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# THE GEORGE WASHINGTON UNIVERSITY

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WASHINGTON, DC

Public Interest Comment<sup>1</sup> on

Reconsideration of the Department of Energy's Final Rule:  
Energy Conservation Standards for Standby Mode and Off Mode for Microwave Ovens

Docket ID No. EERE-BT-PET-0043  
RE: Landmark Legal Foundation Petition

September 6, 2013

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The George Washington University Regulatory Studies Center strives to improve regulatory policy through research, education, and outreach. As part of its mission, the Center conducts careful and independent analyses to assess rulemaking proposals from the perspective of the public interest. This comment on whether the Department of Energy should reconsider its final rule establishing energy efficiency standards for microwave ovens does not represent the views of any particular affected party or special interest, but is intended to encourage more meaningful participation in the rulemaking and the regulatory process more generally.

## I. Introduction

On February 14, 2012, the Department of Energy (“DOE”) published a proposed rule, *Energy Conservation Program: Energy Conservation Standards for Standby Mode and Off Mode for Microwave Ovens*, to set energy efficiency standards for microwave ovens. The proposed rule implemented provisions of the Energy Policy and Conservation Act (“EPCA”), which prescribes

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<sup>1</sup> This comment reflects the views of the authors, and does not represent an official position of the GW Regulatory Studies Center or the George Washington University. The Center’s policy on research integrity is available at <http://research.columbian.gwu.edu/regulatorystudies/research/integrity>.

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energy conservation standards for various consumer products, including microwave ovens. Specifically, DOE proposed reducing the maximum standby power level of microwaves to 1.0 Watt from 4.0 Watts.

EPCA requires that any amendment to an energy efficiency standard for certain consumer products (such as microwave ovens) result in the maximum improvement in energy efficiency, and be determined by the Secretary to be both technologically feasible and “economically justified.” As DOE noted in its proposed rule, Executive Order 12866 (reinforced by Executive Order 13563) requires agencies to:

assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.

To satisfy the requirements of EPCA and EO 12866, DOE considered the regulation’s contribution toward reducing climate change, and incorporated estimates of the social cost of carbon (“SCC”) into the economic analysis of its proposed rule. In the proposed rule, DOE relied on an SCC value derived through an interagency process that relied on technical experts<sup>3</sup> to estimate the monetized benefits associated with an incremental decrease in carbon emissions in a given year as a result of the microwave standards.

After receiving and responding to public comment on its proposal, DOE published its final rule setting energy efficiency standards for microwave ovens on June 17, 2013. However, in the final rule and accompanying updated analysis,<sup>4</sup> DOE relied on an SCC to calculate benefits that was significantly higher than the value that underwent public comment in the proposed rulemaking. Relying on an Interagency Working Group on Social Cost of Carbon “Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866” (SCC-TSD),<sup>5</sup> DOE’s final rule use a \$41.1/metric ton value for the social cost of carbon, a large increase over the \$25.6/metric ton SCC used in the proposed rulemaking.<sup>6</sup> Table 1-3 of the final rule<sup>7</sup> shows that this change increases the anticipated net benefits of the rule by \$438 million (present value). The changed SCC raises the net present

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<sup>3</sup> 77 FR 8553

<sup>4</sup> Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Residential Microwave Ovens – Stand-by Power. May 2013.  
<http://www.regulations.gov/#!documentDetail;D=EERE-2011-BT-STD-0048-0021>

<sup>5</sup> Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866. May 2013. (Incorporated into DOE’s supporting document as Appendix 16B.)  
[http://www.whitehouse.gov/sites/default/files/omb/inforeg/social\\_cost\\_of\\_carbon\\_for\\_ria\\_2013\\_update.pdf](http://www.whitehouse.gov/sites/default/files/omb/inforeg/social_cost_of_carbon_for_ria_2013_update.pdf)

<sup>6</sup> For the final rule, DOE relied on SCC values for 2016 expressed in 2011 dollars. In the proposed rule, an SCC value of \$22.3 per metric ton was expressed in 2010 dollars.

<sup>7</sup> 78 FR 36351

value of U.S. CO<sub>2</sub> emissions by more than \$1 trillion, which will be used to justify myriad regulations from DOE, DOT, EPA, and other agencies engaged directly or indirectly in climate policy.

This significant change in supporting information was made without the benefit of public comment or consultation. In response, the Landmark Legal Foundation (“LLF” or “Landmark”) filed a petition for reconsideration of the final rule, on the grounds that the Department’s use of the new SCC in the final rule without public comment violated the Administrative Procedure Act. On August 16, 2013, DOE requested public comment on the merits of the Landmark petition.

In this comment, we support the Department’s decision to use a standardized SCC to summarize the climate-related benefits of its energy efficiency regulations, but urge the Department and/or the interagency working group to seek both public comment and independent peer review of the SCC’s value and its underlying models and analyses. This is needed not only to support the microwave standard, but also for a range of other regulations<sup>8</sup> that DOE and other agencies will be issuing in reliance on the SCC.

## **II. In principle, it makes sense to use a coordinated SCC across multiple programs.**

The SCC summarizes into a single number (more properly, a range of numbers) a vast array of information derived from scientific and economic research and modeling. All of this information is subject to disagreement, and the relationships embedded in the calculation of the SCC are extraordinarily complex, presenting a daunting challenge to anyone trying to arrive at a consensus figure. Nonetheless, it is worthwhile to try. The SCC may appear to be a gross oversimplification of a complex underlying reality; but, in fact, it is the right simplification to undertake. This is because any damage that greenhouse gas emissions may inflict on global climate systems is independent of the source of the emissions. To the climate, all CO<sub>2</sub> molecules look the same.

This simple fact does not tell us whether it makes sense to regulate energy efficiency or subsidize certain technologies, but it does tell us that any cost-effective portfolio of climate policies will have a single implicit marginal cost of carbon. For this reason, we commend the efforts of the

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<sup>8</sup> As the President stated in his June 25, 2013 remarks on climate change: “America intends to take bold action to reduce carbon pollution.” According to the President’s remarks, this “bold action” will take the form of pollution standards for power plants, more stringent energy efficiency standards for vehicles, and increased reliance on natural gas production, all of which will likely rely on a metric like the SCC during the rulemaking process for justification.

interagency working group to reach agreement on the value of the SCC. A common SCC should be used to evaluate climate-related regulatory mandates, grant programs, and tax policies.

Certainly it makes more sense for policy makers to focus on the SCC than to try to figure out the “right” level of greenhouse gas (GHG) emissions from every source, or the “right” temperature of the earth, or the “right” combination of fuels and technologies to pursue as a policy goal. Indeed, past efforts to develop an international climate policy framework were doomed, in part, by their focus on negotiating the level of emissions each country would be allowed—an unproductive diplomatic zero-sum game. An international conversation about the marginal cost of carbon emissions might have led to some useful policy outcomes. Similarly, the domestic Renewable Fuels Standard attempts to set, in statute and regulation, the required level of renewable transportation fuels. The program has degenerated into a rent-seeking contest for subsidies, with little or no (or negative) benefit to the environment.<sup>9</sup> The marginal cost of GHG emissions—the SCC—may be very difficult to calculate, but is a far more promising path to pursue than the various attempts to guess at optimal quantities of emissions or technologies.

### **III. DOE should seek public comment on the revised justification for the regulation, pursuant to the Administrative Procedure Act of 1946 and other authorities.**

For almost 70 years, the US federal regulatory system has been grounded in the principle that new regulations should not be enforceable until agencies consider views and information provided by the public. The Administrative Procedure Act of 1946 (“APA”) generally requires agencies to (1) publish a notice of proposed rulemaking in the Federal Register; (2) allow interested parties an opportunity to participate in the rulemaking process; and (3) issue a final rule accompanied by a statement of its basis and purpose.

The APA requires Federal agencies to “give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments with or without opportunity for oral presentation.”<sup>10</sup> In the modern rulemaking process, this often takes the form of public comments. In its petition for reconsideration, the Landmark Legal Foundation states:

Landmark objects to the Department’s (and unnamed other agencies) decision to utilize an “Interagency Update” to justify increasing the “social cost” of carbon dioxide without any opportunity for public comment. Finalizing such a far reaching decision without notice and public comment violates the Administrative

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<sup>9</sup> See, e.g., Sofie Miller, “Crony Environmentalism,” *Regulation*. Vol.36 No. 1 (Spring 2013)

<sup>10</sup> 5 U.S.C. 553(c)

Procedure Act's (APA) and Executive Order 13563's tenets of transparency, objectivity and fairness in promulgating and finalizing regulations.<sup>11</sup>

In addition to this statutory requirement, multiple Executive Orders have encouraged agencies to involve the public in the rulemaking process, specifically including pertinent parts of the rulemaking docket such as the updated SCC value. President Obama's Executive Order 13563 states:

To the extent feasible and permitted by law, each agency shall also provide, for both proposed and final rules, timely online access to the rulemaking docket on regulations.gov, including relevant scientific and technical findings, in an open format that can be easily searched and downloaded. For proposed rules, such access shall include, to the extent feasible and permitted by law, *an opportunity for public comment on all pertinent parts of the rulemaking docket, including relevant scientific and technical findings.* [Emphasis added]

In the case of DOE's final microwave rule, the public was unable to participate in a relevant scientific and technical finding because information was not made available to the public online in a timely manner and the public was denied an opportunity to comment on the new SCC value. DOE's handling of this pertinent part of the rulemaking docket is contrary to the statutory requirements of the APA and the guidance of EO 13563.

This is important. As the President has said:

The public must be able to trust the science and scientific process informing public policy decisions. Political officials should not suppress or alter scientific or technological findings and conclusions. If scientific and technological information is developed and used by the Federal Government, it should ordinarily be made available to the public. To the extent permitted by law, there should be transparency in the preparation, identification, and use of scientific and technological information in policymaking.<sup>12</sup>

DOE's decision to incorporate a relevant scientific and technical finding (the updated SCC) into its final microwave rule without the benefit of public comment lacked both the transparency urged by the President and the process required by statute.

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<sup>11</sup> 78 FR 49976

<sup>12</sup> President Barack Obama, Memorandum for the Heads of Executive Departments and Agencies, "Scientific Integrity." March 9, 2009

#### **IV. The Administration should subject the Interagency Working Group's Technical Support Document on the Social Cost of Carbon to peer review.**

In addition to public comment, Federal agencies have long sought peer review of scientific assessments that support important public policy implications, and the federal government should subject the Interagency Working Group on Social Cost of Carbon's SCC-TSD to peer review before proceeding to use it in this or other rulemakings.

President Obama has stressed the importance of adhering to established scientific procedures, including peer review, when making policy decisions, stating:

When scientific or technological information is considered in policy decisions, the information should be subject to well-established scientific processes, including peer review where appropriate, and each agency should appropriately and accurately reflect that information in complying with and applying relevant statutory standards.<sup>13</sup>

As the Office of Management and Budget (OMB) has observed:

Peer review is an important procedure used by the scientific community to ensure that the quality of published information. Peer review can increase the quality and credibility of the scientific information generated across the federal government.<sup>14</sup>

In 2004, the OMB called for more consistency in the use of peer review across government agencies, issuing an *Information Quality Bulletin for Peer Review* ("Bulletin").<sup>15</sup> The Bulletin implemented the Information Quality Act of 2001,<sup>16</sup> which directed OMB to issue guidelines to "provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility and integrity of information" disseminated by Federal agencies.<sup>17</sup> It established "minimum standards for when peer review is required for scientific information and the types of peer review that should be considered by agencies in different circumstances," noting:

The use of a transparent process, coupled with the selection of qualified and independent peer reviewers, should improve the quality of government science

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<sup>13</sup> President Barack Obama, Memorandum for the Heads of Executive Departments and Agencies, "Scientific Integrity." March 9, 2009

<sup>14</sup> Office of Management and Budget, *Information Quality Bulletin for Peer Review*. October 2002.

<sup>15</sup> Available at: <http://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2005/m05-03.pdf>

<sup>16</sup> Pub. L. No. 106-554, § 515(a)

<sup>17</sup> OMB also issued Information Quality Guidelines (October 2002)

[http://www.whitehouse.gov/sites/default/files/omb/assets/omb/inforeg/iqg\\_oct2002.pdf](http://www.whitehouse.gov/sites/default/files/omb/assets/omb/inforeg/iqg_oct2002.pdf)

while promoting public confidence in the integrity of the government’s scientific products.

The Interagency Working Group on Social Cost of Carbon’s May 2013 SCC-TSD appears to be precisely the kind of information the Bulletin was intended to cover. Section I(5) of the Bulletin defines “scientific information” to include “factual inputs, data, models, analyses, technical information, or scientific assessments based on the behavioral and social sciences, public health and medical sciences, life and earth sciences, engineering, or physical sciences.”<sup>18</sup>

The SCC-TSD also qualifies as “influential scientific information,” which the Bulletin defines as “scientific information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions.” As the Bulletin notes, “information dissemination can have a significant economic impact even if it is not part of a rulemaking.”

The Bulletin explicitly covers “scientific assessments,” defined as “an evaluation of a body of scientific or technical knowledge, which typically synthesizes multiple factual inputs, data, models, assumptions, and/or applies best professional judgment to bridge uncertainties in the available information.”

These assessments include, but are not limited to, state-of-science reports; technology assessments; weight-of-evidence analyses; meta-analyses; health, safety, or ecological risk assessments; toxicological characterizations of substances; integrated assessment models; hazard determinations; or exposure assessments. Such assessments often draw upon knowledge from multiple disciplines. Typically, the data and models used in scientific assessments have already been subject to some form of peer review.

Thus, the fact that the models evaluated in the SCC-TSD may have been reviewed separately does not absolve the federal government of the requirement for peer review. The Bulletin states:

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<sup>18</sup> MIT Professor Robert S. Pindyck recently questioned the reliability of the integrated assessment models that inform the SCC-TSD.

A plethora of integrated assessment models (IAMs) have been constructed and used to estimate the social cost of carbon (SCC) and evaluate alternative abatement policies. These models have crucial flaws that make them close to useless as tools for policy analysis: certain inputs (e.g. the discount rate) are arbitrary, but have huge effects on the SCC estimates the models produce; the models’ descriptions of the impact of climate change are completely ad hoc, with no theoretical or empirical foundation; and the models can tell us nothing about the most important driver of the SCC, the possibility of a catastrophic climate outcome. IAM-based analyses of climate policy create a perception of knowledge and precision, but that perception is illusory and misleading.

“Climate Change Policy: What Do the Models Tell Us?”NBER Working Paper No. 19244, July 2013, JEL No. D81,Q5,Q54.

prior peer review and publication is not by itself sufficient grounds for determining that no further review is necessary.

Nor does the fact that the SCC-TSD combines scientific inputs with economic and social science information negate the importance of peer review. The Bulletin references the Congressional/Presidential Commission on Risk Assessment and Risk Management, which recognized that “peer review of economic and social science information should have as high a priority as peer review of health, ecological, and engineering information.”<sup>19</sup>

As President Obama has announced his intent to address climate change through various rulemakings issued by different parts of the federal government, the use of a consistent set of SCC values can encourage more cost-effective policies than if different agencies were permitted to develop different estimates. But that makes peer review and public comment all the more important. As the Bulletin notes, “the need for rigorous peer review is greater when the information contains precedent-setting methods or models, presents conclusions that are likely to change prevailing practices, or is likely to affect policy decisions that have a significant impact.”

According to the Bulletin:

A scientific assessment is considered “highly influential” if the agency or the OIRA Administrator determines that the dissemination could have a potential impact of more than \$500 million in any one year on either the public or private sector or that the dissemination is novel, controversial, or precedent-setting, or has significant interagency interest. One of the ways information can exert economic impact is through the costs or benefits of a regulation based on the disseminated information. The qualitative aspect of this definition may be most useful in cases where it is difficult for an agency to predict the potential economic effect of dissemination. In the context of this Bulletin, it may be either the approach used in the assessment or the interpretation of the information itself that is novel or precedent-setting. Peer review can be valuable in establishing the bounds of the scientific debate when methods or interpretations are a source of controversy among interested parties.

Peer review and public participation are necessary to support the President’s commitment to “creating an unprecedented level of openness in Government.”<sup>20</sup> According to the Bulletin:

Whenever feasible and appropriate, the agency shall make the draft scientific assessment available to the public for comment at the same time it is submitted

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<sup>19</sup> Presidential/Congressional Commission on Risk Assessment and Risk Management, Risk Commission Report, Volume 2, Risk Assessment and Risk Management in Regulatory Decision-Making, 1997:103.

<sup>20</sup> Memorandum on Openness and Transparency, January 21, 2009.

for peer review (or during the peer review process) and sponsor a public meeting where oral presentations on scientific issues can be made to the peer reviewers by interested members of the public. When employing a public comment process as part of the peer review, the agency shall, whenever practical, provide peer reviewers with access to public comments that address significant scientific or technical issues. To ensure that public participation does not unduly delay agency activities, the agency shall clearly specify time limits for public participation throughout the peer review process.<sup>21</sup>

## V. Conclusion

The Social Cost of Carbon is conceptually the right way for DOE to organize its analysis of climate impacts and coordinate with other agencies that are also engaged in climate policy. The difficulties and uncertainties of calculating the SCC demand greater attention—including public comment and peer review—to the task of getting it right.

The process of scientific inquiry revels in debate, discussion, and discourse. Public comment and peer review of how the Interagency Working Group selected, weighed, and combined the integrated assessment models, what those models mean, and the appropriateness of the various assumptions and inferences made to deal with economic and scientific uncertainty will not only add credibility to future government climate policies, but encourage advances in scientific understanding of these complex issues.

In a memorandum to agency heads on January 21, 2009, President Obama said, “my Administration is committed to creating an unprecedented level of openness in Government,”<sup>22</sup> and called on the Director of OMB to issue an Open Government Directive to further that commitment.

That Directive identified three principles essential to an open government:

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

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<sup>21</sup> Bulletin III(5)

<sup>22</sup> Memorandum on Openness and Transparency, January 21, 2009.

Government, across levels of government, and between the Government and private institutions.<sup>23</sup>

By releasing the Interagency Working Group's SCC-TSD as a final decision, and incorporating it in a final rulemaking, the Administration has not only disregarded these principles and undermined the President's commitment to open government, but has violated the Administrative Procedure Act and established administrative policies.

The following steps will remedy these failings:

- The Administration should seek peer review of the Interagency Working Group's TSD on the Social Cost of Carbon.
- The Administration should provide the public an opportunity to engage in the peer review process, and also to comment directly on the SCC-TSD.
- DOE should rescind the rule and either wait to issue it until after a government-wide SCC is established that comports with established principles for transparency, participation, and collaboration, or reissue it based on the evidence that had been available to the public in the rulemaking record.
- If DOE determines that the microwave oven standard would not be altered, regardless of which SCC was used in the analysis, it nonetheless should pursue peer review and public comment on the SCC so that future rulemakings—where it will influence the outcome—can rely on it.

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<sup>23</sup> Memorandum for the Heads of Executive Departments and Agencies, from Peter R. Orszag, OMB Director, "Open Government Directive," December 8, 2009 M-10-06