jurisdiction over challenges to "final action[s]" taken by the EPA under the Clean Air Act. 42 U.S.C. § 7607(b)(1); see supra Part II. The term "final action" in the Clean Air Act is synonymous with "final agency action" in the Administrative Procedure Act. See Indep. Equip. Dealers Ass'n v. EPA, 372 F.3d 420, 428 (D.C. Cir. 2004). This means

that the Clean Air Act empowers us to hear challenges to "discrete agency actions," but we may not consider more sweeping "programmatic" attacks. See Norton v. S. Utah Wilderness All., 542 U.S. 55, 62–65 (2004); Lujan v. Nat'l Wildlife Fed'n, 497 U.S. 871, 891 (1990). The EPA argues that the Environmental Petitioners' claim is outside our jurisdiction because it is a broad attack seeking "wholesale improvement of" the RFS Program. EPA Br. 85 (quoting Lujan, 497 U.S. at 891).

We do not understand the claim so broadly. Although the Environmental Petitioners criticize the RFS Program and complain that the EPA has never consulted on the Program during the past decade, their actual challenge is to the 2018 Rule. According to their petition, they "seek review" of "the EPA's failure to comply with the requirements" of the ESA "in promulgating the Final Rule," and they charge the EPA "in this instance" with failing to consult with the Services "to ensure that the Final Rule" would not harm listed species. Envtl. Pet'rs Pet. ¶ 2, No. 18-1040 (D.C. Cir. Feb. 9, 2018). Because the promulgation of the 2018 Rule is a discrete agency action, this challenge is squarely within our jurisdiction under the Clean Air Act.

B. Standing

The EPA also argues that we may not consider the challenge because the Environmental Petitioners lack standing. "The Constitution limits our 'judicial Power' to 'Cases' and 'Controversies,' and there is no justiciable case or controversy unless the plaintiff has standing." West v. Lynch, 845 F.3d 1228, 1230 (D.C. Cir. 2017) (quoting U.S. Const. art. III, § 2). An association like each of the Environmental Petitioners has standing "only if (1) at least one of its members would have standing to sue in his own right; (2) the interest it seeks to protect is germane to its purpose; and (3) neither the claim

asserted nor the relief requested requires the member to participate in the lawsuit." *Ctr. for Biological Diversity v. EPA*, 861 F.3d 174, 182 (D.C. Cir. 2017) (quoting *Am. Trucking Ass'ns v. Fed. Motor Carrier Safety Admin.*, 724 F.3d 243, 247 (D.C. Cir. 2013)).

The parties do not dispute that one of the Environmental Petitioners—the Sierra Club—satisfies the latter two elements of associational standing. Nor could they. As an organization dedicated to protecting and enjoying the environment, Addendum to Envtl. Pet'rs Br. ("Add.") 275, 289, the Sierra Club "has an obvious interest in challenging the EPA's failure to engage in consultation," a process that ensures that agency action "does not go forward without full consideration of its effects on listed species," *Ctr. for Biological Diversity*, 861 F.3d at 182 (internal quotation marks omitted). Also, the claim asserted (that the EPA violated its obligations under the ESA) and the relief requested (an order requiring the EPA to comply with its obligations) do not require any member of the Sierra Club to participate in this suit. *See id*.

The only disputed element of associational standing is the first: whether at least one of the Sierra Club's members would have standing to sue in his or her own right. Generally, a plaintiff must meet three requirements to have standing. The plaintiff must have suffered (1) a concrete and particularized injury that (2) was caused by the challenged conduct and (3) is likely to be redressed by a favorable judicial decision. *See Hollingsworth v. Perry*, 570 U.S. 693, 704 (2013) (citing *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560–61 (1992)); *Ctr. for Biological Diversity*, 861 F.3d at 181–82.

This case involves a twist on the usual standing inquiry because the claim—that the EPA failed to meet its obligations under the ESA—describes an "archetypal procedural injury."

Ctr. for Biological Diversity, 861 F.3d at 182 (quoting WildEarth Guardians v. Jewell, 738 F.3d 298, 305 (D.C. Cir. 2013)). In cases involving a procedural injury, our "primary focus" is "whether a plaintiff who has suffered personal and particularized injury has sued a defendant who has caused that injury," and our analyses of the injury and of causation tend to involve similar concepts. Fla. Audubon Soc'y v. Bentsen, 94 F.3d 658, 664 (D.C. Cir. 1996) (en banc) (citing *Lujan*, 504 U.S. at 572 n.7); see Ctr. for Biological Diversity, 861 F.3d at 182–83. As to injury, the Sierra Club must show that the failure to comply with the ESA "affects its members' concrete ... interests," Ctr. for Biological Diversity, 861 F.3d at 183; in other words, that the failure "demonstrably increased some specific risk of environmental harm[s]" that "imperil" the members' "particularized interests" in a species or habitat with which the members share a "geographic nexus," Fla. Audubon Soc'y, 94 F.3d at 666–68; see Ctr. for Biological Diversity, 861 F.3d at 183–84. As to causation, the Sierra Club must show two links: "one connecting the omitted procedural step to some substantive government decision that may have been wrongly decided because of the lack of that procedural requirement" and "one connecting that substantive decision to the plaintiff's particularized injury." Ctr. for Biological Diversity, 861 F.3d at 184 (alterations and internal quotation marks omitted). The Sierra Club need not show that harm to a member "has in fact resulted from the EPA's procedural failures," but the Club must "demonstrate that there is a 'substantial probability' that local conditions will be adversely affected" by the final decision infected with procedural failures and "thus harm a [Club] member." Id. (quoting Am. Petroleum Inst. v. EPA, 216 F.3d 50, 63 (D.C. Cir. 2000) (per curiam)).

The Sierra Club has established injury and causation through at least two of its members, C. Elaine Giessel and William Fontenot. We begin by describing their interests, then we explain how the 2018 Rule affects those interests.

Giessel has aesthetic and recreational interests in observing the whooping crane. Watching birds, including whooping cranes, is one of her family's favorite activities. Add. 286. For many years, she has supported the conservation of critical habitat for the whooping crane. In 1997, she helped create an organization that supports a Texas wildlife refuge; she now visits the refuge annually to see the whooping cranes. *Id.* at 283–84. She also belongs to an organization that supports the Quivira National Wildlife Reserve in Kansas, and several times per year she visits that refuge and another in Kansas, the Chevenne Bottoms State Waterfowl Management Area. She intends to continue visiting these areas "for the foreseeable future," and her "enjoyment would be greatly diminished by the loss of the Whooping cranes." *Id.* at 285. These interests are "undeniably ... cognizable interest[s] for purpose of standing." Ctr. for Biological Diversity, 861 F.3d at 183 (quoting *Lujan*, 504 U.S. at 562–63).

Fontenot has similarly cognizable educational and conservation interests in observing and studying the sturgeon that live in the Gulf of Mexico and the Mississippi River Basin. He has visited their habitat in the Gulf and intends to do so again in the future. Add. 298. As the Conservation Chairman for a Sierra Club Chapter, he has "been active in efforts to protect the Gulf Sturgeon and its habitat," including commenting on the 2011 draft plan for the Bogue Chitto Refuge at the mouth of the Mississippi River. *Id.* at 299. He has studied sturgeon, such as those in the Pearl River in the Mississippi River Basin, and he wishes to continue studying the species because it helps him understand, protect, and educate others about the Gulf and the Mississippi River. *Id.* at 296–99.

The interests of Giessel and Fontenot are harmed by the EPA's alleged failure to comply with its ESA obligations in promulgating the 2018 Rule. The EPA's own 2018 Triennial Report concluded that the Program's annual standards likely cause the conversion of uncultivated land into agricultural land for growing crops that can be used to make biofuels. Since the Program was enacted, acreage planted with corn and soybeans has increased, and the evidence suggests that some of this increase "is a consequence of increased biofuel production mandates." *Id.* at 123–25. In the same vein, a declaration by Dr. Tyler Lark, an associate researcher at the University of Wisconsin-Madison's Center for Sustainability and the Global Environment, explains that many studies have found that the RFS Program has heightened demand for ethanol, thus increasing the production of corn, soybeans, and similar crops and incentivizing the conversion of uncultivated land to agricultural land for growing these crops. See id. at 3–7 (Lark Decl. ¶¶ 4–8). Land conversion is particularly marked in areas surrounding ethanol refineries. See id. at 7–8 (Lark Decl. ¶¶ 9– 10).

According to the EPA's Triennial Report and Dr. Lark, this increase in crop production and land conversion harms the habitats of numerous animals and fish, see id. at 212–20; id. at 9–18 (Lark Decl. ¶¶ 12–23), including—critically—the particular habitats of the whooping cranes and Gulf sturgeon in which Giessel and Fontenot have interests. Dr. Lark explains that the Program's annual standards may negatively affect the whooping crane "through the loss and fragmentation of habitat." Id. at 13 (Lark Decl. ¶ 17). Most relevant to Giessel, "[t]here is substantial conversion of land to biofuel feedstock crops near the species' designated critical habitat in Kansas." Id. In support, Dr. Lark cites a map showing that potential land conversion occurred from 2008 to 2016 near and within the very areas that Giessel visits to observe whooping cranes: the

Quivira National Wildlife Reserve and Cheyenne Bottoms State Waterfowl Management Area. *Id.* The Triennial Report echoes this refrain, stating that the whooping crane's critical habitat in Kansas is "at risk of impairment" due to recent land conversion, crop production, and ethanol refinery locations. *Id.* at 64.

Gulf sturgeon are also at risk. The increase in crop production and land conversion caused by the Program's annual standards "negatively impact[s] water quality." *Id.* at 125–26. In particular, the standards contribute to oxygen deficiencies (known as hypoxia) in the northern Gulf of Mexico. Id. Indeed, "[t]he link between the Renewable Fuel Standard, increased cropping intensification, and hypoxia in the Gulf of Mexico" is "well established." *Id.* at 20 (Lark Decl. ¶ 27) (citing studies). This may harm sturgeon, which are "vulnerable" to hypoxia and have migration and feeding ranges and critical habitat in the Gulf and at the mouth of the Mississippi River. *Id.* at 21 (Lark Decl. ¶¶ 28–29); accord. id. at 65; see also Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Gulf Sturgeon, 68 Fed. Reg. 13,370, 13,390, 13,408 (Mar. 19, 2003) (defining the Gulf sturgeon's critical habitat to include the Pearl River and the Bogue Chitto River in the Mississippi River Basin). These are precisely the waterways where Fontenot observes and studies sturgeon. See Add. 296-99.

In these ways, the 2018 Rule created a demonstratable risk to the particularized interests of two Sierra Club members in the whooping crane in Kansas and the sturgeon in the Gulf and the Mississippi River Basin. That risk is an injury to those members. We reached the same conclusion in *Center for Biological Diversity v. EPA*, 861 F.3d 174 (D.C. Cir. 2017). There, an environmental association likewise charged the EPA with failing to meet its ESA obligations before approving a

pesticide that was toxic to insects. *Id.* at 180. We held that two members of the association suffered cognizable injuries because the EPA's alleged failure created a "demonstrable risk" to (1) a beetle that one member sought to observe in a particular habitat several times a year, and (2) a butterfly that lived in a county frequently visited by another member, who intended to return to the county "to look for" the butterfly. *Id.* at 183–84. Here, the 2018 Rule poses a similar risk to species that share a "geographical nexus" with the Sierra Club members. *Id.* (quoting *Fla. Audubon Soc'y*, 94 F.3d at 667). The members have suffered cognizable injuries.

As to causation, the EPA's alleged failure to comply with its ESA obligations is plainly connected to the setting of standards in the 2018 Rule, and those standards might have come out differently if the EPA had complied. See id. at 184. Also, there is a "substantial probability" that the EPA's ultimate decision adversely affected local conditions in Kansas, the Gulf, and the Mississippi River Basin, harming cranes and sturgeon to the detriment of Giessel and Fontenot. Id. (internal quotation marks omitted). This establishes causation. Again, Center for Biological Diversity is instructive. In that case, we held that causation existed due to the substantial probability that approving the pesticide threatened the members' interests, particularly given the pesticide's toxicity to insects and the "geographical overlap" between the beetle habitat and the areas of likely pesticide use. Id. at 184-85. The EPA action here similarly affects the local conditions that matter to Giessel and Fontenot. The Sierra Club has established that at least one of its members has suffered an injury caused by the EPA.

The EPA dismisses all this as "generalized concerns with RFS statutory provisions and past RFS action," which "do not provide 'evidence' that the 2018 Rule causes the same alleged injuries." EPA Br. 91. We disagree. The EPA's argument relies

on the wrong standard. The Environmental Petitioners need not show that the 2018 Rule "in fact" causes the same injuries; they must show only a "substantial probability" of injury. *Ctr. for Biological Diversity*, 861 F.3d at 183–84 (internal quotation marks omitted). The EPA's Triennial Report and the Lark declaration provide evidence of just that. They describe the effects of the annual standards promulgated over the past decade, and the 2018 Rule is simply the next iteration of those standards. Thus, the report and declaration certainly serve as evidence of the likely effects of the 2018 Rule.

The EPA also argues that this case is more like *Florida* Audubon Society than Center for Biological Diversity. Not so. In Florida Audubon Society, an environmental association challenged a new federal tax credit that allegedly harmed wildlife habitats by incentivizing ethanol production. 94 F.3d at 662. We held that no member had standing because there was only a "general risk" of harm throughout the United States, without a "geographic nexus" connecting a member to areas harmed by the tax credit. Id. at 667-68. Also, the chain of causation showing that the tax credit would harm habitats was too "protracted" and "speculative," for the chain depended on "predictive assumptions" about uncertain incentives and "presume[d] certain 'independent action[s] of some third party." Id. at 670 (quoting Simon v. Eastern Ky. Welfare Rights Org., 426 U.S. 26, 42 (1976)). By contrast, here the members of the Sierra Club share a geographic nexus with areas likely affected by the 2018 Rule, and the chain of causation does not depend on predictive assumptions about a novel agency action. We have a decade's worth of information, including the EPA's own Triennial Report, on the effects of the Program's annual standards. And unlike in Florida Audubon Society, those standards do not simply establish uncertain tax incentives that might lead third parties to take actions that harm habitats, but rather directly regulate biofuel producers who are

"before this court." *Id.* at 670. It requires "no great speculative leap" to conclude that the EPA caused an injury to the members of the Sierra Club. *Ctr. for Biological Diversity*, 861 F.3d at 183 n.7.

This injury is also redressable. In this context, the requirement of redressability is "relaxed." *Id.* at 185 (quoting *WildEarth Guardians*, 738 F.3d at 306). The Sierra Club need not show that the EPA "would alter" the 2018 Rule if ordered to comply with its ESA obligations, but rather that "the EPA *could* reach a different conclusion." *Id.* (quoting *Nat'l Parks Conservation Ass'n v. Manson*, 414 F.3d 1, 5 (D.C. Cir. 2005)). The Sierra Club has made this showing. There "remains at least the possibility" that the EPA could set different standards by, for example, invoking the general waiver for severe environmental harm. *Id.*; see 42 U.S.C. § 7545(o)(7)(A)(i).

Having established that at least one of its members would have standing to sue, the Sierra Club has associational standing. We do not address whether the other Environmental Petitioner, the Gulf Restoration Network, has standing. When multiple associations bring suit, only one must have standing. *See Ctr. for Biological Diversity*, 861 F.3d at 182.

C. Preservation

The EPA next argues that we may not consider the Environmental Petitioners' challenge because it was not preserved. As we explained in Part IV.C, the Clean Air Act directs that "[o]nly an objection to a rule . . . raised with reasonable specificity during the period for public comment . . . may be raised during judicial review." 42 U.S.C. § 7607(d)(7)(B). An objection is reasonably specific if it provides "adequate notification of the general substance of the complaint." *Nat. Res. Def. Council*, 571 F.3d at 1259 (quoting *S. Coast Air Quality Mgmt. Dist.*, 472 F.3d at 891).

The Environmental Petitioners preserved their claim in a letter sent to the EPA on July 14, 2017. At that time, the upcoming fuel standards were those that were to be promulgated in the 2018 Rule. The letter criticizes the Program generally, but it also objects that the EPA did not consult on the Program's annual standards. The letter states on its first page that the EPA has violated the ESA "[b]y failing to initiate and complete consultation with the [Services] in . . . setting annual volumetric standards for renewable fuels" and in "failing to exercise[] its waiver authority." J.A. 1450. The letter elaborates that the "annual standards" have harmed various species, and in setting the standards, the EPA "ha[s] not complied" with its obligations under the ESA. J.A. 1458–69. The letter specifically identifies these annual standards through 2017.

The EPA argues that the letter is not sufficiently specific because it does not refer to the forthcoming 2018 standards or urge the EPA to consult on the 2018 Rule in particular. Given these omissions, we too might doubt that the letter preserved an objection to the 2018 Rule were it not for some additional facts: the EPA placed the letter in the administrative record for the 2018 Rule, and the letter appears on the EPA's rulemaking docket as a comment on the 2018 Rule. See EPA Docket, EPA-HQ-OAR-2017-0091-5030, J.A. 1450; Oral Arg. Tr. 106. In our view, these facts lend substantial support to the argument that the letter can be reasonably read to target the 2018 Rule and provided "adequate notification of the general substance" of the challenge. Nat. Res. Def. Council, 571 F.3d at 1259 (quoting S. Coast Air Quality Mgmt. Dist., 472 F.3d at 891). After all, the EPA's own actions reflect as much.

We note that the letter is dated July 14, 2017, making it possible that the EPA received the letter *before* and not "*during* the period for public comment" that opened on July 21. 42

U.S.C. § 7607(d)(7)(B) (emphasis added); see Proposed Rule, 82 Fed. Reg. at 34,206. But the EPA does not make that argument. See EPA Br. 86 (arguing that the letter was insufficiently specific, not that it was submitted outside the comment period); cf. id. at 86-87 & n.39 (arguing that other documents failed to preserve the challenge because they were submitted after the comment period). Perhaps the EPA does not urge this point because the letter was sent before the comment period but received during the period, which its placement on the rulemaking docket for the 2018 Rule suggests. In any event, we need not resolve this issue. Section 7607(d)(7)(B) does not impose jurisdictional requirements, so we are not obligated to address issues that go undisputed by the parties. See EPA v. EME Homer City Generation, LP, 572 U.S. 489, 511–12 (2014); CTS Corp. v. EPA, 759 F.3d 52, 60 n.2 (D.C. Cir. 2014). On this record and the arguments before us, we hold that the Environmental Petitioners preserved their ESA claim.

D. Merits

Because this claim survives the EPA's threshold objections, we turn to its merits. The Environmental Petitioners argue that the EPA did not comply with its obligations under the ESA in promulgating the 2018 Rule. The ESA requires each federal agency to "insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any [listed] species or result in the destruction or adverse modification" of designated critical habitat by adhering to the consultation process. 16 U.S.C. § 1536(a)(2); see Ctr. for Biological Diversity, 861 F.3d at 177-78; see also 50 C.F.R. § 402.02 (defining "listed species" as those "determined to be endangered or threatened" under 5 U.S.C. § 1533). As the first step in this process, the agency must make an "effects determination," i.e., the agency must assess whether a proposed action "may affect" listed species or critical habitat. 50 C.F.R. § 402.14(a). If so, the

agency must engage in formal consultation with the Services. *Id.* But if the agency makes a "no effect" determination by finding that its proposed action "will *not* affect any listed species or critical habitat," then "it is not required to consult" with the Services. *Ctr. for Biological Diversity v. U.S. Dep't of Interior*, 563 F.3d 466, 475 (D.C. Cir. 2009) (emphasis added); *see also* 50 C.F.R. §§ 402.13(a), 402.14(b) (the consultation process terminates and no further action is necessary if the agency determines, with the written concurrence of the relevant Service, that the action "is not likely to adversely affect" any listed species or critical habitat).

The EPA claims that it was not obligated to make an effects determination or consult with the Services on the 2018 Rule because the Clean Air Act required the agency to establish certain fuel volumes, which eliminated any discretion it might otherwise have had to act differently based on information gathered through consulting with the Services. It is true that the EPA's duty to consult with the Services "covers only discretionary agency actions and does not attach to actions . . . that an agency is required by statute to undertake." Nat'l Ass'n of Home Builders v. Defs. of Wildlife, 551 U.S. 644, 669 (2007). But the EPA's argument fails because the agency had discretion to reduce fuel volumes in at least two ways. First, the EPA could have invoked its authority to issue a general waiver allowing it to reduce statutory volumes that "would severely harm the ... environment of a State, a region, or the United States." 42 U.S.C. § 7545(o)(7)(A)(i). Second, the EPA retained discretion to establish volumes for biomass-based diesel. When setting such volumes, the EPA must consider six factors, one of which allows the EPA to modify volumes based on environmental considerations, such as concerns about wetland conversion, wildlife habitat, and water quality. See id. § 7545(o)(2)(B)(ii)(I).

The EPA next argues that it made a "no effect" determination, thus eliminating any obligation to consult with the Services. According to the EPA, it "expressly determined that its actions do not affect" listed species, EPA Br. 99, by stating in response to comments that "any harm to threatened or endangered species or their critical habitat that may be associated with crop cultivation in 2018 could not be attributed with reasonable certainty to EPA's action" in promulgating the 2018 Rule, *id.* (quoting J.A. 1249); *see also* J.A. 1253 (EPA similarly stating that "whatever impacts or threats to listed and endangered species or their critical habitats that may be caused by corn or soy cultivation in 2018 cannot with reasonable certainty be attributed to" the 2018 Rule).

These statements are not a "no effect" determination. The inability to "attribute[]" environmental harms "with reasonable certainty" to the 2018 Rule, EPA Br. 99 (quoting J.A. 1249), is not the same as a finding that the 2018 Rule "will not affect" or "is not likely to adversely affect" listed species or critical habitat. Moreover, the EPA made this purported "no effect" determination in response to comments urging the EPA to reduce volumes through a finding of "severe environmental harm" under 42 U.S.C. § 7545(o)(7)(A)(i). See J.A. 1248–49. Concluding that the 2018 Rule may not cause harms that meet that high threshold does not necessarily mean the 2018 Rule will have no effect on listed species or critical habitat. Finally, the EPA's brief omits an important part of the purported "no effect" determination, which reads: "[W]e believe that even with additional research and analysis, ... any harm to threatened or endangered species or their critical habitat that may be associated with crop cultivation in 2018 could not be attributed with reasonable certainty to EPA's action "J.A. 1249 (emphasis added). In other words, the EPA concluded that it is impossible to know whether the 2018 Rule will affect listed species or critical habitat. That is not the same as determining that the 2018 Rule "will not" affect them.

By failing to make an effects determination, the EPA did not comply with its obligations under the ESA. See 16 U.S.C. § 1536(a)(2); 50 C.F.R. §§ 402.13(a), 402.14(a). We therefore grant the Environmental Petitioners' petition for review and remand the 2018 Rule to the EPA to make an appropriate effects determination. See Ctr. for Biological Diversity, 861 F.3d at 188–89; Am. Bird Conservancy, Inc. v. FCC, 516 F.3d 1027, 1034–35 (D.C. Cir. 2008).

The Environmental Petitioners ask us to go a step further and make the effects determination ourselves. In their view, the evidence conclusively establishes that the 2018 Rule "may affect" listed species or critical habitat. Envtl. Pet'rs Br. 28–29. This would trigger formal consultation, 50 C.F.R. § 402.14(a), and so the Environmental Petitioners ask us to order the EPA to consult with the Services, Envtl. Pet'rs Br. 30. On this record, we decline to make this effects determination on the EPA's behalf, preferring instead to allow the EPA to develop the record and decide the issue in the first instance on remand. See Ctr. for Biological Diversity, 861 F.3d at 189 n.13.

Finally, the Environmental Petitioners do not ask us to vacate the 2018 Rule. Envtl. Pet'rs Br. 31 (seeking remand "without vacatur"). Accordingly, and consistent with our practice in similar cases, our remand is without vacatur. See, e.g., Ctr. for Biological Diversity, 861 F.3d at 188–89; North Carolina v. EPA, 550 F.3d 1176, 1178 (D.C. Cir. 2008) (per curiam).

VII. Conclusion

For the foregoing reasons, we deny the petitions for review filed by American Fuel & Petrochemical Manufacturers, Valero Energy Corporation, and the National Biodiesel Board.

We grant the Environmental Petitioners' petition for review and remand the 2018 Rule without vacatur for further proceedings consistent with this opinion.

So ordered.