

**U.S. Environmental Protection Agency
Science Advisory Board
Illegal Competitive Advantage (ICA) Economic Benefit (EB) Advisory Panel**

Summary Minutes of Public Conference Call Meeting¹
July 12, 2004

Committee/Panel: Illegal Competitive Advantage (ICA) Economic Benefit (EB) Advisory Panel of the U.S. Environmental Protection Agency's Science Advisory Board (SAB). (See Roster - Attachment A.)

Date and Time: July 12, 2004, 10:00 am to 12:00 noon Eastern Time (See Federal Register Notice - Attachment B).

Location: Via conference call from Washington, DC

Purpose: The purpose of this public conference call meeting is to provide background information for the Panelists on the issues in preparation for the advisory activity. The Panelists are to: a) discuss the charge, review and background materials provided to the Panel, b) discuss specific charge assignments for the Panelists, and c) advise the Office of Enforcement and Compliance Assurance (OECA) of any specific points that may need clarification for the August 5 & 6 advisory meeting. (See Meeting Agenda - Attachment C.)

Attendees: Panel members who were present include the following: Drs. A. Myrick Freeman, Dallas Burtraw, Michael Hanemann, Catherine L. Kling, Arik Levinson, Clifford Russell, Michael A. Salinger and David Sunding (See Attachment A); Panel members Drs. Mark Cohen and Jane V. Hall were unavailable. Dr. K. Jack Kooyoomjian (Designated Federal Official - SAB Staff) and Dr. Vanessa Vu, SAB Staff Office Director; Mr. Randy Hill, Deputy Director, Office of Regulatory Enforcement (ORE) and Mr. Jonathan Libber, Senior Attorney and BEN/ABEL Coordinator of ORIA, were present. Members of the interested public present included Mr. James Conrad and Mr. Robert (Bob) Fuhrman with the American Chemistry Council; Mr. Benjamin (Ben) Geman, Inside EPA; Mr. Edward (Ed) Herbert, National Ready Mix Concrete Association, Inc., and Mr. Jonathan S. Scheftz, Industrial Economics, Inc. (IEc).

¹ NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by the SAB Panelists during the course of deliberations within the meeting. Such ideas, suggestions and deliberations do not necessarily reflect definitive consensus advice from the Panelists. The reader is cautioned to not rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters or reports prepared and transmitted to the EPA Administrator following the public meetings.

Meeting Summary:

The meeting followed the issues and general timing as presented in the meeting Agenda, except where otherwise noted (see Meeting Agenda - Attachment C and marked-up Agenda - Attachment H). There were no written comments submitted to the Panel. However, public comments were verbally conveyed during the meeting, and are summarized below.

Welcome and Introductions: Dr. K. Jack Kooyoomjian, Designated Federal Officer (DFO), opened the meeting at approximately 10:05 am with identification of the participants logging into the call and with opening remarks. He introduced himself as the DFO for the ICA EB Advisory Panel, explained the purpose of the call, indicating that this Panel operates under the requirements of the Federal Advisory Committee Act (FACA) and is chartered to conduct business under the SAB Charter. He explained that, consistent with FACA and with EPA policy, the deliberations of the ICA EB Advisory Panel are conducted in public meetings, for which advance notice is given. He advised that the Panel may choose to conduct a technical editing session on their Advisory, and that may or may not be open to the public, depending on the logistics involved. He explained that he is present to ensure that the requirements of FACA are met, including the requirements for open meetings, for maintaining records of deliberations of the ICA EB Advisory Panel, and making available the public summaries of meetings, as well as providing opportunities for public comment. Dr. Kooyoomjian also commented on the status of this advisory panel's compliance with Federal ethics and conflict-of-interest laws and following the Panel Formation Process, as well as determinations made by the SAB staff and others pertaining to confidential financial information protected under the Privacy Act, and that each panelist has complied with all these provisions, that there are no conflict-of-interest or appearance issues for any Panel members, nor was any individual needing the granting of waivers or any recusals. He also advised that the biosketches of each Panelist are posted on the SAB website, and hard copies will be provided and the August 5 & 6, 2004 meeting in Washington, DC.

Dr. Kooyoomjian highlighted the review and background materials which had been provided to the Panel and noted that a complete set of materials was available for public access at the IEc website (www.indecon.com), and that there is additional background material, including the Federal Register notices pertaining to the invitation for nominations to the Panel and the announcement of the public meetings, as well as the Panel selection memo on the SAB website. He reminded panelists that contacts with the Agency or public during the Committee deliberative phase (i.e., prior to production of a consensus draft report) should involve the DFO, and while the Panel members may communicate with one-another, it is advisable to provide copies of all communications to the DFO to keep him in the loop, for communication with the other Panelists and for record-keeping purposes.

Dr. A. Myrick Freeman, Panel Chair, provided brief introductory remarks at approximately 10:10 am welcoming the Panelists (Roster, Attachment A), and briefly reviewed the meeting agenda (Attachment C). Dr. Vanessa Vu, SAB Staff Office Director made some brief welcoming remarks to the Panel. Dr. Freeman then introduced Mr. Randy Hill to provide

the Panel and the participants with the regulatory context of this request for an advisory to the SAB. Mr. Hill provided a brief background on the Illegal Competitive Advantage (ICA) concept, starting with the issuance of EPA's Policy on a framework on civil penalties in 1984 (See Attachments E-5 and E-6). Recapture of economic benefits is the cornerstone of the Agency's penalty assessment program. There are three types of economic benefits 1) Delaying costs of compliance, 2) avoiding costs of regulation, and 3) benefit derived from gaining an Illegal Competitive Advantage (ICA). It is the latter component that the Agency wishes to enter into dialogue with the Panel for more fully exploring the ICA issue. Of critical interest to the Program Office is how the Agency might pursue and refine the economic methodology to better understand how to implement the ICA issue.

Mr. Hill pointed out that there are very few cases that have applied the ICA concept. In fact, there is only one unreported decision from 1984 until 1996. Since 1996, judges in about 10 EPA cases have applied the ICA concept, but usually in the simplest forms, such as the sale of an illegal product. There have been three State decisions where the judges applied the ICA concept, but only in the simplest form. We are here before the SAB's ICA EB Advisory Panel to engage in an SAB Advisory to obtain some guidance on possible approaches to take in addressing these types of cases in the ICA realm.

Dr. Freeman asked if the Agency's guidance on civil penalties applies to the states. Mr. Hill responded that there is no need for the states to comply with the federal policy and practices. Mr. Hill indicated that Mr. Jonathan Libber is the main point of contact within the Agency on this topic, and that the Panel advisory is intended to focus on the economic methodology issues that goes beyond avoided or delayed costs. He then introduced Mr. Libber for an overview of the EPA's White Paper and Charge to the Panel.

Overview of the EPA's White Paper and Charge to the Panel: Mr. Libber discussed the circumstances regarding the compliance and non-compliance scenarios. Mr. Libber explained the role of the BEN model in calculating avoided or delayed costs when there were no differences in the in the revenue streams between two scenarios. BEN prompts a series of questions which are intended to identify those cases where there are differences in the revenue streams and where the BEN calculation does not correctly estimate the gains from non-compliance.

A discussion followed on Charge Questions 1-4. The Agency's Office of Regulatory Enforcement (ORE) is committed to coming up with an approach for calculating the benefits, and there is a concern and desire to articulate the benefits appropriately, to calculate the benefits fairly and to capture all the relevant components without double-counting the benefits.

Mr. Libber noted that the purpose of this SAB Advisory is to develop some standard approaches for identifying and calculating economic benefit derived from the ICA situations. He advised that ICA is a loose term that refers collectively to economic benefit that goes beyond delayed and avoided costs, and that EPA is very open to suggestions for approaches to this area, including such things as clarification of terminology. OECA's goal is to develop and refine the

standardized approaches that come out of this SAB Advisory and to apply them on a routine basis in appropriate enforcement actions.

Mr. Libber gave an overview of the Agency's OECA White Paper that is the subject of this Peer Review. He explained the nature of the economic benefit, comparing and contrasting the benefit derived from the typical BEN situation of avoided or delayed costs, as compared to the ICA type of economic benefit that goes beyond avoided or delayed costs. While the fundamental definition of economic benefit is essentially the same, he explained the difference between the net present values of the compliant, on-time and noncompliant delayed scenarios. In the BEN cases, the revenues that the violator obtains in either scenario are essentially the same, and they consequently cancel each other out. This allows the Agency to derive the benefit from the costs that would have been different had the violator been in compliance. In the ICA type of cases, these revenues obtained by the violator in the two scenarios do not cancel each other out, and thus BEN's simplifying paradigm does not work.

Mr. Libber further offered examples of the differences between these BEN and ICA types of cases. In the BEN type cases, all the revenues were obtained regardless whether the defendant violated the law. In the ICA type cases, there is no way some or all of that revenue could have been obtained, unless the defendant violated that law, such as selling DDT on the black market to pesticide applicators. The White Paper identifies four categories of ICA cases, providing background for each category, linking each category to the screening question in the BEN program, and providing examples and counter-examples in each category to illustrate the issue. The last section in the White Paper suggests an approach for calculating the ICA benefit for each category.

Mr. Libber then presented the four charge questions as follows:

1. Are there categories of cases that would be useful for the Agency to consider in calculating the ICA economic benefit, other than those that are identified in the White Paper? Should any of these be combined?
OECA Comment: While OECA is comfortable with the categories in the White Paper, they may have missed some types of cases, and there may be a better way to categorize the cases that are in the White Paper.
2. How can the Agency more accurately characterize the types of cases that are described in the White Paper? Have any of the examples and counter-examples in the White Paper been misidentified with regard to whether they are amenable to the BEN model's simplifying paradigm?
OECA Comment: Perhaps the categories, while they make sense, could be better described and explained.
3. Are there any suggestions for modifying the described analytical approach to calculate the economic benefits, and;

OECA Comment: OECA is committed to coming up with the calculation approaches that make sense and is very interested in the Panel's views on the proposed calculation approaches.

4. The Agency's proposed approach strives to avoid double-counting of the benefit by laying out all relevant cash flows stemming from the violations, as opposed to simply adding on the additional calculations to a BEN run. What additional measures (if any) should the Agency put in place to avoid such potential double-counting?

OECA Comment: The Agency's concern is that we calculate the benefit fairly. The 1984 policy's cornerstone is to recapture economic benefit, and we want to make sure that we recapture all of it. However, we also want to be sure that we do not recapture more than the benefit.

Panel Discussion of the Charge Questions: After the overview presentation on EPA's White Paper and the Charge to the Panel by Mr. Libber, Dr. Freeman requested that we go "round-the-table" so to speak and have each Panelist introduce themselves briefly, indicating how they might relate to the topic under consideration by this Panel. Each Panelist present introduced themselves, explaining how they relate to the topic.

A discussion then followed pertaining to the charge questions and how we might best organize to deal with answering the charge questions or other issues that may arise in the course of this advisory activity. A discussion followed, and some of the points raised included the following:

Monitoring and the Probability of Getting Caught: One Panelist enquired regarding the issue of monitoring and the probability that a violator could be caught for the expected violation, and enquired as to Rules-of-Thumb that might be used in this area. Mr. Libber indicated that, to the best of his knowledge, the Agency does not collect that sort of information. There are various aspects to this issue pertaining to the assurance of getting caught, the size of the penalty, and the prompt assurance of punishment. Such requirements would require considerable information and documentation which may not be available. It was the sense of the Panel that the issue of the role of probability of imposition of a penalty in determining the proper deterrent penalty needs further examination. Additionally, the Panel Chair indicated that we might need a paragraph or two in our report to discuss this matter even though it is not part of our charge.

Purpose of the ICA: Other cases were discussed, such as pertaining to failure to properly register for a particular service, and where the advantage might include selling the product in advance of a required product registration in order to make inroads into the market ahead of the competition. Other examples of non-compliance were discussed such as pertaining to wetlands issues, illegal removal of catalytic converters, a company boosting output and discharges to a publically-owned wastewater treatment plant, a situation where an oil company applied additives to its product, but failed to provide notification to the Agency as required by the Toxic Substances Control Act (TSCA), the case of trying to consciously capture an illegal market share, etc. If an additional category is identified, we need to decide what should be done

with it in reference to the charge.

Risk Reduction: It was asked by the Panelists if there are any potential cases where illegal actions might reduce risk to the firms. There may be situations where, for instance, someone uses an illegal pesticide that reduces the risk or variance of yield without increasing average yield. If the risk could be quantified, then it could potentially qualify as an ICA. The Panelists concluded that such a benefit would depend on the degree of risk aversion on the part of the residual income recipients.

Applicability of State Laws and the Charge to the Panel: In the discussions that followed, it was recognized that there are a variety of State laws, such as the Cartwright Act, which deals with an injury to competitors, but that the Panel is not charged to look at this area. Instead, the Panel is charged to look at giving advice on the economic science methodology for ICA. There are also quite different approaches to calculate profits. Mr. Libber of OECA stressed that the Agency is very pragmatic and looks for a bottom line on these activities that ultimately makes sense and is very practical.

Early Mover Market to Obtain an Illegal Market Share and Other Scenarios: A discussion followed on the need for practical advice to the Agency in order to identify the possible economic methodology approaches that the Panelists might suggest for such violations scenarios.

Public Comment:

At approximately 11:17 am, after the panel discussion on the charge questions, Dr. Freeman asked if there were any members of the public that wished to make any public comments. Mr. Ed Herbert of the National Ready Mix Concrete Association (NRMCA) asked to speak. He indicated that his organization represents about 40% of the firms that make concrete, but about 70% of the industry's output. He provided anecdotal commentary of the Agency having an appearance of directing more of their enforcement at the larger companies, instead of the smaller companies. He inferred that there are many others out there that are out of compliance, and he raised the issue of equity and fairness of treatment.

Dr. Freeman observed that this issue may also relate to the probability of detection, but it is outside of the charge to the Panel. Mr. Libber agreed with the public commenter that the smaller operators also need consistency in policy. He observed the long-range trend that the federal government tends to go after the bigger operators, leaning toward the practice of getting the "bigger bang for the buck," and more visibility, while at the State level, the practice tends to avoid the bigger employers and go after the smaller operators for violations. Some discussions followed on these points.

Dr. Freeman asked if anyone else wishes to raise any public comments at this time. The other participants from the public were identified and invited to comment, but deferred from making any comment at this time.

Open Discussion to Organize for Dealing with the Charge Questions:

At approximately 11:24 a.m., Dr. Freeman called for an open discussion on how to deal with the charge questions and assignments to the Panelists. Dr Freeman suggested a way to deal with the charge questions, namely to answer charge question #1, and then to pose the situational cases and apply charge questions #2, 3 & 4 to each category of cases mentioned in the White Paper. In addition, the OECA staff should provide additional case study information and use the time allocated in the proposed August 5 & 6, 2004 agenda (See Attachment D) to discuss the case study information. All panelists should bring their pre-meeting written materials to the August 5th and 6th meeting for sharing with their colleagues on the Panel.

The Panelists discussed how to grapple with this advisory topic in an organized fashion to deal with the advisory. A variety of topics were further discussed, including the probability of detection (which was recognized to be outside the charge, but could relate to the compliance issue), the need for consistency and fairness in application of the methodology for all the regulated community, including the smaller and larger operators, the need for exploring details on specific cases, such as the Louisiana Pacific case that was mentioned by Mr. Libber, the forming of teams to deal with the writing assignments, the need for more examples to look at hypothetical situations, and other topics.

In the discussions by the Panelists, they recognized that market structure is an important criterion with respect to cost advantages from illegal activity, such as early entry that could swing market share. It was the sense of the Panelists that market structure questions cut across the categories, where ICA related activities may result in injury to competition, and should be examined more closely. A discussion followed on how the Agency could more adequately characterize the types of situations where the market is more or less competitive as a result of ICA-related activities. The Panelists looked for categories and situations that might be clustered and characterized, such as selling products in an early entry stage which would be prohibited by law, the initiation of construction prior to approval (with respect to costs & revenues), and other situations which were characterized as “early mover cases.” The Panel thought that they may need to look at a larger time frame for reference in some of these cases. Other examples were offered by the Panelists, such as a cable company locking in an exclusive service on an island, etc.

What follows in the action items is a summary of the detailed list of activities agreed to, with assignments made to the Panelists. Drs. Hall and Cohen were unable to participate, and were assigned Action Item #7, dealing with Category of Cases #4, where a violator operates at a higher capacity than it should have. The detailed action items follow this discussion.

Panel Writing Assignments and General Discussion on Schedule:

With guidance from the Chair, the Panelists worked out the details of the writing assignments, and these are captured in the action Items that follow (see below). Dr. Kooyoomjian briefly touched upon the August 5 & 6, 2004 agenda, and referred to the

September 22 public conference call that has been advertised in advance in the June 25, 2004 Federal Register notice (See Attachment - B) for reaching closure of the draft advisory. He noted that we not know at this time the exact nature of the activity which is reserved for the September 22 public conference call, but that we anticipate it may be a closure discussion to prepare the first public draft advisory on the topic. The action items agreed to after the discussions by the Panelists are summarized as follows:

Action items:

1. Case Materials:

A. OCEA Staff: Jonathan Libber will provide case study information to be a part of the OECA presentation time at the August 5 & 6, 2004 face-to-face meeting. Additionally, he plans to highlight practical judicial proclivities, for instance, on how judges actually approach the problem of penalty assessment in the cases, as contrasted to the liability issues.

Assigned to: OECA Staff (Libber et al)

B. The Panel requested a copy of the article dealing with details and highlights of the Louisiana Pacific Case and the Prevention of Significant Deterioration (PSD) Issue from the OECA Staff.

Assigned to: OECA Staff (Libber et al)

2. Pre-Meeting Written Materials Need to be Prepared for the August 5 & 6, 2004 Face-to-face Meeting:

Each panelist will bring some written material on some aspects of the Charge Questions assigned, below or on comments they wish to make on the other Charge Questions or cross-cutting issues to the August 5 & 6, 2004 face-to-face meeting in Washington, DC.

Assigned to: All

3. Charge Question #1:

Are there categories of cases that would be useful for the Agency to consider in calculating the ICA economic benefit, other than those that are identified in the White Paper? Should any of these be combined?

Assigned to: Cathy Kling (lead), Dallas Burtraw

4. Category of Cases #1 - Violator Gains Additional Market Share:

Consider Charge Questions 2, 3, and 4 in the context of this category

Assigned to: Michael Hanemann

5. Category of Cases # 2 - Violator Sells Products or Services Prohibited by Law:
Consider Charge Questions 2, 3, and 4 in the context of this category
Assigned to: Michael Salinger
6. Category of Cases #3 - Violator Initiates Construction or Operation Prior to Government Approval:
Consider Charge Questions 2, 3, and 4 in the context of this category
Assigned to: Cathy Kling
7. Category of Cases #4 - Violator Operates at Higher Capacity Than It Should Have:
Consider Charge Questions 2, 3, and 4 in the context of this category
Assigned to: Jane Hall (lead), Mark Cohen
8. Implications of Market Structure for Estimating Economic Gains:
Assigned to: David Sunding (lead), Michael Salinger, Arik Levinson
9. Consideration of Probability of Detection in Setting Deterrent Penalties:
Assigned to: Cliff Russell (lead), Michael Hanemann

There being no additional items to discuss, Dr. Freeman adjourned the Panel at 11:50 am.

The Panel will reconvene as planned on August 5 & 6, 2004 in Washington, DC for its face-to-face public meeting.

Respectfully Submitted:

Certified as True:

_____/s/_____
K. Jack Kooyoomjian, Ph.D.
Designated Federal Official

_____/s/_____
A. Myrick Freeman, Chair
ICA EB Advisory Panel

List of Attachments

- A Roster of ICA EB Advisory Panel
- B Federal Register Notice (Vol 69, No. 122, pages 35599-35600, June 25, 2004)
- C July 12, 2004 Public Conference Call Proposed Meeting Agenda (dated July 6, 2004 and contains proposed charge)
- D August 5 & 6, 2004 Proposed Agenda (dated June 25, 2004 and contains proposed charge)

- E Panelist Review and Informational Materials: June 17, 2004 Package for Each Panelist which contains the following:
 - E-1 Cover memo to each Panelist from K. Jack Kooyoomjian, dated June 17, 2004
 - E-2 The Proposed Charge
 - E-3 The OECA White Paper entitled “*Identifying and Calculating Economic Benefit That Goes Beyond Avoided and/or Delayed Costs,*” May 25, 2003, US EPA/OECA
 - E-4 BEN User’s Manual, U.S. EPA, September, 1999
 - E-5 Policy on Civil Penalties: EPA General Enforcement Policy #GM - 21, US EPA, dated Feb 16, 1984 and
 - E-6 A FRAMEWORK FOR STATUTE-SPECIFIC APPROACHES TO PENALTY ASSESSMENTS: IMPLEMENTING EPA’S POLICY ON CIVIL PENALTIES, EPA GENERAL ENFORCEMENT POLICY #GM - 22 US EPA, Feb 16, 1984
 - E-7 Shefftz, Jonathan S., “*Wrongful Profits: Setting the Record, and the Concept, Straight,*” Environmental Reporter, Vol. 35, No. 1, 01/02/2004, BNA, Inc. Wash, DC

- F Informational Memo to Panelists entitled “Proposed Agendas, and Follow-up on the Review and Informational Material for the Illegal Competitive Advantage (ICA) Economic Benefit (EB) Advisory Panel Review Activities (Also referred to as the ICA EB Advisory Panel, or simply as “the Panel”):
 - F-1 Cover Memo to Each Panelist explaining each item that was e-mailed on June 17, 2004, and providing current Proposed Agendas
 - F-2 ICA EB Adv Panel Proposed Agenda for July 12, 2004 (dated June 25, 2004)
 - F-3 ICA EB Adv Panel Proposed Agenda for Aug. 5 & 6, 2004 (dated June 25, 2004)

- G ICA EB Advisory Panel Correspondence, June 22 thru July 12, 2004
- H Marked up Agenda for July 12, 2004 Conference Call
- I DFO Notes from July 12, 2004 Conference Call