

THE EPA’S PROPOSED TRANSPORT RULE:  
IMPLICATIONS FOR CLIMATE CHANGE REGULATION

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On July 6, 2010, the U.S. Environmental Protection Agency (EPA) proposed a Clean Air Act rulemaking to reduce sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>) emissions from power plants in the eastern United States.<sup>1</sup> The proposal, also known as the “Transport Rule” is intended to replace the 2005 Clean Air Interstate Rule (CAIR), which was invalidated by the D.C. Circuit Court of Appeals in 2008.<sup>2</sup> The Transport Rule would cover thirty-one states and the District of Columbia, requiring emissions reductions starting in 2012.

The purpose of the Transport Rule is to protect air quality and public health in downwind states, by reducing SO<sub>2</sub> and NO<sub>x</sub> emissions at their source.<sup>3</sup> These pollutants form fine particles and ozone in the atmosphere, which can travel hundreds of miles across state lines, causing regional health and environmental problems.<sup>4</sup> To achieve reductions, the rule would impose a

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<sup>1</sup> EPA, Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone 394 (proposed July 6, 2010) (to be codified at 40 C.F.R. §§ 51, 52, 72, 78, 97) *available at* <http://www.epa.gov/airtransport/pdfs/TransportRule.pdf> [hereinafter “Transport Rule”].

<sup>2</sup> *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008) *available at* <http://www.epa.gov/airtransport/pdfs/TRPresentationfinal.pdf>.

<sup>3</sup> EPA, Air Transport (2010), <http://www.epa.gov/airtransport/>.

<sup>4</sup> Transport Rule, *supra* note 1, at 14.

“hybrid cap-and-trade program”<sup>5</sup> with state-specific SO<sub>2</sub> and NO<sub>x</sub> emission budgets.<sup>6</sup> The program would allocate emission allowances to energy-generating units (EGUs), and would permit full intrastate trading and limited interstate trading of those allowances.<sup>7</sup> The EPA estimates that, by 2014, the rule and other state and federal actions would reduce SO<sub>2</sub> emissions by 71% and NO<sub>x</sub> emissions by 52% (over 2005 levels).<sup>8</sup> As a co-benefit, the EPA also predicts that the rule’s compliance costs would encourage greater use of natural gas and non-fossil fuel sources, reducing carbon dioxide (CO<sub>2</sub>) emissions by 15.3 million tons.<sup>9</sup>

## I. General Overview

The EPA proposes this rulemaking under the Clean Air Act’s “good neighbor” provision, which “requires states to prohibit emissions that contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any primary or secondary [National Air Act Quality Standards (NAAQS)].”<sup>10</sup> Based on a finding that NO<sub>x</sub> and SO<sub>2</sub> significantly interfere with downwind states’ ability to maintain air quality standards,<sup>11</sup> the EPA proposes emission reduction responsibilities for upwind states.<sup>12</sup>

Under the Transport Rule, state emission budgets would be determined by an “analysis of each upwind state’s significant contribution to nonattainment and interference with maintenance downwind.”<sup>13</sup> Contributions would be calculated with respect to three air quality standards: the 1997 annual PM<sub>2.5</sub> standards, the 2006 24-hour PM<sub>2.5</sub> standards, and the 1997 ground-level ozone standard.<sup>14</sup> Twenty-eight states would be required to reduce SO<sub>2</sub> and NO<sub>x</sub> emissions under the 1997 and 2006 PM<sub>2.5</sub> standards, and twenty-six states would be required to reduce NO<sub>x</sub>

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<sup>5</sup> John Walke, *EPA Proposes to Cut Smog and Soot Pollution From Power Plants in the Western & Midwestern U.S.*, Switchboard: NRDC Staff Blog (July 6, 2010), available at [http://switchboard.nrdc.org/blogs/jwalke/epa\\_proposes\\_rule\\_to\\_cut\\_smog.html](http://switchboard.nrdc.org/blogs/jwalke/epa_proposes_rule_to_cut_smog.html).

<sup>6</sup> Transport Rule, *supra* note 1, at 336-337 (tables IV.E-1 and IV.E-2 illustrate the annual SO<sub>2</sub>, annual NO<sub>x</sub> and seasonal NO<sub>x</sub> budgets for each state).

<sup>7</sup> Transport Rule, *supra* note 1, at 423 (“Allocation of Emissions Allowances”).

<sup>8</sup> EPA, TRANSPORT RULE FACT SHEET 1 (2010) available at <http://www.epa.gov/airtransport/pdfs/FactsheetTR7-6-10.pdf> [hereinafter “FACT SHEET”].

<sup>9</sup> EPA, REGULATORY IMPACT ANALYSIS FOR THE PROPOSED FEDERAL TRANSPORT RULE 262 (June 2010), available at [http://www.epa.gov/ttn/ecas/regdata/RIAs/proposaltrria\\_final.pdf](http://www.epa.gov/ttn/ecas/regdata/RIAs/proposaltrria_final.pdf) [hereinafter “REGULATORY IMPACT ANALYSIS”].

<sup>10</sup> Transport Rule, *supra* note 1, at 14 (describing CAA § 110(a)(2)(D)(i)(I)).

<sup>11</sup> Section IV.D of the Transport Rule discusses the EPA’s proposed methodology for quantifying emissions that significantly contribute or interfere with maintenance. *Id.* at 248.

<sup>12</sup> *Id.* at 14.

<sup>13</sup> *Id.* at 23.

<sup>14</sup> Transport Rule, *supra* note 1, at 14.

emissions during the summer months under the 1997 ozone standard.<sup>15</sup> These requirements would take effect in two phases. By January 1, 2012, states with the largest SO<sub>2</sub> reduction obligations (Group 1) would be required to partially reduce SO<sub>2</sub> emissions. By January 1, 2014, both Group 1 and the remaining states (Group 2) would be required to reduce the remaining SO<sub>2</sub> and NO<sub>x</sub> emissions that were identified as “significant contributions” by the EPA.<sup>16</sup>

The EPA proposes the use of Federal Implementation Plans (FIPs) to directly regulate EGUs in each state.<sup>17</sup> FIPs would promulgate specific, enforceable rules to ensure that states achieve target reductions and comply with trading restrictions.<sup>18</sup> These regulations would apply to all “fossil-fuel fired [EGUs] with a nameplate capacity of greater than 25 megawatts, producing electricity for sale in the covered states, with certain exemptions for cogeneration units and solid waste incineration.”<sup>19</sup> As an alternative path to compliance, states would also have the option of developing their own implementation plans, so long as these plans fall within the Transport Rule’s framework and are approved by the EPA.<sup>20</sup>

Full intrastate and limited interstate trading of emissions allowances would be permitted under the EPA’s preferred version of the transport rule. Allowances would be allocated to individual entities based on “the state emission budgets for SO<sub>2</sub>, NO<sub>x</sub> and ozone season NO<sub>x</sub>, with a three percent set-aside for new units.”<sup>21</sup> EGUs could trade these allowances with other in-state entities, and could bank allowances for use in future years.<sup>22</sup> However, opportunities for interstate trading would be limited by a number of provisions, which were adopted to address the Court’s objections to CAIR and are discussed in the next section.

Recognizing that a state’s baseline emissions can be affected by a number of variables, the EPA proposes state-specific variability limits for one and three-year periods.<sup>23</sup> These limits would “define how many allowances can be traded out of state due to the variability of actual emissions annually”, setting a limit at “either 10% of the state’s budget *or* 5,000 tons for annual

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<sup>15</sup> FACT SHEET, *supra* note 8, at 3.

<sup>16</sup> Transport Rule, *supra* note 1, at 29.

<sup>17</sup> *Id.* at 26.

<sup>18</sup> *Id.*

<sup>19</sup> Seth D. Jaffe et al., *EPA Proposes Transport Rule to Address Interstate Air Pollution*, Foley Hoag Environmental Alert (July 13, 2010), available at [http://www.foleyhoag.com/NewsCenter/Publications/Alerts/Environmental/Environmental\\_Alert-071310.aspx](http://www.foleyhoag.com/NewsCenter/Publications/Alerts/Environmental/Environmental_Alert-071310.aspx).

<sup>20</sup> Section VII of the Transport Rule discusses state implementation plan submissions. Transport Rule, *supra* note 1, at 591.

<sup>21</sup> Jaffe et al., *supra* note 19.

<sup>22</sup> Transport Rule, *supra* note 1, at 406.

<sup>23</sup> *Id.* at 339.

NO<sub>x</sub>, 1,700 tons for SO<sub>2</sub>, and 2,100 tons for seasonal NO<sub>x</sub>, whichever is greater.”<sup>24</sup> Under the proposed rule, no state could emit more than its budget plus the variability limit, and total emissions could not exceed the sum of all state budgets without variability.<sup>25</sup>

## II. Comparison to the Clean Air Interstate Rule

The 2005 Clean Air Interstate Rule (CAIR) created an interstate cap-and-trade program to limit downwind SO<sub>2</sub> and NO<sub>x</sub> emissions in twenty-eight states.<sup>26</sup> In *North Carolina v. EPA*, the D.C. District Court vacated the entire rule, due to “several fatal flaws”.<sup>27</sup> The court determined that the interstate trading program “lacked reasonable measures” to assure compliance from all states,<sup>28</sup> and thus there was no guarantee that the program would actually “prohibit significant contributions to downwind nonattainment.”<sup>29</sup> In addition, the EPA’s methods of establishing state SO<sub>2</sub> and NO<sub>x</sub> budgets were found to be “arbitrary and capricious.”<sup>30</sup> The court held that CAIR was not authorized by the Clean Air Act, but permitted the rule to remain in effect until the EPA devised a replacement.

The EPA addresses these problems in the Transport Rule by proposing a more limited interstate cap-and-trade program and strict emission caps. Whereas CAIR “would have allowed emissions sources in different states to trade with each other”, the transport rule would only allow interstate trading “within relatively narrow variability limits”.<sup>31</sup> Most significantly, the Transport Rule contains an “assurance provision” which would assign each state a firm emission limit (state budget plus variability limit) that it could not exceed by purchasing allowances.<sup>32</sup> The rule further restricts interstate trade by establishing four separate trading programs: one program for SO<sub>2</sub> allowances in “Group 1” states, a second program for SO<sub>2</sub> allowances in “Group 2” states, a third program for annual NO<sub>x</sub>, and a fourth program for seasonal NO<sub>x</sub>.<sup>33</sup> Allowances

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<sup>24</sup> *EPA Proposes Interstate Emissions Transport Rule*, Evolution Markets Blog (July 6, 2010), available at <http://new.evomarkets.com/desks/emissions/post/298/>.

<sup>25</sup> Transport Rule, *supra* note 1, at 470.

<sup>26</sup> Clean Air Interstate Rule 70 Fed. Reg. 25162 (proposed Thursday, May 12, 2005) (to be codified at 40 C.F.R. pts. 51, 72, 73, 74, 77, 78 and 96).

<sup>27</sup> *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008) at 901.

<sup>28</sup> *Id.* at 907.

<sup>29</sup> *Id.* at 916.

<sup>30</sup> *Id.* at 906.

<sup>31</sup> Nathan Richardson, *Death of Cap and Trade?*, Weathervane: A Climate Policy Blog (July 7, 2010), available at <http://www.rff.org/wv/archive/2010/07/07/death-of-cap-and-trade.aspx>.

<sup>32</sup> Transport Rule, *supra* note 1, at 441.

<sup>33</sup> Jaffe et al., *supra* note 19.

could only be traded within programs, so an EGU in a Group 1 state could not trade SO<sub>2</sub> allowances with an EGU in a Group 2 state.<sup>34</sup> Recognizing that there may still be legal challenges to this approach, the EPA's proposal also includes two alternative rules with no interstate trading: one which allows intrastate trading,<sup>35</sup> and another which would permit "command and control emission limits for each power plant, possibly allowing some averaging among units at each station."<sup>36</sup>

The Transport Rule also includes additional provisions to address the court's concerns about arbitrary and capricious application. The assurance provision, noted above, is the most important new mechanism for ensuring that all states will comply with emissions reductions. The EPA's proposal also clarifies state obligations by defining "significant contribution" and "interfere with maintenance" in quantitative terms, based on objective calculations with respect to the three air quality standards.<sup>37</sup> As the proposal notes, "[b]y tying these budgets directly to EPA's quantification of each individual's state significant contribution and interference with maintenance, EPA directly linked the budgets to the mandate in section 110(a)(2)(D)(i)(I), and thus addressed the Court's concerns about the development of budgets for the CAIR."<sup>38</sup> The EPA emphasizes that its proposal "relies on detailed, bottom-up scientific and technical analysis", rather than subjective or discretionary standards.<sup>39</sup>

Overall, the Transport Rule would create a broader, more stringent program than CAIR. The increased stringency of the Transport Rule as compared with CAIR can be attributed in part to the Obama administration's stronger environmental priorities and in part to the need to address the court's concerns about compliance in upwind states. The Transport Rule expands the scope of the program by adding Kansas, Nebraska, and Oklahoma to the original 28 states covered by CAIR.<sup>40</sup> In addition, the Transport Rule imposes stricter limits on emissions, particularly SO<sub>2</sub> emissions. Under the new proposal, 2012 emissions of SO<sub>2</sub> would be 1.0 million tons less than under CAIR, and 2014 SO<sub>2</sub> emissions would be 1.3 million tons less.<sup>41</sup> Annual and seasonal NO<sub>x</sub>

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<sup>34</sup> Transport Rule at 31.

<sup>35</sup> FACT SHEET, *supra* note 8, at 4.

<sup>36</sup> Sidley Austin LLP, *EPA Proposes New Air Emission Transport Rules for Power Plants in Eastern U.S.*, Environmental Update (July 7, 2010), available at <http://www.sidley.com/epa-proposes-new-air-emission-transport-rules-for-power-plants-in-eastern-us-07-07-2010/>.

<sup>37</sup> FACT SHEET, *supra* note 8, at 4.

<sup>38</sup> Transport Rule, *supra* note 1, at 23.

<sup>39</sup> *Id.* at 20.

<sup>40</sup> Walke, *supra* note 5.

<sup>41</sup> Transport Rule, *supra* note 1, at 36.

emissions would be 0.1 million tons less in both 2012 and 2014.<sup>42</sup> The following table compares the projected emissions under the two rules:

Table III.A-4 –Comparison of Actual and Projected SO<sub>2</sub> and NO<sub>x</sub> Emissions from Electric Generating Units in States Under the CAIR and Transport Rule.<sup>43</sup>

		2005	2012		2014	
		Actual	Transport	CAIR	Transport	CAIR
SO <sub>2</sub> (Million Tons)		9.5	4.1	5.1	3.3	4.6
NO <sub>x</sub> (Million Tons)	Annual	2.9	1.6	1.7	1.6	1.7
	Ozone season	1.0	0.7	0.8	0.7	0.8

### III. Anticipated Results

The Transport Rule should achieve significant reductions of SO<sub>2</sub> and NO<sub>x</sub> emissions in a relatively short period of time. The EPA estimates that, “by 2014, the rule and other state and EPA actions would reduce power plant SO<sub>2</sub> emissions by 71 percent over 2005 levels. Power plant NO<sub>x</sub> emissions would drop by 52 percent.”<sup>44</sup> In terms of raw tonnage, annual SO<sub>2</sub> emissions in 2014 would be 6.3 million tons less than in 2005, annual NO<sub>x</sub> emissions would be 1.4 million tons less, and seasonal NO<sub>x</sub> would be 0.3 million tons less.<sup>45</sup>

Table III.A-3 – Projected SO<sub>2</sub> and NO<sub>x</sub> EGU Emissions in Covered States With the Transport Rule Compared to 2005 Actual Emissions<sup>46</sup>

	2005 Actual Emissions	2012 Transport Rule Emissions	2012 Emissions Reductions from 2005	2014 Transport Rule Emissions	2014 Emissions Reductions from 2005
SO <sub>2</sub>	8.9	3.4	5.5	2.6	6.3
Annual NO <sub>x</sub>	2.7	1.3	1.4	1.3	1.4
Seasonal NO <sub>x</sub>	0.9	0.6	0.3	0.6	0.3

#### A. *Public Health and Environmental Impacts*

The EPA predicts that these reductions in SO<sub>2</sub> and NO<sub>x</sub> will produce substantial public health and environmental benefits to the eastern United States. In 2014, the rule is expected to prevent: 14,000 to 26,000 premature deaths, 21,000 cases of acute bronchitis, 23,000 nonfatal heart attacks, 26,000 hospital and emergency room visits, 1.9 million days or missed work or

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*

<sup>44</sup> FACT SHEET, *supra* note 8, at 1.

<sup>45</sup> FACT SHEET, *supra* note 8, at 5. (EPA specifies that these figures include the Transport Rule and other federal regulations)

<sup>46</sup> Transport Rule, *supra* note 1, at 34.

school, 240,000 cases of aggravated asthma, and 440,000 cases of upper and lower respiratory symptoms.<sup>47</sup> Reduced pollution would also lead to “improvements in visibility in national and state parks, and increased protection for sensitive ecosystems including Adirondack lakes and Appalachian streams, coastal waters and estuaries, and sugar maple forests.”<sup>48</sup> The projected monetary worth of annual benefits would be from \$120 to \$290 billion.<sup>49</sup>

Many environmental and public health advocates agree that the Transport Rule represents “an important and necessary step to cut harmful air pollution.”<sup>50</sup> Prominent organizations like the Sierra Club and the American Lung Association have expressly endorsed the rule.<sup>51</sup> Jeff Holmstead, former EPA air chief and lead author of CAIR, says that the proposed Transport Rule “substantially increases” the stringency of CAIR,<sup>52</sup> thus augmenting the public benefits.<sup>53</sup>

Some environmental and state advocates are concerned about the inadequacy of NO<sub>x</sub> regulations, however. Specifically, these advocates claim that the EPA used “outdated and unprotective 1997 ozone air quality standards” when determining NO<sub>x</sub> emission limits.<sup>54</sup> It is anticipated that EPA will promulgate new ozone standards in August 2010, with more stringent requirements for NO<sub>x</sub> production.<sup>55</sup> To account for this, the proposed Transport Rule includes “a schedule committing EPA to propose a second transport rule seeking any deeper NO<sub>x</sub> reductions in the summer of 2011 with a final rule in the summer of 2012.”<sup>56</sup>

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<sup>47</sup> FACT SHEET, *supra* note 8, at 4.

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

<sup>50</sup> See, e.g., Walke, *supra* note 5; Kyle Danish et al., *EPA Proposes New Interstate Transport Rule and Previews Upcoming Regulatory Agenda*, Van Ness Feldman Alerts (July 8, 2010), available at <http://www.vnf.com/news-alerts-484.html>.

<sup>51</sup> See, e.g., David Graham-Caso, *EPA Transport Rule Would Save as Many as 36,000 Lives Each Year*, Sierra Club Press Room (July 6, 2010), available at [http://action.sierraclub.org/site/MessageViewer?em\\_id=181822.0](http://action.sierraclub.org/site/MessageViewer?em_id=181822.0) (Bruce Nilles, Deputy Conservation Director of the Sierra Club, releases a statement in support of the Transport Rule); *U.S. EPA Proposal Will Drive Cleanup of Dirty Power Plants and Save Lives*, Statement of Charles D. Connor, President and CEO of the American Lung Association (July 7, 2010), available at <http://www.news-medical.net/news/20100707/American-Lung-Association-welcomes-US-EPA-proposal-to-reduce-power-plant-pollution.aspx>.

<sup>52</sup> Darren Goode, *EPA Issues New Rule to Reduce Emissions*, The Hill Energy and Environment Blog (July 6, 2010), available at <http://thehill.com/blogs/e2-wire/677-e2-wire/107365-epa-issues-new-rule-on-pollution>.

<sup>53</sup> In comparison, CAIR’s projected public health benefits (as of 2015) were: \$85-100 billion annually, preventing 17,000 premature deaths, 22,000 non-fatal heart attacks, 12,300 hospital admissions, 1.7 million lost work days, and 500,000 lost school days. EPA Office of Air and Radiation, *Clean Air Interstate Rule: Reducing Power Plant Emissions for Cleaner Air, Healthier People, and a Strong America* 14 (March 2005) available at [http://www.epa.gov/cair/charts\\_files/cair\\_final\\_presentation.pdf](http://www.epa.gov/cair/charts_files/cair_final_presentation.pdf).

<sup>54</sup> Walke, *supra* note 5.

<sup>55</sup> *Id.*

<sup>56</sup> *Id.*

### B. Greenhouse Gas Emission Co-Benefits

Under the Transport Rule, many coal-fired power plants would be required to install new technology, purchase low-sulfur coal, or reduce operations so as to limit their SO<sub>2</sub> and NO<sub>x</sub> production.<sup>57</sup> These compliance costs may incentivize the use of other energy sources, and are expected to render some coal-fired plants uneconomic to operate. The EPA estimates that “[reduced] coal and oil use, and greater use of natural gas and non-fossil sources of electric generation” will lower 2014 CO<sub>2</sub> emissions by 15.3 million tons, relative to the 2005 baseline.<sup>58</sup>

The EPA also estimates that “a relatively small amount of coal-fired capacity, about 1.2 GW (0.3 percent of all coal-fired capacity and 0.1% of all generating capacity), is projected to be uneconomic to maintain”.<sup>59</sup> Furthermore, “coal production for use in the power sector is projected to decrease by 0.3% in 2012 and by 0.8% by 2014.”<sup>60</sup> The EPA does not estimate the number of uneconomic plants, but does note that they will primarily be “small and infrequently used” coal plants.<sup>61</sup> Some analysts predict that the Transport Rule, when combined with anticipated EPA regulations on mercury emissions, will “trigger the closing of the ‘smallest and dirtiest’ coal plants”,<sup>62</sup> many of which were “grandfathered in under the original Clean Air Act and have been spewing harmful pollutants (and greenhouse gases) into the air for decades.”<sup>63</sup> Installing scrubbing equipment or switching to low-sulfur coal to achieve compliance with the rule would cost more than some of these coal plants are worth.<sup>64</sup>

### C. Industrial and Consumer Costs

The EPA estimates that the annual costs of the Transport Rule to the power industry will be \$3.7 billion in 2012 and \$2.8 billion in 2014.<sup>65</sup> Retail electricity prices are projected to increase nationally by an average of 2.5% in 2012 and 1.5% in 2014 as a result of the Transport

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<sup>57</sup> REGULATORY IMPACT ANALYSIS, *supra* note 9, at 250.

<sup>58</sup> REGULATORY IMPACT ANALYSIS, *supra* note 9, at 262.

<sup>59</sup> *Id.* at 252.

<sup>60</sup> *Id.* at 14.

<sup>61</sup> *Id.* at 252.

<sup>62</sup> *Transport Rule Targets “Dirty” Power Plants*, SmartMeters (July 14, 2010), available at <http://www.smartmeters.com/the-news/1088-transport-rule-targets-dirty-power-plants.html>.

<sup>63</sup> Bradford Plumer, *The Energy Bill Could be a Disaster, if Utilities Get Their Way*, The Vine (July 15, 2010), available at <http://www.tnr.com/blog/the-vine/76296/energy-bill-could-be-disaster-if-utilities-get-their-way>.

<sup>64</sup> Lindsay Morris, *EPA transport rule sets fast-track for compliance*, Power-Gen WorldWide (2010), available at <http://www.powergenworldwide.com/index/display/articledisplay/7307855641/articles/powergenworldwide/emissions-and-environment/regulation/2010/07/EPA-emissions.html>.

<sup>65</sup> REGULATORY IMPACT ANALYSIS, *supra* note 9, at 20.

Rule.<sup>66</sup> The “social cost” of the rule, that is, the cost passed on to consumers from industries, is estimated at \$2.2 billion in 2014.<sup>67</sup>

There are several ways that EGUs could achieve compliance with the rule: “(1) operate already installed control equipment more frequently; (2) use lower sulfur coal; or (3) install pollution control equipment such as low NO<sub>x</sub> burners, Selective Catalytic Reduction, or scrubbers.”<sup>68</sup> Some industry and utility advocates are skeptical about these options. The CEO of American Boiler Manufactures notes that many EGUs have contracts with coal suppliers that run through 2014, and cannot switch to lower sulfur coal until after those contracts expire.<sup>69</sup> He also argues that scrubbers cannot be installed by 2012, markets for Trona and sodium bicarbonate (chemicals that control coal-stack pollutants) will be swamped, and the only short-term alternative is to run the units less.<sup>70</sup> Other sources have also expressed concern about the Transport Rule’s timeline, since reducing SO<sub>2</sub> and NO<sub>x</sub> emissions may “require the installation of costly technology that takes months—and sometimes years—to put in place”.<sup>71</sup> Based on these concerns, many power companies are opposed to the proposed rule and would prefer a less stringent legislative solution.

However, the response from the sector has not been uniformly critical. Some companies are already preparing for future regulations. Melissa McHenry, a spokesperson for American Electric Power (AEP), said that the AEP was in “good shape” to address the rules in the near future: “We’re wrapping up a very significant environmental retrofits program we started in 2004. A lot of our large power plants are already prepared for controls with SO<sub>2</sub> and NO<sub>x</sub>.”<sup>72</sup> McHenry also noted that “some of the older plants will need to be retired, since the cost of a scrubber would be more than the value of the plant itself. Still others will convert to lower sulfur coals, or install SO<sub>2</sub> scrubbers.”<sup>73</sup>

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<sup>66</sup> REGULATORY IMPACT ANALYSIS, *supra* note 9, at 14.

<sup>67</sup> FACT SHEET, *supra* note 8, at 5.

<sup>68</sup> Jaffe et al., *supra* note 19.

<sup>69</sup> Morris, *supra* note 64.

<sup>70</sup> *Id.*

<sup>71</sup> Tennille Tracy, *Wave of EPA Regulations Could Overshadow New Pollution Rule*, Dow Jones Newswire (July 9, 2010), available at <http://www.nasdaq.com/aspx/stock-market-news-story.aspx?storyid=201007091554dowjonesdjonline000509&title=wave-of-epa-regulations-could-overshadow-new-pollution-rule>.

<sup>72</sup> Morris, *supra* note 64.

<sup>73</sup> *Id.*

There has been a mixed response to the rule's limited cap-and-trade mechanisms. The Environmental Markets Association released a statement expressing support for "efforts, such as this, to promote market-based mechanisms for responding to environmental issues", encouraging EPA "to maintain the continuity of existing trading programs" and imploring Congress "to provide EPA with sufficient flexibility in the future to avoid problems that EPA has encountered in trying to maintain a viable emissions trading market".<sup>74</sup> However, other sources are more skeptical about the proposed cap-and-trade limitations. One author asserts that the hard emission budgets suggest "the absence of a real market mechanism to achieve reductions."<sup>75</sup>

#### IV. Implications for Future Policy

Gina McCarthy, Assistant Administrator for Air and Radiation, has indicated that the current version of the Transport Rule is an important step towards improving air quality but "not the final answer."<sup>76</sup> The EPA expects to finalize new ozone NAAQS by the end of August, which will require further reductions in NO<sub>x</sub> emissions.<sup>77</sup> The Transport Rule will then be revised in 2011 to reflect the new NAAQS.<sup>78</sup> The EPA also plans to use the rule as a model for future rulemakings, because its method for determining upwind reduction obligations can be easily applied to changing air quality standards.<sup>79</sup>

In order to create a "cleaner and more efficient power sector", the EPA is developing a number of additional regulations and standards for conventional air pollutants, GHG emissions, and other climate forcers.<sup>80</sup> These include: standards for mercury and other air toxins, revised PM<sub>2.5</sub> NAAQS, revised new source performances standards (NSPS) for coal- and oil-fired power plants, regional haze / Best Alternative Retrofit Technology (BART) requirements, energy efficiency initiatives, and non-air office regulations that will have potential impacts on power

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<sup>74</sup> Environmental Markets Association, *Industry Group Urges Continuity of Trading Under New EPA Transport Rule*, PRLog Press Release (July 7, 2010), available at <http://www.prlog.org/10782273-industry-group-urges-continuity-of-trading-under-new-epa-transport-rule.html>.

<sup>75</sup> Joe Koncelik, *EPA Releases "No Trade" CAIR Replacement Rule*, Ohio Environmental Law Blog (July 6, 2010), available at <http://www.ohioenvironmentallawblog.com/2010/07/articles/air/epa-releases-no-trade-cair-replacement-rule/>.

<sup>76</sup> Darren Goode, *EPA draft clean air rule could affect future regs, Congress*, The Hill Energy & Environment Blog (July 6, 2010), available at <http://thehill.com/blogs/e2-wire/677-e2-wire/107327-epa-draft-clean-air-could-affect-future-regs-congress>.

<sup>77</sup> EPA, National Ambient Air Quality Standards for Ozone, 75 Fed. Reg. 2938 (proposed Jan. 19, 2010) (to be codified at 40 C.F.R. §§ 50, 58).

<sup>78</sup> Jaffe et al., *supra* note 19.

<sup>79</sup> *Id.*

<sup>80</sup> Transport Rule, *supra* note 1, at 87.

plants.<sup>81</sup> The EPA predicts that these regulations in particular will enhance the Transport Rule's impact on air quality, and will yield "substantial health and environmental benefits for the public."<sup>82</sup> Following its 2009 determination that CO<sub>2</sub> and five other heat-trapping gases fit within the Clean Air Act's definition of air pollutants, the EPA is also creating rules to regulate these gases.<sup>83</sup> For example, on May 13, 2010, the EPA announced a final rule to define GHG permitting requirements for stationary sources.<sup>84</sup>

Some industry and utility groups are upset by what they perceive to be a sudden onslaught of regulations.<sup>85</sup> Dan Riedinger, a spokesman for the Edison Electric Institute, expressed concern that the Transport Rule would "require dramatic reductions in power-sector emissions, on top of major reductions to date, on a very short timeline."<sup>86</sup> He emphasized that this rule, combined with the promise of future regulations, left the power sector "exposed to a great deal of regulatory uncertainty."<sup>87</sup>

The EPA is anticipating a lawsuit after the proposal is finalized, and there are concerns that the Transport Rule may "suffer the same fate as its predecessor."<sup>88</sup> Both industry groups and public health advocates are frustrated by the lack of certainty, and have sought action from the Senate.<sup>89</sup> Senators Tom Carper (D-Del) and Lamar Alexander (R-Tenn) have proposed a legislative alternative, which would codify a cap-and-trade program for SO<sub>2</sub>, NO<sub>x</sub> and mercury.<sup>90</sup> Alexander told one reporter that the EPA's rules were "a good first step, but they are too regional, too complicated, and too weak to be a permanent solution for public health and for the certainty and flexibility that utilities need to keep electric rates down."<sup>91</sup> Many clean-air groups like the proposed legislation, and it is considered to be one viable alternative to EPA regulations.<sup>92</sup>

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<sup>81</sup> Transport Rule, *supra* note 1, at 87.

<sup>82</sup> *Id.*

<sup>83</sup> John Broder, *E.P.A. Clears Way for Greenhouse Gas Rules*, N.Y. Times (April 17, 2009), available at <http://www.nytimes.com/2009/04/18/science/earth/18endanger.html>.

<sup>84</sup> 40 C.F.R. §§ 51, 52, 70, 71 (2010).

<sup>85</sup> See, e.g., Tracey, *supra* note 71; Morris, *supra* note 64.

<sup>86</sup> Goode, *supra* note 76.

<sup>87</sup> *Id.*

<sup>88</sup> Gabriel Nelson, *EPA Unveils Rules on Smog-Forming Emissions From Power Plants*, N.Y. Times (July 7, 2010) available at <http://www.nytimes.com/gwire/2010/07/07/greenwire-epa-unveils-rules-on-smog-forming-emissions-fr-27348.html>.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

<sup>91</sup> Goode, *supra* note 76.

<sup>92</sup> Plumer, *supra* note 63.

## V. Conclusion

The EPA's proposed Transport Rule would require fast, significant reductions in SO<sub>2</sub> and NO<sub>x</sub> emissions to protect downwind states from harmful pollutants. The rule would also contribute to reductions in CO<sub>2</sub> and the closure of some coal-fired power plants. During the next few years, the EPA plans to develop additional regulations for conventional pollutants and GHGs, which would further improve air quality in the United States. Some utility companies are concerned about the compounded costs of these regulations, but most environmental and public health advocates agree that they are a necessary step towards protecting human health and air quality in the United States.