

**Statement of Scott H. Segal  
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**An Analysis of the Obama Administration's Social Cost of Carbon**

**Hearing Before the Committee on Natural Resources  
United States House of Representatives  
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Chairman Bishop, Ranking Member Grijalva, and members of the Committee, my name is Scott Segal and I am a partner in the Policy Resolution Group of the law firm Bracewell and Giuliani where I have practiced energy, environmental and natural resource law for over 25 years. I also direct the Electric Reliability Coordinating Council<sup>1</sup>, a group of energy companies working on commonsense environmental policy, including approaches to climate change, but the comments I present today are my own. It is an honor to be here today to address the issue of the use of the social cost of carbon (SCC) in rulemaking and other administrative actions. In short, the methodology promoted by the Administration is not an appropriate basis for setting policy and misleads the public regarding the true costs of government action.

**Why the SCC is Misguided**

Any part of the regulated community with passing interest in carbon policy and attendant regulatory development needs to be concerned with the development and use of SCC. Because a higher value for SCC can be used directly to justify broader reaching and more expensive regulations, or to deny permits, the SCC itself must be subject to close scrutiny. Let me give you some real world examples:

- A Department of Transportation (DOT) vehicle efficiency standard would impose a cost of \$350 billion on manufacturers and would return conventional benefits of \$278 billion, meaning costs outweigh benefits by more than \$50 billion. But when DOT factored in SCC, suddenly the regulation benefits exceeded cost by \$100 billion;<sup>2</sup>

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<sup>1</sup> ERCC filed comments regarding SCC Technical Support Documents pursuant to the notice at 78 Fed. Reg. 70,586 (Nov. 26, 2013). The comments are available at [regulations.gov](http://www.regulations.gov) as FR Doc #2014-01605, dated Feb. 26, 2014.

<sup>2</sup> Mark Drajem, Obama Quietly Raises 'Carbon Price' as Costs to Climate Increase, BLOOMBERG (June 12, 2013, 2:52 PM), <http://www.bloomberg.com/news/2013-06-12/tougher-regulationsseen-from-obama-change-in-carbon-cost.html>; Jay G. Stirling, How to Deal with Hornets: The Administrative Procedure Act and the Social Cost of Carbon, 100 Iowa Law Rev. (2015) at 855-56.

- When the US Environmental Protection Agency (EPA) proposed its carbon emissions guidelines for existing power plants, it estimated net benefits of \$26 to \$46 billion by as soon as 2020 – with some 40 to 65% of these alleged net benefits deriving directly from SCC.<sup>3</sup>

And as the President’s Climate Action Plan comes further into focus, more and more regulations claiming to reduce carbon emissions as a primary or secondary benefit will use SCC to appear cost-beneficial when the truth might be otherwise. When actual environmental benefits fail to satisfy a skeptical audience, SCC should not be used as *Hamburger Helper* to make the dish look larger than it really is.

But that’s the real problem. When rulemakings and other government actions impose real costs, and when benefits analysis can be manipulated to yield almost any number, the result is a serious misallocation of limited societal resources. The United States Supreme Court has recently put the EPA on notice that it expects an honest assessment of cost and benefit. In *Michigan v. EPA*, the Court said that, “One would not say that it is even rational, never mind ‘appropriate,’ to impose billions of dollars in economic costs in return for a few dollars in health or environmental benefits.” The Court explains why:

“Consideration of cost reflects the understanding that reasonable regulation ordinarily requires paying attention to the advantages and the disadvantages of agency decisions. It also reflects the reality that ‘too much wasteful expenditure devoted to one problem may well mean considerably fewer resources available to deal effectively with other (perhaps more serious) problems.’ (quoting Justice Breyer in a previous decision).”<sup>4</sup>

The SCC as it stands now is an admittedly one-sided assessment under which the mere allusion to carbon reductions can confer large benefits, even if the proposed action will have no effect on global warming and related environmental endpoints. The fact that particular rules cannot predictably result in reduction of climate-change endpoints in a linear fashion was recently demonstrated in an exchange between a member of the House of Representatives and the EPA Acting Assistant Administrator for Air Janet McCabe:

“*Mr. Pompeo.* You have gone from 26 to 30 indicators on your website about how you measure impact of what you-all call climate change today. So I want to ask you a series

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<sup>3</sup> Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830, 34,840 tbl.1 (June 18, 2014) (to be codified at 40 C.F.R.pt. 60); Stirling at 856.

<sup>4</sup> *Michigan v. EPA*, 576 U. S. \_\_\_\_ (2015), slip op. at 7.

of yes or no questions about this set of regulations, these carbon regulations [on power plants], and what you think they will do to the indicators that EPA uses. So, yes or no, will this set of rules, when fully implemented, reduce sea surface temperatures.

*Ms. McCabe.* I can't answer that. I don't know.

*Mr. Pompeo.* Will this reduce ocean acidity?

*Ms. McCabe.* It will contribute to reducing ocean acidity.

*Mr. Pompeo.* Do you have the data to support that, and can you tell how much and when we will see reduced ocean acidity as a result of these regulations?

*Ms. McCabe.* You can't predict the climate this way.

*Mr. Pompeo.* I will take that as you have no idea.<sup>5</sup>

Ms. McCabe is of course correct. You cannot look at a particular rulemaking or administrative action and determine what effect it will have on any particular climate impact. As she says, “You can’t predict the climate this way.” Yet, that is precisely what the SCC would purport to do, utilizing hand-picked inputs into hand-picked integrated assessment models (IAMs).

### **SCC is Inappropriate as a Basis for Rulemaking and Administrative Action**

Our colleagues at the Utility Air Regulatory Group (UARG) offered a succinct discussion of the legal shortcomings that manifest from reliance on the SCC methodology as currently developed, pointing to “numerous legal, procedural, and other shortcomings associated with the development, derivation, and application of the SCC” sufficient to “warrant the immediate discontinuation of the use of SCC values in the regulatory context.” They continue:

“OMB has not identified any legal authority for this proceeding, and lacks statutory authority to promulgate rules that would bind the USG to use its SCC estimates in regulatory analyses and agency proceedings. Adoption of the SCC values would be arbitrary, capricious, and contrary to law because such action would be unauthorized by statute and because the TSD is substantively flawed. Because there are no statutory principles to guide OMB’s exercise of discretion, this action also raises serious constitutional concerns under the non-delegation and separation of powers doctrines. In effect, OMB is purporting to exercise nonexistent legislative authority in prescribing policy to be followed by other agencies regarding consideration of the SCC in regulatory analyses and decisions.”<sup>6</sup>

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<sup>5</sup> Transcript of Hearing on EPA’s Proposed Carbon Dioxide Regulations for Power Plants, House Committee on Energy and Commerce, Subcommittee on Energy and Power (June 19, 2014), at 88, available at <http://democrats.energycommerce.house.gov/sites/default/files/documents/Preliminary-Transcript-EP-EPA-Carbon-Dioxide-Regulations-Power-Plants-2014-6-19.pdf>

<sup>6</sup> UARG Comments on SOCIAL COST OF CARBON TECHNICAL SUPPORT DOCUMENT AND UPDATES

Others before the Committee today can review in greater detail the numerous flaws within models, including underlying sensitivity assumptions. Curious choices abound regarding discount rates inconsistent with growth-rate assumptions and the use of international benefits to reducing carbon when international costs are regarded as too speculative. But in short, there are simply too many uncertainties in both the models themselves and in their application to neat and tidy SCC numbers ready to be plugged in to any regulatory impact analysis.

Sometimes, it appears as though the Intergovernmental Working Group (IWG) tasked with developing the SCC is satisfied to simply state that we live in an uncertain world, and therefore our rulemaking process should expect no better. But we do expect better. And it is long-settled administrative law that the federal government cannot waive a wand and call magic numbers into existence to justify its activities. The federal appeals courts have explained why:

“[The agency] must provide a complete analytic defense of its model [and] respond to each objection with a reasoned presentation. The technical complexity of the analysis does not relieve the agency of the burden to consider all relevant factors... There must be a rational connection between the factual inputs, modeling assumptions, modeling results and conclusions drawn from these results.”<sup>7</sup>

As one indication that this minimum threshold is not met by the SCC process, consider the fact that the IWG “simply asserts without any documentation or other justification that the FUND, PAGE, and DICE models now stand as the most comprehensive and reliable efforts to measure the economic damages from climate change. No evidence is offered to support that judgment.”<sup>8</sup>

Further, noted MIT economist Robert Pindyck, despite his general support for the SCC conceptual framework, observed that IAMs “have crucial flaws that make them close to useless as tools for policy analysis . . . [; they] are completely ad hoc, with no theoretical or empirical

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78 Fed. Reg. 70,586 (Nov. 26, 2013), Docket ID No. OMB-2013-0007, at 3. See, e.g., *Coal. for Common Sense in Gov't Procurement v. Sec'y of Veterans Affairs*, 464 F.3d 1306, 1317 (Fed. Cir. 2006) (“The definition of a substantive rule is broad and includes action that is legislative in nature, is primarily concerned with policy considerations for the future rather than the evaluation of past conduct, and looks not to the evidentiary facts but to policy-making conclusions to be drawn from the facts.”) (internal quotations omitted).

<sup>7</sup> *Sierra Club v. Costle*, 657 F.2d 298, 333 (D.C. Cir. 1981) (internal quotations omitted).

<sup>8</sup> Frank Ackerman & Elizabeth A. Stanton, “The social cost of carbon,” 53 REAL WORLD ECONOMICS REVIEW 129 (2010), at 135.

foundation. . . . IAM-based analyses of climate policy create a perception of knowledge and precision, but that perception is illusory and misleading.”<sup>9</sup>

The stakes in the current context are simply too high to proceed without an adequate framework. If OMB wishes to proceed as indicated in its most recent response to comments, then it must stop, propose an open and transparent basis under the strictures of the Administrative Procedure Act (APA) and invite comments on the legal basis for SCC and its use as a factor in justifying regulations.

### **Violations of the Administrative Procedure Act**

OMB has on several occasions reminded the Congress that SCC is not a rule or regulation, but merely an “ingredient” that is used in a broader cost-benefit context.<sup>10</sup> But the APA defines a “rule” as including any “agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy,” encompassing “the approval or prescription of . . . valuations, costs, or accounting.”<sup>11</sup> Contrary to OMB’s conceptualization, the courts have held that the APA definition includes “virtually every statement an agency may make.”<sup>12</sup> If OMB does possess the legal authority to establish an SCC – an open point – under APA it would still have to comply with the full range of procedural requirements, including advance public notice, a full and robust opportunity for comment, and a description of the legal basis and purpose of the SCC mechanism. Any process short of these safeguard would be regarded, in the famous words of the statute, as “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”<sup>13</sup>

One cannot consider the development and use of SCC as anything other than a substantive rule. After all, OMB claims that SCC is “extremely important . . . measure of what harm to our society

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<sup>9</sup>Robert S. Pindyck, *Climate Change Policy: What do the Models Tell Us?*, National Bureau of Economic Research Working Paper 19244 (abstract) (2013), available at <http://www.nber.org/papers/W19244>.

<sup>10</sup> See, e.g., *Examining the Obama Administration’s Social Cost of Carbon Estimates*, Hearing before the Subcomm. on Energy Policy, Health Care and Entitlements, Comm. on Oversight and Government Reform, U.S. House of Representatives (July 18, 2013), at 12 (hereinafter “Shelanski testimony”).

<sup>11</sup> 5 U.S.C. § 551(4).

<sup>12</sup> *Avoyelles Sportsmen’s League, Inc. v. Marsh*, 715 F.2d 897, 908 (5th Cir. 1983).

<sup>13</sup> 5 U.S.C. § 706(2)(A).

will be” in determining regulatory priorities.<sup>14</sup> Once final, the entire federal government is to use SCC in determining and calibrating regulatory standards that impose real burden on the regulated community, and beyond that, on the American public at large.

The case study of the EPA is particularly telling, in light of the disproportionate impact the Agency has had in the development of SCC and the operation of the IWG.<sup>15</sup> The costs to the American public of EPA carbon regulation will indeed be large in the context of the Clean Power Plan (CPP) currently under consideration. The Electric Reliability Coordinating Council reviewed the literature on the proposal and found the following:

- The CPP puts the reliability of the U.S. electricity supply at risk. In fact, a growing chorus of independent experts have expressed their concern for the future of America's affordable, dependable electricity supply were the CPP to take effect.
- Blackouts cause incalculable economic damage. For example, the direct costs to high technology manufacturing in the San Francisco Bay Area alone during the California blackouts alone ran as high as one million dollars a minute due to lost production, and the relatively brief Northeast blackout of 2003 cost business about \$13 billion in lost productivity.
- The CPP will impose tremendous costs on the U.S. economy and the American people. Higher energy prices will produce a ripple effect throughout the U.S. economy that will shutter businesses, deter hiring, cause layoffs, increase the price of essential goods and services, and increase the cost-of-living for all Americans. People living on fixed incomes, like senior citizens and the poor, will be hardest hit by rate hikes.<sup>16</sup>

In this case, the OMB would be attempting to “prescribe law or policy” by specifying particular “valuations, costs or accounting” under alleged executive authority, without authorization by Congress, and without following the full and open APA procedures required by law and designed to subject the SCC to rigorous quality assurance. Meeting these APA standards is required before action is taken, not after the numbers are generated time and time again. To date,

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<sup>14</sup> Shelanski testimony at 12.

<sup>15</sup> While the use of SCC first appeared in relatively obscure US Department of Energy proposed efficiency standards – small engines, coin-operated beverage machines and then microwave ovens – these regulations may merely have been a front to obscure the true beneficiary of the methodology, EPA, an agency committed to far more extensive and expensive rules. The Government Accountability Office (GAO) found in July 2014 that “experts” from the Council of Economic Advisors that had been detailed to the IWG were from EPA, and by the time the methodology was changed and expanded, had even returned to the Agency but still maintained seats on the IWG. With respect to each of the IAM models, it was EPA that made the presentations on how the models worked, and it was EPA that supervised the running of those models to generate the SCC numbers. GAO, Regulatory Impact Analysis: Development of Social Cost of Carbon Estimates, GAO-14-663 (July 2014), at pp, 10-15.

<sup>16</sup> ERCC Comments on EPA's Proposed Clean Power Plan (June 2014), ID No. EPA-HQ-OAR-2013-0602, available at <https://www.cibo.org/wp-content/uploads/2014/07/ERCC-Comments-on-111d.pdf>

OMB has cherry-picked the administrative process by selecting models, generating estimates, and applying them – all before seeking any comment.

## **Openness and Transparency**

President Obama famously instructed heads of executive departments and agencies that:

“My Administration is committed to creating an unprecedented level of openness in Government... Transparency promotes accountability and provides information for citizens about what their Government is doing. Information maintained by the Federal Government is a national asset.”<sup>17</sup>

OMB Director Peter Orszag offered further definition as to how these principles would be implemented:

“The three principles of transparency, participation, and collaboration form the cornerstone of an open government. Transparency promotes accountability by providing the public with information about what the Government is doing. Participation allows members of the public to contribute ideas and expertise so that their government can make policies with the benefit of information that is widely dispersed in society. Collaboration improves the effectiveness of Government by encouraging partnerships and cooperation within the Federal Government, across levels of government, and between the Government and private institutions.”<sup>18</sup>

The development of SCC by the IWG has not lived up to the Administration’s explicit commitment. The federal government has never discussed openly the fundamental questions regarding the purpose, development, derivations, and bases for applying the SCC in the rulemaking context. These would be the essential elements of transparency and openness as it applies to SCC. Instead, the Administration has only narrowly sought comment on the November update to the May 2013 TSD, an 11-page document modifying the February 2010

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<sup>17</sup> President Barack Obama, Transparency and Open Government, Memorandum for the Heads of Executive Departments and Agencies, available at [https://www.whitehouse.gov/the\\_press\\_office/TransparencyandOpenGovernment](https://www.whitehouse.gov/the_press_office/TransparencyandOpenGovernment) .

<sup>18</sup> Peter R. Orszag, Dir., OMB, Memorandum for the Heads of Executive Departments and Agencies, Open Government Directive (Dec. 8, 2009), available at <http://www.whitehouse.gov/open/documents/open-government-directive>.

document. The choice of models, and their operation, has not undergone peer review, let alone public comment.

### **Recent Response to Comments**

While the IWG has now offered brief response to sophisticated comments challenging the veracity of the SCC development process, the July 2 Response to Comments (RTC) document still forms an inadequate basis for utilizing the SCC in the rule making or administrative process.

First, IWG admits that despite the comments filed, it still plans “to seek independent expert advice on technical opportunities to improve the SCC estimates, including many of the approaches suggested by commenters...” This independent assessment will come from a tasking of the National Academies of Sciences, Engineering, and Medicine, or NAS, to “examine the technical merits and challenges” present in the effort to improve SCC. But IWG candidly admits that the NAS “review will take some time” during which time “IWG continues to recommend the use of the current SCC estimates in regulatory impact analysis...” The only actual revisions to the SCC are described by IWG as constituting “a minor technical revision.”<sup>19</sup> This gets the comment process precisely backwards. Until the NAS has completed its work, the SCC remains too imprecise for use in the policy-making context and should not be utilized. As the IWG reminds readers throughout the RTC, direct costs and benefits to proposed rules and actions may continue to be measured outside of the elaborate artifice of SCC; there is no need to subject the American taxpayer to the results of SCC-driven policy when NAS review is still underway.

Second, the RTC demonstrates continual conflating of policy outcomes under the guise of SCC economic objectivity. For example, IWG states that it has chosen not even to consider the typical 7 percent discount rate that is consistent with IWG’s own economic growth projections because it believes “special ethical considerations” may obtain in the context of climate change policy development.<sup>20</sup> Whether such special considerations are appropriate is clearly not a

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<sup>19</sup> IWG, Response to Comments (RTC): Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (July 2015) at 5, available at <https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-response-to-comments-final-july-2015.pdf>

<sup>20</sup> RTC at 21.



matter of economics, but of policy consideration that of necessity must be left to the U.S. Congress.

Third, on the matter of consideration of global benefits to carbon reductions – even when no consideration is given to global “dis-benefits” associated with perpetuating energy poverty<sup>21</sup> – IWG indicates that its preference is based in part on the notion that, “By adopting a global estimate of the SCC, the U.S. government can signal its leadership in this effort.”<sup>22</sup> Again, this is a policy assessment better left to Congress – the importance of leadership – and not an objective economic assessment. Indeed, unilateral carbon policy may not only fail to manifest in a copying effect overseas, it may do the opposite resulting in “leakage” of energy-intensive industries to less energy-efficient economies, resulting in greater carbon emissions worldwide!<sup>23</sup>

Thank you for this opportunity to testify. I look forward to working with the Committee further as it completes its important oversight tasks.

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<sup>21</sup> For more on energy poverty, see e.g., Rep. David McKinley, “Powering Africa by Investing in Coal,” The Hill, Aug. 8, 2014 (citing WH “Next Generation” summit, McKinley observes, “Poverty-stricken countries need access to all forms of energy, not just the forms approved by the Obama administration or the World Bank... Without energy, it’s impossible to educate children and give them a brighter future. Without energy it is impossible to grow businesses and encourage entrepreneurship.”), at <http://thehill.com/blogs/congress-blog/energy-environment/214604-powering-africa-by-investing-in-coal>

<sup>22</sup> RTC at 31.

<sup>23</sup> For a fuller explanation of the leakage effect, see ERCC Comments Submitted to EPA on the New Source Performance Standards for Power Plant Carbon Emissions (June 25, 2012), at <http://www.electricreliability.org/ercc-comments-submitted-epa-new-source-performance-standards-power-plant-carbon-emissions> (citing Maguire Energy Institute report and other studies demonstrating that, “Carbon leakage means that the domestic climate mitigation policy is less effective and more costly in containing emission levels, a legitimate concern for policy-makers.”).