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**TESTIMONY OF HOWARD SHELANSKI
ADMINISTRATOR FOR THE OFFICE OF INFORMATION AND REGULATORY AFFAIRS
OFFICE OF MANAGEMENT AND BUDGET
BEFORE THE HOUSE COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
SUBCOMMITTEE ON ENERGY POLICY HEALTHCARE AND ENTITLEMENTS
UNITED STATES HOUSE OF REPRESENTATIVES**

July 18, 2013

Thank you for the opportunity to appear before you today. I was recently confirmed as the Administrator of the Office of Information and Regulatory Affairs (OIRA) at the Office of Management and Budget (OMB), and I am honored to be serving in this role. I look forward to speaking with you about the social cost of carbon.

When I refer to the “social cost of carbon” (SCC) I mean the values used to calculate the monetary costs and benefits of incremental changes in the volume of carbon emissions in a given year. The social cost of carbon includes, for example, changes in net agricultural productivity and human health, property damage from increased flood risk, energy system costs, and the value of ecosystem services lost because of climate change.

Executive Orders 12866 and 13563 direct agencies to use the best available scientific, technical, economic, and other information to quantify the costs and benefits of rules. Rigorous evaluation of costs and benefits has been a core tenet of the rulemaking process for decades through Republican and Democratic Administrations. This fundamental principle of using the best available information underpins the Administration’s efforts to develop and update its estimates of the social cost of carbon. Indeed, cost benefit analysis better informs decision makers if it takes into account the current and future damages from carbon pollution.

In 2009, the Administration launched a process to determine how best to quantify the net benefits from reducing carbon dioxide emissions. The purpose of this process was to ensure that agencies were using the best available information and to provide consistency in economic analysis associated with the rulemaking process across agencies. During the previous Administration and at the beginning of this Administration, agencies used a range of social cost of carbon values when evaluating the costs and benefits of rules.

To determine how best to quantify the net benefits from reducing carbon dioxide emissions, the Administration first conducted a preliminary assessment of existing literature in order to set interim social cost of carbon values while it worked on a more comprehensive analysis. Agencies began using these interim values in rulemakings and solicited public comments on the proposed rules in which the values were used. Informed by public comments received on the interim values, the Administration developed and released improved SCC estimates in February 2010 in conjunction with a Department of Energy (DOE) appliance

efficiency- standard rulemaking for small electric motors. Other agencies subsequently used these SCC estimates in their rulemakings.

Since the release of the SCC values in February 2010, numerous rulemakings have used those values for the social cost of carbon. Agencies using the SCC values in rulemakings received extensive public comments, many of which focused on the discount rates chosen and the three peer-reviewed academic models used to develop the SCC estimates.

As explained in the February 2010 Technical Support Document, the SCC methodology rests on three integrated climate change assessment models: the FUND, DICE, and PAGE models. These models combine climate processes, economic growth, and interactions between the climate and the global economy into a single modeling framework. These are by far the most widely cited models that link physical impacts to economic damages for the purposes of estimating the SCC. The SCC estimates rely on a common set of inputs to each model and equally weigh the outputs of the three models, as described in detail in the 2010 technical document.

Recognizing that the underlying climate change impact models would evolve and improve over time as scientific and economic understanding increased, the 2010 SCC documentation committed to regular updates, and set a goal of updating the SCC estimates within two years or after updated versions of the underlying models became available. Since the February 2010 estimates were released, the three models that underpin the interagency social cost of carbon estimates have been all significantly updated and subsequently used in peer-reviewed studies. Many public comments urged the agencies to update the estimates based on the latest models. It is important to note that the only changes made in May 2013 to the SCC estimates reflect the refinements made to the underlying models. In other words, all of the changes to the social cost of carbon values were the result of updates to the FUND, DICE, and PAGE models that were made by the model developers themselves. The Federal Government inputs, such as the discounts rate, population growth, climate sensitivity distribution, and socio-economic trajectories used to develop the 2010 estimates remain unchanged.

As explained in the 2013 Technical Support Document, the updates to FUND, DICE, and PAGE reflect, among other things, improvements in the way economic damages from climate change are modeled. The net result of these updates to the three peer-reviewed models was to increase the SCC estimates. These net changes reflect many specific changes within the three models, some of which increased the estimates and some of which decreased them. For example, for 2015 emissions and using a 3 percent real discount rate, the social cost of carbon value rose from \$24 per metric to \$38 per metric ton (in 2007 dollars). The technical support document provides a range of estimates using different discount rates.

Entities outside of the Federal government are using estimates that are similar to the updated SCC values. For example, these updated estimates are consistent with the SCC values used by other governments, such as the United Kingdom and Germany. Major corporations, such as ExxonMobil and Shell, have also used similar estimates to evaluate capital investments. The Administration will continue to investigate ways to improve the social cost of carbon estimates. The current estimates will be used in the economic analysis of rulemakings, and we

fully expect comments on the SCC values in the context of future rules. We will consider those comments to ensure that we use the best available information to evaluate the costs and benefits of our regulation.

Thank you for your time. I would be happy to answer any questions.

Howard A. Shelanski

Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget

Howard A. Shelanski was previously the Director of the Bureau of Economics at the Federal Trade Commission (FTC) and a professor at Georgetown University Law Center. From 2011 to 2012 he was Of Counsel to the law firm Davis, Polk & Wardwell. He was also the Deputy Director for Antitrust in the FTC's Bureau of Economics from 2009 to 2011. Mr. Shelanski was on the faculty at the University of California at Berkeley from 1997 to 2009. He served as Chief Economist of the Federal Communications Commission from 1999 to 2000 and as Senior Economist for the President's Council of Economic Advisers at the White House from 1998 to 1999. He was an associate with Kellogg, Huber, Hansen, Todd & Evans from 1995 to 1997. He served as a clerk for Justice Antonin G. Scalia of the United States Supreme Court, for Judge Louis H. Pollak of the U.S. District Court in Philadelphia, and for Judge Stephen F. Williams of the U.S. Court of Appeals for the D.C. Circuit. Mr. Shelanski received a B.A. from Haverford College, and a J.D. and Ph.D. from the University of California at Berkeley.