



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

June 20, 1989

CHAIRMAN

The Honorable John B. Breaux, Chairman
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

The Nuclear Regulatory Commission (NRC) has been working to complete an in-depth study of the risks of severe reactor accidents presented by five typical U. S. reactors. A draft report on this study (NUREG-1150, "Severe Accident Risks: An Assessment for Five U. S. Nuclear Power Plants"), was initially issued for public comment in February 1987. In response to the comments that were received, the report has been extensively revised. The second draft of NUREG-1150 is now nearing completion and should be available to the public late in June, 1989.

In view of the role that NUREG-1150 is expected to play in implementing NRC's severe accident policy, including our Individual Plant Examination program, the Commission in March 1989 decided that an objective, independent review of the second draft should be carried out and directed the Office of Nuclear Regulatory Research (RES) to establish a special nine-member committee for this purpose. The committee is expected to provide its views on the extent to which the second draft reflects the public comments previously received; the appropriateness of the proposed uses of the information contained in the report; and the technical adequacy of the methods, insights, and conclusions presented. We also directed that the membership of the committee, which will operate in accordance with the provisions of the Federal Advisory Committee Act, reflect a wide range of technical disciplines and viewpoints, both national and international. In response, the Director, Office of Nuclear Regulatory Research, nominated the individuals listed in Attachment 1 for membership on the committee. The Commission has reviewed and concurred in these nominations.

A notice is being published in the Federal Register informing the public of the establishment of this committee. In accordance with provisions of the Federal Advisory Committee Act, we will formally submit the committee's charter to the Congress two weeks after publication of the Federal Register notice. I have attached an advanced copy of the charter for your information.

We believe that the establishment of this independent review group will assist the Commission in finalizing NUREG-1150 and, ultimately, in resolving the issue of severe reactor accidents.

Sincerely,

Lando W. Zech Jr.
Lando W. Zech, Jr.

Attachments:
As stated

cc: Senator Alan K. Simpson

MEMBERSHIP ON SPECIAL REVIEW COMMITTEE FOR THE
SEVERE REACTOR RISKS REPORT

Dr. H.J.C. Kouts, Chairman
Brookhaven National Laboratory

Dr. George Apostolakis
University of California, Los Angeles

Dr. E.H. Adolf Birkhofer
Society for Reactor Safety (GRS), Federal Republic of Germany

Dr. Lars Hoegberg
Swedish Nuclear Power Inspectorate (SKI)

Dr. William Kastenberg
University of California, Los Angeles

Dr. Leo LeSage
Argonne National Laboratory

Dr. Norman Rasmussen
Massachusetts Institute of Technology

Dr. John Taylor
Electric Power Research Institute

Dr. Harry Teague
United Kingdom Atomic Energy Authority

UNITED STATES NUCLEAR REGULATORY COMMISSION

CHARTER

SPECIAL COMMITTEE TO REVIEW THE SEVERE ACCIDENT RISK REPORT

1. The committee's official designation: Special Committee to Review the Severe Accident Risks Report
2. The committee's objectives and the scope of its activity:

The committee shall report to and advise the Director of the Office of Nuclear Regulatory Research and through him the Commission, on the adequacy of the methods, insights, analyses and conclusions set forth in the April 1989 draft of NUREG-1150, Severe Accident Risks: An Assessment for Five U.S. Nuclear Power Plants. The Commission requires this information so as to ensure that the proposed regulatory uses of the information set forth in NUREG-1150 are appropriate. In particular, the committee shall provide its views on the following specific questions:

1. Does NUREG-1150 adequately reflect the comments made by the Kastenbergh review group (Nureg/CR-5113) given the uncertainties in data and models?
 2. Have the uncertainties associated with both front and back end analyses been adequately described in NUREG-1150? Is the use of expert elicitation appropriate in developing these uncertainties?
 3. To what extent should probabilistic risk assessment focus on the low probability tails of the accident frequency distributions? Is there an appropriate cut-off in terms of reportable accident frequencies?
 4. Do the methods, models and data used in NUREG-1150 suggest they could be used as standardized methods for preparing probabilistic risk assessments?
 5. Does the committee have any recommendations to make on the need for further improvement in probabilistic risk assessment methods?
3. The period of time necessary for the committee to carry out its purposes:

The Special Committee to Review the Severe Accident Risks Report is expected to complete its work within twelve months of the filing of its charter.

4. The agency or official to whom the committee reports:

The committee will report to the Director of the Office of Nuclear Regulatory Research and, as appropriate, through the Director to the Commission.

5. The agency responsible for providing the necessary support for the committee:

The U.S. Nuclear Regulatory Commission. The NRC's Office of Nuclear Regulatory Research will provide the necessary administrative support through a contract with the Brookhaven National Laboratory.

6. A description of the duties for which the committee is responsible:

The committee shall provide the Director of the Office of Nuclear Regulatory Research with a written report of its views and recommendations regarding the adequacy of NUREG-1150 focusing on the objectives described in paragraph 2 above.

7. The estimated annual operating costs in dollars and FTE staff years:

The estimated operating costs for this committee will be approximately \$300,000 and 0.5 FTE.

8. The estimated number and frequency of committee meetings:

It is estimated that the committee will hold four or five meetings.

9. The committee's termination date:

The committee will terminate one year from the date this charter is filed, subject to renewal by the Commission.

10. The date this charter is filed: _____.

John C. Hoyle
Advisory Committee Management Officer
U.S. Nuclear Regulatory Commission