



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

November 30, 2004

OFFICE OF THE ADMINISTRATOR
SCIENCE ADVISORY BOARD

MEMORANDUM

SUBJECT: Determination for SAB Second Generation Model (SGM) Advisory Panel

FROM: Holly Stallworth, Ph.D. / *Signed* /
Designated Federal Officer, Environmental Economics Advisory
Committee
EPA Science Advisory Board Staff Office (1400F)

THRU: Daniel Fort / *Signed* /
Ethics and FACA Policy Officer
EPA Science Advisory Board (SAB) Staff Office (1400F)

TO: Vanessa T. Vu, Ph.D.
Director
EPA Science Advisory Board Staff Office (1400F)

This memorandum summarizes steps taken in regard to the request from the EPA's Office of Atmospheric Program (OAP) for an SAB advisory on the Second Generation Model (Project 05-31). A planning memo dated July 6, 2004 documented initial discussions with the Office of Atmospheric Programs in response to their project request. A second memo of August 11, 2004 documented the "Short List" candidates for the SGM Advisory Panel and which was published on the SAB website. This third and final determination memorandum documents the process for selecting members for the SGM Advisory Panel.

A. Background

The Second Generation Model (SGM) is OAP's primary tool for analyses of climate change policies and impacts. SGM is a computable general equilibrium (CGE) model of the world economy that can be used to estimate the domestic and international economic impacts of policies designed to reduce greenhouse gas emissions. A primary purpose of the SGM is to provide an integrated assessment of a portfolio of mitigation strategies. The SGM projects economic activity, energy transformation and consumption, and greenhouse gas emissions in five-year time steps from 1990 through 2050. The model has been used extensively over the last decade to assess U.S. policy options to achieve greenhouse gas mitigation goals. The OAP's overview paper and extensive documentation describing the Second Generation Model are posted on OAP's website at <http://www.epa.gov/air/sgm-sab.html>.

The OAP is seeking advice from the SAB in the form of an “advisory”. The OAP plans to consider the advice of the SAB panel into the model’s future development.

B. The Charge to the Panel

The OAP initially provided draft charge questions. Final charge questions listed in Attachment A were agreed upon by the SAB Staff Office, OAP and the Chair of the Panel.

C. Formation of SGM Advisory Panel

A *Federal Register* Notice soliciting nominations for the Second Generation Model Advisory Panel was published on July 9, 2004 and can be found at <http://www.epa.gov/EPA-SAB/2004/July/Day-09/sab15615.htm>. This Notice solicited nominations for panelists with expertise in one or more of the following areas: (a) energy or environmental economics; (b) economic modeling of climate options; (c) computable general equilibrium modeling; (d) computable general equilibrium modeling; (e) technological change and diffusion, and (f) climate science.

A total of 16 nominations of experts were received in response to this “widecast” solicitation. The SAB Staff Office confirmed their willingness to serve on the SAB Panel and evaluated their scientific and technical credentials and expertise relevant to the SAB Panel. On August 24, 2004, a “Short List” of 14 candidates for the SGM Advisory Panel was posted on the SAB website for public comment. The only comments received were from EPA’s Office of Atmospheric Programs.

Short List candidates were then evaluated for any conflict of interest or appearance of a lack of impartiality. Panelists’ availability to meet during the proposed meeting time served as an additional criterion. In the final selection, consideration was given for the panel’s collective depth, breadth of expertise and diversity of scientific view points. Attachment B provides the final roster of the SGM Advisory Panel.

Conflict of Interest Considerations:

“Short List” candidates were evaluated for potential ethics issues using information submitted by each panel member through the EPA 3110-48 form (Confidential Financial Disclosure Form for Special Government Employees Serving on Federal Advisory Committees at the U.S. Environmental Protection Agency) and other staff research. Members of any SAB Committee or Panel meet the legal definition of an “employee” because they serve as Special Government Employees (SGEs) and, as such, are subject to conflict of interest laws as follows. In addition to the Confidential

Financial Disclosure Form, each panelist has answered five ethics questions posed in reference to this particular panel's work.

For Financial Conflict of Interest (COI) issues, the basic 18 U.S.C. 208 provision states that: "An employee is prohibited from participating personally and substantially in an official capacity in any particular matter in which he, to his knowledge, or any person whose interests are imputed to him under this statute has a financial interest, if the particular matter will have a direct and predictable effect on that interest [emphasis added]." For a conflict of interest to be present, all elements in the above provision must be present. If an element is missing, the issue does not involve a formal conflict of interest; however, the general provisions in the appearance of impartiality guidelines still apply and have been considered.

Does the charge involve a Particular Matter?

A "particular matter" refers to matters that "...will involve deliberation, decision, or action that is focused upon the interests of specific people, or a discrete and identifiable class of people." It does not refer to "...consideration or adoption of broad policy options directed to the interests of a large and diverse group of people." [5 C.F.R. 2640.103 (a)(1)]

The Second Generation Model has been used extensively over the last decade to assess U.S. policy options to achieve greenhouse gas mitigation goals. These policy options will affect a broad range of interested parties inasmuch as climate is a global phenomena. Therefore, the model does not focus on the interests of specific persons, or a discrete and identifiable class of persons. Rather, the SAB panel's activity will consider broad policy options directed to a diversity of interests. Thus, the criteria for particular matter are not met and no financial conflict of interest as defined in 18 USC 208 exists.

How will regulations concerning "appearance of lack of impartiality" under 5 C.F.R. 2635.502 and other ethics factors, apply to members of the Panel:

The Code of Federal Regulations [5 C.F.R. 2635.502(a) states that: "Where an employee knows that a particular matter involving specific parties is likely to have a direct and predictable effect on the financial interest of a member of his household, or knows that a person with whom he has a covered relationship is or represents a party to such matter, and where the person determines that the circumstances would cause a reasonable person with knowledge of the relevant facts to question his impartiality in the matter, the employee should not participate in the matter unless he has informed the agency designee of the appearance problem and received authorization from the agency designee." Further, 5 C.F.R. 2635.502(a)(2) states that, "An employee who is concerned that circumstances other than those specifically described in this section would raise a question regarding his impartiality should use the process described in this section to determine whether he should or should not participate in a particular matter."

To ascertain whether there was any potentially disqualifying involvement with the topic of the SGM review, which would indicate the appearance of a lack of impartiality, the following five (5) questions were posed to all candidates for the SGM review:

- a) Do you know of any reason that you might be unable to provide impartial advice on the matter to come before the Panel or any reason that your impartiality in the matter might be questioned?
- b) Have you had any previous involvement with the issue(s) or document(s) under consideration, including authorship, collaboration with the authors, or previous peer review functions? If so, please identify those activities.
- c) Have you served on previous advisory panels or committees that have addressed the topic under consideration. If so, please identify those activities.
- d) Have you made any public statements (written or oral) on the issue? If so, please identify those statements.
- e) Have you made any public statements that would indicate to an observer that you have taken a position on the issue under consideration? If so, please identify those statements.

As a result of a review of the EPA Form 3110-48 and the responses to the above questions provided by each prospective SGM Panel member and public comments, the SGM DFO and SAB Ethics and FACA Policy Officer, in consultation with the Alternate Agency Ethics Official and with the approval of the SAB's Deputy Ethics Official, have determined that there is no appearance of a lack of impartiality on the part of the selected SGM Panel members. All members will have taken the SGE ethics training course found at http://www.epa.gov/sab/sge_course/index.htm. The final roster of SGM Advisory Panel members is provided in Attachment B.

Concurred,

/ Signed /

Vanessa T. Vu, Ph.D.
Director
EPA Science Advisory Board Staff Office

Attachment B

**U.S. Environmental Protection Agency
Science Advisory Board
Second Generation Model Advisory Panel**

CHAIR

Dr. Lawrence Goulder, Shuzo Nishihara Professor in Environmental and Resource Economics, Stanford University, Palo Alto, California

MEMBERS

Dr. Dallas Burtraw, Senior Fellow, Resources for the Future, Washington, D.C.

Dr. Carol Dahl, Professor of Mineral Economics, Colorado School of Mines, Golden, Colorado

Dr. Glenn Harrison, Professor Economics, University of Central Florida, Orlando, Florida

Dr. Michael Hanemann, Professor, Department of Agricultural and Resource Economics, University of California, Berkeley, CA

Dr. James Opaluch, Professor of Environmental Economics, University of Rhode Island, Kingston, Rhode Island

Dr. Sergey Paltsev, Research Scientist, Joint Program on the Science and Policy of Global Change, Massachusetts Institute of Technology, Cambridge, Massachusetts

Dr. William Pizer, Senior Fellow, Resources for the Future, Washington, D.C.

Dr. Adam Rose, Professor of Geography, Pennsylvania State University, State College, Pennsylvania

Dr. James Shortle, Professor of Agricultural and Environmental Economics, Pennsylvania State University, State College, Pennsylvania

Dr. Ian Sue Wing, Assistant Professor of Geography, Boston University, Boston Massachusetts

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