Committee on Interagency Radiation Research and Policy Coordination

FIRST ANNUAL REPORT

June 30, 1985

Alvin L. Young, Chairman

The Committee on Interagency Radiation Research and Policy Coordination is chartered through the Federal Coordinating Council for Science, Engineering and Technology (FCCSET), Office of Science and Technology Policy, Executive Office of the President, Washington, D.C. 20506.

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I. Introduction

This is the first annual report of the Committee On Interagency Radiation Research and Policy Coordination (CIRRPC). CIRRPC was established on April 9, 1984, by Dr. George A. Keyworth, II, Science Advisor to the President and Director of the Office of Science and Technology Policy (OSTP). CIRRPC replaced the Committee on Interagency Radiation Policy and was assigned responsibilities of the former Interagency Radiation Research Committee and former Radiation Policy Council. CIRRPC is chartered under the Federal Coordinating Council for Science, Engineering and Technology (FCCSET). Its overall charge is to coordinate radiation matters between agencies, evaluate radiation research, and provide advice on the formulation of radiation policy.

Dr. Keyworth, Chairman of FCCSET, appointed Dr. Alvin L. Young as chairman of CIRRPC; and federal agencies having specific responsibilities or interest in radiation research and/or policy were invited to be represented on the Committee. Subcabinet and senior policy level representatives and senior scientists from member agencies constitute CIRRPC and its scientific component designated as the Science Panel. There are 18 CIRRPC member agencies at this time, with the majority having members on both the Policy and Science Panels. Figures 1 & 2 illustrate the organization of CIRRPC and a listing of member agencies and their representatives is shown in the Appendix.

The CIRRPC management body is the Executive Committee composed of Dr. Alvin L. Young (OSTP), Chairman; Mr. Charles L. Elkins (EPA), Vice Chairman; Mr. A. Bryan Siebert, Jr. (DOE), Executive Secretary; Dr. Randall S. Caswell (DOC), Chairman, Science Panel; Dr. Marvin Rosenstein (HHS), Vice Chairman, Science Panel; and Dr. Lawrence B. Hobson (VA), Executive Secretary, Science Panel. Also supporting CIRRPC is Bruce W. Church from the DOE who is the Technical Assistance Director and the Oak Ridge Associated Universities' (ORAU) staff which provides technical assistance through the Executive Secretariat: Anthony H. Ewing, ORAU/CIRRPC Program Director, William A. Mills, ORAU/CIRRPC Senior Technical Advisor.

II. Background

The Federal Radiation Council (FRC) was formed as a cabinet level body in 1959 by Executive Order 10831 followed by Public Law 86-373. The FRC was to "...advise the President with respect to radiation matters, directly or indirectly affecting health, including guidance to all federal agencies in the formation of standards...." For approximately 10 years the FRC carried out functions of coordination, recommending federal guides and publishing reports on national radiation issues. However, with the establishment of the Environmental Protection Agency (EPA), under Reorganization Plan No. 3 of 1970, the FRC was disestablished and its functions transferred to the Administrator of EPA.

The 1970s was a period of significant increase in public awareness of radiation matters and passage of legislation to address radiation issues. With the abolishing of the FRC, an apparent lack of effective coordination developed between federal agencies in the area of radiation protection policies and related research. This situation was noted by the General Accounting Office (GAO), Congress, and others. In early 1980, President Carter, in recognition of the problem, established two interagency groups by Executive Order. These were the Interagency Radiation Research Committee (IRRC) to consider research matters, and the Radiation Policy Council (RPC). The IRRC proved to be effective; however, the RPC appeared unable to significantly improve policy coordination. In view of the continuing need, Senator John Glenn introduced legislation in 1982 that would have created a Federal Council on Radiation Protection and a Federal Conference on Research into the Biological Effects of Radiation. At hearings on this bill, it was the position of the Administration that the purpose of the bill could be achieved by the formation of a body similar to the present CIRRPC under OSTP. The Committee on Interagency Radiation Research and Policy Coordination was established under FCCSET to meet this objective of policy coordination.

Regarding CIRRPC, Senator Glenn stated that he welcomed any coordination initiative by the Administration in radiation matters. Further, Chairman Fuqua of the House Science and Technology Committee said that CIRRPC "could play a very important role in coordinating and centralizing the efforts of the various agencies involved in radiation policy" and commended Dr. Keyworth for forming CIRRPC.

III. Major Achievements

The Committee on Interagency Radiation Research and Policy Coordination in its first year of operation has provided a unique and effective mechanism to coalesce policy guidance to federal agencies on several national issues of major concern; to help define national radiation issues of concern to member agencies, Congress, and other segments of society; and to represent, as appropriate, the Executive Branch with Congress.

Atomic Veterans Report

On November 8, 1984, Dr. Keyworth transmitted the CIRRPC Report (CIRRPC Science Panel Report No. 1) on the "VA Health Assessment of Veterans with Military Service at Sites of Temporarily Augmented Ionizing Radiation" to Mr. Walters, Administrator of Veterans Affairs. The Report concluded, "that it is highly unlikely that new or useful information regarding the health effects of radiation would result from the proposed epidemiological study of veterans exposed to radiation during military operations in Japan or at nuclear weapons tests."

Radioepidemiological Tables

On January 25, 1985, Dr. Keyworth forwarded to Secretary Heckler, HHS, the Science Panel Report on the draft Report of the National Institutes of Health (NIH) Ad Hoc Working Group to Develop Radioepidemiological Tables. In its report (CIRRPC Science Panel Report No. 2), the Science Panel concluded that the "report of the Ad Hoc Working Group is an excellent and scientifically responsible document which provides probabilities of causation on the basis of the current knowledge on radiation carcinogenesis in man." However, the Science Panel went on to observe "that there are several aspects of the report that require attention to define more clearly the limitations of the tables. An improved discussion of the uncertainties inherent to the PC calculation, and guidance concerning application of the radioepidemiological tables to high-LET radiations and internally deposited radionuclides are particularly important." In closing, the Panel advised that "To the extent that the Panel's concerns cannot be adequately expressed by the present Ad Hoc Working Group, it is suggested that they be considered by any future Working Group established to update the tables."

In its final report of January 4, 1985, the NIH Ad Hoc Working Group took into consideration many of the comments of the CIRRPC Science Panel. CIRRPC Science Panel Report No. 3 reviews this final report.

Senators Orrin Hatch (R. Utah) and Alan Simpson (R. Wyoming) requested that CIRRPC present testimony before the Joint Hearing of the Senate Labor & Human Resources Committee and the Subcommittee on Nuclear Regulation of the Committee on Environment and Public Works. The testimony, which was first coordinated with the member agencies, represented the official position of the Executive Branch on the report of the NIH Ad Hoc Working Group to Develop the Radioepidemiological Tables. The far-reaching consequences of the application of the Tables touches virtually all of the CIRRPC member agencies. The testimony expressed caution on their application and recommended further refinement, research, and reduction of the uncertainties in their calculations.

A policy subpanel has been established to consider potential impacts on federal activities and responsibilities resulting from using the Radioepidemiological Tables in injury compensation cases.

Issues Development

At the first meeting of CIRRPC on May 25, 1984, each of the then 15 member agencies was requested to respond to a questionnaire for identification of current radiation issues of concern to each agency. A similar request was also sent to the appropriate congressional committee chairmen and to national organizations concerned with radiation matters.

In December, 1984, the CIRRPC Executive Committee began a series of meetings with senior staff of each member agency. Specific matters affecting agencies' programs have been brought to light, problem areas identified, and invaluable insight gained into the major issues affecting federal government operations upon which CIRRPC must focus its attention.

The information developed during these visits will be the basis for an issues document to be completed in the fall of 1985. The following issues were identified most often by the respondents. This list does not indicate an order of priority.

- Radiation Risk Assessment/Probability of Causation
- U.S. Population and Worker Exposure to Radon Progeny
- Radiation Protection Standards and Regulations
- High-LET Radiation
- Radiation Measurement, Recording, and Control
- Radiation Education and Awareness
- Radioactive Wastes
- Levels Below Regulatory Concern
- Efficacy and Safety of Radiation Processes
- Non-Ionizing Radiation

Scientific Talent Pool

The CIRRPC Talent Pool, created to provide consultants to the various CIRRPC Science Subpanels, has a database of approximately 400 experts in a wide-range of radiation-related fields. Nominations to the Talent Pool were made by the staff of member agencies, state organizations, and other non-federal organizations involved in radiation issues.

Retrospective Dosimetry Informational Meeting

On May 17, 1985, over seventy representatives of member agencies and their contractors attended the first major CIRRPC educational/informational meeting held to provide member agencies with background on the multi-agency program to reconstruct radiation doses which individuals could have received from the nuclear weapons atmospheric testing programs of the 1950s and 1960s. Speakers were drawn from the Defense Nuclear Agency, DOE and its National Laboratories, the National Cancer Institute, the University of Utah, and the National Council on Radiation Protection and Measurements.

Summary

CIRRPC has brought together some of the most qualified scientific talent in the federal government in the area of radiation health effects to assist in formulating federal policy on radiation matters. To date, two important issues have been

so addressed and efforts begun to address other complex scientific issues.

Not immediately apparent is the equally important impact CIRRPC has had on the ability of the federal agencies to manage radiation research. This has been brought about by valuable and productive dialogue at the senior policy and senior scientific levels, and a focusing within each member agency on those issues of special interest. Not since the Federal Radiation Council has the level of interagency communication on radiation matters been as effective or has the Executive Branch had available the consensus of top government scientists on which to base well-informed policy positions.

IV. Year in Review

To review the past year chronologically, the following is an outline of the major events:

April 9, 1984—Dr. George A. Keyworth, II established CIRRPC to coordinate radiation matters between agencies, evaluate radiation research, and provide advice on the formulation of radiation policy.

May 25, 1984—First Policy Panel meeting was held consisting of representatives from USDA, DOC, DOD, DOE, HHS, DOI, DOL, DOS, DOT, EPA, NASA, VA, NRC, NSC, OMB. (Subsequently, DOJ, FEMA, and HUD became members.)

May 25, 1984—Press Release issued announcing formation of CIRRPC.

June 12, 1984—First Science Panel Meeting planned the strategy for addressing the VA Health Assessment of Atomic Veterans and the NIH Ad Hoc Working Group Report on the Radioepidemiological Tables and requested the identification of radiation issues.

July 30, 1984—Oak Ridge Associated Universities was advised to begin work as the technical assistance contractor.

September 4, 1984—The CIRRPC Secretariat Office was opened at 1346 Connecticut Avenue, N.W., Washington, DC.

October 8, 1984—Dr. Young addressed the Annual Meeting of the Atomic Industrial Forum Conference on Radiation Protection.

November 8, 1984—The CIRRPC Report on the VA Health Assessment of Atomic Veterans was forwarded to Administrator Walters by Dr. Keyworth.

December 10, 1984—Dr. Young addressed the Annual Conference of the American Nuclear Society.

January 16, 1985—The Policy Panel approved the creation of a subpanel on the metrication of radiation units.

January 25, 1985—Dr. Keyworth transmitted the CIRRPC Report on the draft Report of the NIH Ad Hoc Working Group to Develop the Radioepidemiological Tables to Secretary Heckler.

March 1985 through May 1985—The Science Panel formed five subpanels to (1) review the January draft of the Radioepidemiological Tables; (2) consider the Scientific Basis for Radiation Protection Standards; (3) review Radon Protection and Health Effects; (4) monitor developments on Risks of High-LET Radiation; (5) evaluate the research agenda on Radiofrequency Health Effects; and (6) study how the Science Panel might address a radiation research agenda.

May 17, 1985—The CIRRPC Retrospective Dosimetry Informational Meeting was conducted for the benefit of member agencies.

May 20, 1985—Dr. Young addressed the 17th Annual Meeting of the Conference of Radiation Control Program Directors, Inc. Members are drawn from all state goverments.

December 1984 through June 1985—The Executive Committee met with member agencies to develop the issues which they consider of primary concern with regard to radiation policy and research. The Department of Housing and Urban Development, a recent member, will be visited in the summer of 1985.

June 11, 1985—Dr. Young presented testimony on the CIRRPC views on the January 4, 1985 report of the NIH Ad Hoc Working Group to Develop Radioepidemiological Tables before a Joint Senate Hearing of the Committee on Labor and Human Resources and the Subcommittee on Nuclear Regulation of the Committee on Environment and Public Works.

June 13, 1985—The Policy Panel approved the charter and membership of a policy subpanel on the impact of the application of the Radioepidemiological Tables.

V. The Year Ahead

In the year to come, CIRRPC will build on the solid foundation established during its first year. Experience to date indicates that the major activities will focus around the following five science issues, two policy issues, one charter responsibility, and a major independent study by the National Council on Radiation Protection and Measurements.

Science Subpanels

Radon Protection and Health Effects

The Executive Committee on February 7, 1985, agreed to establish a science subpanel on radon protection problems and health effects. Approval of objectives and approaches was obtained by memorandum of February 19, 1985. The Subpanel charter was presented to CIRRPC on June 13, 1985, with Dr. Aurel Goodwin (DOL) identified as Chairman. The Subpanel will develop a federal consensus on scientific issues regarding environmental radon exposure, with particular emphasis on the magnitude of health risks, the assessment of national exposures, and the state of knowledge regarding abatement measures. A report is being prepared for the August 12, 1985 Science Panel Meeting.

High-LET Radiation

The Executive Committee on February 7, 1985 and the Science Panel on March 11, 1985 agreed with the need to establish a science subpanel on High-LET radiation. Concurrence of the Policy Panel was obtained by memorandum of February 18, 1985. Dr. Bruce Wachholz (HHS) was chosen as Chairman on April 18, with the task of defining a proposed charter which would include monitoring of on-going scientific assessments of such groups as National Council on Radiation Protection and Measurement (NCRP), National Academy of Sciences (NAS), National Research Council's Committee on the Biological Effects of Ionizing Radiation (BEIR), International Commission on Radiation Protection (ICRP), Department of Energy (DOE); and to survey research on relative biological effectiveness (RBE). Information on the Subpanel was presented to CIRRPC on June 13, 1985.

Research Agenda for Radiofrequency Health Effects

In response to a request from EPA, on April 25, 1984, a science subpanel was formed under the chairmanship of Dr. Ross Adey (VA) to review existing research programs on radiofrequency health effects and to define appropriate research

needs. The approval of CIRRPC was obtained by memorandum of May 3, 1985. The information is to be made available to EPA by September of 1985.

Radioepidemiological Tables

In response to requests from the VA on November 3 and December 11, 1984, a science subpanel was established with Dr. J.W. Thiessen (DOE) as Chairman, on March 11, 1985.

Having completed its reviews and comments on the draft and final Reports of the NIH Ad Hoc Working Group to Develop Radioepidemiological Tables, the Subpanel is currently examining the Tables to assess the potential utility of employing the Tables in some fashion to adjudicate veterans' compensation claims for radiation injury. No firm target date for the completion of the Subpanel's report has been established, but initial drafting is expected to be completed in late summer.

Scientific Basis for Radiation Protection Standards

The Scientific Panel on January 18, 1985, recommended the formation of a subpanel on this issue. The Executive Committee agreed with the formation of such a subpanel and approval of the subpanel was obtained from the Policy Panel by memorandum of February 19, 1985. Dr. William A. Mills (NRC) was appointed Chairman on March 11, 1985. However, he subsequently retired from government service and a new Chairman, David E. Janes (EPA), has been appointed. The immediate task of this Subpanel is to examine the scientific basis of the system of dose limitation recommended by the International Commission on Radiological Protection in Publication 26 (ICRP-26). This ICRP-26 is the basis being used or considered by national and international agencies in reviewing present radiation standards to protect radiation workers and members of the general public. No completion date for the initial effort by this Subpanel has been established.

Policy Subpanels

Metrication of Radiation Units

By memorandum of January 19, 1985, the Chairman of CIRRPC established a policy subpanel on SI Metric Radiation Units, under the chairmanship of Dr. David T. Goldman (DOC) with the following charter:

- Define the metrication issue with emphasis on radiation-related units.
- Define and evaluate metrication alternatives and the policy implications and/or impact.
- Submit a final report with recommendations for CIRRPC position on the issues as well as recommended position for the United States to espouse in international forums.

The Subpanel's report is expected to be circulated for approval early in the fall of 1985.

Policy Impact of the Radioepidemiological Tables

By memorandum of April 15, 1985, the Chairman of CIRRPC established a policy subpanel to consider the policy impacts of the Report of the NIH Ad Hoc Working Group to Develop the Radioepidemiological Tables and their applications to the Federal Government's operational, regulatory, and legislative activities. Dr. Richard Wagner (DOD) is Chairman. A final report is expected in the late fall of 1985, which will recommend specific actions relative to the report's findings.

Ad Hoc Subpanel on How to Address a Radiation Research Agenda

During the early part of the next year, an ad hoc subpanel of the Science Panel will consider how to address the following provision set forth in CIRRPC's Charter: "...Science Panel will assist the Committee in preparing an appropriate research agenda on selected radiation issues...." The ad hoc subpanel, chaired by Dr. Marvin Rosenstein (HHS), is expected to present recommendations in July of 1985.

Assessment of Radiation Exposure to the U.S. Population

At the CIRRPC meeting on June 13, 1985, a proposal was presented and accepted to contract with the National Council on Radiation Protection and Measurements over the next fifteen months to develop an assessment of the radiation exposure to th U.S. population. In the initial stages, this effort will augment and accelerate several studies cur-

rently underway at NCRP. In its entirety, up to six separate studies will be combined to provide a comprehensive and authoritative report on radiation exposures in the United States. The project will examine and evaluate present sources and exposures, project trends, and compare various types of sources to provide an overall exposure assessment. The report is scheduled to be completed for review by the end of FY 1986, with expected publication as an NCRP Report in 1987.

VI. CIRRPC Reports

During its first year, CIRRPC has issued three reports, two of which concern the draft and final Report of the NIH Ad Hoc Working Group to Develop the Radioepidemiological Tables. The other was a report on the "VA Health Assessment of Veterans with Military Service at Sites of Temporarily Enhanced Ionizing Radiation." As is the policy of CIRRPC, these reports were prepared at the request of the member agency concerned and were transmitted to the heads of those agencies.

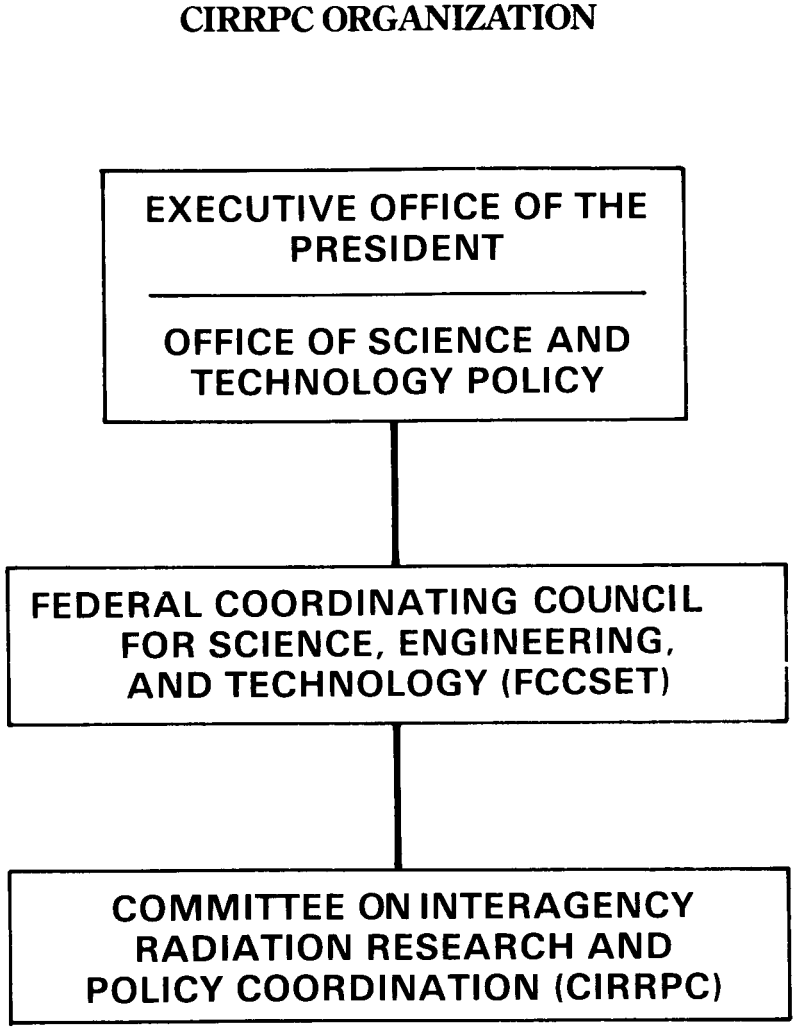

Figure 1: CIRRPC's Organizational Position in the Executive Branch

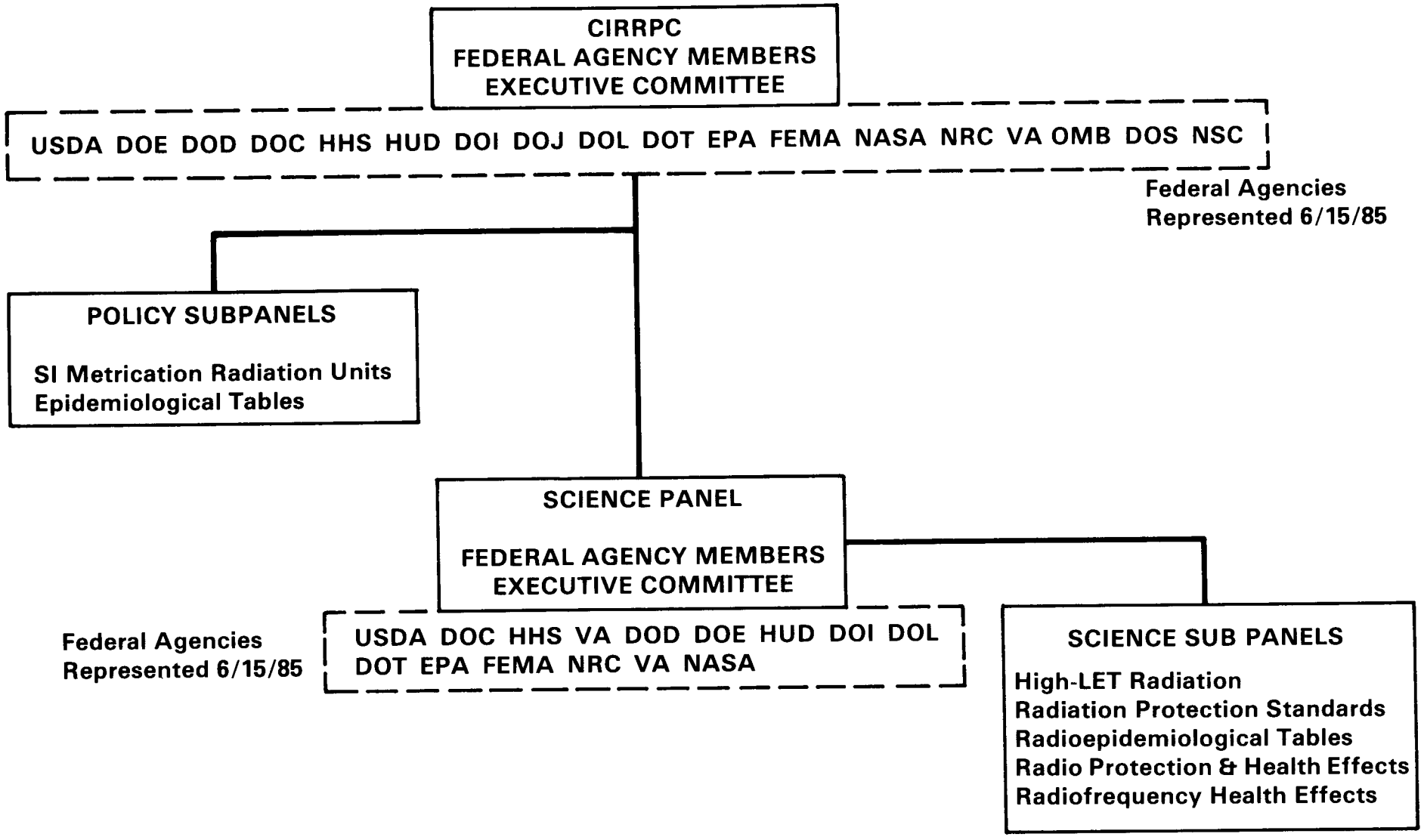

Figure 2: CIRRPC Organization

APPENDIX

MEMBER AGENCIES AND REPRESENTATIVES (including Subpanels)

*Denotes Science Panel Member

Chairman
Dr. Alvin L. Young
Office of Science and Technology Policy
Executive Office of the President

Vice Chairman
Mr. Charles L. Elkins
Environmental Protection Agency

Executive Secretary
Mr. A. Bryan Siebert, Jr.
Department of Energy

Chairman, Science Panel
Dr. Randall S. Caswell*
Department of Commerce

Vice Chairman, Science Panel
Dr. Marvin Rosenstein*
Department of Health & Human Services

Executive Secretary, Science Panel
Dr. Lawrence B. Hobson*
Veterans Administration

Department of Agriculture
Dr. Mary E. Carter
Dr. James O. Lee, alt.
Dr. Jane Roben*
Dr. Ronald E. Engel*, alt.

Department of Commerce
Mr. Raymond Kammer
Dr. Randall S. Caswell* (and alternate to Policy Panel)
Mr. Charles Eisenhauer*, alt.

Department of Defense
Dr. Richard L. Wagner, Jr.
LTG Richard K. Saxer, USAF, alt.
Dr. Lawrence S. Myers, Jr.*
LTC Carl Stroud*, alt.

Department of Energy
Dr. Alvin W. Trivelpiece
Dr. James F. Decker, alt.
Dr. J.W. Thiessen*

Department of Health & Human Services
Mr. John C. Villforth
Dr. Marvin Rosenstein, alt.
Dr. Gilbert W. Beebe*
Dr. Bruce W. Wachholz*, alt.

Department of Housing and Urban Development
Mr. Richard H. Broun
Mr. James L. Christopulos*

Department of Interior
Mr. James F. Devine
Dr. Clement F. Shearer, alt.
Mr. Allan B. Tanner*

Department of Justice
Mr. Robert Willmore
Mr. Jeffrey Axelrad, alt.
Mr. Donald Jose, alt.

Department of Labor
Mr. Thomas Shepich
Dr. Aurel Goodwin* (and alternate to Policy Panel)
Mr. Sheldon R. Weiner*

Department of State
Dr. Charles Newstead

Department of Transportation
Dr. Frank Hassler*

Environmental Protection Agency
Mr. Charles L. Elkins
Mr. Sheldon Meyers, alt.
Mr. David E. Janes*

Federal Emergency Management Agency
Mr. Bernard A. Maguire
Mr. David McLoughlin, alt.
Dr. David Bensen*
Mr. Carl R. Siebentritt, Jr.*, alt.

National Aeronautics & Space Administration
Mr. Harry Sonneman
Mr. Leven Gray, alt.
Dr. Paul Rambaut*

Nuclear Regulatory Commission
Mr. Robert Minogue
Mr. John G. Davis, alt.
Mr. Robert E. Alexander*

Veterans Administration
Mr. Donald L. Ivers
Mr. Robert Coy, alt.
Dr. James J. Smith*
Dr. Ross Adey*, alt.

Office of Management & Budget
Mr. Michael J. Horowitz

National Security Council

Science Subpanel on Radioepidemiological Tables
Dr. J.W. Thiessen, DOE (Chairman)
Dr. Lawrence S. Myers, Jr., DOD
Dr. Bruce W. Wachholz, HHS

Science Subpanel on Radon Protection and Health Effects
Dr. Aurel Goodwin, DOL (Chairman)
Mr. James L. Christopulos, HUD
Mr. Ronald Colle, DOC
Mr. Wayne Lowder, DOE
Dr. Frank Lundin, HHS
Dr. Neal Nelson, EPA
Mr. Allan B. Tanner, DOI
Mr. Ralph Wilde, NRC

Science Subpanel on High-LET Radiation
Dr. Bruce W. Wachholz, HHS (Chairman)
Mr. J. Joseph Coyne, DOC
Dr. Lawrence S. Myers, Jr., DOD
Dr. Stuart Nachtwey, NASA

Science Subpanel on Scientific Basis for Radiation Protection Standards
Mr. David Janes, EPA (Chairman)
Dr. John Boice, HHS
Mr. Elmer Eisenhower, DOC
Dr. Robert G. Thomas, DOE

Science Subpanel on Research Agenda for Radiofrequency Health Effects
Dr. Ross Adey, VA (Chairman)
Mr. David Janes, EPA
Dr. Elliot Postow, DOD
Dr. Moris L. Shore, HHS

Policy Subpanel on the Radioepidemiological Tables
Dr. Richard L. Wagner, Jr., DOD (Chairman)
Mr. Robert Brittigan, DOD
Mr. Richard Staufenberger, DOL
Mr. Robert Willmore, DOJ
Mr. Richard J. Riseberg, HHS

Policy Subpanel on Metrication
Dr. David T. Goldman, DOC (Chairman)
CDR Tom Bell, DOD
Dr. Gordon Burley, EPA
Mr. Karl Goller, NRC
Mr. Robert W. Poe, DOE
Mr. Richard Rawl, DOT
Mr. Harry Sonneman, NASA
Mr. Richard Weinstein, NASA, alt.
Mr. Carl R. Siebentritt, Jr., FEMA