# BECOMING GOOD NEIGHBORS AFTER EME HOMER CITY GENERATION, L.P. V. EPA

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#### Introduction

Under the Clean Air Act's ("CAA") cooperative federalism model, the Environmental Protection Agency ("EPA") sets national standards for air pollutants, and each state is responsible for ensuring that the air quality within its borders meets those standards. However, recognizing that air pollution travels from upwind to downwind states and interferes with downwind states' ability to achieve their federally imposed National Ambient Air Quality Standards ("NAAQS"), Congress empowered EPA to guarantee that upwind states still "bear responsibility for their fair share of the mess in downwind States." Under section 110(a)(2)(D)(i)(I) of the Act, the "good neighbor provision," EPA can require states to include provisions in their State Implementation Plans ("SIPs") to mitigate their significant contributions to the pollution in downwind states.

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<sup>&</sup>lt;sup>1</sup> 42 U.S.C. §§ 7409–7410 (2006).

<sup>&</sup>lt;sup>2</sup> EME Homer City Generation, L.P. v. EPA, 696 F.3d 7, 13 (D.C. Cir. 2012).

<sup>&</sup>lt;sup>3</sup> 42 U.S.C. § 7410(a)(2)(D)(i)(I).

<sup>&</sup>lt;sup>4</sup> *Id*.

Although simple in principle, regulating under section 110(a)(2)(D)(i)(I) has been anything but simple in practice. EPA's first two attempts to regulate interstate air pollution — the NOx SIP Call<sup>5</sup> and the Clean Air Interstate Rule ("CAIR")<sup>6</sup> — met with mixed success. While aspects of the NOx SIP Call were upheld in *Michigan v. EPA*,<sup>7</sup> CAIR was remanded by the same court eight years later in *North Carolina v. EPA*.<sup>8</sup> The Cross-State Air Pollution Rule ("CSAPR"),<sup>9</sup> also known as the Transport Rule, was EPA's third and most recent attempt to effectuate Congress's goal of "effective and flexible authority" for EPA to deal with the challenge of interstate air pollution. Nevertheless, the D.C. Circuit vacated the rule in *EME Homer City Generation, L.P. v. EPA*<sup>11</sup> because EPA did not "stay[] within the boundaries Congress [] set" under the CAA.<sup>12</sup>

As one commentator noted, after the D.C. Circuit's *EME Homer* decision, "the good neighbor provision of the CAA, as well as the scope of the EPA's regulatory authority over interstate air pollution generally, drift in a haze of uncertainty." Perhaps hoping to address this uncertainty, the U.S. Supreme Court granted certiorari in *EME Homer* in June 2013. 14

Part I of this Comment describes EPA's prior attempts to regulate interstate air pollution under section 110(a)(2)(D)(i)(I) and discusses the D.C. Circuit's evaluation of those rules in *Michigan* and *North Carolina*. Part II profiles the D.C. Circuit's decision to invalidate CSAPR in *EME Homer*. Part III offers an alternative path for EPA to address the uncertainty created by the D.C. Circuit's decision. Instead of asking the Supreme Court to reverse the *EME Homer* decision, EPA could gain the benefits of regulating interstate pollution and avoid the problems that plagued CAIR and CSAPR by incorporating ex post reviews and contingent exemptions for states into its next rulemaking.

<sup>&</sup>lt;sup>5</sup> Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone, 63 Fed. Reg. 57,356 (Oct. 27, 1998) [hereinafter NOx SIP Call].

<sup>&</sup>lt;sup>6</sup> Rule To Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to the NOx SIP Call, 70 Fed. Reg. 25,162 (May 12, 2005) [hereinafter CAIR].

<sup>&</sup>lt;sup>7</sup> 213 F.3d 663 (D.C. Cir. 2000) (per curiam).

<sup>&</sup>lt;sup>8</sup> 531 F.3d 896 (D.C. Cir. 2008) (per curiam).

<sup>&</sup>lt;sup>9</sup> Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 Fed. Reg. 48,208 (Aug. 8, 2011) [hereinafter CSAPR].

<sup>&</sup>lt;sup>10</sup> Brief for Respondents at 13, EME Homer City Generation, L.P. v. EPA, 696 F.3d 7 (D.C. Cir. 2012) (No. 11-1302 and consolidated cases) [hereinafter Resp't's Br.].

<sup>&</sup>lt;sup>11</sup> 696 F.3d 7 (D.C. Cir. 2012).

<sup>12</sup> Id. at 12.

<sup>&</sup>lt;sup>13</sup> Julie D. Carter, *EME Homer City Generation, L.P. v. EPA: The D.C. Circuit Strikes Down Another EPA Attempt to Make Good Neighbors Through Interstate Air Pollution Regulation*, 26 Tul. Envtl. L.J. 123, 134 (2012).

<sup>&</sup>lt;sup>14</sup> EME Homer City Generation, L.P. v. EPA, 696 F.3d 7 (D.C. Cir. 2012), cert. granted in part 133 S.Ct. 2857 (2013) (No. 12-1182).

### BACKGROUND: EPA'S ATTEMPTS TO REGULATE INTERSTATE AIR POLLUTION

#### A. The NOx SIP Call and Clean Air Interstate Rule

Under section 108 of the CAA,15 the EPA Administrator must develop a list of "criteria pollutants" — pollutants that "cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare" and that "result[] from numerous or diverse mobile or stationary sources." 16 Section 10917 then requires EPA to set air quality standards, the attainment and maintenance of which, "allowing [for] an adequate margin of safety, are requisite to protect the public health."18 After EPA sets the standards, the CAA's cooperative federalism kicks in, and the states, rather than EPA, determine how to achieve these NAAQS for each of the pollutants.<sup>19</sup> Within three years of an update to a NAAQS, states must submit SIPs in which they "choose which individual sources within the State must reduce emissions, and by how much."20 Areas that fail to achieve the NAAQS are designated as "nonattainment" areas by the EPA Administrator.<sup>21</sup> If any state fails to submit an adequate SIP, EPA must issue a Federal Implementation Plan ("FIP") for that state instead.22

Affording states flexibility through a federalist scheme has a high cost: the overregulation of states downwind of polluters. Indeed, the "NAAQS nonattainment and maintenance problems in many States are caused in part by emissions transported from other States . . . requiring the 'downwind' State to regulate its own emission sources more stringently to compensate."23 The problem is so dramatic that "[i]n some cases, due to transport, there is no feasible action the downwind State can take on its own to attain and maintain the NAAQS."24 As a result, in 1990, Congress strengthened EPA's ability to require upwind states to regulate their contributions to downwind pollution. Under the good neighbor provision, states must include provisions in their SIPs to prohibit emission of air pollutants that will "contribute significantly" to nonattainment of the NAAOS by a downwind state.25

Since the 1970s, EPA has maintained a NAAQS for ozone, because of the pollutant's scientifically established impacts on human health and ecosystems.<sup>26</sup>

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15 42 U.S.C. § 7408 (2006).
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<sup>&</sup>lt;sup>16</sup> *Id.* § 7408(a)(1). <sup>17</sup> 42 U.S.C. § 7409.

<sup>&</sup>lt;sup>18</sup> *Id.* § 7409(b)(1).

<sup>&</sup>lt;sup>19</sup> *Id.* §§ 7409–7410.

<sup>&</sup>lt;sup>20</sup> EME Homer City Generation, L.P. v. EPA, 696 F.3d 7, 13 (D.C. Cir. 2012); see also 42 U.S.C. § 7410(a).

<sup>&</sup>lt;sup>21</sup> 42 U.S.C. § 7407(c)(1).

<sup>&</sup>lt;sup>22</sup> *Id*.

<sup>&</sup>lt;sup>23</sup> Resp't's Br., supra note 10, at 5.

<sup>&</sup>lt;sup>25</sup> 42 U.S.C. § 7410(a)(2)(D)(i)(I).

<sup>&</sup>lt;sup>26</sup> EPA, NOx Budget Trading Program – Basic Information 2–3 (2009), available at http:// perma.cc/PWF6-W4EJ [hereinafter NOx Budget Trading Program].

Recognizing that states failed to meet the NAAQS for ozone, EPA concluded that nitrogen oxide ("NOx") emissions from twenty-three jurisdictions "significantly contribute[d]" to the nonattainment of the ozone NAAQS in one or more states.<sup>27</sup> As a result, EPA issued its NOx SIP Call in 1998.<sup>28</sup> EPA set the emissions caps for upwind states to abate their "significant contributions," but gave states flexibility in meeting those limits.<sup>29</sup>

But EPA did not stop there. First, although EPA initially determined which states were significant contributors of air pollution from "the magnitude, frequency, and relative amount of each state's ozone contribution," EPA "called for termination of only a subset of each state's contribution" — emissions reductions that could be achieved at a cost of less than \$2,000 per ton. On In doing so, EPA decided that any emissions that would cost more than \$2,000 per ton to eliminate were not "significant" and thus not covered by section \$110(a)(2)(D)(i)(I). Second, EPA encouraged states to participate in a federally managed cap-and-trade program. Despite commenters' fears that an emissions market might affect regional patterns of pollution, benefiting some states and harming others, EPA found that significant shifts would not occur.

EPA stressed that the program was "voluntary" and did not preclude any other measures to achieve the emissions reductions required.<sup>34</sup> Indeed, a state could "choose whether to adopt the model rule, which [would] be administered by EPA, to adopt its own trading program, or to have no trading program at all."<sup>35</sup> However, every covered upwind state decided to participate.<sup>36</sup> This approach was unsurprising. Not only was the emissions trading approach more cost-effective, but EPA also issued a model rule that guaranteed participating states would be in compliance with the SIP Call and achieve over ninety percent of the required reductions.<sup>37</sup>

In *Michigan v. EPA*, the D.C. Circuit largely upheld the NOx SIP Call.<sup>38</sup> First, the court determined that EPA had "undertake[n] a sufficiently state-specific determination of ozone contribution."<sup>39</sup> According to the court, state-specific modeling was necessary to satisfy the good neighbor provision, which "requires that the relevant offending emissions be 'emissions activity within the State.'"<sup>40</sup> In its Notice of Proposed Rulemaking, EPA had relied only on

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<sup>27</sup> NOx SIP Call, supra note 5, at 57,358.
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<sup>&</sup>lt;sup>28</sup> Id. at 57,356.

<sup>&</sup>lt;sup>29</sup> Id.

<sup>&</sup>lt;sup>30</sup> Michigan v. EPA, 213 F.3d 663, 675 (D.C. Cir. 2000) (per curiam).

<sup>31</sup> Id

<sup>&</sup>lt;sup>32</sup> NOx SIP Call, *supra* note 5, at 57,359.

<sup>&</sup>lt;sup>33</sup> *Id.* at 57,460.

<sup>&</sup>lt;sup>34</sup> *Id*.

<sup>35</sup> Michigan, 213 F.3d at 689 n.6.

<sup>&</sup>lt;sup>36</sup> NOx Budget Trading Program, supra note 26, at 5.

<sup>&</sup>lt;sup>37</sup> NOx SIP Call, *supra* note 5, at 57,458.

<sup>&</sup>lt;sup>38</sup> 213 F.3d at 695. In all aspects relevant to this comment, the D.C. Circuit upheld the NOx SIP Call. However, the court did vacate elements of the SIP Call on other grounds. *See id.* <sup>39</sup> *Id.* at 669.

<sup>&</sup>lt;sup>40</sup> Id. at 673 (quoting 42 U.S.C. § 7410(a)(2)(D)(i)(I)).

regional and multi-state data, a "potential shortcoming" of its approach.<sup>41</sup> But in response to comments, EPA had conducted state-specific modeling before promulgating its final rule.<sup>42</sup>

Second, the *Michigan* court determined that "there is nothing in the text, structure, or history of § 110(a)(2)(D) that bars EPA from considering cost."<sup>43</sup> The court held that EPA would only be barred from considering cost in determining which contributions were "significant" if congressional intent to prevent EPA from doing so was clear.<sup>44</sup> Finding no clear congressional intent, the court upheld EPA's consideration of cost in setting emissions budgets.<sup>45</sup>

Seven years later, in response to the dangers posed by fine particulate matter ("PM<sub>2.5</sub>") and the problems still posed by ozone, EPA sought new regulations of interstate NOx and sulfur dioxide ("SO<sub>2</sub>") pollution, known as CAIR.<sup>46</sup> EPA again relied on section 110(a)(2)(D)(i)(I) in establishing optional trading programs.<sup>47</sup> If an upwind state failed to submit an approved SIP, sources in that state would be subject to an EPA-managed trading program under its FIP.<sup>48</sup>

In the first step of promulgating this new rule — determining which states were subject to CAIR — EPA assessed the "air quality factor," namely the magnitude of NOx and SO<sub>2</sub> emissions contributions from each state (but not the cost of reductions).<sup>49</sup> But EPA never measured the significant contributions of pollution for the linkages between each upwind state and each downwind state in nonattainment.<sup>50</sup>

EPA then considered cost factors in setting emissions budgets.<sup>51</sup> However, while the NOx SIP Call set state-by-state emissions budgets for upwind states, CAIR "set[] an annual cap on NOx and SO<sub>2</sub> emissions in the region."<sup>52</sup> In allocating NOx budgets among the covered states, EPA allocated them "according to each state's proportion of oil-, gas-, and coal-fired facilities," adjusting for fuel mix so that "states with higher percentages of gas- and oil-fired facilities received comparably fewer NOx allowances than states with higher percentages of coal-fired facilities."<sup>53</sup> In determining emissions budgets for SO<sub>2</sub>, EPA again set a region-wide cap, but then used the state's SO<sub>2</sub> allowances

<sup>&</sup>lt;sup>41</sup> *Id*.

<sup>&</sup>lt;sup>42</sup> *Id*.

<sup>&</sup>lt;sup>43</sup> *Id*. at 679

 <sup>44</sup> *Id.* at 678 (citing Indus. Union Dep't, AFL-CIO v. Am. Petroleum Inst., 448 U.S. 607, 655 (1980); Natural Res. Def. Council v. EPA, 824 F.2d 1146, 1163 (D.C. Cir. 1987) (en banc)).
45 *Id.* at 679.

<sup>&</sup>lt;sup>46</sup> CAIR, *supra* note 6, at 25,162.

<sup>&</sup>lt;sup>47</sup> North Carolina v. EPA, 531 F.3d 896, 903 (D.C. Cir. 2008) (per curiam).

<sup>&</sup>lt;sup>48</sup> *Id.* (citing Rulemaking on Section 126 Petition from North Carolina To Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans To Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program, 71 Fed. Reg. 25,328, 25,328 (Apr. 28, 2006)).

<sup>&</sup>lt;sup>49</sup> *Id*.

<sup>&</sup>lt;sup>50</sup> Id. at 907.

<sup>&</sup>lt;sup>51</sup> *Id.* at 903.

<sup>52</sup> Id. at 904.

<sup>&</sup>lt;sup>53</sup> *Id*.

under the CAA's Title IV program as the starting point for allocating emissions credits among the covered upwind states.<sup>54</sup>

In *North Carolina v. EPA*, the D.C. Circuit invalidated CAIR.<sup>55</sup> The court found that this regional approach had exceeded EPA's statutory authority,<sup>56</sup> as its mandate was only to prevent "sources 'within the state' from 'contribu[ting] significantly to nonattainment in . . . any other state." <sup>57</sup> In enacting CAIR, EPA sought to reduce the pollution from a region "as a whole," without "measur[ing] each state's significant contribution to specific downwind nonattainment areas and eliminat[ing] them in an isolated, state-by-state manner." <sup>58</sup>

The North Carolina court reminded EPA that Michigan did not "pass[] on the lawfulness of the NOx SIP Call's trading program," but only evaluated EPA's reliance on cost to mitigate the severity of emissions budgets. <sup>59</sup> CAIR represented Michigan's logic taken "too far"; without calculating state-by-state contributions and upwind-downwind linkages, how could EPA "assure that the trading programs it ha[d] designed in CAIR [would] achieve section 110(a)(2)(D)(i)(I)'s goals"? <sup>60</sup> To fit within the good neighbor provision, the rule "must include some assurance that it achieves something measurable towards the goal of prohibiting sources 'within the State' from contributing to . . . 'any other State.' " <sup>61</sup>

Reviewing the NOx budgets, the court noted that while EPA had determined each upwind state's share of the regional emissions budget on a proportional basis, EPA then adjusted each state's budget for the mix of fuels that it used. While this weighting was done "for the sake of sharing the burden of emissions reductions fairly," such weighting exceeded the bounds of the Act because EPA could not "make one state's significant contribution depend on another state's cost of eliminating emissions." The SO<sub>2</sub> budgets were also "not what *Michigan* approved." The fact that EPA based its budgets on the allocations states received under Title IV undermined any claim that they were based on the text of the good neighbor provision instead. While EPA had

<sup>&</sup>lt;sup>54</sup> EPA's Clean Air Interstate Rule (CAIR): Recent Court Decision and its Implications: Hearing Before the S. Comm. on Env't and Pub. Works Subcomm. on Clean Air and Nuclear Safety, 110th Cong. (2008) (statement of Brian McLean, Dir., Office of Atmospheric Programs, Office of Air & Radiation, EPA), available at http://perma.cc/TD8J-YWFA.

<sup>55 531</sup> F.3d at 929.

<sup>&</sup>lt;sup>56</sup> *Id.* at 908.

<sup>&</sup>lt;sup>57</sup> Id. at 907 (quoting 42 U.S.C. § 7410(a)(2)(D)(i)(I)).

<sup>&</sup>lt;sup>58</sup> *Id*.

<sup>&</sup>lt;sup>59</sup> *Id.* at 908.

 $<sup>^{60}</sup>$  *Id* 

<sup>61</sup> Id. at 908.

<sup>62</sup> Id. at 918.

<sup>63</sup> Id. at 919.

<sup>64</sup> Id. at 919-20.

<sup>65</sup> Id. at 917.

<sup>&</sup>lt;sup>66</sup> *Id.* Moreover, relating the additional SO<sub>2</sub> reductions under the good neighbor provision to Title IV allowances constituted unlawful "tampering with the Title IV trading program." Carla M. Gray, *What Now? The Future of EPA Transport Programs Following Vacatur of the Cross-State Air Pollution Rule*, 14 N.C. J.L. & Tech. On. 103, 116 (2012) (quoting *North Carolina*, 531 F.3d at 930).

attempted to preserve the ongoing Title IV program, that important goal was "not among the objectives of section 110(a)(2)(D)(i)(I)."<sup>67</sup>

Given the court's belief that CAIR was "fundamentally flawed," so that "very little [would] 'survive[] remand in anything approaching recognizable form," the court vacated CAIR.<sup>68</sup> However, on rehearing, the panel remanded without vacatur while EPA conducted "further proceedings consistent with [its] prior opinion." <sup>69</sup>

# B. Proceedings Consistent with Prior Opinions: The Cross-State Air Pollution Rule

After revising the NAAQS for PM<sub>2.5</sub> in 2006, EPA again issued a SIP call under the good neighbor provision.<sup>70</sup> EPA did not quantify emissions budgets for NOx and SO<sub>2</sub> for each upwind state under section 110(a)(2)(D)(i)(I). However, EPA still required upwind states to submit SIPs that "address[ed] [their] significant contribution to nonattainment and [their] interference with maintenance of a NAAQS in any neighboring state" by September 21, 2009.<sup>71</sup>

On June 9, 2010, EPA issued a finding that twenty-nine states had not yet submitted SIPs containing adequate provisions to address interstate pollution, "establish[ing] a 2-year deadline for promulgation by EPA of a FIP" to regulate emissions from those upwind states. On August 8, 2011, EPA issued its third attempt to regulate interstate pollution under a trading scheme — the Transport Rule, or CSAPR — in the form of FIPs for each covered state. Unless a state informed EPA that it would replace EPA's FIP with its own program, that state would be required to participate in CSAPR's emissions trading program.

In developing the new rule, EPA divided its analysis into two steps: (1) deciding which states to cover under the Transport Rule, and (2) determining the emissions budgets for covered states.<sup>75</sup> In determining which states fit within the jurisdiction of the rule, EPA had to evaluate *each state's* significant contribution to nonattainment in downwind states to avoid the problems that plagued CAIR. In an effort to do so, EPA "us[ed] air quality modeling to identify downwind areas with nonattainment or maintenance problems for the PM<sub>2.5</sub> and ozone NAAQS."<sup>76</sup> EPA then determined which states contributed air

<sup>67</sup> North Carolina, 531 F.3d at 918.

<sup>&</sup>lt;sup>68</sup> Id. at 929 (quoting Natural Res. Def. Council v. EPA, 489 F.3d 1250, 1261 (D.C. Cir. 2007)).

<sup>&</sup>lt;sup>69</sup> North Carolina v. EPA, 550 F.3d 1176, 1178 (2008) (per curiam).

<sup>&</sup>lt;sup>70</sup> Finding of Failure To Submit Section 110 State Implementation Plans for Interstate Transport for the 2006 National Ambient Air Quality Standards for Fine Particulate Matter, 75 Fed. Reg. 32,673 (June 9, 2010).

<sup>&</sup>lt;sup>71</sup> *Id*.

<sup>&</sup>lt;sup>72</sup> *Id.* at 32,673–74.

<sup>&</sup>lt;sup>73</sup> CSAPR, *supra* note 9, at 48,208–12.

<sup>&</sup>lt;sup>74</sup> See EPA Office of Air & Radiation, Cross-State Air Pollution Rule: Reducing Air Pollution, Protecting Public Health 4 (2011), available at http://perma.cc/CQB5-LPF9 [hereinafter Cross-State Air Pollution Rule: Reducing Air Pollution].

<sup>&</sup>lt;sup>75</sup> Resp't's Br., *supra* note 10, at 17–18.

<sup>&</sup>lt;sup>76</sup> *Id.* at 17 (citing CSAPR, *supra* note 9, at 48,224–46).

pollution in excess of a specified magnitude — "one percent of the applicable NAAQS" — to at least one of those downwind areas.<sup>77</sup> In this way, EPA determined which upwind states would be covered by CSAPR based on air quality factors and on the linkages between each upwind and downwind state.<sup>78</sup>

After determining which states to cover under the Transport Rule, EPA incorporated cost considerations into its calculation of each upwind state's emissions budget. EPA "identified the emissions that would remain in those States after application of ascending cost thresholds of emission reductions." Ultimately, as in the NOx SIP Call and CAIR, EPA determined that the reductions available at the chosen cost threshold would represent that upwind state's "significant contribution." Finally, to avoid the concern in CAIR that state emissions budgets were based on impermissible factors, EPA calculated emissions budgets by simply subtracting the "significant" contributions from that state's average emissions in previous years.

#### II. THE COURT'S REASONING AND RED LINES IN EME HOMER

Despite EPA's efforts to avoid the pitfalls of CAIR, the D.C. Circuit held that CSAPR, like its predecessor, violated EPA's mandate under the CAA.<sup>82</sup> Writing for the majority, Judge Kavanaugh concluded, "[o]ur limited but important role is to independently ensure that the agency stays within the boundaries Congress has set. EPA did not do so here."83 Taking a strict approach to the construction of the good neighbor provision, Judge Kavanaugh identified two independent problems: (1) that EPA promulgated the trading program in CSAPR as a FIP concurrently with its determination of state emissions budgets, and (2) that certain states might be required to reduce NOx and SO<sub>2</sub> emissions by more than would be necessary to abate their "significant" contributions to the nonattainment in downwind states.<sup>84</sup>

### A. Invalidating EPA's Premature Federal Implementation Plan

To Judge Kavanaugh, EPA's decision to simultaneously promulgate the Transport Rule as a FIP while establishing states' emissions budgets under section 110(a)(2)(D)(i)(I) represented a violation of the Act sufficient to merit invalidation. States As Judge Kavanaugh explained, section 110(c)(1) only empowers

<sup>&</sup>lt;sup>77</sup> *Id.* (citing CSAPR, *supra* note 9, at 48,224–46).

<sup>&</sup>lt;sup>78</sup> *Id.* Emphasizing this last point, EPA publicly released a map detailing every linkage between covered upwind states and states in nonattainment. *See* Cross-State Air Pollution Rule: Reducing Air Pollution, *supra* note 74, at 22.

<sup>&</sup>lt;sup>79</sup> Resp't's Br., *supra* note 10, at 17 (citing CSAPR, *supra* note 9, at 48,246–65).

<sup>&</sup>lt;sup>80</sup> *Id.* at 17–18 (citing CSAPR, *supra* note 9, at 48,246–65).

<sup>81</sup> *Id.* at 18 (citing CSAPR, *supra* note 9, at 48,259).

<sup>82</sup> EME Homer City Generation, L.P. v. EPA, 696 F.3d 7, 11 (D.C. Cir. 2012).

<sup>83</sup> *Id.* at 12.

<sup>84</sup> Id. at 11-12.

<sup>&</sup>lt;sup>85</sup> *Id*.

EPA to promulgate FIPs *after* a state "fail[s] to make a required submission" or EPA disapproves of its SIP.<sup>86</sup>

The question, then, became when the requirements of the good neighbor provision took effect. The only way EPA could have promulgated this FIP while also establishing state budgets under the Transport Rule would be if "a State's implementation of its good neighbor obligation can be considered part of the State's 'required submission' in its SIP (or whether the SIP can be deficient for failing to implement the good neighbor obligation) even before EPA quantifies the State's good neighbor obligation."

Although a state's failure to meet the NAAQS permits EPA to promulgate a FIP, Judge Kavanaugh distinguished that failure from a state's violation of the good neighbor provision.<sup>88</sup> While a NAAQS offers clear goals, "the good neighbor obligation is not a clear numerical target — far from it — until EPA defines the target. Even after EPA sets a NAAQS, an upwind State's good neighbor obligation for that pollutant is nebulous."<sup>89</sup> As such, it is "impossible" for upwind states to achieve their good neighbor obligations before EPA sets these targets.<sup>90</sup> Since states could not be required to follow section 110(a)(2)(D)(i)(I) until EPA promulgated CSAPR's numerical targets, CSAPR represented an impermissible "FIP-first" approach.<sup>91</sup>

Judge Rogers dissented on both jurisdictional and substantive grounds. As she explained, the CAA requires that petitions for review of a final rule be filed within sixty days of that rule's publication. <sup>92</sup> Judge Rogers reminded the majority that, over one year before EPA issued CSAPR, EPA had found that twentynine states and territories failed to submit SIPs satisfying section 110(a)(2)(D)(i)(I). <sup>93</sup> Petitioners' claim that EPA imposed a FIP before setting numerical targets for states was therefore filed more than sixty days after the relevant final rule. <sup>94</sup>

The jurisdictional issue notwithstanding, Judge Rogers also argued that the *EME Homer* court misconstrued EPA's *ability* to quantify states' significant contributions as a *requirement* that EPA do so. In her view, the *Michigan* court only permitted EPA to quantify state emissions caps under section 110(a)(2)(D)(i)(I); doing so represented a reasonable reading of the CAA under *Chevron* Step Two.<sup>95</sup> However, the *EME Homer* majority 'turn[ed] 'may' into 'must,'" finding that EPA had to set prospective emissions budgets before enforcing the statute.<sup>96</sup> Since Judge Rogers thought that quantifying state caps was

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<sup>86</sup> Id. at 30 (quoting 42 U.S.C. § 7410(c)(1)).
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<sup>&</sup>lt;sup>87</sup> *Id.* (quoting 42 U.S.C. § 7410(c)(1)).

<sup>88</sup> Id. at 32.

<sup>&</sup>lt;sup>89</sup> *Id*.

<sup>&</sup>lt;sup>90</sup> *Id*.

<sup>&</sup>lt;sup>91</sup> *Id.* at 33.

<sup>&</sup>lt;sup>92</sup> *Id.* at 40 (Rogers, J., dissenting) (citing 42 U.S.C. § 7607(b)(1)).

<sup>&</sup>lt;sup>93</sup> *Id.* at 41.

<sup>&</sup>lt;sup>94</sup> *Id.* at 43.

<sup>&</sup>lt;sup>95</sup> Id. at 48 (citing Michigan v. EPA, 213 F.3d 663, 687 (D.C. Cir. 2000) (per curiam); Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 843 (1984)).

optional under section 110(a)(2)(D)(i)(I), she found that states were required to include adequate provisions to mitigate their contributions to downwind states' nonattainment even before numerical targets were set. 97 After states failed to do so, EPA was entitled to promulgate its FIP. 98

## B. The Significance of a Theoretical Problem: Invalidating a Trading Scheme that May Lead to Excessive Reductions by Upwind States

Turning to CSAPR's substantive scheme, Judge Kavanaugh noted that EPA did conduct the necessary state-by-state determinations to identify the "linkages" between upwind states and states in nonattainment.<sup>99</sup> Unlike CAIR, which had regulated an upwind region as a whole, EPA only covered an upwind state that contributed emissions to a downwind state in nonattainment if its contribution exceeded a specific numeric threshold (one percent of the relevant NAAQS).<sup>100</sup> If a state was not responsible for air pollution contributions above that threshold, "[t]hose upwind States were off the hook altogether."<sup>101</sup> This approach was met with implicit judicial approval.<sup>102</sup>

However, Judge Kavanaugh also identified a second issue that required CSAPR's invalidation. Applying the court's holdings in *Michigan* and *North Carolina*, Judge Kavanaugh identified three "red lines" that limit EPA's authority under the good neighbor provision. First, "EPA may not force a State to eliminate more than its own *'significant'* contribution to a downwind State's nonattainment area. In other words, although EPA is empowered to determine what constitutes a significant contribution, once it does so, EPA cannot require a state to reduce its emissions by any more than that amount. CSAPR crossed this line. Under CSAPR, EPA chose to include upwind states based solely on their contributions over the one-percent threshold, but imposed restrictions based on cost-effectiveness that "could require upwind States to reduce emissions by more than the amount of that contribution."

Second, in issuing a rule under section 110(a)(2)(D)(i)(I), EPA must consider relative state contributions because a state's significant contribution "necessarily depends on the relative contributions of that upwind State, of other upwind State contributors, and of the downwind State itself." Even as Judge Kavanaugh conceded that "EPA may consider cost . . . in a way that benefits some upwind States more than others," such considerations were only proper

<sup>97</sup> Id. at 49.

<sup>&</sup>lt;sup>98</sup> *Id.* at 51.

<sup>99</sup> Id. at 15 (majority opinion).

<sup>100</sup> Id. at 25.

<sup>101</sup> Id. at 23.

<sup>&</sup>lt;sup>102</sup> See id. at 23-24.

 $<sup>^{103}</sup>$  *Id.* at 19.

<sup>&</sup>lt;sup>104</sup> *Id.* at 20.

<sup>105</sup> Id. at 25.

<sup>106</sup> Id. at 25 (emphasis added).

<sup>&</sup>lt;sup>107</sup> *Id.* at 20.

where EPA sought to "lower an individual State's obligations." <sup>108</sup> In this way, Judge Kavanaugh drew a red line between considering cost for the purpose of reducing state obligations, and ignoring relative contributions entirely. CSAPR crossed this line as well. Since EPA "made no attempt to calculate upwind States' required reductions on a proportional basis," the possibility existed that a "State [was] necessarily being forced to clean up another upwind State's share of the mess." <sup>109</sup>

The third red line was similarly interconnected. Just as EPA could not require individual upwind states to reduce their emissions by more than their significant contributions, EPA also had to guarantee that "the combined obligations of the various upwind States, as aggregated, do not produce more than necessary 'over-control' in the downwind States — that is, that the obligations do not go beyond what is necessary for the downwind States to achieve the NAAQS."<sup>110</sup> By failing to ensure that the aggregate obligations under the Transport Rule would not lead to over-control, EPA had again violated its statutory mandate under the CAA.<sup>111</sup> EPA turned the good neighbor provision into a tool to "effectively force every power plant in the upwind States to install every emissions control technology EPA deems 'cost-effective.'" <sup>112</sup>

Although Judge Kavanaugh treated the red lines as independent, albeit related, flaws, each relies on one assumption: "[U]pwind States *may* be required to reduce emissions by more than their own significant contributions to a downwind State's nonattainment." Thus, what Judge Kavanaugh treated as three problems should be conceived as one, where the second and third red lines are merely outgrowths of the first. Indeed, if no state were required to reduce its emissions by more than its significant contribution, then it would be impossible for a state to have borne more than its share of the downstate mess (the second red line) and for aggregate reductions to have led to over-control (the third).<sup>114</sup>

<sup>&</sup>lt;sup>108</sup> *Id.* at 21–22. Judge Kavanaugh also wrote that "the collective burden [of interstate pollution] must be allocated among the upwind States in proportion to the size of their contributions to the downwind State's nonattainment." *Id.* at 21. While this language could have been read as imposing a principle of equal state treatment — meaning that cost could only be used to raise emissions caps by the same proportion for all covered states — Judge Kavanaugh recognized that *Michigan* permits EPA to use cost in a way that benefits some states more than others. Instead, Judge Kavanaugh was likely referring to the initial calculations of "significance" before cost is taken into account.

<sup>109</sup> Id. at 27.

<sup>110</sup> *Id.* at 22.

<sup>111</sup> Id. at 27.

<sup>&</sup>lt;sup>112</sup> *Id.* at 28.

<sup>&</sup>lt;sup>113</sup> Id. at 11 (emphasis added).

<sup>&</sup>lt;sup>114</sup> Judge Rogers also pointed out this oddity in the court's use of three red lines. *See id.* at 59 (Rogers, J., dissenting) (noting that the proportionality argument was "premised on the speculative possibility that the Transport Rule might require States to reduce emissions to a level below the one percent of NAAQS inclusion threshold of EPA's two-step approach"); *id.* (citing Transcript of Oral Argument at 32, *EME Homer*, 696 F.3d 7 (No. 11-1302 and consolidated cases)) (highlighting that petitioners conceded the proportionality argument was not an "independent" claim, but rather just a "repackaged" argument).

Judge Rogers dissented. Turning first to jurisdiction, she found that "the court's effort to avoid this court's well-settled precedent fails clearly."115 While petitioners complained of the hypothetical possibility that CSAPR would require emissions reductions from upwind states in excess of their "significant" contributions, no commenter had raised this concern during EPA's administrative proceedings.116 Because "'[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," petitioners could not bring this claim before the courts.<sup>117</sup>

Judge Rogers also disagreed on the merits. Addressing all three "red lines" at once, she contested the underlying assumption that any state could be required to reduce its emissions to levels lower than would be required to abate its significant contribution. She wrote, "nothing in the record suggests this hypothetical possibility actually would occur as a result of the Transport Rule."118 Similarly, the Department of Justice noted that petitioners made "no showing" that this hypothetical would occur. 119 Rather, the record suggested that "at the cost thresholds used in the Rule, such a scenario is extremely unlikely to occur."120 Finally, the idea of excessive cost-based reductions was illogical; the purpose "of choosing a 'cost' that is 'effective' for each State assumes only a reasonable subset of emissions will be reduced."121

Ultimately, the *EME Homer* court vacated CSAPR.<sup>122</sup> While EPA was permitted to continue implementing CAIR, Judge Kavanaugh reiterated the North Carolina court's demand that EPA not manage CAIR "indefinite[ly]." 123 As a result, he ordered that EPA "proceed expeditiously on remand" to issue another rule under the good neighbor provision.<sup>124</sup>

#### PROCEEDING EXPEDITIOUSLY: (How) CAN EPA EFFECTIVELY REGULATE III. SIGNIFICANT INTERSTATE AIR POLLUTION TODAY?

In debating the substance of the Transport Rule, EPA and Judge Kavanaugh offered two different approaches to regulating under uncertainty. Judge Kavanaugh would not allow a rule to go forward where there is even a hypothetical possibility of over-control. By contrast, EPA, the Department of Justice, and Judge Rogers would permit such regulations. Accordingly, Judge Kava-

<sup>115</sup> Id. at 52.

<sup>116</sup> Id. at 55; see also Resp't's Br., supra note 10, at 32 n.18 ("EPA is not aware of any comments that argued that EPA's proposed approach was flawed because of the theoretical possibility that a State's emissions . . . could fall below the one-percent screening threshold."). <sup>117</sup> *EME Homer*, 696 F.3d at 38 (Rogers, J., dissenting).

<sup>118</sup> Id. at 52 n.15.

<sup>&</sup>lt;sup>119</sup> Resp't's Br., supra note 10, at 33.

<sup>&</sup>lt;sup>120</sup> Id. As the Department of Justice argued, raising the specter of this hypothetical possibility of over-control represented no more "than an attack on a straw man." *Id.* at 32-33.

<sup>&</sup>lt;sup>121</sup> *EME Homer*, 696 F.3d at 52 n.15 (Rogers, J., dissenting).

<sup>&</sup>lt;sup>122</sup> Id. at 37 (majority opinion).

<sup>&</sup>lt;sup>123</sup> Id. at 38 n.35 (quoting North Carolina v. EPA, 550 F.3d 1176, 1178 (2008) (per curiam)). 124 Id.

naugh suggested that EPA develop a rule that does not take cost considerations into account; the government has continued to advocate for the validity of CSAPR by seeking Supreme Court review. Both options are unsatisfying.

EPA efforts to regulate interstate air pollution demonstrate the importance of rethinking environmental regulations by "agreeing to disagree." Rather than speculate about the hypothetical results of a rule, EPA can include ex post reviews of its interstate pollution program, while promising to grant exemptions to any state that demonstrates actual over-control.

# A. The Traditional Route: Supreme Court Review or Back to the Drawing Board

The Department of Justice sought review of the D.C. Circuit's decision to vacate CSAPR, and the Supreme Court granted certiorari in part on June 24, 2013. 125 The Court accepted three questions for argument: whether the court of appeals enjoyed jurisdiction, whether EPA applied an unacceptable FIP-first approach, and whether EPA "permissibly interpreted the statutory term 'contribute significantly' so as to define each upwind State's 'significant' interstate air pollution contributions in light of the cost-effective emission reductions it can make to improve air quality in polluted downwind areas." 126

An overview of the possible answers to these questions reveals the ambiguities that will persist regardless of the Court's holding. First, if the Court rules that the D.C. Circuit lacked jurisdiction, the validity of EPA's approach will remain uncertain. Second, if the Court rules that CSAPR represented an invalid FIP-first approach, it need not go further. Third, if the Court holds CSAPR is invalid because EPA may not consider cost at all, it would again not need to rule on the issue of invalidating a regulation due to hypothetical problems. Finally, if the Court finds that the term "contribute significantly" could incorporate cost, the Court would only be affirming *Michigan*, which Judge Kavanaugh also purported to do.<sup>127</sup> Such a decision would not offer the final word on the validity of CSAPR. The Court's holding may therefore leave open as many questions as it solves, despite the time and effort involved in Supreme Court review.

The alternative that the D.C. Circuit offered is equally unsatisfying. In *EME Homer*, Judge Kavanaugh noted that EPA had considered an approach that reflected the principles he endorsed.<sup>128</sup> In EPA's Significant Contribution Technical Support Document, EPA considered a "[c]umulative air quality

<sup>&</sup>lt;sup>125</sup> EPA v. EME Homer City Generation, L.P., 133 S. Ct. 2857 (2013).

<sup>&</sup>lt;sup>126</sup> Questions Presented, EPA v. EME Homer City Generation, L.P., (12-1182) (June 24, 2013), available at http://perma.cc/KU8T-P22W.

<sup>&</sup>lt;sup>127</sup> See EME Homer, 696 F.3d at 27 ("To be sure, under Michigan, EPA may rely on cost-effectiveness factors in order to allow some upwind States to do less than their full fair share."). <sup>128</sup> Id. at 27 n.24.

threshold approach."129 Under this approach, EPA would not take cost considerations into account.<sup>130</sup> If EPA sought to reduce the NOx concentration in a specific state by twenty-five percent, each upwind state that significantly contributed to the NOx pollution in that state would be required to reduce emissions by that same twenty-five percent.<sup>131</sup>

However, EPA had deliberately discarded this option. Under the cumulative air quality threshold approach, "states that had previously implemented stringent control programs might not be able to achieve the required reductions using existing control technologies, while others that had previously done little . . . would achieve their required reductions using significantly less than optimal control technologies."132 Thus, a proportional approach would achieve the same benefits of CSAPR at a substantially higher cost, giving up on the promise of Michigan.

# B. Regulating Interstate Air Pollution Under Uncertainty: "Agreeing To Disagree" Via Ex Post Review and Contingent Exemptions

The traditional options available to EPA are unsatisfying. On the one hand, the Supreme Court might leave open as many questions as it answers. On the other hand, Judge Kavanaugh's suggestions would result in an inefficient and costly interstate air pollution regime. Accordingly, EPA has both the opportunity and the obligation to rethink its regulatory approach in response to EME Homer. Because Judge Kavanaugh's three red lines rest on the assumption that "upwind States may be required to reduce emissions by more than their own significant contributions,"133 EPA's next rulemaking must demonstrate that this possibility cannot occur. EPA can do so by incorporating ex post reviews and contingent exemptions into a new rule, which would guarantee (1) that EPA and the courts assess the existence of over-control only after accurate information is available and (2) that no state will be over-regulated in the event that such fears are borne out.

In "An Options-Approach to Agency Rulemaking," Professor Yoon-Ho Alex Lee argues in favor of this atypical path for regulating under uncertainty. 134 Although discussing a different context — demonstrating a rule's benefits justify its costs after Business Roundtable v. SEC<sup>135</sup> — Lee's suggestions

<sup>&</sup>lt;sup>129</sup> EPA, EPA-HQ-OAR-2009-0491, Technical Support Document (TSD) for the Transport Rule 6-7: Alternative Significant Contribution Approaches Evaluated (2010), available at http://perma.cc/4LJC-SY9N.

<sup>130</sup> Id. <sup>131</sup> *Id*.

<sup>133</sup> EME Homer, 696 F.3d at 11 (emphasis added).

<sup>&</sup>lt;sup>134</sup> Yoon-Ho Alex Lee, An Options-Approach to Agency Rulemaking, 65 ADMIN. LAW REV. (forthcoming 2013), available at http://perma.law.harvard.edu/08EvTp7Vr4U.

<sup>&</sup>lt;sup>135</sup> 647 F.3d 1144 (D.C. Cir. 2011). In Business Roundtable, the Securities and Exchange Commission disagreed with commenters about the likely economic impact of a new rule regulating stockholders, due to differing predictions regarding the prevalence of stockholder abuse that would result. Lee, *supra* note 134, at 3–4. The court "found it insufficient for the agency to disagree with commenters' speculative cost estimates simply by way of disagreeing with their

apply here. Arguing that an "agency seldom has all the necessary information to understand the intricacies of any industry," and that regulations "often produce unintended consequences that cannot be predicted," Lee suggests an approach that incorporates ex post review while lessening the burden imposed by courts on agencies ex ante. <sup>136</sup> Professor Michael Greenstone has also criticized the government's ex ante approach: "Many [regulations] are only evaluated before they are implemented — the point when we know the least about them. The result is that our regulatory system all too frequently takes shots in the dark

Rather than force the courts to choose between an agency's predictions about the results of a rule and of commenters, Lee argues that an agency can use "[o]ptions as a [w]ay of '[a]greeing to [d]isagree.'" <sup>138</sup> In the rulemaking context, an option would be the right for a party to demand the repeal of or an exemption from a rule contingent upon "certain adverse situations" resulting from the rule. <sup>139</sup> Illustrating the impact options would have on rulemaking, Lee offers a hypothetical in which G, a seller, is optimistic about an investment, while S, the buyer, is more concerned with its risk. <sup>140</sup> G could "signal the investment's expected high value by granting S a contingent right" wherein "if and only if the investment turns out to be net costly . . . S has the right to rescind and recover a substantial fraction of his cost." <sup>141</sup> While "S may still disagree with G (and in fact, may still lose money), S has much less reason to vigorously oppose the opportunity." <sup>142</sup> Moreover, if G is confident in her predictions, then G has little to fear. <sup>143</sup>

Lee builds on Professor Cass Sunstein's work, which reveals that options rulemaking is especially important for environmental regulations. He Because many environmental risks may be "irreversible" or "catastrophic," there are

assumptions about the future world, even as the court viewed the agency's own position as reasonable." Id. at 4 (emphasis preserved). As Lee notes, "[a] number of legal scholars have criticized the court for demanding too much from agencies." Id.

<sup>&</sup>lt;sup>136</sup> Lee, *supra* note 134, at 9. Lee argues that ex post reviews are more accurate because there will be "hard data from compliance experience" and because the rule will be evaluated not just by agencies and interested commenters but by "neutral academics publishing on peer-reviewed journals." *Id.* at 13.

<sup>&</sup>lt;sup>137</sup> Michael Greenstone, *Toward a Culture of Persistent Regulatory Experimentation and Evalua*tion, in New Perspectives on Regulation 111, 112 (David Moss and John Cisternino eds., 2009), *available at* http://perma.law.harvard.edu/0oMhMUg9YR4.

<sup>&</sup>lt;sup>138</sup> Lee, *supra* note 134, at 16.

<sup>&</sup>lt;sup>139</sup> *Id.* at 5.

<sup>140</sup> Id. at 17.

<sup>&</sup>lt;sup>141</sup> *Id*.

<sup>&</sup>lt;sup>142</sup> *Id*.

<sup>&</sup>lt;sup>143</sup> *Id.* at 18. Greenstone's approach is similar. Greenstone concludes that agencies should "fund the evaluations" of their rules, allocating money to "research groups (for example, academics or private companies) [with] the highest standards in research design and data analysis." Greenstone, *supra* note 137, at 119. In order to ensure these analyses play a prominent role in agency rulemakings, rules should include "the date by which the regulatory review board has to assess their costs and benefits." *Id.* at 121. When an agency fails to meet the deadlines, "the regulation should be repealed by default." *Id.* 

<sup>&</sup>lt;sup>144</sup> Lee, *supra* note 134, at 7 n.27.

high costs to waiting for data. 145 Thus, environmental agencies must "'act, then learn,' rather than 'wait and learn.'" 146 Options rulemaking empowers EPA to do exactly that.

Although Lee focuses on situations where agencies and commenters disagree about cost-benefit analyses, his insights apply here, where EPA, commenters, and the court disagreed about the possibility that CSAPR could lead to excessive reductions. EPA could re-issue CSAPR with an option: If a state is required to reduce emissions by more than its significant contribution under a quality-only standard (one-percent of the NAAQS), then EPA must exempt the state from its emissions budgets for that year and instead impose a state budget based solely on the magnitude of its emissions. EPA would thus be able to guarantee that its rule could never require reductions beyond what section 110(a)(2)(D)(i)(I) supports. Under this approach, "the court should accord greater deference to the agency," even if the new rule includes flaws that merited remand "under a static analysis." Furthermore, given EPA's confidence that over-control will not occur, the contingent exemption would never be triggered and EPA should view this regulation as identical to CSAPR.

#### CONCLUSION

EPA has already attempted to regulate interstate air pollution three times; it has seen its rulemakings remanded twice. Rather than seek Supreme Court review or give up on cost factors, EPA should incorporate ex post reviews and contingent exemptions to achieve the benefits of CSAPR but avoid hypothetical over-control. Admittedly, this approach represents an ambitious reliance on regulatory methods that have not been adopted by agencies or approved by courts. But rather than decry the "haze of uncertainty" surrounding interstate pollution regulation, EPA must "act, then learn" how courts will treat its innovative efforts

<sup>&</sup>lt;sup>145</sup> Cass Sunstein, *Irreversible and Catastrophic*, 91 Cornell L. Rev. 841, 842–47 (2005).

<sup>146</sup> Id. at 855.

<sup>&</sup>lt;sup>147</sup> Lee, *supra* note 134, at 25.