

Summary Minutes of the  
U.S. Environmental Protection Agency (EPA)  
Science Advisory Board (SAB)  
Second Generation Model Advisory Panel  
Public Teleconference  
May 6, 2005

Committee Members: Dr. Lawrence Goulder, Chair  
Dr. Carol Dahl  
Dr. James Opaluch  
Dr. Sergey Paltsev  
Dr. Adam Rose  
Dr. Ian Sue Wing  
Dr. Dallas Burtraw  
Dr. Billy Pizer  
Dr. Glenn Harrison  
Dr. Michael Hanemann

Date and Time: 2:00pm – 4:00pm, May 6, 2005

Purpose: The purpose of this teleconference of the Second Generation Model Advisory Panel is for panelists to discuss the Draft Advisory.

SAB Staff: Dr. Holly Stallworth, Designated Federal Officer

Other EPA Staff: Michael Shelby, Michael Leifman, Alan Fawcett,

Other: Ron Sands, Hugh Pitcher, Antoinette Brenkert, Jay Edmonds (all from Pacific Northwest National Lab)

Meeting Summary

The discussion followed the issues and general timing as presented in the meeting agenda (Attachment A).

**FRIDAY, May 6, 2005**

Opening of Public Meeting

Dr. Holly Stallworth, Designated Federal Officer (DFO) for the Second Generation Model Advisory Panel, opened the meeting with a statement that the SGM Advisory Panel is a federal advisory committee whose meetings are subject to the requirements of the Federal Advisory Committee Act.

Dr. Larry Goulder spoke to the group about the two-stage process for the panel's work. The first stage is the panel's issuance of an informal Advisory to be discussed in today's teleconference. The second stage would be a report written after changes were made in the Second Generation Model.

The members proceeded to present their submitted written sections of the Advisory according to the sequence below.

- A. Documentation of Model Structure – Dr. Goulder
- B. Documentation of model's parameters. –Dr. Rose
- C. Sensitivity analysis and backcasting – Drs. Hanemann and Burtraw
- D. Treatment of Everything Else sector – Dr. Dahl
- E. International Trade – Dr. Sue Wing
- F. Household behavior/welfare – Dr. Opaluch
- G. Nested prod. functions – Dr. Pizer
- H. Update data set – Dr. Harrison
- I. Endogenize non-CO2 gases – Dr. Paltsev
- J. Sector-specific policies – Dr. Burtraw

See above sections of the Draft Advisory for specific content of each panelists' presentation. These Minutes capture only those comments not found in the Draft Advisory.

During the discussion of improving the model's documentation, Dr. Shelby mentioned the need for an iterative process with the panel so that OAR could get specific feedback from each team. Another issue discussed was whether planned changes to the model should go into the next version of the SGM documentation.

The discussion on improving the model's parameters followed the written comments on this topic contained in the Draft Advisory.

In the discussion of sensitivity analysis and backcasting, it was agreed that the model developers could present ideas for backcasting than actual backcasting results. A suggestion was made for layering the sensitivity analysis from the most basic to the most sophisticated and asking only for the most basic first.

The discussion on clarifying treatment of the "Everything Else" sector followed the comments on this topic contained in the written Advisory. In addition, a suggestion was made for checking Walrus' law.

During the discussion of improving the model's treatment of international trade, in response to a question, the Office of Air said most policy questions would focus on the U.S. The suggestion was made to separate out those policy experiments which involve primarily the U.S. model versus policy experiments that are global and to make separate recommendations for each.

During the discussion of building a household sector, the level of aggregation was discussed and the suggestion was made that the Advisory provide suggestions about the nature of the household decision problem without specifying a particular functional form.

During the discussion on improving the model's production specification, a question was raised about finding econometrics to support nesting structures. One panelists responded that nesting allow modelers to try out alternative empirical specifications even if those are not known with certainty.

During the discussion on updating the model's data set, the suggestion was made to use non-linear programming so incorporate new data and rebalance the data set, thereby minimizing the time spending processing new data.

The presentation on endogenizing other greenhouse gases followed the comments found on this topic in the written Advisory.

During the discussion of the model's treatment of sector-specific policies, one panelists suggested the industrial organization issues surrounding the production of electricity be discussed. Another panelist said that it was not clear whether the model could exempt certain sectors from cap and trade. The model developers said the model had the ability to apply a carbon price to a particular sector.

The Chair asked the panel for their thoughts on priorities and next steps. The Office of Air offered an update on the timing for model improvements. Discussion took place on how long to keep the panel open. The Chair said an e-mail providing the panelists with guidance for revisions of the Draft Advisory and description of next steps would follow.

Respectfully Submitted:

*/Signed/ Holly Stallworth*

Certified as True:

*/Signed/ Larry Goulder*

Chair