

Written Testimony of

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before the

**Subcommittee on Energy and Power of the**

**The House of Representatives Committee on Energy and Commerce**

on

**“A Review of EPA's Regulatory Activity During the  
Obama Administration: Energy and Industrial Sectors”**

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Mr. Chairman and Members of the Committee,

Thank you for the opportunity to testify today on regulatory policy issues. I am Robert Weissman, president of Public Citizen. Public Citizen is a national public interest organization with more than 400,000 members and supporters. For 45 years, we have advocated with some considerable success for stronger health, safety, consumer protection, environmental and other rules, as well as for a robust regulatory system that curtails corporate wrongdoing and advances the public interest.

Public Citizen chairs the Coalition for Sensible Safeguards (CSS). CSS is an alliance of more than 75 consumer, small business, labor, scientific, research, good government, faith, community, health and environmental organizations joined in the belief that our country's system of regulatory safeguards provides a stable framework that secures our quality of life and paves the way for a sound economy that benefits us all. Time constraints prevented the Coalition from reviewing my testimony in advance, and today I speak only on behalf of Public Citizen.

Over the last century, and up to the present, regulations have made our country stronger, better, safer, cleaner, healthier and more fair and just. Regulations have made our food supply safer; saved hundreds of thousands of lives by reducing smoking rates; improved air quality, saving hundreds of thousands of lives; protected children's brain development by phasing out leaded gasoline; saved consumers billions by facilitating price-lowering generic competition for pharmaceuticals; reduced toxic emissions into the air and water; empowered disabled persons by giving them improved access to public facilities and workplace opportunities; guaranteed a minimum wage, ended child labor and established limits on the length of the work week; saved the lives of thousands of workers every year; protected the elderly and vulnerable consumers from a wide array of unfair and deceptive advertising techniques; ensured financial system stability (at least when appropriate rules were in place and enforced); made toys safer; saved tens of thousands of lives by making our cars safer; and much, much more.

The benefits of rules adopted during the Obama administration, as with rules adopted during the Bush administration, vastly exceed the costs, even when measured according to corporate-friendly criteria. This is especially true for environmental rules adopted by the Obama administration in the energy and industrial sectors, though the administration has been slow to act and has forsaken net benefits for our country in the interest of reducing cost.

To review the facts of how environmental regulation in the energy and industrial sector strengthens our country is also to identify the need for significant regulatory reform, including reducing endemic regulatory delay.

The first section of this testimony argues that regulatory benefits vastly exceed costs, that regulation is not a significant cause of job loss and that regulatory costs are regularly and significantly overestimated. The second section reviews the rulemaking experience with the three recent environmental energy rules: the mercury/MATS rule, the ozone rule and the Clean Power Plan. It shows that they will confer tremendous benefits on society; that cost-benefit analyses systematically underestimate benefits and overestimate costs; that the rulemaking process is characterized by delay; and that rulemaking significantly trails what science tells us we should be

doing. The third section of this testimony presents highlights from a just-completed Public Citizen study on rulemaking and regulatory delay. It shows that the regulatory process is broken, such that it takes a full presidential term to issue major rules, and that the rulemaking process has become notably slower during the Obama administration. The final section concludes with a recommendation for Congress to focus on how to improve the rulemaking process, starting with an examination of how to reduce harmful delay.

## I. Environmental Regulations are Economically Smart

### A. Regulatory benefits vastly exceed costs

Rhetorical debates and cost-benefit abstractions can obscure the dramatic gains our country has made due to regulation. Among many other achievements, environmental regulation has:

- Made it safer to breathe, saving hundreds of thousands of lives annually.<sup>1</sup>
- Protected children's brain development by phasing out leaded gasoline and dramatically reducing average blood levels.<sup>2</sup>
- As part of an international treaty, led to the phase out of ozone-depleting chemicals, facilitating the recovery of the stratospheric ozone layer and a projection of 280 million skin cancers in the United States averted, and 1.6 million skin cancer deaths prevented.<sup>3</sup>

These are not just the achievements of a bygone era. Regulation continues to improve the quality of life for every American, every day. Ongoing and emerging problems and a rapidly changing economy require the issuance of new rules to ensure that America is strong and safe, healthy and wealthy. Consider just two environmental and energy rules issued by the Obama administration:

- **Fuel efficiency standards.** Pursuant to the Energy Policy and Conservation Act, the Energy Independence and Security Act and the Clean Air Act, the National Highway Safety and Transportation Agency and the Environmental Protection Agency have proposed new automobile and vehicular fuel efficiency standards. The new rules, on an average industry fleet-wide basis for cars and trucks combined, establish standards of 40.1 miles per gallon (mpg) in model year 2021, and 49.6 mpg in model year 2025. The agencies estimate that fuel savings will far outweigh higher vehicle costs, and that the net benefits to society from 2017-2025 will be in the range of \$311 billion to \$421 billion. The auto industry was integrally involved in the development of these proposed standards, and supports their promulgation.
- **Energy efficiency standards.** Pursuant to the Energy Security and Independence Act, the Department of Energy has proposed energy efficiency standards for a range of products, including Metal Halide Lamp Fixtures, Commercial Refrigeration Equipment,

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<sup>1</sup> Clean Air Act rules saved 164,300 adult lives in 2010. In February 2011, EPA estimated that by 2020 they will save 237,000 lives annually. EPA air pollution controls saved 13 million days of lost work and 3.2 million days of lost school in 2010, and EPA estimates that they will save 17 million work-loss days and 5.4 million school-loss days annually by 2020. See U.S. Environmental Protection Agency, Office of Air and Radiation. (2011, March). *The Benefits and Costs of the Clean Air and Radiation Act from 1990 to 2020*. Available from: <<http://www.epa.gov/oar/sect812/feb11/fullreport.pdf>>.

<sup>2</sup> EPA regulations phasing out lead in gasoline helped reduce the average blood lead level in U.S. children ages 1 to 5. During the years 1976 to 1980, 88 percent of all U.S. children had blood levels in excess of 10µg/dL; during the years 1991 to 1994, only 4.4 percent of all U.S. children had blood levels in excess of that dangerous amount. Office of Management and Budget, Office of Information and Regulatory Affairs. (2011). *2011 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. Available from: <[http://www.whitehouse.gov/sites/default/files/omb/inforeg/2011\\_cb/2011\\_cba\\_report.pdf](http://www.whitehouse.gov/sites/default/files/omb/inforeg/2011_cb/2011_cba_report.pdf)>.

<sup>3</sup> Stratospheric Protection Division, Environmental Protection Agency, Updated Ozone Calculations and Emissions Profiles for Use in the Atmospheric and Health Effects Framework Model, February 27, 2015, available at: [https://www.epa.gov/sites/production/files/2015-11/documents/ahf\\_2015\\_update\\_report-final\\_508.pdf](https://www.epa.gov/sites/production/files/2015-11/documents/ahf_2015_update_report-final_508.pdf).

and Battery Chargers and External Power Supplies, Walk-In Coolers and Walk-In Freezers, Residential Clothes Washers.<sup>4</sup> The Department of Energy estimates the net savings from implementation of the Energy Security and Independence Act to be \$48 billion - \$105 billion (in 2007 dollars).<sup>5</sup>

Although most regulations do not have economic objectives as their primary purpose, in fact regulation is overwhelmingly positive for the economy. It is worth underscoring this point, because concerns about particular rules or that the rulemaking process is unfair to regulated industry are usually rooted in economic arguments.

While regulators commonly do not have economic growth and job creation as a mission priority, they are mindful of regulatory cost, and by statutory directive or on their own initiative typically seek to minimize costs; relatedly, the rulemaking process gives affected industries ample opportunity to communicate with regulators over cost concerns, and these concerns are taken into account. To review the regulations actually proposed and adopted is to see how much attention regulators pay to reducing cost and detrimental impact on employment. And to assess the very extended rulemaking process is to see how substantial industry influence is over the rules ultimately adopted—or discarded.

There is a large body of theoretical and non-empirical work on the cost of regulation, some of which yields utterly implausible cost estimates. There is also a long history of business complaining about the cost of regulation—and predicting that the next regulation will impose unbearable burdens. More informative than the theoretical work, anecdotes and allegations is a review of the actual costs and benefits of regulations, though even this methodology is significantly imprecise and heavily biased against the benefits of regulation. Every year, the Office of Management and Budget analyzes the costs and benefits of rules with significant economic impact. The benefits massively exceed costs.

The principle finding of *OMB's draft 2015 Report to Congress on the Benefits and Costs of Federal Regulation* is:

The estimated annual benefits of major Federal regulations reviewed by OMB from October 1, 2004, to September 30, 2014, for which agencies estimated and monetized both benefits and costs, are in the aggregate between \$216 billion and \$812 billion, while the estimated annual costs are in the aggregate between \$57 billion and \$85 billion. These ranges are reported in 2001 dollars and reflect uncertainty in the benefits and costs of each rule at the time that it was evaluated.<sup>6</sup>

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<sup>4</sup> List of Regulatory Actions Currently Under Review. Available from: <<http://www.reginfo.gov/public/jsp/EO/eoDashboard.jsp>>.

<sup>5</sup> U.S. Department of Energy. (2007). *Energy Independence and Security Act of 2007 Prescribed Standards*. Available from: <[http://www1.eere.energy.gov/buildings/appliance\\_standards/m/eisa2007.html](http://www1.eere.energy.gov/buildings/appliance_standards/m/eisa2007.html)>.

<sup>6</sup> Office of Management and Budget, Office of Information and Regulatory Affairs. (2015). *Draft 2015 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. pp.1-2. Available at: [https://www.whitehouse.gov/sites/default/files/omb/inforeg/2015\\_cb/draft\\_2015\\_cost\\_benefit\\_report.pdf](https://www.whitehouse.gov/sites/default/files/omb/inforeg/2015_cb/draft_2015_cost_benefit_report.pdf).

In other words, even by OMB's most conservative accounting, the benefits of major regulations over the last decade exceeded costs by a factor of more than two-to-one. And benefits may exceed costs by a factor of 15.

These results are consistent year-to-year as the following table shows.

**Total Annual Benefits and Costs of Major Rules by Fiscal Year (billions of 2001 dollars)<sup>7</sup>**

<b>Fiscal Year</b>	<b>Number of Rules</b>	<b>Benefits</b>	<b>Costs</b>
2001	12	22.5 to 27.8	9.9
2002	2	1.5 to 6.4	0.6 to 2.2
2003	6	1.6 to 4.5	1.9 to 2.0
2004	10	8.8 to 69.8	3.0 to 3.2
2005	12	27.9 to 178.1	4.3 to 6.2
2006	7	2.5 to 5.0	1.1 to 1.4
2007	12	28.6 to 184.2	9.4 to 10.7
2008	11	8.6 to 39.4	7.9 to 9.2
2009	15	8.6 to 28.9	3.7 to 9.5
2010	18	18.6 to 85.9	6.4 to 12.4
2011	13	34.3 to 98.5	5.0 to 10.2
2012	14	53.2 to 114.6	14.8 to 19.5
2013	7	25.6 to 67.3	2.0 to 2.5
2014	13	8.1 to 18.9	2.5 to 3.7

The reason for the consistency is that regulators pay a great deal of concern to comparative costs and benefits (even though there is, we believe, a built-in bias of formal cost-benefit analysis against regulatory initiative<sup>8</sup>; see further comments below). Very few major rules are adopted where projected costs exceed projected benefits, and those very few cases typically involve direct Congressional mandates.

It should also be noted that relatively high regulatory compliance costs do not necessarily have negative job impacts; firm expenditures on regulatory compliance typically create new jobs within affected firms or other service or product companies with which they contract.

<sup>7</sup> Office of Management and Budget, Office of Information and Regulatory Affairs. (2015). *Draft 2015 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. Table 1-4, pp. 20-21. Available at:

[https://www.whitehouse.gov/sites/default/files/omb/inforeg/2015\\_cb/draft\\_2015\\_cost\\_benefit\\_report.pdf](https://www.whitehouse.gov/sites/default/files/omb/inforeg/2015_cb/draft_2015_cost_benefit_report.pdf); 2001-2004 data from: Office of Management and Budget, Office of Information and Regulatory Affairs. (2011). *2011 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. Table 1-3, p. 19-20. Available at:

[http://www.whitehouse.gov/sites/default/files/omb/inforeg/2011\\_cb/2011\\_cba\\_report.pdf](http://www.whitehouse.gov/sites/default/files/omb/inforeg/2011_cb/2011_cba_report.pdf).

<sup>8</sup> See, e.g., Shapiro, S. et al., *CPR Comments on Draft 2010 Report to Congress on the Benefits and Costs of Federal Regulations* 16-19 (App. A, Pt. C.) (2010), Available from:

<[http://www.progressivereform.org/articles/2010\\_CPR\\_Comments\\_OMB\\_Report.pdf](http://www.progressivereform.org/articles/2010_CPR_Comments_OMB_Report.pdf)>; Steinzor, R. et al., *CPR Comments on Draft 2009 Report to Congress on the Benefits and Costs of Federal Regulations* 16-19 (App. A, Pt. C.) (2009), Available from: <[http://www.progressivereform.org/articles/2009\\_CPR\\_Comments\\_OMB\\_Report.pdf](http://www.progressivereform.org/articles/2009_CPR_Comments_OMB_Report.pdf)>.

## B. Job Loss Claims are Not Empirically Supported

Moreover, the empirical evidence also fails to support claims that regulation causes significant job loss. Insufficient demand is the primary reason for layoffs. In extensive survey data collected by the Bureau of Labor Statistics, employers cite lack of demand roughly 100 times more frequently than government regulation as the reason for mass layoffs!<sup>9</sup> (Unfortunately, in response to budget cuts, the BLS ceased producing its mass layoff report in 2013.)

### Reason for layoff: 2008-2012<sup>10</sup>

	2008	2009	2010	2011	2012
<b>Business Demand</b>	516,919	824,834	384,564	366,629	461,328
<b>Governmental regulations/intervention</b>	5,505	4,854	2,971	2,736	3,300

It is also the case that firms typically innovate creatively and quickly to meet new regulatory requirements, even when they fought hard against adoption of the rules.<sup>11</sup> The result is that costs are commonly lower than anticipated.

## C. Cost Estimates Are Routinely and Regularly Inflated

This point cannot be overstated: Industry consistently overstates the cost of pending regulation.

It should not be controversial to recognize that corporations have a natural bias to overestimate cost of rules that may affect the way they conduct business. As a result, while there is a long history of industry claiming that the next regulation under consideration would unreasonably raise the cost of doing business, those claims routinely prove to be overblown.

- Bankers and business leaders described the New Deal financial regulatory reforms in foreboding language, warning that the Federal Deposit Insurance Commission and related agencies constituted "monstrous systems," that registration of publicly traded securities constituted an "impossible degree of regulation," and that the New Deal reforms would

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<sup>9</sup> U.S. Department of Labor, Bureau of Labor Statistics. (2012, November). *Extended Mass Layoffs in 2011. Table 5. Reason for layoff: extended mass layoff events, separations, and initial claimants for unemployment insurance, private nonfarm sector, 2009-2011*. Available from: <<http://www.bls.gov/mls/mlsreport1039.pdf>>.

<sup>10</sup> U.S. Department of Labor, Bureau of Labor Statistics. (2012, November). *Extended Mass Layoffs in 2011. Table 5. Reason for layoff: extended mass layoff events, separations, and initial claimants for unemployment insurance, private nonfarm sector, 2010-2012*. Available from: <<http://www.bls.gov/mls/mlsreport1043.pdf>>. U.S. Department of Labor, Bureau of Labor Statistics. (2013, September). *Extended Mass Layoffs in 2011. Table 4. Reason for layoff: extended mass layoff events, separations, and initial claimants for unemployment insurance, private nonfarm sector, 2009-2011*. Available from: <<http://www.bls.gov/mls/mlsreport1039.pdf>>; U.S. Department of Labor, Bureau of Labor Statistics. (2011, November). *Extended Mass Layoffs in 2010. Table 6. Reason for layoff: extended mass layoff events, separations, and initial claimants for unemployment insurance, private nonfarm sector, 2008-2010*. Available from: <<http://www.bls.gov/mls/mlsreport1038.pdf>>.

<sup>11</sup> Mouzoon, N., & Lincoln, T. (2011). *Regulation: The Unsung Hero in American Innovation*. Public Citizen. Available from: <<http://www.citizen.org/documents/regulation-innovation.pdf>>.

"cripple" the economy and set the country on a course toward socialism.<sup>12</sup> In fact, those New Deal reforms prevented a major financial crisis for more than half a century—until they were progressively scaled back.

- Chemical industry leaders said that rules requiring removal of lead from gasoline would "threaten the jobs of 14 million Americans directly dependent and the 29 million Americans indirectly dependent on the petrochemical industry for employment." In fact, while banning lead from gasoline is one of the single greatest public policy public health accomplishments, the petrochemical industry has continued to thrive. The World Bank finds that removing lead from gasoline has a ten times economic payback.<sup>13</sup>
- Big Tobacco long convinced restaurants, bars and small business owners that smokefree rules would dramatically diminish their revenue—by as much as 30 percent, according to industry-sponsored surveys. The genuine opposition from small business owners—based on the manipulations of Big Tobacco—delayed the implementation of smokefree rules and cost countless lives. Eventually, the Big Tobacco-generated opposition was overcome, and smokefree rules have spread throughout the country—significantly lowering tobacco consumption. Dozens of studies have found that smokefree rules have had a positive or neutral economic impact on restaurants, bars and small business.<sup>14</sup>
- Rules to confront acid rain have reduced the stress on our rivers, streams and lakes, fish and forests.<sup>15</sup> Industry projected costs of complying with acid rain rules of \$5.5 billion initially, rising to \$7.1 billion in 2000; ex-ante estimates place costs at \$1.1 billion to \$1.8 billion.<sup>16</sup>
- In the case of the regulation of carcinogenic benzene emissions, "control costs were estimated at \$350,000 per plant by the chemical industry, but soon thereafter the plants developed a new process in which more benign chemicals could be substituted for benzene, thereby reducing control costs to essentially zero."<sup>17</sup>
- The auto industry long resisted rules requiring the installation of air bags, publicly claiming that costs would be more than \$1000-plus for each car. Internal cost estimates actually showed the projected cost would be \$206.<sup>18</sup> The cost has now dropped

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<sup>12</sup> Lincoln, T. (2011). *Industry Repeats Itself: The Financial Reform Fight*. Public Citizen. Available from: <<http://www.citizen.org/documents/Industry-Repeats-Itself.pdf>>.

<sup>13</sup> Crowther, A. (2013). *Regulation Issue: Industry's Complaints About New Rules Are Predictable -- and Wrong*. p.8. Available from: <<http://www.citizen.org/documents/regulation-issue-industry-complaints-report.pdf>>

<sup>14</sup> *Regulation Issue: Industry's Complaints About New Rules Are Predictable -- and Wrong*. p.10.

<sup>15</sup> Environmental Protection Agency. *Acid Rain in New England: Trends*. Available from: <<http://www.epa.gov/region1/eco/acidrain/trends.html>>.

<sup>16</sup> The Pew Environment Group. (2010, October). *Industry Opposition to Government Regulation*. Available from: <[http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Fact\\_Sheet/Industry%20Clean%20Energy%20Factsheet.pdf](http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Fact_Sheet/Industry%20Clean%20Energy%20Factsheet.pdf)>.

<sup>17</sup> Shapiro, I., & Irons, J. (2011). *Regulation, Employment, and the Economy: Fears of job loss are overblown*. Economic Policy Institute. Available from <<http://www.epi.org/files/2011/BriefingPaper305.pdf>>.

<sup>18</sup> Behr, P. (August 13, 1981). U.S. Memo on Air Bags in Dispute. Washington Post.



significantly below that. The National Highway Traffic Safety Administration estimates that air bags saved 2,300 lives in 2010, and more than 30,000 lives from 1987 to 2010.<sup>19</sup>

There is a long list of other environmental examples from the last century—the CFC phase out, asbestos rules, coke oven emissions, cotton dust controls, strip mining, vinyl chloride<sup>20</sup>—that teach us to be wary of Chicken Little warnings about the costs of the next regulation.

Industry over-estimates of cost matters both for political reasons and because regulated industry typically has an undue influence over cost estimates, in large part because it controls access to internal corporate information, as well as because of its ability to commission studies that tend to support the interest of their funders. This information asymmetry is a significant problem in the conduct of cost-benefit analysis, including because businesses may not provide important cost information or disclose methodological assumptions in their submitted cost estimates.<sup>21</sup>

Cost calculations also are frequently too high because they tend to rely on static estimates of cost, based on existing technologies and business systems. But industry and our national economy is characterized by technological dynamism, and compliance costs regularly fall quickly once new rules are in place. Many of the examples above illustrate this point, and there are many others. Indeed, regulation spurs innovation and can help create efficiencies and industrial development wholly ancillary to its directly intended purpose.

Looking at a dozen emissions regulations in 1997, Hodges found that early estimates of cost were at least double subsequent estimates or actually realized costs. (Interestingly, the Hodges study found that while emissions reductions estimated or actual costs fell dramatically over time, costs for clean-up typically exceeded estimates—underscoring the case for preventative regulation.)<sup>22</sup>

“Part of the reason for the error” of repeated overestimations of regulatory cost, Hodges found “is that, over time, process and product technologies change. An estimate of the cost of compliance with a particular regulation might be based on one technology while actual compliance costs are based on another.” Once business must respond to implemented regulations, they stop bemoaning them and work to do so as efficiently as possible; technological innovation, learning by doing, and economies of scale routinely cut costs far below initial estimates.<sup>23</sup>

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<sup>19</sup> National Highway Traffic Safety Administration. (2012). Traffic Safety Facts: Occupant Protection. Available from: <<http://www-nrd.nhtsa.dot.gov/Pubs/811619.pdf>>.

<sup>20</sup> *Regulation Issue: Industry's Complaints About New Rules Are Predictable -- and Wrong*; Hodges, H. (1997). *Falling Prices: Cost of Complying With Environmental Regulations Almost Always Less Than Advertised*. Economic Policy Institute. Available from: <<http://www.epi.org/publication/bp69>>; Shapiro, I., & Irons, J. (2011). *Regulation, Employment, and the Economy: Fears of job loss are overblown*. Economic Policy Institute. Available from: <<http://www.epi.org/files/2011/BriefingPaper305.pdf>>.

<sup>21</sup> Ruttenberg, R. (2004). *Not Too Costly, After All: An Examination of the Inflated Cost Estimates of Health, Safety and Environmental Protections*. Available from <<https://www.citizen.org/documents/ACF187.pdf>>.

<sup>22</sup> Hodges, H. (1997). *Falling Prices: Cost of Complying With Environmental Regulations Almost Always Less Than Advertised*. Economic Policy Institute. Available from: <<http://www.epi.org/publication/bp69>>

<sup>23</sup> Hodges, H. (1997). *Falling Prices: Cost of Complying With Environmental Regulations Almost Always Less Than Advertised*. Economic Policy Institute. Available from: <<http://www.epi.org/publication/bp69>>

A decade ago, in a detailed report prepared for Public Citizen, Ruttenberg cited a series of factors that explained how technological dynamism led to actual costs far below those estimated in cost-benefit analysis:

- Cost-benefit analyses routinely exhibit inaccurate assumptions about the compliance path industry actually follows once new standards are in place;
- Cost-benefit analyses regularly fail to consider new adaptations of existing technologies to meet new standards;
- Cost-benefit analyses generally do not consider the positive effects of learning by doing and economies of scale;
- Cost-benefit analyses often fail to considering adaptations to technology already in place in other industries; and
- Cost-benefit analyses typically fail to account for new innovations that follow from new regulatory standards.<sup>24</sup>

Ruttenberg highlights the case of vinyl chloride as an illustrative case study. When OSHA began developing a new health standard to reduce the risk of workers developing liver cancer, the industry claimed that the new standard threatened to “shut down” the industry and estimated costs on the order of \$65-90 billion. Once the standard was in place, industry quickly implemented six technological changes—ranging from improved housekeeping to reduce exposures to new computerized production processes that reduced exposures and saved money—within 18 months. Retrospective analyses of costs placed them at far below 1 percent of industry’s pre-rule analyses, with actual costs placed at between \$25 million to \$182 million, depending on how costs are calculated.<sup>25</sup>

Finally, although numerous business trade association papers suggest to the contrary, capital-intensive compliance costs do not continue to accumulate in perpetuity. When a new standard is in place, industry invests in improvements or new capital equipment to comply with new rules, after which costs are generally not recurring. (There are, to be sure, ongoing compliance costs in some instances, notably for ongoing reporting requirements, but those typically do not involve costs at the scale of regulations requiring significant capital investments.) One piece of evidence in this regard is that while industry regularly and aggressively contests new rules, at least in the health, safety and environmental areas, it does not continue to complain about rules once they are well established.<sup>26</sup>

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<sup>24</sup> Ruttenberg, R. (2004). Not Too Costly, After All: An Examination of the Inflated Cost Estimates of Health, Safety and Environmental Protections. Available from <<https://www.citizen.org/documents/ACF187.pdf>>. pp 22-32.

<sup>25</sup> Ruttenberg, R. (2004). Not Too Costly, After All: An Examination of the Inflated Cost Estimates of Health, Safety and Environmental Protections. Available from <<https://www.citizen.org/documents/ACF187.pdf>>. pp 32-33.

<sup>26</sup> Lincoln, T. (2014, September 16.) Streamlining the Rules-Making Process. The Hill. Available from: <<http://thehill.com/blogs/congress-blog/the-administration/217751-streamline-the-rules-making-process>>.

## **II. Environmental Rulemaking in Energy and Industrial Sectors during the Obama Administration**

Although there is a perception that the Obama administration has issued a record number of regulations, in fact the administration has issued a comparable, if slightly lower, number of major rules than the two preceding administrations. Major rules are down about 10 percent under the Obama administration.<sup>27</sup>

That said, the Obama administration has completed a number of important environmental rules in the energy and industrial sectors. As noted above, a number of these rules advance efficiency in the motor vehicle and industrial sectors, and will achieve enormous cost-saving, health and environmental gains for America. Here, I briefly consider three other energy and industrial rules: The mercury (MATS) rule, the ozone rule, and the Clean Power Plan.

Assessing these three rules in tandem illustrates important patterns in rulemaking generally, as well as patterns specific to the environment and energy arenas.

First, even using the conservative accounting of cost-benefit analysis, these rules will confer immense net benefits on society.

Second, cost-benefit analysis is failing to capture huge portions of the benefits of these rules, often excluding key benefits that are part of the very rationale for rulemaking in the first place. This systematic exclusion of benefits means the system is biased to inaction and affording insufficient protections.

Third, even based on identified costs and benefits, the government often fails to adopt the most protective standards available – even when they would achieve higher net benefits for society – because of cost considerations.

Fourth, major rules from the EPA are accompanied by a staggering – nearly paralyzing – amount of justifying technical information.

Fifth, the government is achingly slow to act on major rules. In the following section of my testimony I present new data on this point, but the narrative discussion here shows that the story is far worse than suggested by the data I present. Not only does the rulemaking process take far too long, but years and sometimes decades of delay are embedded in the failure of the government to initiate the rulemaking process.

Finally, environmental rulemaking in the energy and industrial sectors trails available science – including the EPA’s science – by years or decades. The stingy regulatory approach of the EPA means that America is not afforded the degree of health and environmental protection it should be.

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<sup>27</sup> Public Citizen, *Unsafe Delays: An Empirical Analysis Shows That Federal Rulemakings To Protect the Public Are Taking Longer Than Ever*, June 28, 2016, available at: <http://www.citizen.org/documents/Unsafe-Delays-Report.pdf>.

## A. The Mercury/MATS Rule

In 2000, the EPA proposed to regulate mercury under the Clean Air Act Section 112. Five years later, the agency issued mercury control rules for mercury under Section 111, aiming to reduce national mercury emissions from 48 to 15 tons annually. Those rules were challenged in court by environmental organizations and subsequently invalidated by the D.C. Appeals Court in 2008, on the grounds that the EPA had improperly removed oil- and coal-fired electric generating units from regulation under Section 112.<sup>28</sup> The environmental groups argued that the EPA had failed to meet a mandatory deadline for issuing updated hazardous air pollutant rules for oil- and coal-fired plants by 2002. In 2010, the EPA entered into a consent decree, agreeing to issue new rules. In 2011, the EPA proposed and, after adjustments in response to 700,000 public comments, later made final mercury and air toxics standards (MATS) for oil- and coal-fired electric plants, requiring that they adopt maximum achievable control technologies, as required under the Clean Air Act. The final rules apply to roughly 1,600 power plants and will reduce mercury emissions by roughly 90 percent, as well as significantly cutting a range of other toxic emissions.

The MATS standards will make America healthier and economically stronger. Every year, according to EPA analyses, the rules will prevent:<sup>29</sup>

- 4,200 to 11,000 premature deaths,
- 2,800 cases of chronic bronchitis,
- 4,700 heart attacks,
- 130,000 cases of aggravated asthma
- 5,700 hospital and emergency room visits,
- 6,300 cases of acute bronchitis,
- 140,000 cases of respiratory symptoms,
- 540,000 days when people miss work, and
- 3.2 million days when people must restrict their activities.

In connection with issuance of the final rule, the EPA published a Regulatory Impact Analysis that was more than 500 pages long.<sup>30</sup> The analysis found that benefits of the rule would yield annual benefits between \$33 billion and \$90 billion, as against compliance costs of \$9.6 billion a year. Beyond the normal uncertainties associated with cost-benefit analysis, this analysis had significant limitations and flaws, most or all of which tended to undercount benefits. First, as is common, it discounted the value of lives saved and health impacts averted in the future. Yet while it makes sense to discount monetary costs and benefits, there is no reason to treat a life saved in the future as worth less than one saved today. Moreover, to illustrate how small changes in assumptions can override whatever purported evidentiary basis is included in cost-benefit analyses, consider the impact of changing the applied discount rate: moving from a 3 percent to 7

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<sup>28</sup> *State of New Jersey v. Environmental Protection Agency* (D.C. Circuit, 2008), available at: [https://pacer.cadc.uscourts.gov/internet/opinions.nsf/68822E72677ACBCD8525744000470736/\\$file/05-1097a.pdf](https://pacer.cadc.uscourts.gov/internet/opinions.nsf/68822E72677ACBCD8525744000470736/$file/05-1097a.pdf).

<sup>29</sup> Environmental Protection Agency, "Fact Sheet: Mercury and Air Toxics Standards for Power Plants," December 2011, available at: <https://www.epa.gov/sites/production/files/2015-11/documents/20111221matssummaryfs.pdf>.

<sup>30</sup> Environmental Protection Agency, Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards, December 2011, available at: <https://www.epa.gov/sites/production/files/2015-11/documents/matsriafinal.pdf>.

percent discount rate wipes out as much as 90 percent of the anticipated health benefits from reduced mercury emissions in the analysis (p. 4-67). Second, analysts were unable to capture key benefits of the rule. The EPA did not quantify key welfare benefits of the rule: reductions in damage to ecosystems, improved visibility and improvements in recreational and commercial fishing, agricultural yields, and forest productivity. Nor was the agency able to quantify very significant health benefits expected through reduced ozone, nitrogen dioxide and sulfur dioxide. Indeed, the agency was only able to quantify a fraction of the expected benefit from reducing mercury pollution – reduced IQ loss in children from exposure to recreationally caught fish. The EPA analysis notes that recreational fish accounts for only about 10 percent of domestically consumed fish.

The EPA's rule was challenged by 23 states and others. In 2015, in *Michigan v. EPA*, the U.S. Supreme Court ruled that the EPA erred in deciding to issue a rule without first conducting a cost analysis.<sup>31</sup> On remand, an appellate court declined to issue a stay while the EPA conducted a cost analysis. The agency published a supplemental finding in April 2016, concluding that, by any of several independent analytic approaches, costs were reasonable in light of the substantial benefits.<sup>32</sup>

Perhaps the most telling commentary on both the supplemental finding and the overall industry attack on the mercury rule was contained in a Wall Street Journal news report on the EPA's supplemental finding:

Most utilities have already complied with the rule, making Friday's analysis more important for legal rather than substantive purposes. In one sign that stakeholders have moved on, EPA received just 39 comments as it prepared the updated analysis, compared with nearly one million comments when the rules were being written.

Some industry trade groups had argued that mercury rule would prompt blackouts and skyrocketing electricity prices. Neither scenario has materialized, due largely to the increased production of natural gas, which unlike coal produces no mercury and whose price has dropped sharply since 2008.<sup>33</sup>

## **B. The Ozone Rule**

The Clean Air Act requires the Environmental Protection Agency to establish and periodically review National Ambient Air Quality Standards (NAAQS) for pollutants harmful to health and the environment, including ground-level ozone. Breathing ozone can cause serious lung problems, and ozone harms vegetation. The EPA failed to issue new, statutorily mandated standards in 2002, resulting in litigation that permitted the agency to delay issuing new standards

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<sup>31</sup> *Michigan v. EPA*, 576 U. S. \_\_\_\_ (2015).

<sup>32</sup> Environmental Protection Agency, Supplemental Finding That It Is Appropriate and Necessary To Regulate Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units; Final Rule, Federal Register, Vol. 81, No. 79, April 25, 2016, 24420, available at: <https://www.gpo.gov/fdsys/pkg/FR-2016-04-25/pdf/2016-09429.pdf>.

<sup>33</sup> Amy Harder, "EPA Defends Cost of 2015 Mercury Rules in Updated Analysis," Wall Street Journal, April 15, 2016, available at: <http://www.wsj.com/articles/epa-defends-cost-of-2015-mercury-rules-in-updated-analysis-1460734705>.

until 2008. In 2008, the EPA issued updated ozone rules, including both a primary standard directed to protecting public health and a secondary standard aiming to protect public welfare, including limiting adverse environmental effects. The 2008 standard set a .075 primary and secondary standard, measured as parts per million (ppm) over 8-hour exposure.

Public health and environmental organizations challenged the 2008 standard on the grounds that it was insufficiently protective, as based on the scientific findings of the agency's Clean Air Scientific Advisory Committee. That litigation was stayed while the Obama administration set out to issue a new rule early in its first term.

In 2011, the EPA proposed an updated standard, which – in keeping with the agency's scientific advisory committee's recommendations as to safe levels – would have reduced levels of .060-.070 ppm. The Obama White House rejected this proposal.<sup>34</sup> This was a decision directly responsive to an industry lobby campaign, channeled through then-White House Chief of Staff William Daley, described by the New York Times as “the administration's conduit for business interests,” and not reflective of existing science.<sup>35</sup>

Eventually, the D.C. Circuit upheld the primary rule but ruled that the EPA had not adequately explained how the secondary standard provided the required level of public welfare protection.

In December 2014, acting per the Clean Air Act requirement for five-year NAAQS standards, the EPA proposed new ozone standards. After a notice-and-comment period and public hearings, the agency issued final ozone standards in October 2015, setting both primary and secondary permissible levels at .070, and resolving the litigation over the 2008 standard.<sup>36</sup> The evidentiary basis for the new standard included an Integrated Science Assessment, Health and Welfare Risk and Exposure Assessments and a Policy Assessment – really, an astounding volume of technical material.<sup>37</sup>

The benefits of the new standard will be substantial. The EPA estimates that, excluding California,<sup>38</sup> the new standards will, among other health benefits, save as many as 600 lives a year, avert 230,000 incidents of asthma exacerbation and prevent 160,000 lost school days.<sup>39</sup>

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<sup>34</sup> John Broder, “Obama Administration Abandons Stricter Air-Quality Rules,” New York Times, September 2, 2011, available at:

[http://www.nytimes.com/2011/09/03/science/earth/03air.html?\\_r=2&ref=environmentalprotectionagency](http://www.nytimes.com/2011/09/03/science/earth/03air.html?_r=2&ref=environmentalprotectionagency).

<sup>35</sup> John Broder, “Re-election Strategy Is Tied to a Shift on Smog,” New York Times, November 16, 2011, available at: <http://www.nytimes.com/2011/11/17/science/earth/policy-and-politics-collide-as-obama-enters-campaign-mode.html>.

<sup>36</sup> Environmental Protection Agency, National Ambient Air Quality Standards for Ozone; Final Rule, Federal Register, Vol. 80, No. 206, 65292, October 26, 2015, available at: <https://www.gpo.gov/fdsys/pkg/FR-2015-10-26/pdf/2015-26594.pdf>.

<sup>37</sup> See [https://www3.epa.gov/ttn/naaqs/standards/ozone/s\\_o3\\_index.html](https://www3.epa.gov/ttn/naaqs/standards/ozone/s_o3_index.html).

<sup>38</sup> California will be slower to comply and the EPA cautions that benefits and costs for the state should be considered separately from the national aggregate. Annual benefits for California include as many as 200 lives saved, 160,000 incidents of asthma exacerbation averted, and 120,000 lost school days prevented.

<sup>39</sup> Environmental Protection Agency, “Regulatory Impact Analysis of the Final Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone,” September 2015, available at <https://www3.epa.gov/ttn/naaqs/standards/ozone/data/20151001ria.pdf>.

The EPA also conducted a cost-benefit analysis in connection with the ozone rule. What is most notable about the cost-benefit analysis is that it details how the agency chose neither the most protective rule that science recommends, nor a cost-benefit maximizing rule. Rather, the agency appears to have placed primary emphasis on averting costs. The cost-benefit analysis considered costs and benefits both for a regulatory standard of .070 and .065. According to the analysis, costs are considerably higher at the more protective level, but benefits soar even more. Altogether, according to the analysis, the annual net benefits of the .070 standard range from \$1.5 billion to \$4.5 billion (mean \$3 billion) (inclusive of typical, and inappropriate discounting of future health benefits). The net benefits of the .065 standard range from -\$1.0 to \$14 billion (mean \$6.5 billion) (Table ES-5).

In less technical and more human terms, the decision to go with a less protective standard means the country will tolerate as many as 2500 preventable fatalities every year, 800,000 preventable incidents of asthma exacerbation every year, and 100,000 avoidable lost work days every year (Table ES-6).

### **C. The Clean Power Plan**

Averting catastrophic climate change is the greatest challenge facing humanity. Our government has been shamefully slow in acting to reduce the peril from a threat that could cost millions of lives – or potentially many more, lead to war, famine and pestilence, and disrupt modern civilization. Scientists have warned us about the threat for more than 40 years;<sup>40</sup> leading oil companies such as Exxon have been aware of the threat for a comparable period;<sup>41</sup> the first popular book on the topic was published more than a quarter century ago;<sup>42</sup> and the Intergovernmental Panel on Climate Change (IPCC), a UN scientific body of the world's leading climate scientists, published its first comprehensive report more than two decades ago.<sup>43</sup>

In 1999, 19 public interest organizations, including Public Citizen, petitioned the EPA to regulate greenhouse gas emissions from motor vehicles under Section 202 of the Clean Air Act. In 2003, the EPA denied the petition. The citizen groups, joined by several states, sued to reverse the EPA's decision. In 2007, the U.S. Supreme Court overturned the denial of the petition, holding that "EPA has offered no reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change."<sup>44</sup>

In June 2014, the EPA finally proposed its Clean Power Plan. In August 2015, it issued a federal plan designed to serve as a model for states to adopt implementation plans. The EPA hosted webinars, held public hearings and received more than 4 million comments on the rule. As with

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<sup>40</sup> Spencer Weart, The Discovery of Global Warming, Scientific American, August 17, 2012, available at: <http://www.scientificamerican.com/article/discovery-of-global-warming>.

<sup>41</sup> Neela Banerjee, Lisa Song and David Hasemyer, "Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago," Inside Climate News, September 16, 2015, available at: <http://insideclimatenews.org/content/Exxon-The-Road-Not-Taken>.

<sup>42</sup> Bill McKibben, End of Nature, New York: Anchor, 1989.

<sup>43</sup> J.T. Houghton, G.J. Jenkins and J.J. Ephraums (eds.), Intergovernmental Panel on Climate Change, Climate Change: The IPCC Scientific Assessment, New York: Cambridge University Press, 1990, available at: [https://www.ipcc.ch/publications\\_and\\_data/publications\\_ipcc\\_first\\_assessment\\_1990\\_wg1.shtml](https://www.ipcc.ch/publications_and_data/publications_ipcc_first_assessment_1990_wg1.shtml).

<sup>44</sup> *Massachusetts v. EPA*, 549 U.S. 497 (2007).



other major rules, the EPA published an astounding amount of technical material in conjunction with the rule.<sup>45</sup> It finalized the rule on August 3, 2015 and published it in the Federal Register on October 23, 2015.<sup>46</sup> The rule has been stayed pending judicial review of the agency's action.

The final Clean Power Plan affords very substantial flexibility to states in devising customized plans to meet targets designed to reduce overall emissions of greenhouse gases. The plan is built on three building blocks: (1) reducing the carbon intensity of electricity generation by increasing the operational efficiency of existing coal-fired power plants; (2) reducing the carbon intensity of electricity generation by shifting electricity generation from higher emitting fossil fuel-fired steam power plants (generally coal-fired) to lower emitting natural gas-fired power plants; and (3) reducing the carbon intensity of electricity generation by increasing electricity generation from zero-emitting renewable sources of energy like wind and solar. The rule is designed to reduce carbon dioxide emissions in 2030 by 32 percent below 2005 levels, an important and commendable objective, though far less than science tells us is necessary.

Accompanying the final rule is an incredibly elaborate cost-benefit analysis. The EPA's cost-benefit analysis shows that the rule will deliver tremendous, monetized benefits to America. The exact monetized benefits vary by year and assumption, but climate benefits alone exceed costs in every EPA scenario, and climate benefits plus health co-benefits vastly exceed costs. By 2020, net benefits – subject to standard and inappropriate discounting of climate and health benefits – are expected to be \$25 billion to \$43 billion (Tables ES-9 and ES-10). Benefits are vastly under considered, however, because the EPA was not able to quantify a wide range of benefits:

“Due to current data and modeling limitations, our estimates of the benefits from reducing CO<sub>2</sub> emissions do not include important impacts like ocean acidification or potential tipping points in natural or managed ecosystems. Unquantified benefits also include climate benefits from reducing emissions of non-CO<sub>2</sub> greenhouse gases and co-benefits from reducing exposure to SO<sub>2</sub>, NO<sub>x</sub>, and hazardous air pollutants (e.g., mercury), as well as ecosystem effects and visibility impairment” (ES-21).

Note that excluded from the EPA calculation are “potential tipping points in natural or managed ecosystems” – exactly the kind of large-scale, unmanageable catastrophe that demands urgent action to address climate change. Or, stated more plainly, the EPA cost-benefit analysis arguably excludes the most important benefits of action.<sup>47</sup>

Concern with the EPA's Clean Power Plan, of course, focuses on the dollar cost to society. But these concerns turn out to be misplaced, for while under the EPA's conservative assumptions there will be some increase in energy generating costs, these will be more than offset by the reduction in energy used thanks to investments in efficiency. As a result, household electricity bills will *fall*, not rise, under the Clean Power Plan.

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<sup>45</sup> <https://www.epa.gov/cleanpowerplan/clean-power-plan-final-rule-technical-documents>.

<sup>46</sup> Environmental Protection Agency, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Final Rule, Federal Register, Vol. 80, No. 205, 64662, October 23, 2015, available at <https://www.gpo.gov/fdsys/pkg/FR-2015-10-23/pdf/2015-22842.pdf>.

<sup>47</sup> Environmental Protection Agency, Regulatory Impact Analysis for the Clean Power Plan Final Rule, August 2015, available at: <https://www.epa.gov/sites/production/files/2015-08/documents/cpp-final-rule-ria.pdf>.



Public Citizen analyzed the plan's projected impact on household electricity bills in states. We found that, by 2030, household electricity bills will fall in every single state:

The Clean Power Plan offers states a great opportunity to lower electricity bills while curbing climate change. If states follow the course that the EPA envisions for them, then household electricity bills will fall in every state by 2030—and in nearly every state by 2025. These numbers are likely too low, as they incorporate the EPA's admittedly conservative take on energy efficiency. States can and should choose to exceed the EPA's expectations. If a state makes stronger improvements in energy efficiency, and makes them more quickly, then its households will enjoy even greater savings.<sup>48</sup>

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<sup>48</sup> "Clean Power, Clear Savings: The EPA Clean Power Plan Can Cut Household Electricity Bills in Every State," Public Citizen, November 2015, available at: <http://www.citizen.org/documents/Clean-Power-Clear-Savings-Report-November-2015.pdf>.

### III. Rulemaking Delays Are Widespread and Getting Worse

There is certainly no dearth of examples and anecdotes showing how long it takes for federal agencies to issue new rules, particularly those rules that provide the biggest benefits to the public in term of health, safety, and financial security. The anecdotes touch virtually every regulatory sector and every agency. Recent examples of long-delayed rules that failed to protect Americans quickly enough include new oil train safety standards, new safety standards for blowout preventers on offshore oil rigs to prevent the next BP Gulf Oil Spill, major new food safety regulations that overhaul our food safety system to prevent rather than just respond to tainted food outbreaks, Wall Street reforms that have yet to be finalized almost 8 years after the financial crash, new pipeline safety standards to prevent pipeline leaks and spills, new energy efficiency standards that save consumers money, new workplace safety protections against known carcinogens like silica dust, and new measures to put money back in the pockets of Americans like the fiduciary rule and the overtime rule. Yet, there has been a notable lack of empirical analysis to identify both the length of these delays and the extent of the delays across different agencies. Last month, Public Citizen unveiled a ground-breaking report aimed at filling this void.

The report, entitled *Unsafe Delays*,<sup>49</sup> examines regulatory delays by collecting and analyzing one of the most comprehensive data sets of rulemaking actions to date. Our report gathered data on all rules listed in the Unified Agenda over the last 20 years, from the first Unified Agenda available electronically in 1995 to the most recent, spring 2016 Unified Agenda. In total, we studied a total of 24,311 rulemakings, of which 18,146 were actually completed. The picture of delay that emerges from the report is deeply troubling and highlights the dysfunction in our regulatory system – dysfunction that impedes regulatory agencies from acting to carry out congressionally assigned responsibilities and to protect Americans.

Overall, we found that the rules that are most important to protecting the environment as well as the public’s health, safety, and financial security were also the rules that took the longest to finalize and encountered the most delays in the regulatory process. On the other hand, routine or technical rules that were not considered “significant,” which comprised the vast majority of all rulemakings, encountered few delays and were usually finalized in a fairly efficient manner. In other words, the “economically significant” rules subject to the most procedural requirements in the rulemaking process are also the rules with the greatest delays.

It may not be surprising that rules which must go through more steps in the rulemaking process will take longer, but what is striking and worrisome is the extent of the delay we found.

- Overall, the average length of rulemakings for all economically significant rules is 2.4 years, 41 percent longer than the overall average for all rules (1.7) years.

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<sup>49</sup> Public Citizen, *Unsafe Delays: An Empirical Analysis Shows That Federal Rulemakings To Protect the Public Are Taking Longer Than Ever*, June 28, 2016, available at: <http://www.citizen.org/documents/Unsafe-Delays-Report.pdf>. All data, charts and figures in this section of my testimony are drawn from this report. The study is based on data published in the federal government’s Unified Agenda of rulemakings, which has been published twice annually in every year but one since 1996. The full methodology is discussed on pages 10-11 of the report.

- Economically Significant rules that required a Regulatory Flexibility Analysis (RFA) took on average 2.5 years to complete.
- Economically Significant rules that began with an Advanced Notice of Proposed Rulemaking (ANPRM) took on average 4.4 years to complete, almost twice as long as Economically Significant rules without ANPRMs.
- Economically Significant rules that included both ANPRMs and RFA analyses took almost five years to complete on average. Hence, the inclusion of major additional procedural requirements leads to substantial additional delay in the rulemaking process.

#### Number of Rulemakings and Average Length - All Rulemakings Begun and Finished 1996 - 2016

	Number of Rules	Average Rulemaking Length
<b>All Rulemakings</b>	24,311	2.1
Uncompleted	6,165	3.2
Completed	18,146	1.7

#### Length of Completed Rulemakings (RM) With and Without Inclusion of ANPRM and RFA Analysis

Priority	ANPRM					Non ANPRM			
	RFA Required			No RFA Required		RFA Required		No RFA Required	
	#	Average RM Length	% Longer than non-ANPRM non-RFA	#	Average RM Length	#	Average RM Length	#	Average RM Length
Economically Significant	24	4.7	114%	27	4.1	235	2.3	450	2.2
Other Significant	30	4.5	105%	162	3.3	388	2.4	3,319	2.2
Substantive, Nonsignificant	37	3.3	120%	239	3.1	1,115	1.5	10,577	1.5

Among the agencies that took the longest to complete Economically Significant rules on average were the Department of Energy (5 years) and the Environmental Protection Agency (3.8 years) (the third and fourth slowest agencies). We also found that important sub-agencies within larger agencies are more prone to substantial rulemaking delays for Economically Significant rules. For example, two EPA sub-agencies, the office of Solid Waste and Emergency response and the Water office, both take longer than 5 years on average to complete Economically Significant rulemakings. Another sub-agency with noteworthy delays for Economically Significant rules is the DOE Energy Efficiency and Renewable Energy (5.1 years).

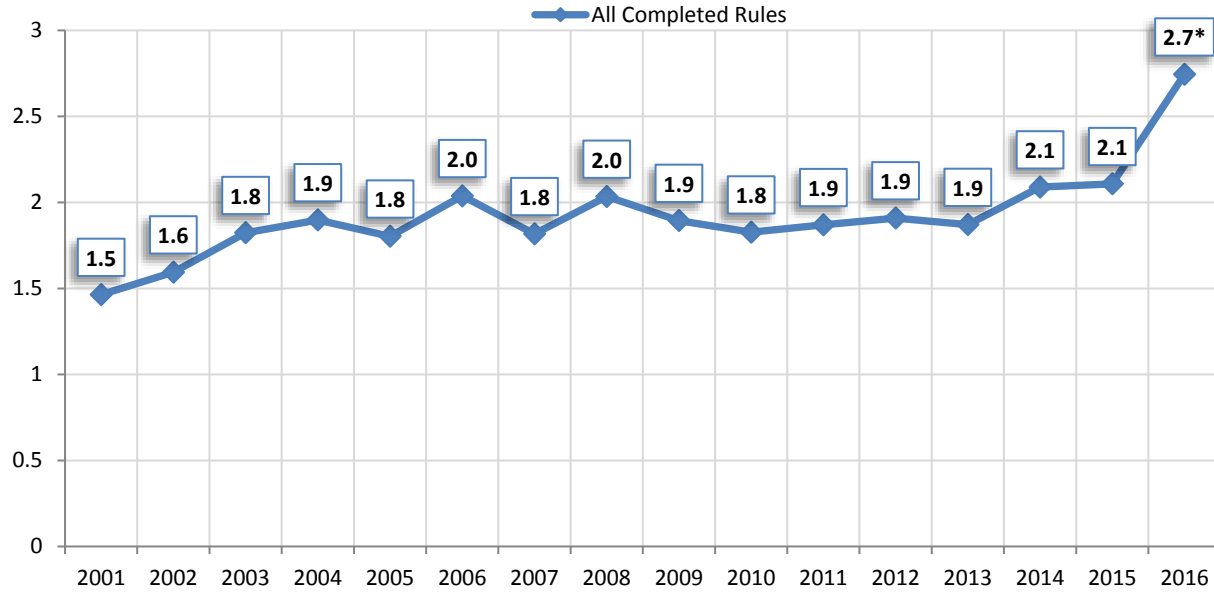
### Number and Average Rulemaking (RM) Length of Completed Rules

Agency	Name	Economically Significant		Other Significant	
		#	Average RM Length	#	Average RM Length
<b>DOJ</b>	Department of Justice	6	5.5	173	3.0
<b>DOL</b>	Department of Labor	27	5.4	172	2.7
<b>DOE</b>	Department of Energy	28	5.0	40	2.8
<b>EPA</b>	Environmental Protection Agency	72	3.8	323	2.9
<b>DHS</b>	Department of Homeland Security	22	3.4	91	2.5
<b>TREAS</b>	Department of the Treasury	15	3.3	70	2.0
<b>DOT</b>	Department of Transportation	56	2.9	252	2.9
<b>HUD</b>	Dept. of Housing and Urban Development	8	2.6	166	2.6
<b>USDA</b>	Department of Agriculture	73	2.1	343	2.5
<b>DOC</b>	Department of Commerce	13	1.9	217	1.6
<b>HHS</b>	Department of Health and Human Services	262	1.7	468	2.2
<b>DOD</b>	Department of Defense	12	1.7	163	2.0
<b>DOI</b>	Department of the Interior	24	1.5	214	2.4
<b>ED</b>	Department of Education	27	0.9	89	1.2
<b>Other*</b>		91	1.5	1,118	2.0
<b>Total</b>		<b>736</b>	<b>2.4</b>	<b>3,899</b>	<b>2.3</b>

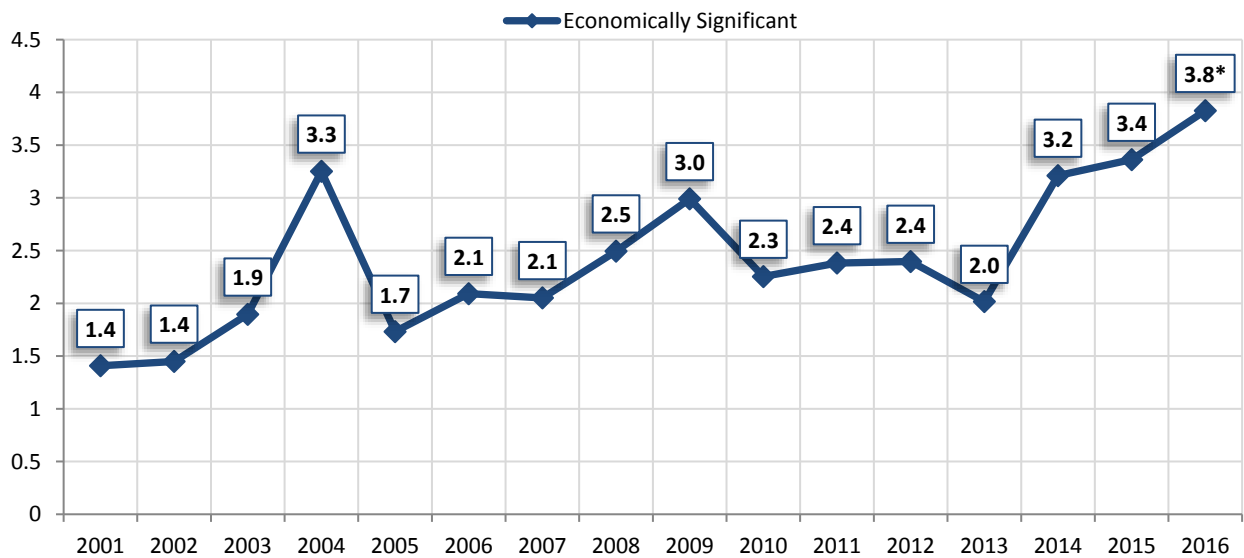
\*This category, which includes 67 agencies, regards rulemakings for which the field in the Unified Agenda typically devoted to cabinet level agencies is blank and the agency conducting the rulemaking is listed in the Unified Agenda field normally devoted to sub agencies. Most agencies in this category are independent agencies. Two agencies included in this category – the State Department and Veterans Affairs Department – are cabinet level agencies.

The clear takeaway from our comprehensive empirical research is that many agencies are simply unable to complete Economically Significant rulemakings over the course of one presidential term. Unfortunately, the data in our report also shows that the trend is going in the wrong direction, with regulatory delay increasing. We found that the George W. Bush and Obama Administrations experienced similar rulemaking lengths for their first five years. Beginning in the sixth year of the Obama Administration, completed Economically Significant rulemakings became substantially longer than in the corresponding year in the Bush Administration. Over the last three years, the average length of rulemakings has increased steadily from 3.2 years in 2014 to 3.4 years in 2015 and now 3.8 years this year. In short, the rulemaking delays have reached new heights over the last few years. The data for other types of rules also reflects an increase in rulemaking lengths over the last few years. It has become clear that our current problems with regulatory delay are getting worse.

**Length of Completed Rulemakings (in years)**



**Length of Completed Economically Significant Rules**



### Years in Which the Average Completed Rulemakings Were the Longest

A. All Completed Rules		
Year	President	Average Rulemaking Length
2016*	Obama	2.745
2015	Obama	2.111
2014	Obama	2.089
2006	Bush	2.038
2008	Bush	2.034
B. Economically Significant Completed Rules		
Year	President	Average Rulemaking Length
2016*	Obama	3.826
2015	Obama	3.363
2004	Bush	3.251
2014	Obama	3.211
2009	Obama	2.990
C. Other Significant Completed Rules		
Year	President	Average Rulemaking Length
2016*	Obama	3.582
2015	Obama	3.027
2014	Obama	3.014
2006	Bush	2.751
2007	Bush	2.636

#### **IV. Conclusion: Strengthening the System of Regulatory Protections to Strengthen America**

There is much to celebrate in our nation's system of regulatory protections. It has tamed marketplace abuses and advanced the values we hold most dear: freedom, safety, security, justice, competition and sustainability. It has led to dramatic environmental improvements, saved millions of lives, and averted countless illnesses and injuries. We should celebrate the achievements of regulatory protections.

Recognizing the crucial role that regulation plays in improving our standard of living underscores the importance of ensuring that the regulatory process works well. Regulators should be nimble and flexible, able to act quickly with appropriate new rules in response to changing technologies, new science and social learning, evolutions in industry structure and other emerging trends and developments. At the same time, regulators must effectively enforce new and old rules; they must be adequately funded, equipped with needed regulatory tools including inspection powers and sufficiently tough penalties for lawbreakers, independent from the parties they regulate while maintaining appropriate responsiveness, and guided by leadership with sufficient political will and protected from interference. Unfortunately, those qualities by and large do not describe the current state of the regulatory process or enforcement, and the regulatory system is failing to meet its promise, in the energy and environmental sector and more generally.

In the environmental area and generally, Congress should look to reforms to strengthen regulatory enforcement, stiffen penalties for corporate wrongdoing, speed the rulemaking process, address uneven judicial review of regulations, and adopt pro-competitive rules to level the playing field for small business and improve the economy and consumer well-being.

Combating harmful delay should be a special priority for Congress. Agencies commonly fail to meet congressionally mandated deadlines, and drag out important rulemakings for years or even decades. We have to find a way to make our government more nimble than that. Endemic problem is not easily cured. Congress should look especially at the role of excessive analytic requirements and at the impact of centralized regulatory review in the Office of Information and Regulatory Affairs (OIRA) in slowing regulatory action. One thing is certain: Congress should not impose more analytic requirements and more time-consuming burdens on regulators.

The reason is this: The consequences of delay are serious, with real impacts on real people. Delay creates the regulatory uncertainty that many business spokespeople denounce. Delay also means that lives are needlessly lost, injuries needlessly suffered, environmental harm needlessly permitted, consumer rip-offs extended, and more.