

*20 R. 14 Part 20 158* SECRETARY



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D. C. 20545

OF RECORD COPY

DEC 22 1970

*K. O. M. 6. Reg*  
Chairman Seaborg  
Commissioner Ramey  
Commissioner Johnson  
Commissioner Larson

PROPOSED PROGRAM FOR CONSULTING WITH NUCLEAR INDUSTRY AND ENVIRONMENTAL GROUPS ON MORE DEFINITIVE CRITERIA FOR NUCLEAR POWER PLANT WASTE TREATMENT FACILITIES TO KEEP LEVELS OF RADIOACTIVITY IN EFFLUENTS AS LOW AS PRACTICABLE

In line with my recent discussions with the Commission, we are arranging a series of meetings in January 1971, with representatives of the nuclear power industry and environmental groups to discuss the feasibility of establishing more definitive criteria for design objectives for nuclear power plant waste treatment systems to keep levels of radioactivity in effluents as low as practicable. The proposed schedule for these meetings is as follows:

1. January 4 thru 15 - Separate meetings with each of the power reactor suppliers, that is, Atomics International, Babcock and Wilcox, Combustion Engineering, Gulf Atomic, General Electric and Westinghouse.
2. January 14 - A meeting is being scheduled with representatives from national environmental and conservation groups to discuss the implementation of NEPA, high level waste policy, and the amendments to Parts 20 and 50, including the development of more definitive criteria. This meeting was discussed in my memorandum to the Commission dated December 7, 1970. Attached as Appendix I is a list of the environmental groups that will be invited.
3. Week beginning January 17 - A group meeting will be held with the major architect-engineering firms in the power reactor field.
4. Week beginning January 24 - A meeting will be held with a select group of utilities.

Attached as Appendix II is a draft letter and a list of questions that we propose to send to the listed power reactor suppliers, architect-engineering firms and utilities (Appendix III) during the week of December 27. We propose to invite the new Environmental Protection Agency to send one or two observers to the group meetings.

*K. O. M. 6. Reg*

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Commissioners

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Based on information and views developed in these discussions, the staff will prepare draft criteria for Commission consideration. At that time the Commission may wish to consider whether additional consultation with interested groups is desirable prior to publishing the criteria for public comment.

We are discussing the public announcement aspect of this with the Division of Public Information. We plan to issue a public announcement generally covering all of the meetings at the same time the letters are sent out.

I would like to discuss this with the Commission at the December 23 Information Meeting.

( signed ) Harold L. Price  
Harold L. Price  
Director of Regulation

cc: General Manager (2)  
General Counsel (2)  
Secretary (2)

Attachments:

- Appendix I - List of Tentative Invitees - Environmental Groups
- Appendix II - Draft letter to power reactor suppliers, architect-engineering firms and utilities with list of questions
- Appendix III - List of Tentative Invitees - Power Reactor Suppliers, Architect-Engineers, and Utilities

APPENDIX I

LIST OF TENTATIVE INVITEES

ENVIRONMENTAL GROUPS

Dr. Fred G. Everden  
Executive Director  
Wildlife Society  
2900 Wisconsin Avenue, N.W.  
Washington, D.C. 20016

Mr. Thomas L. Kimball  
Executive Director  
National Wildlife Federation  
1412 16th Street, N.W.  
Washington, D.C. 20036

Mr. Richard H. Stroud  
Executive Vice President  
Sport Fishery Institute  
Suite 503  
719 13th Street, N.W.  
Washington, D. C. 20005

Mr. Allen V. Kneese  
Director, Quality of Environment  
Program  
Resources for the Future  
1755 Massachusetts Avenue, N.W.  
Washington, D. C. 20036

Mr. James N. Smith  
Director of Conservation Services  
The Conservation Foundation  
1250 Connecticut Avenue, N.W.  
Washington, D.C.

Mr. Stuart M. Brandborg  
Executive Director  
Wilderness Society  
729 15th Street, N.W.  
Washington, D.C. 20005

Mr. William Siri  
Vice President, Sierra Club  
235 Massachusetts Ave., N.E.  
Washington, D.C. 20002

Mr. Wallace D. Bowman  
Assistant Chief  
Environmental Policy Division  
Legislative Reference Service  
Library of Congress  
Washington, D.C. 20540

Isaak Walton League of America  
719 13th Street, N.W.  
Washington, D.C. 20005

Dr. Thomas Ripley  
Director of Forestry & Wildlife Services  
Division of Forestry  
Fisheries and Wildlife Development, TVA  
Norris, Tennessee 37827

Dr. Elvis J. Stahr, President  
National Audubon Society  
1130 Fifth Avenue  
New York, New York 10028

APPENDIX 11

DRAFT LETTER TO POWER REACTOR SUPPLIERS, ARCHITECT-ENGINEERING FIRMS,  
AND UTILITIES<sup>1/</sup> FOR MEETINGS ON MORE DEFINITIVE GUIDANCE - CONTROL OF EFFLUENTS

Dear \_\_\_\_\_:

Enclosed is a copy of a notice of rule making amending the Commission's regulations 10 CFR Parts 20 and 50, regarding the control of releases of radioactivity to the environment. These amendments were published in the Federal Register on December 3, 1970, and become effective on January 2, 1971.

As indicated in the notice, the Commission recognizes the desirability of developing more definitive guidance in connection with the amendments and is initiating discussions with the nuclear power industry, environmental organizations and other groups to achieve this goal.

During the first two weeks in January 1971, we plan to meet individually with each of the power reactor suppliers. At these meetings we propose to discuss the questions on the enclosed list which deal with existing technology for minimizing radioactivity in effluents, efficiencies of waste treatment equipment, equipment operating difficulties, cost, need for operating flexibility, and other subjects pertinent to criteria for design objectives. Enclosed also is a tentative agenda for the meeting.

You are invited to designate not more than \_\_\_\_ members of your organization to meet with us in Room No. \_\_\_\_ of the Commission's offices at Bethesda, Maryland, at 9:30 A.M., on January \_\_\_\_, 1971, to discuss

<sup>1/</sup>

To be modified as appropriate for each group meeting.

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the feasibility of developing definitive criteria on design objectives to limit radioactivity in effluents from nuclear power plants.

We shall appreciate your informing us of the names of your designated representatives.

Sincerely,

Harold L. Price  
Director of Regulation

Enclosures:

1. Notice of rule making
2. List of questions
3. Tentative agenda

### LIST OF QUESTIONS

1. In connection with the amendments to 10 CFR Parts 20 and 50 published in the Federal Register on December 3, 1970, do you believe it is desirable to develop more definitive criteria for design objectives for nuclear power plant waste treatment systems to keep levels of radioactivity in effluents as low as practicable?
2. If the answer to Question 1 is yes, would you favor:
  - a. Development of waste treatment equipment requirements; or
  - b. Development of numerical criteria?
3. If you favor more definitive criteria in terms of waste treatment equipment requirements, what would you propose on the basis of technology already in commercial use?
4. If you favor the development of numerical criteria, would it be in the form of:
  - a. quantity of radionuclides released?
  - b. concentrations of radionuclides in effluents at the point of release on-site?
  - c. concentrations of radionuclides in the environment?
  - d. annual exposures to individuals offsite?
  - e. average annual intake guides for population groups?
  - f. annual exposures to population groups offsite?
  - g. annual average exposure to the whole population (man rems)?
  - h. other? (specify)
5. If more definitive criteria were to be derived in any one of the above categories on the basis of available technology not yet in routine use, what equipment or numerical criteria would you propose as appropriate?



- 6.a. With expected higher power levels and power densities, do you believe that technology already in use can control routine releases of radioactivity from future nuclear power reactors at less than a few percent of the annual maximum limits specified in Part 20 and in license conditions?
- b. If not, why not?
- 7.a. As a result of further technological advances and of more experience with techniques already under development, do you believe that substantial further reduction of these releases can be obtained?
- b. If not, why not?
- c. If you believe that further such incremental reductions can be obtained, please be prepared to discuss:
- i. the process involved
  - ii. the media and nuclides involved
  - iii. the extent of the additional reduction expected
  - iv. the probable length of time before the process could be commercially feasible
  - v. the expected cost to the utility
  - vi. any expected problems with the process in plant operation that may increase risks inplant.

APPENDIX III

LIST OF TENTATIVE INVITEES

POWER REACTOR SUPPLIERS

1. Atomic International
2. Babcock and Wilcox
3. Combustion Engineering
4. Gulf Atomic
5. General Electric
6. Westinghouse



APPENDIX III

LIST OF TENTATIVE INVITEES

ARCHITECT-ENGINEERS

Mr. Harvey Brush, Vice President  
Bechtel Corporation  
Fifty Beal Street  
San Francisco, California 94119

Mr. George L. Morris, Vice President & Manager  
Power Plant Engineers Department  
Brown & Root, Inc.  
P. O. Box 3  
Houston, Texas 77001

Dr. S. Baron, Vice President, Engineering  
Burns and Roe, Inc.  
700 Kinderkamack Road  
Oradell, New Jersey 07649

Mr. L. F. C. Reichle, Vice President  
Nuclear Engineering and Special Projects  
Ebasco Services, Inc.  
2 Rector Street  
New York, New York 10006

Mr. W. A. Chittenden, Partner  
Sargent & Lundy  
140 South Dearborn Street  
Chicago, Illinois 60603

Mr. J. L. Kennedy, Chief Nuclear Engineer  
Stone & Webster Engineering Corporation  
225 Franklin Street  
Boston, Massachusetts 02107

Mr. Harold E. Vann  
Vice President - Power  
United Engineers & Constructors, Inc.  
1401 Arch Street  
Philadelphia, Pennsylvania 19105

Mr. Rubel Thomas  
Southern Services, Inc.  
P. O. Box 2641  
Birmingham, Alabama 35202

APPENDIX III

LIST OF TENTATIVE INVITEES

UTILITIES

<u>Region</u>	<u>Utility</u>
1. Northeast -----	Yankee Atomic Electric Company Philadelphia Electric Company Consolidated Edison Company
2. East Central -----	Consumers Power Company of Michigan
3. Southeast -----	Tennessee Valley Authority Duke Power Company Florida Power & Light Company
4. West Central -----	Commonwealth Edison Company Omaha Public Power District
5. South Central -----	Arkansas Power and Light Company
6. West -----	Los Angeles Department of Water and Power Pacific Gas and Electric Company Southern California Edison