NUTES OF THE ACRS SITE EVALUATION SUBCOMMITTEE MEETING Room 1046, 1717 H. Street, N.W.

Washington, D. C. 20555

December 20, 1979

ACRS-1704

Peb. 9, 1980

Feb. 9, 1980

The ACRS Site Evaluation Subcommittee met in Washington, D.C. to review recent policy changes and their implementation in the area of siting and emergency planning, to discuss possible ACRS report in the above areas, and to complete the Site Evaluation (including emergency planning) section of a draft of the Annual ACRS Report to Congress on NRC Reactor Safety Research. In the latter effort, attention was directed especially to research needed but not now planned). Notice of the meeting, with the agenda, appeared in the Federal Register, Vol. 44, No. 235, Wednesday, December 5, 1979. (Attachment A). A copy of the detailed schedule is included (Attachment B) A list of attendees is included (Attachment C). Copies of presentation slides and supporting documents are attached as noted below. A written comment was received from Mr. Aubrey V. Godwin, Director, Division of Radiological Health of the State of Alabama Department of Public Health. (Attachment D). Mr. Godwin also appeared at the meeting to made an oral statement.

Present were:

D. W. Moeller, Subcommittee Chairman

S. Lawroski, Member

J. C. Ebersole, Member

R. F. Foster, ACRS Consultant

F. A. Gifford, ACRS Consultant

A. Grendon, ACRS Consultant

J. W. Healy, ACRS Consultant

D. A. Orth, ACRS Consultant

F. L. Parker, ACRS Consultant

M. J. Steindler, ACRS Consultant

R. Wilson, ACRS Consultant

Ragnwald Muller, DFE

NRC Staff

Robert F. Abbey, Jr. Frank Congel Craig Roberts E. F. Conti Jerry Harbour Andrew T. Murphy

THIS DOCUMENT CONTAINS

POOR QUALITY PAGES

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Executive Session

Dr. Moeller asked the Subcommittee to review and comment on:

- (a) A draft report on Siting.
- (b) A proposed section on Siting Research for the RSR Report.

It was noted that the following background documents had been distributed:

- (a) A " Presidential Commission on the TMI Accident" Staff Report,
 Section II on Reactor Siting, dated October 31, 1979 (Attachment E).
- (b) A "Presidential Commission on the TMI Accident" Staff Report, Section III on Emergency Preparedness, dated October 31, 1979.
 (Attachment F).
- (c) A history of remote siting taken from an M. K. Udall memorandum, dated October 9, 1979 (Attachment G).
- (d) A discussion of Emergenc, Plans taken from the above Udall memorandum of October 9, 1979 (Attachment H).
- (e) Sections on Siting and Radiological Effects from the NRC Draft Action Plan in response to the President's Commission on the TMI Accident.
- (f) Comments received from the public on NURES (610 *Draft Emergency Action Level Guidelines for Nuclear Power Plants* (Sept. 1979)
 (Attachment I).
- (g) Letter from Baltimore Gas & Electric re NUREG 0610 (Attachment J).
- (h) Excerpt from SECY 79-216A (April 2, 1979) USNRC, Future Research
 Needs of the Nuclear Regulatory Commission (Attachment K).

Dr. Steindler noted that ANS will sponsor an executive conference on emergency planning in Texas in February.

The Federal Emergency Management Agency (FBMA) will take over lead responsibility for providing federal guidelines and for reviewing state and local emergency plans in accordance with President Carter's response to the Kemeny Commission report.

Meeting With NRC Staff

Dr. Frank Congel commented on the "Radioecological Assessment of the Wyhl Nuclear Power Plant" prepared by Faculty members of the University of Heidelberg, Germany: (NRC Translation 520).(Attachments L and M).

- (a) The Wyhl Report was referenced in the Honicker petition. It alleged that Reg. Guide 1.109 severely underestimated doses near nuclear plants.
- (b) A quick review (March 1979) indicated that the high dose estimates in the report were not supported by other studies.
- (c) A more thorough review was undertaken, is partially completed, and will be published as a NURES report in February.
- (d) Actual field measurements do not support models used to estimate doses in the Wyhl Report. (The Wyhl Report used the higher values of ranges of each one of the parameters found in the literature).
- (e) Particulates, especially strontuim and cesium, are principally the cause of the higher Wyhl Report doses.
- (f) Research is needed on how radionuclides are emitted into the environment.

Daniel R. Muller, NRC Staff, indicated that the Staff felt it would be feasible to have a proposed rule on siting in place in 270 days. The Staff has not focussed on the issue of multiple sites vs. multi-unit sites, though the advantages of each are recognized.

Jan Norris covered the Tasks in the Task Action Plan to implement Siting Policy Task Force Recommendations. These covered changes to Parts 100 and 50 and the eventual promulgation of a rule. A Staff objective is to eliminate dose calculations in determining the acceptability of a site under Part 100 and to transfer the dose calculations to design criteria in Part 50. NRC has no control mechanism over population or industry influx during the operating life of a plant. Mr. Norris' slides are Attachment N.

L. G. Hulman explained NRC plans for ARAC, the computer based system developed by DOE for tracking airborne radiation. Source terms can be determined by monitoring radiation and using meteorological estimates. Met tower data will be available at the Incidence Response Center. An alternate source of met data will be required. Dr. Gifford pointed out that elaborate computer technology does not necessarily guarantee better accuracy, especially where terrain is irregular. He felt each plant should have an independent minicomputer rather than to rely on a central large computer such as ARAC. Mr. Hulman agreed that the needed accuracy had not been identified, but greater accuracy than is available at the farther out distances is needed. Mr. Hulman's slides are Attachment(0).

Bob Abbey discussed the meteorological research program. The largest uncertainty is in trajectory calculations. He stated three objectives:

- (a) to evaluate wind field prediction models
- (b) to evaluate dispersion coefficients out to 50 miles
- (c) to evaluate precipitation scavenging.

This is a \$1.5 million program for which only \$100,000 is budgeted. Mr. Robert Jaske indicated there were plans in the Office of State Programs to install pilot ARAC installations at Indian Point, Zion, and Rancho Seco. These will replicate the installation at the NRC Emergency Operations Center. Their test use will determine how best to provide State decision makers with the information they need for emergency preparedness. It will prepare State officials to use computer-assisted results whether from ARAC or other systems.

Roger Blond (PAS) reviewed work on consequence modeling and risk assessment. He indicated that it was important for meteorologists to get involved with ARAC. Cost/benefit analyses of using potassium iodide as a protective measure, have just been completed. Mr. Blond's slides are Attachment P.

Mr. Markee indicated that there is a program at BNL to develop better meteorological instrumentation. It is a Technical Assistance Program.

David Aldrich of Sandia described the cost/benefit and risk/benefit analyses of using potassium iodide as a protective measure.

These studies were instigated by Commissioner Ahearne after Dr. Von Hippel at Princeton recommended to CEQ that KI be administered to persons at large distances (100-300 miles) from reactors. Cost estimates of 50 cents/dose were made for KI. Four degrees of seriousness of accidents were analyzed, with varying degrees of sheltering and/or evacuation assumed. Thyroid ablation and thyroid nodules were considered. At distances of 7 100 miles, the costs for pills would be 10 - 10 dollars per reduced thyroid damage case. Curves of the results were presented. (See Aldrich slides in Attachment P). Von Hippel and Beyea have reviewed the results and agree that unless the cost/dose can be reduced, the effectiveness of the drug is marginal even if their upper bound probability for core melt is assumed. (Commissioner Kennedy expressed an interest in the discussion of KI).

Brian Grimes reported that the Commission had approved a proposed rule on emergency preparedness which, among other things, requires NRC concurrence in state and local emergency plans, and requires that the public be instructed in the plan. (Attachment Q).

NRC has scheduled regional workshops in January, 1980. The 60 day comment period ends in February. FEMA will assume management responsibility for emergency planning. NRC and FEMA are working on a Memorandum of Understanding (MOU). Courses are being given to State and Local people at Battle Creek, Michigan. Mandatory evacuation is not envisioned in training exercises though voluntary evacuation may be. There is no plan for training utility

people, only for requiring that they be trained. Dr. Wilson observed that there is a need to establish who is in charge of what during an emergency. This includes utility people, state and local people, DOE people flown in to help, NRC people who appear on the scene, FEMA people, FDA people, EPA people, and others. Mr. Grimes reported that this was being worked out.

Mr. Ebersole observed that the operator does not now have clear authority to make a small release to prevent containment failure and thus avoid a much larger release.

Mr. Grimes covered public comment on NUREG 0610, (Attachment R) the Draft Emergency Action Level Guidelines. The AIF and twenty utilities felt that notifying local authorities for every ECCS initiation would be "crying wolf" too often. Dr. Steindler expressed concern that the public might be alerted to an event that required no public response, and the resultant worry might be worse than any consequences of a possible accident. Dr. Orth pointed out that evacuations can have serious consequences in themselves. It was indicated that an EPRI committee was meeting at this time to develop comments. Mr. Grimes indicated the States' comments were generally supportive.

Dr. Moeller requested that the consultants prepare written comments on the Federal Register Notice on Emergency Planning (Attachment Q) by early January.

Mr. Aubrey Godwin of the State of Alabama discussed problems the State has with emergency planning:

(a) Training local Civil Defense Coordinators is difficult. There are often frequent and unexpected turnovers of personnel.

- (b) The State staff needs to be more familiar with reactor systems in order to assess the impact of information received from utilities.
- ample: EPA/NRC Guidance in NURFG 0396 says make no special preparation with regard to particulates. A recently received book of scenarios from WASH 1400, NUREG/CR0388, contains a scenario with 11 million curies of particulates, another with 77 million curies). (Dr. Wilson noted that 20,000 curies of particulates were released at Windscale and no evacuation was required.) This release, however, was at elevated temperature through a tall stack.
 - (d) A method of dose estimation with particulates is not available.
 Something like Reg. Guide 1.145 for atmospheric dispersion is needed.
 Measuring particulates on large numbers of people is difficult.
 - (e) No data are available on which to base reentry plans. (Mr. Blond indicated that the choice of dose, between 1 and 50 rem in 30 years, is one that will have to be made by the decision makers on site for each incident). Mr. Godwin pointed out the desirability of making this choice in advance.
 - (f) Iodine pills do not come in useful dose units considering that a 3-day supply is desirable.
 - (g) A November 21, 1979 NRC letter on upgraded Emergency Plans (Attachment S) signed by Vassallo, requires the emergency plan to contain
 "a concept of operations from the perspective of each official

having a coordinating role." Another letter from James Miller, DOR, implies that the states would coordinate the marticipation of Federal agencies during an emergency response.

(h) A Technical and a Coordinating Function should be maintained with some continuity at State level.

Estimates of evacuation times depend on weather, traffic, and other factors and may be seriously in error.

Final Executive Session

Dr. Moeller asked for areas of research that could be suggested. Discussed were:

- (a) Methods of controlling migration of nuclides in groundwater.
- (b) Obtaining better data to predict emissions from tailings piles.
- (c) Radiation measuring instruments that do not have to be on continuously, but can be remotely interrogated and rugged enough to be dropped by helicopter.
- (d) Research on doses to be allowed prior to ordering evacuation.
- (e) Studies of past evacuations. (For example, the recent case of evacuation of 250,000 people in Canada.)
- (f) Site specific factors that may affect dose.
- (g) Needed weather prediction data inputs to ARAC.
- (h) Research on when reentry should be permitted.
- Determination of whether there is a threshold for thyroid modules.
- (j) Determination of data actually required by emergency planners.

The meeting was adjourned at 4:30 P.M.

A complete transcript of the meeting is on file at the NRC Public Document Room at 1717 H Street, N.W. Washington, D. C. or can be obtained from International Verbatim Reports, Inc. Suite 107, 449 South Capitol Street, S.W. Washington, D.C. 20002, 202/484-3550.

Administrator with respect to the hazarde of proposed or existing facilities and proposed operations and with west to the adequacy of proposed or existing safety standards, and shall perform such other duties as the Administrator may request.

Persuant to carrying out its statutory datios, the Panei reviews, evaluates, and advises on those program activities. systems, procedures and management policies that contribute to risk and provide identification and assessment of these for management. Priority is given to those programs that invoive the safety of manmed flight. Major subject will be the Space Shuttle Program.

Chairperson of the Panel is Mr. Herbert E. Grier. The contact for further information is Gifbert L. Roth, Special Assistant, Aerospace Safety Advisory Panel, 400 Maryland Avenue SW. Vashington, DC 20546. Phone. Area Orde 202 755-8380.

November 27, 1979.

Russell Ritchia.

Deputy Associate Administrator for External Reighous

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MUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Sefeguards, Subcommittee on Site Evaluation; Meeting

The ACRS Subcommittee on Site Evaluation will boid a meeting starting at \$30 a.m. on Thursday, December 20. 1979 in Room 1048, 1717 H SL, NW. Washington, DC 20555 to discuss siting and emergency planning research and NRC string poucy.

The Subcommittee will be considering portions of the budget and program of the Office of Nuclear Regulatory Research. Since the NRC budget proposeis are now part of the President's budget not yet submitted to Congress public disclosure of budgetary information is not permitted. See OMB Circular A-10. The ACRS however, is required by Section 5 of the 1978 NRC Authorization Act to review the NRC research program and budget and report the results of the review to Congress. In order to perform this review, the ACRS must be a bie to engage in frank discussion with members of the NRC Staff. For the reason had stated, a discussion would not be possible if held in public session.

I have determined, therefore, that it is necessary to close portions of this meeting to prevent frustration of this

espect of the ACRS' statetory responsibilities. In secerciance with Exemption #180 to the Government in the Semebine Act (522b(c)(9)(5)).

Purther information can be obtained by a prepaid telephone call to be Designated Federal Staployee for this meeting, Mr. Ragnweld Muller telephone 282/634 1413) between \$15 a.m. and MOO p.m. e.s.t.

Dated November 28, 1979. Into C. Hoyle, Advisory Committee Management Officer. TR Doc 79-1702 Ples 13-4-76 and one MALANS COOR 7809-41-46

OFFICE OF MANAGEMENT AND BUDGET

Office of Federal Procurement Policy

Contracting System for Medion Meture and Videotape Productions

ACENCY: Office of Federal Procurement Policy (OFPP), Office of Management and Budget.

ACTION Notice of issuance of contracting system for motion picture and videotape productions.

SUMMARY: OFFP Policy Letter No. 79-4 was issued on November 28, 1979 prescribing a uniform Government wide system for contracting for motion picture and videotape productions. The uniform system will be implemented by the General Services Administration and the Department of Defense through changes to the Federal Procurement Regulations and the Defense Acquisition Regulation. The Policy Letter, which is to become effective on lanuary 1, 1980. is set forth in Attachment 1 below. POR PURTHER IMPORMATION CONTACT: David F. Baker, Chairman, Federal Audiovisual Committee, 202/305-7207. Jesses D. Cursie,

Acting Administrator. November 28, 1979.

Policy Letter No. 79-4

To the Heads of Executive Departments and Establishments

Contracting for Motion Picture Productions and Videotape Productions

1. Purpose. This Policy Letter directs the establishment of a uniform Government-wide system for contracting for motion picture and videotape productions. It replaces Policy Letter 78-5 issued by the Office of Federal Procurement Policy (OFPP) on August 28, 1978.

2. Background. Beginning in the early 1970's various management studie, were made of the Government's audiovisual

contracting programs. These studies indicated widespread dissetts faction with the policies and procedures followed by Federal agencies and departments in contracting for the production of enthovironis, perticularly motion pictures. OPPP Policy Letter 78-5 corrected many of the motion picture contracting problems noted in the studies and established a Governmentwide system for contracting for motion pictures. Since the issuance of Policy Letter 78-5, members of the sudiovisual industry, Congress, and individual Federal agencies have ursed OFFP to develop a similar system for videotape productions. This policy letter responds to those suggestions and establishes a Government-wide system for both motion picture and videotape productions.

3. Policy. Executive agencies and departments shall use the uniform Government-wide system described in paragraph 7 below in contracting for motion picture and videotape productions. The uniform system is intended to:

a. Reduce waste and mefficiency inherent in many existing departmental and agency contracting procedures:

b. Ensure that the Government obtains quality motion picture and videotape productions at fair, competitive prices;

c. Provide a central point within the Government where producers can obtain information on motion picture and videotape contracting procedures and opportunities, and

d. Increase competition for Government contracts.

4. Implementation. The General Services Administration and the Department of Defense shall make such changes to the Federal Procurement Regulations and the Defense Acquisition Regulation as are necessary to make the uniform contracting system operational on March 31, 1980. The motion picture contracting system required by this policy letter was initially implemented on March 30, 1979, by Policy Letter 78-5. That system shall continue in effect until March 31, 1980, when solicitations and awards for both motion pictures and videotape productions shall be in accordance with the herein prescribed system. The Executive Agent shall take immediate steps to assure that the prescribed system is fully functional on March 31, 1980.

5. 8(a) Contracts. Contracts made persuant to Section 8(a) of the Small Business Act will be handled in accordance with existing regulations and use of the uniform system is not required.

8. Definitions. As used in this Policy

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November 27, 1979.

Russell Ritchia

Deputy Associate Administrator for External Relations

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The Subcommittee will be considering portions of the budget and program of the Office of Nuclear Regulatory Research. Since the NRC budget proposais are now part of the President's budget-not yet submitted to Congress public disclosure of budgetary information is not permitted. See OMB Circular A-10. The ACRS. however, is required by Section 5 of the 1978 NRC Authorization Act to review the NRC research program and budget and report the results of the review to Congress. In order to perform this review, the ACRS must be a bie to engage in frank discussion with members of the NRC Staff. For the reason had stated, a discussion would not be possible if held in public session.

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Dated: November 28, 1979. John C. Hoyle. Advisory Committee Management Officer. FR Doc. 79-5788 Flori 13-4-76 885-885 MILES CODE 788-41-8

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POR PURTHER INFORMATION CONTACT: Devid F. Baker, Chairman, Federal Audiovisual Committee, 202/395-7207. James D. Carrie.

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8. Definitions. As used in this Policy

TENTATIVE DETAILED SCHEDULE

B

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

SUBCOMMITTEE ON SITE EVALUATION MEETING

December 20, 1979

Room 1046, 1717 H Street, N. W. Washington, D. C. 20555

Times are Approximate

8:30 a.m.

- I. EXECUTIVE SESSION (OPEN)
 - A. Opening Statement (Dr. Dade Moeller, Chairman)
 - B. Review of Schedule
 - C. Discussion of Objectives including: (1) proposed draft letter on siting, (2) comment on emergency preparedness, and (3) completion of siting section of RSR report.

II. MEETING WITH NRC STAFF (OPEN)

9:00 a.m.

A. Comment on U. of Heidelberg Study of Wyhl Nuclear Plant in Germany - Dr. Frank Congel (15 min)

9:30-9:45

BREAK

9:45

B. New Siting Criteria and their Implementation Mr. Daniel R. Muller (20 min.)
Mr. Jan Norris

10:30

C. NRC Plans for ARAC (20 min.)
Mr. Lewis G. Hulman
Mr. R. Jaske

11:15

D. Progress Report on Risk and Consequence Research use for siting and emergency planning.

Mr. Roger Blend (20 min.)

Mr. David Aldrich, Sandia

12:00-1:00

LUNCHEON BREAK

1:00

E. Emergency Planning
Mr. Brian Grimes, Chairman, Emergency
Planning Steering Group
Mr. H. E. Collins
Mr. R. Wayne Houston

Review of Proposed New Rules and Guidance and Discussion of Public Comment Received. (1 hr. 30 min.)

3:00	Difficulties Encountered in a State Emergency Planning Program
	Mr. Aubrey Godwin, Alabama State Dept. of Radiological Health
3:30	Staff Response
3:45	Break
4:00	Executive Session. (Open) Discussion of proposed recommendations to the full Committee.
5:00	ADJOURN

NOTE: If matters regarding the research budget arise, the meeting will be CLOSED for those discussions.

ACRS SITE EVALUATION SUBCOMMITTEE MEETING December 20, 1979 Room 1046, 1717 H. St. N.W. Washington, D.C. 20555

ATTENDEES:

ACRS Members

D. W. Moeller S. Lawroski J. C. Ebersole

Consultants ACRS

R. F. Foster
F. A. Gifford
A. Grendon
J. W. Healy
D. A. Orth
F. L. Parker
M. J. Steindler
R. Wilson
Ragnwald Muller, DFE

NRC Staff

Robert F. Abbey, Jr. Ken Perkins Charles Troutman Rod Mason Frank Congel Craig Roberts E. F. Conti Jerry Harbour Andrew T. Murphy Daniel R. Muller Earl Markee L. G. Hulman Robert T. Jaske Roger Blond Marshall E. Sanders B. Grimes Jan Norris

Others

Joanne Dann, McGraw-Hill Bob Leyse, EPRI Bruce Montgomery, Bechtel Tim S. Margulies, John Hopkins/APL David C. Aldrich, Sandia Labs Aubrey V. Godwin, Ala. Health Dept. W. R. Bloom, ACE D. E. Scheffstoll, KMC Inc. C. L. Harper