

***Response to Wall Street Journal Editorial of June 12th, 1996***  
***by Frederick Seitz***

Frederick Seitz's op-ed of June 12, "A Major Deception on 'Global Warming'" wrongly accuses both the Intergovernmental Panel on Climate Change (IPCC) and a member of the climate science community of violation of procedure and deception. Not only does he thereby demonstrate ignorance of both the topic and the IPCC process, but his actions reflect an apparent attempt to divert attention away from the scientific evidence of a human effect on global climate by attacking the scientists concerned with investigating that issue.

Dr. Seitz discusses editorial changes made to Chapter 8 of the 1995 IPCC report on the science of climate change. The chapter in question evaluates the scientific evidence from many studies that have attempted to detect 'unusual' change in the Earth's climate, and determine whether some portion of that change is due to human activities. Dr. Seitz claims that the alterations made to Chapter 8, after a November 1995 IPCC meeting held in Madrid, were in violation of IPCC rules of procedure, and that their effect is to "deceive policy makers and the public into believing that the scientific evidence shows human activities are causing global warming". Similar claims of procedural improprieties have been made by the Global Climate Coalition (GCC), a consortium of industry interests. These claims conjure visions of sinister conspiracies that are entirely unfounded.

All IPCC procedural rules were followed in producing the final, now published, version of the Chapter 8. The changes made after the Madrid IPCC meeting in November 1995 were in response to written review comments received in October and November 1995 from governments, individual scientists, and non-governmental organizations. They were also in response to comments made by governments and non-governmental organizations during plenary sessions of the Madrid meeting. IPCC procedures *required* changes in response to these comments, in order to produce the best-possible and most clearly-explained assessment of the science.

There has been no dishonesty, no corruption of the peer-review process and no bias — political, environmental or otherwise. Seitz claims that the scientific content of Chapter 8 was altered by the changes made to it after the Madrid IPCC meeting. This is incorrect. The present version of Chapter 8, in its Executive Summary, draws precisely the same "bottom-line" conclusion as the original Oct. 9th version of the chapter — "Taken together, these results, point

towards a human influence on climate". A statement conveying the same message was endorsed unanimously by the governments of the 96 IPCC countries represented at the Madrid meeting.

The pre- and post-Madrid versions of the chapter are equally cautious in their statements. Uncertainties have not been suppressed. Roughly 20% of Chapter 8 is devoted to the discussion of uncertainties in estimates of natural climate variability and the expected "signal" due to human activities.

The deletions quoted by Seitz relate to the difficulties involved in attributing climate change to the specific cause of human activities, and to uncertainties in estimates of natural climate variability. These issues are dealt with at great length in the published chapter. The basic content of these particular sentences has not been deleted.

Dr. Seitz is not a climate scientist. He was not involved in the process of putting together the 1995 IPCC report on the science of climate change. He did not attend the Madrid IPCC meeting on which he reports. He was not privy to the hundreds of review comments received by Chapter 8 Lead Authors. Most seriously, before writing his editorial, he did not contact any of the Lead Authors of Chapter 8 in order to obtain information as to how or why changes were made to Chapter 8 after Madrid. He also did not contact either Prof. Bert Bolin, the Chairman of the IPCC, or those in charge of the report, the Co-Chairmen of IPCC Working Group I, Sir John Houghton and Dr. L.G. Meira Filho, in order to determine whether IPCC rules of procedure had been violated by the changes made to Chapter 8.

Scientists examine all items of evidence before drawing conclusions. They generally avoid making pronouncements outside their own areas of expertise. Seitz has failed on both counts, and his conclusions are incorrect. We urge readers of the Wall Street Journal to read the IPCC report ("Climate Change 1995: The Science of Climate Change", Cambridge University Press, 1996). They will see for themselves that, as required by and stated in and IPCC procedural rules, the detection chapter is a "comprehensive, objective and balanced" review of the science.

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*(This reply appeared in the June 25th edition of the Wall Street Journal. It was not published in its entirety. The following three sentences were deleted from the final paragraph: "Scientists examine all items of evidence before drawing conclusions. They generally avoid making pronouncements outside their own areas of expertise. Seitz has failed on both counts, and his conclusions are incorrect." The full list of the names and affiliations of the signatories of the reply was also removed.)*

***Response to "Energy Daily" article of May 22nd, 1996  
by Dennis Wamsted***

We would like to respond to an article that was published in *Energy Daily* on May 22, 1996. The article, by Dennis Wamsted, was entitled "Doctoring The Documents?" and deals with alleged improprieties on the part of the Lead Authors of Chapter 8 of the 1995 Report by Working Group I of the Intergovernmental Panel on Climate Change (IPCC). This Report is a comprehensive assessment of the scientific information on climate change, involving hundreds of scientists worldwide. The chapter in question evaluates the scientific evidence from studies that have attempted to detect significant climate change and determine whether some portion of that change can be attributed to human activities.

Mr. Wamsted's article relies on information from the Global Climate Coalition, which he characterizes as "a group of U.S. businesses opposing immediate action to reduce greenhouse gas emissions". The Global Climate Coalition alleges that:

- Unauthorized changes were made to Chapter 8 ("The key document outlining the scientific backing for global climate change has been rewritten without proper authority", writes Mr. Wamsted).
- Scientific uncertainties were suppressed (The revised chapter, according to Mr. Wamsted, "soft-pedals the uncertainties". He further asserts that "The only remaining uncertainty, the revised chapter contends, is the magnitude of the (human-induced) change").

Mr. Wamsted then gives a number of specific examples that purportedly support these serious allegations. We show below that these allegations are baseless.

At the beginning of October 1995, a draft of the Summary for Policymakers (SPM), together with all eleven chapters of the 1995 IPCC Working Group I Report, was circulated to governmental and non-governmental participants of an IPCC meeting that was to be held in Madrid from November 27-29th, 1995. The primary goal of the Madrid meeting was to modify where necessary, and then formally approve the SPM, and to accept the eleven scientific chapters. The circulated chapters were dated October 9th, 1995.

It is true that changes were made to Chapter 8 after the Madrid meeting. However, *these changes did not circumvent procedural rules*. As is required by IPCC procedures, changes were made in direct response to:

- Written comments made by governments and non-governmental organizations (NGOs) during October and November 1995;
- Comments made by governments and NGOs during the plenary sessions of the Madrid meeting. These comments helped to identify specific problems with the clarity of the text of Chapter 8, leading to misinterpretation of some of the scientific statements. Such problems were a natural outcome of the difficulties encountered in conveying complex scientific ideas to lay persons.

Post-Madrid changes to Chapter 8 were made solely in response to review comments and/or in order to clarify scientific points. None of the changes were politically motivated. The suggestion by the Global Climate Coalition that this was the case is entirely wrong. All revisions were made with the sole purpose of producing the best-possible and most clearly-explained assessment of the science, and were under the full scientific control of the Convening Lead Author of Chapter 8.

Did the changes alter the substance of the scientific conclusions of Chapter 8, as the Global Climate Coalition has alleged? The answer is categorically no. The evaluation of the scientific evidence in Chapter 8 was the same before and after the Madrid meeting. The bottom-line assessment of the science in the Oct. 9th version of Chapter 8 was "Taken together, these results point towards a human influence on climate". The final assessment in the now-published Summary for Policymakers is that "the balance of evidence suggests that there is a discernible human influence on global climate". The latter sentence, which is entirely consistent with the earlier Oct. 9th sentence, was unanimously approved at the Madrid meeting by delegates from nearly 100 countries.

Did the Lead Authors of Chapter 8 engage in "scientific cleansing" as the Global Climate Coalition have alleged, and purge material that would have tended to highlight uncertainties? Here, too, the answer is no. Over *four-and-a-half pages* of Chapter 8 are specifically devoted to the discussion of uncertainties in estimates of natural climate variability and the expected "signal" due to human activities. The remaining text abounds with caveats and discussions of other uncertainties.

Uncertainty is an integral part of the climate change detection and attribution problem, and the discussion of uncertainty is an integral part of the main text and executive summary of Chapter 8. Mr. Wamsted could not be further from the truth with the claim that “The only remaining uncertainty, the revised chapter contends, is the magnitude of the change”. The only plausible explanation for this statement is that Mr. Wamsted had not read the published version of Chapter 8 before writing his article, and relied solely on information supplied by the Global Climate Coalition.

A major concern of the Global Climate Coalition, reports Mr. Wamsted, is that the "Concluding Summary" (Section 8.7) in the Oct. 9th version of Chapter 8 has now been removed. The Oct. 9th version of Chapter 8 was the only chapter in the 1995 IPCC WG I report to have both an executive summary up front and a concluding summary. After receiving much criticism of this redundancy in October and November 1995, the Convening Lead Author of Chapter 8 decided to remove the concluding summary. About half of the information in the concluding summary was integrated with material in Section 8.6. It did not disappear completely, as the Global Climate Coalition has implied. The lengthy Executive Summary of Chapter 8 addresses the issue of uncertainties in great detail — as does the underlying Chapter itself.

Clearly, it is beyond the scope of this letter to give the full scientific justification for each of the changes Mr. Wamsted mentions. Chapter 8 deals with a complex scientific issue, and it is easily possible to consider individual changes out of the scientific context in which they occur. One crucial example highlights the problem.

Mr. Wamsted, apparently using the Global Climate Coalition’s analysis of Chapter 8 as a source, quotes the following sentences from the Oct. 9th version of Chapter 8:

“Finally, we come to the most difficult question of all: When will the detection and unambiguous attribution of human-induced climate change occur? In the light of the very large signal and noise uncertainties discussed in this Chapter, it is not surprising that the best answer to this question is, ‘We do not know’.”

He then contrasts this with the corresponding statement in the now-published chapter:

“Finally, we come to the difficult question of when the detection and attribution of human-induced climate change is likely to occur. The answer to this

question must be subjective, particularly in the light of the large signal and noise uncertainties discussed in this chapter. Some scientists maintain that these uncertainties currently preclude any answer to the question posed above.”

Unfortunately, Mr. Wamsted’s quote ends here, thus conveying the erroneous impression that “We do not know” has been swept under the carpet. Had he continued, he and his readers would have received a more balanced impression of the changes made. In fact, the next sentences read as follows:

“Other scientists would and have claimed, on the basis of the statistical results presented in Section 8.4, that confident detection of a significant anthropogenic climate change has already occurred. As noted in Section 8.1, attribution involves statistical testing of alternative explanations for a detected observed change, and few would be willing to argue that completely unambiguous attribution has already occurred, or was likely to happen in the next few years”.

Why were changes made here? Throughout the text of Chapter 8, “detection” and “attribution” are defined and handled separately. Detection involves showing that some observed climate change is unusual, while attribution is the process of demonstrating cause and effect. The Oct. 9th statement quoted above lumped detection and attribution together. This was clearly confusing to some of the participants at the Madrid meeting. The revision considers detection and attribution *separately* in trying to answer the “when can we expect” question. This is more in line with the rest of the chapter. *The changes are a more accurate reflection of the currently diverse scientific opinion* — some scientists say we’ve already detected significant climate change, others say that we can’t claim detection at present, and both sides concur that unambiguous attribution hasn’t happened yet.

The Global Climate Coalition — a less than disinterested party — has made serious allegations regarding the scientific integrity of the Lead Authors of Chapter 8, and of the IPCC process itself. We are troubled that Mr. Wamsted did not consult with the Lead Authors of Chapter 8 or with members of the IPCC Working Group I Technical Support Unit before writing his article. Had he done so, he would have gained a better understanding of how and why changes were made to Chapter 8.

Finally, we refer to an alternative assessment of the full 1995 IPCC Second Scientific Assessment by the World Energy Council. Like the Global Climate Coalition, the World Energy Council is also a consortium of energy interests. The similarity ends there. The World Energy Council and Global Cli-

mate Coalition reach very different conclusions regarding the scientific balance of the post-Madrid version of Chapter 8, and the extent to which it accounts for important uncertainties. We are encouraged that the World Energy Council makes the following statements regarding the 1995 IPCC report:

“It is important that commentators on the IPCC SAR’s discussion of human influence on global climate do not run ahead of the evidence and of what the SAR actually says, and *fail to note sufficiently well the references to ongoing uncertainty*” (emphasis added).

“The IPCC’s reputation rests upon its scientific objectivity, excellence and balance and it must not run ahead of the game if its reputation is to be safeguarded. *The careful reader will judge the IPCC’s SAR to have retained scientific integrity*” (emphasis added).

The published version of Chapter 8 is the best possible evaluation of the *evolving* scientific evidence. It was produced by a process that rigorously adhered to the procedural guidelines laid down for the production of IPCC reports and to the scientific principles of openness, honesty and peer review. We would encourage Mr. Wamsted and others to read Chapter 8 and form their own opinions on the scientific justification for its conclusions, and not to rely solely on views espoused by the Global Climate Coalition.

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