Inside the Black Box of Science Advisory Committee Empanelment

bridges vol. 25, April 2010 / Pielke's Perspective

By Roger A. Pielke


Roger A. Pielke, Jr.

In my graduate seminar on science and technology policy, I have developed a unit focused on the empanelment of scientific advisory committees. The empanelment process - that is, the selection and appointment of committee members to advise policy makers - is a largely unstudied aspect of science policy, but one with significant importance for understanding the role of expertise in decision making and the intersection of science and politics.

In the United States, science advice has flourished in government. In 1950 approximately 350 scientists advised the federal government, but by 2003 approximately 8,000 scientists served on about 400 federal advisory committees. In addition, more than 6,000 scientists advise the government through committees of the National Research Council, established in 1918 to expand government access to scientific expertise.

Who chooses these advisors? And through what process?

Answers to these questions are not easy to come by, because the empanelment process has long been out of sight, even for close observers of science policies. However, the obscurity of empanelment decision making changed dramatically during the administration of George W. Bush when administration officials asked prospective advisory committee members about their politics, including whom they had voted for in the previous election. It was hard to avoid the impression that the Bush Administration was trying to "stack" its advisory committees with experts who held friendly ideological or political perspectives.

The Bush administration's efforts led to more attention being paid to the empanelment process, especially by its political opposition. This trend has continued. For instance, after the University of East Anglia appointed an independent committee to review issues associated with the release of emails from climate scientists, a member of that committee (Phil Campbell, editor of *Nature*) was forced to resign when critics of the review discovered earlier comments he had made on Chinese State radio in support of the East Anglian researchers

at the focus of the inquiry, and then called into question his objectivity. Similarly, in recent weeks and months the UK has seen a number of high-profile resignations from a drug advisory committee over alleged politicization of their advice and the government's handling of the committee. For better or worse, the empanelment process is now a political battlefield.

To give my students a sense of what happens in the empanelment process, I ask them to serve as empanelers in a class project to create a hypothetical science advisory committee in the area of climate science. The subject area for the unit really does not matter, so long as there is readily available information on prospective panelists. In other years I have used endangered species as a focus.

The rules of the assignment are:

- the students can pick anyone in the world;
- the committee to be empaneled must be a "science arbitration" panel as described in my book, *The Honest Broker*. A science arbitration panel focuses on questions that can be addressed empirically, including consideration of associated areas of uncertainty and ignorance, using the methodologies of science;
- the focal area for this assignment is "physical climate science," as represented by Working Group I of the Intergovernmental Panel on Climate Change;
- the committee may have no more than 12 members.

I divide the class into three groups, and each is to present a proposed committee and write an accompanying press release. The students in my course this term come from a range of disciplines - chemistry, geology, atmospheric science, sociology, anthropology, environmental studies, policy, and journalism - and are highly qualified for their role as empanelers. In fact, if history is a guide to the future, then some of these students will be helping to empanel expert committees in just a few years.

The purpose of the hypothetical committee that they are empanelling is to stand ready to respond to questions posed by policy makers, nationally and internationally, about physical climate science. Consistent with the notion of "science arbitration," questions about "what to do" are not part of the purview of the committee. As a lead-up to the assignment, we discussed guidelines for empanelling such a committee, as recommended to the Obama Administration by the Bipartisan Policy Center in a report produced in 2009. However, the class groups were free to choose whomever they wanted and to justify those selections however they'd like.

Midway through the assignment, I asked the students to present their prospective list of committee members for discussion in the class. This year the three groups presented a total of 67 potential committee members

across the three groups and, rather remarkably, no scientist appeared on more than one group's list.

The three groups began by taking very different approaches to the exercise. One group began by trying to assemble a committee that would "motivate action on climate policy" even though advocacy was outside the mandate of the committee. They selected people for their political orientation and perceived credibility with key stakeholder groups more than for their expertise. Group two chose a different path, relying mainly on scientists with a career track record of serving on such committees, but also including a few new faces. This group also had politics in mind, but was much more subtle. For instance, they decided to avoid scientists who expressed skepticism regarding the overarching consensus on climate science as put forth by the IPCC. Group 3 took yet another route to empanelment and focused on creating a "balanced" committee with skeptical scientists and those who endorsed the IPCC consensus.

The proposed committees enabled a rich and interesting discussion. We asked ourselves questions such as: What sort of scientific judgments should the empanelers make? Should outlier views be included, or not? How should balance among gender, race, or nationality be addressed? Is balance of any sort desirable? Is it possible to ignore panelists' political and policy preferences? Is it desirable to ignore those preferences? The ways such questions are answered will lead to vastly different committees with different memberships.

The process of eliciting expert advice through scientific advisory committees has a long and distinguished history. However, as science becomes more politicized, a better understanding of the empanelment process and the resulting legitimacy of advice will become ever more important in effectively marshalling expertise in service of decision making.

You can see the results of my students' work this term here:
http://rogerpielkejr.blogspot.com/2010/04/climate-science-advisory-dream-teams.html

***

Roger Pielke, Jr. is the former director of the Center for Science and Technology Policy Research (2001-2007). He has been on the faculty of the University of Colorado since 2001 and is a professor in the Environmental Studies Program and a fellow of the Cooperative Institute for Research in the Environmental Sciences (CIRES).