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1530 P STREET, NORTHWEST
WASHINGTON, D. C. 20005-1910

OFFICE OF THE PRESIDENT

VIA TELEFAX

November 30, 1989

Jesse Ausubel
Carnegie Commission on Science,
Technology, and Government
The Rockefeller University
Box 234
1230 York Avenue
New York, New York 10021

Dear Jesse:

Here are my comments on the draft report of the Environment and Energy Task Force. They focus on one major point, which overlaps what I take to be the thrust of item #6 in your memo of 16 November.

Every report on environmental issues that I've ever seen makes a point concerning the paucity of relevant and reliable fundamental knowledge. The lack of adequate fundamental knowledge 1) compromises evaluation of the significance of the parameters that are measured and 2) sorely diminishes the ability to undertake sound ameliorative measures. Yet neither the subject draft nor much else I have seen sufficiently emphasizes the need for new knowledge. Even item #6 in your memo seems to emphasize secondary rather than primary research efforts in ecology, broadly defined. Such a definition should include research on living things as well as work on oceans, climate, and so forth. Look, for example, at Table 1. The only research effort mentioned is to promote agricultural research. Yet, we know that only minimal amounts are spent on fundamental plant biology. I would argue that plant research must be done in the context of environmental questions, rather than in the context of agriculture. Thus, even were all the recommendations adopted, it would not likely lead to a substantial increase in the necessary basic research absent a major independent decision to enhance such activities. No one item in the listed recommendations stresses this.


Jesse their
November 30, 1989
Page 2

One aspect of this report (and others) that underscores my point is the anthropocentric view of the environmental issues. The focus is on humans, their health, their 'adaptation.' But should there be some critical organism within an ecosystem that is particularly sensitive to one aspect of environmental conditions, humans and many other organisms could be seriously affected.

I believe that we need a major new research thrust in ecology, preferably with international cooperation, but the United States must make a serious commitment on its own. The "War on Cancer" had a lot of flaws, but the fact is that understanding of cancer has increased enormously in the last 15 years. That 'War' concerned itself with fundamental research, not with policies, or strategies, or delivery of health care. The fundamental knowledge is now being applied in health policy and care. The same could be true for environmental problems.

Bruce Ames has recently written that "environmentalism is rapidly becoming an anti-science, anti-technology movement." Such a dismal slide will continue unless hard facts are acquired to undergird policy. I hope that the Commission's report can be revised to make clear the need for a major new research effort.

Sincerely,


Maxine F. Singer

MFS:sdb