DISTRIBUTION:
Central File
SD RDG/ALPHA
SESB RDG/SUBJECT
EFConti
RPGrill
w cff

MEMORANDUM FOR: Those on attached list

FROM: Enrico F. Conti, Chief
Siting and Environmental Standards Branch
Office of Standards Development

SUBJECT: MAJOR COMMENTS RECEIVED ON THE SITING ANR

Seventy comment letters have been received (thru 1/28/81) on the ANR for the siting rulemaking (45 FR 50350). A detailed compilation and categorization of these comments has been prepared for SD by ORNL. Examination of these comments has identified four major topics which are significant to the substance and timing of the rulemaking. These topics are:

1. The NRC should have an overall safety goal in place before proceeding with the siting rulemaking. As a subsidiary comment many suggested that a comprehensive assessment of the risk from all energy sources should be prepared for consideration in the rulemaking.

2. There is no justification in the ANR, NUREG-0625; nor in industry and NRC licensing experience or in the events at TMI for more remote siting or the separation of siting from design.

3. Non-industry commenters generally favored consideration of accidents beyond the design basis while industry uniformly opposed this concept.

4. The prohibition on sites requiring unique or unusual design was met with confusion by some parties and strong opposition by others. A recurrent observation was that unique or unusual engineering designs are not necessarily bad.

A more detailed list of frequent comments (Enclosure A) was prepared as an executive summary for the categorization document prepared by ORNL. Enclosure B is a listing of all comment letters in order of receipt and grouped by commenter affiliation.

Task No.: ES-003-1

/s/
Enrico F. Conti, Chief
Siting and Environmental Standards Branch
Office of Standards Development

	SD:SESB	
OFFICE>	EFConti:plf	
SURNAME>	2/5/81	
DATE>		

Enclosures:
As stated

DISTRIBUTION for memorandum dated February 5, 1981

R. G. Smith, SD
K. R. Goller, SD
G. Arlotto, SD
M. Medeiros, SD
C. Kelber, RES
D. Ross, NRR
R. Bernero, RES
D. Muller, NRR
I. C. Roberts, SD
G. Cunningham, ELD
T. Murley, RES
R. Purple, NRR
T. Rehm, EDO
R. Voegeli, ELD
R. Fraley, ACRS
G. Knighton, NRR
J. Norberg, SD
L. Beratan, SD
W. Regan, NRR
J. Norris, NRR
G. Sege, OPE

Enclosure A

Executive Summary

Comments Received in Response to the
Advance Notice of Rulemaking on Reactor
Siting (FR 45 50350, July 29, 1980)

The ANR on Reactor Siting was published on July 29, 1980 with the public comment period ending on September 29, 1980. By that date 37 comment letters were received by the staff, the requestors pointed out the great complexity of the ANR and its supporting information. Though a formal extension was not granted, the staff made efforts to consider every letter that was received no matter how late. For the purposes of the comment analysis (Enclosure C) December 1, 1980 was used as a cutoff point, by which time NRC letter No. 69 was docketed. NRC letter numbers 70, 71, 73, 74 and 75 have been considered by the staff but are not analyzed in detail in the ORNL document (some NRC numbers were not used and a total of 70 letters were docketed through January 28, 1981).

Comment letters were received from 68 respondents: 13 utilities, plus 10 law firms acting on behalf of utilities, 18 Federal and State agencies, 7 trade associations (including two from Japan), 8 nuclear industry consulting firms, 19 individual commenters and 1 foreign government (United Kingdom). (Two respondents submitted additional analytical material which was docketed separately.) These letters are listed in Enclosure B, chronologically as received and by category of commenter.

This summary does not attempt to reflect all viewpoints expressed but does attempt to cover those recurrent or particularly cogent comments directed at major items in the ANR and/or which bear on the rulemaking.

The comments were:

1. The NRC should have an overall safety goal in place before proceeding with siting rulemaking. The great majority of commenters touched upon this point.

2. Neither the ANR, NUREG-0625, nor industry and licensing experience provides justification for more remote siting.

3. The incidents at [illegible] clearly indicate that there is no need for more stringent siting criteria.

4. The NRC planned rulemakings should be changed to a more rational order, i.e., a) safety goal, b) degraded core, c) minimum engineered safety features, d) siting, e) emergency planning.

5. The present practice of allowing design features to compensate for unfavorable site characteristics should be continued. Two thirds [illegible] the commenters expressed this view and many of these felt the cha[illegible] would remove incentive for safety-related design improvements.

6. A very well documented EIS exploring the costs of more stringent siting criteria is needed.

7. A comprehensive assessment of risk from all energy sources should be prepared. Only a few commenters disagreed with this approach, citing the great difficulties and uncertainties involved.

8. The adoption of the population criteria listed as examples in NUREG-0625 would cast doubt on the safety of many currently licensed sites and would preclude licensing additional plants at these sites.

9. Site selection should be left to the private sector and no "Federal site bank" should be established. Other commenters disagreed.

10. There is need for a standardized method of population projection to judge increasing risk during plant's lifetime.

11. NRC has no legal authority to control offsite activities which might prove hazardous to the plant and should seek none. Further, controlling such hazard by holding the plant license at risk is unfair, probably unenforceable and possibly illegal. This would also place the licensees at the mercy of local political, zoning, industrial and special interest groups for the duration of the license.

12. This rulemaking should apply to only light water reactors. To assign siting criteria to all reactor types on the basis of accident scenarios and consequence modeling from one reactor type is technically not justifiable and is unfair. Such general criteria would place an unjust burden upon other reactor types which: a) may be less liable to have an accident; b) cannot physically have accidents resulting in the large releases postulated for LWR's and c) place an economic and competitive burden upon reactor types that are more suited to co-generation, i.e., production of process steam, space heating for cities, etc

13. The NRC should not terminate license review if a State disapproves a site. The State respondents, of course, took the opposite viewpoint.

14. Emphasis on "remote" siting exposes populations that use only a small part of the energy to the risks that should be borne by the urban populations that benefit from the power produced.

15. Remote siting means not only increased costs but also may increase overall risks from: a) less reliable power due to transmission outages, b) difficulty in maintaining competent staff, and c) less reliability of emergency planning. This should be quantified in an EIS.

16. Nationwide criteria is in violation of Sect. 182(d) of the Atomic Energy Act which requires preferential treatment for license applications in high fuel cost regions of the country.

17. Class 9 accident consideration was favored, in general, by the States, environmental groups and some individual commenters. Industry was almost universally opposed to consideration of accidents beyond the design basis or felt the subject should be addressed in a separate rulemaking prior to choosing siting criteria.

18. That the nuclear option should not be denied to any region of the country was strongly supported, but commenters differed widely as to what a proper definition of "region" should be. Some felt that each electrical service area should be allowed this option while others felt the nation could be divided into just two, the East and the rest of the country.

19. Any siting criteria should be interim until completion of other rulemakings.

20. The effect of U. S. siting policy upon other nations' siting policy and upon their nuclear industries should be addressed in the rulemaking.

21. Populations of nations bordering the U. S. should be specifically considered for both siting criteria and emergency planning in the rulemaking.

22. The uniform exclusion distance concept response was mixed. Some commenters favored this approach while others felt such distances should remain site specific and/or be related to individual risk assessments.

23. The emergency planning distance is inappropriate and arbitrarily chosen. This view was held by a large number of commenters.

24. Reaction was mixed to the concept of a "three tier" approach to both demographic and stand-off criteria. Some felt this would give additional flexibility while others argued that the chief advantage of fixed criteria, i.e., certainty in the licensing process, is destroyed by allowing criteria to be evaluated on a case-by-case basis.

25. While the concept of being able to interdict contaminated groundwater is attractive, setting criteria in this rulemaking is premature. Some commenters felt that the degraded core rule should first determine if such contamination events are possible. Others asserted that a generic regulation could not possibly be written that could cover the site specific parameters that govern groundwater and radionuclide movement.

26. The prohibition of sites requiring unique or unusual designs to compensate for site deficiencies drew a mixed response. Many respondents were puzzled by the vagueness in the concepts of "unique" or "unusual" and requested clarification. Others felt that, while such prohibition might simplify the task of the NRC reviewer, innovative engineering approaches should not be stifled.

Enclosure B

LISTING OF RESPONSES TO NRC ADVANCE NOTICE OF RULEMAKING:
REVISION OF REACTOR SITING CRITERIA, 45 FR 50350 (29 JULY 1980)

Category Code*	NRC Number**	Responding Organization or Individual and Location
G	1	Michael Whitehead, State Federal Coordinator, State of Alaska, Office of Governor, Juneau, Alaska 99811
G	2	Richard A. Gimman, State Review Coordinator, New Jersey Dept. of Community Affairs, 363 W. State St., Trenton, New Jersey 08625
I	3	Michael R. Greenberg Prof., Rutgers University, Livingston College, New Brunswick, New Jersey
I	4	F. J. Twogood, P E., 1317 Cedarbrook Ave., Millville, New Jersey
I	5	Niels K. Kistrup, 2 Monaghan Rd., Edison, New Jersey
I	6	Robert G. Pfahler, 7 Wistar Rd., Padi, Pennsylvania
I	7	Charles V. Rowley, 623 Arrowhead St., Sand Springs, Oklahoma
I	8	W. S. Quapp, P.E., 3850 Wonda, Idaho Falls, Idaho 83401
U	9	Dr. Eric N. Sloth, Director of Environmental Affairs, Nebraska Public Power Distric, P. O. Box 499, Columbua, Nebraska
I	10	Vicki Funderburk, 7562-O Quail Wood Dr., Charlotte, North Carolina 28211
I	11	Judy walker, Quail Glen Ct., Charlotte, North Carolina
I	12	Jill S. Baylor, 3518 Piney Grove Rd., Charlotte, North Carolina 25212
I	13	Mary Burch, 5110 Rounding Run Rd., Matthews, North Carolina 28105
I	14	Betty H. Walker, 6329 Lake Dr., Charlotte, North Carolina 28212
I	15	Mark Hugo, 852 S. 35th Ave., Omaha, Nebraska
I	16	Robert P. Shively, P. O. Box 145, Stockton, Pennsylvania
G	17	Micheal Whitehead, State-Federal Coordinator, State of Alaska, Office of the Governor, Juneau, Alaska 99811

*See end of table for legend
**Docketed in order of receipt.

Category Code	NRC Number	Responding Organization or Individual and Location
I	18	Lawrence J. Winker, 212 Avendale Ave., Pittsburgh, Pennsylvania
U	19	L. Bernata, Mgr. - Generation, Engineering Dept., San Diego, California 92112
	20	No respondent assigned to this number.
T	21	Harry Lawroski, President, American Nuclear Society, 555 North Kensington Ave., La Grange Park, Illinois 60525
T	22	Toshio Ito, Chairman, Nuclear Power Development Council, Federation of Electric Power Companies of Japan
I	23	Lynn Rice, F-4 Cedar Park, Juneau, Alaska 99801
G	24	Jerry Frick, Engineering Mgr., Bonneville Power Admin., Dept. of Energy, P. O. Box 3621, Portland, Oregon 97208
G	25	Michael V. Hasten, Chairman, Illinois Commerce Commission, 527 E. Capitol Ave., Springfield, Illinois 62706
T	26	Miro M. Todorovich, Exec. Sec., Scientists and Engineers for Secure Energy, Inc., 570 7th Ave., New York, New York 10018
C	27	L. G. Hulman, V. Pres. for Water Resources, Tetra Tech, Inc., 630 N. Rosemeade Blvd, Pasadena, California
G	28	George Ray Hudson, Chairman, Illinois Commission on Atomic Energy, 524 S. Second St., Springfield, Illinois 62706
	29	No respondent assigned to this number.
G	30	Carl J. Valore, Valore, McAllister, Avon, Westmoreland, & Vesper, 535 Titton Rd., Northfield, New Jersey 08225 (law)3
C	31	Jack C. Jones, V. Pres., Harza Engineering Co., 150 S. Wacker Dr., Chicago, Illinois 60606
C	32	Colin R. Fisher, Director, Licensing Division, General Atomic Company, P. O. Box 81608, San Diego, California
C	33	A. L. Cohn, Mgr. of Engineering, Thermal Power Mgmt., Bechtel Power Corporation, 50 Beale St., San Francisco, California
T	34	John J. Kearney, Edison Electric Institute, 1111 19th St., NW Washington, DC 20036

Category Code	NRC Number	Responding Organization or Individual and Location
T	35	K. Mori, Executive Managing Director, Japan Atomic Industrial Forum
U	36	D. L. Renberger, Asst. Director, Technology, Washington Public Power Supply Systems, 3000 George Washington Way, Richland, Washington
U	37	Peter Zarakas, V. Pres., Consolidated Edison Co. of N.Y., Inc., 4 Irving Place, New York, New York 10003
I	38	J. N. Vance, 2008 Manchester Rd., Ann Arbor, Michigan
I	39	J. O. Mingle, Prof., Dept. of Nuclear Engineering, Kansas State University, Manhatten, Kansas
U	40	Joel D. Patterson, Middle South Services, Inc., Box 61000, New Orleans, Louisiana 70161
C	41	J. C. Saldarini, Mgr., Nuclear Licensing, Envirosphere Company, 2 World Trade Centre, New York, New York 10048
U	42	J. Michael McGarry III, Nicholas S. Reynolds, Debevoise & Liberman, 1200 17th St., N.W., Washington, DC 20636 (law)2
I	43	Jim Scott, 13435 Ivy Mount, Sugarland, Texas
C	44	F. J. Path, Chief Nuclear Engineer, Burns and Roe, Inc., 200 Kinderkamack Rd., Oradell, New Jersey 07649
T	45	Dr. D. C. Gibbs, Chairman, Committee on Reactor Licensing & Safety, Atomic Industrial Forum, 7101 Wisconsin Ave., Chevy Chase, Maryland 20014
	46	No respondent assigned to this number.
C	47	S. B. Jacobs, Chief Licensing Engineer, Stone & Webster Engineering Corp., 245 Summer St., Boston, Massachusetts
U	48	H. M. Howe, Pacific Gas and Electric Co., 77 Beale St., San Francisco, California 94016
U	49	J. W. Lentsch, Mgr., Generation Licensing & Analysis, Portland General Electric Co., 121 S. W. Salmon St., Portland, Oregon

Category Code	NRC Number	Responding Organization or Individual and Location
C	50	T. M. Anderson, Mgr., Nuclear Safety Dept., Westinghouse Electric Corp., Box 355, Pittsburgh, Pennsylvania 15230
T	51	Donald K. Ross, Director, New York Public Interest Research Group, Inc., 5 Beekman St., New York, New York 10038
T	52	Fred Stetson, Licensing & Safety Projects Mgr., Atomic Industrial Forum, 7101 Wisconsin Ave., Chevy Chase, Maryland 20014
G	53	David W. South, Energy & Environmental Systems Div., Argonne National Laboratory, U. S. Dept. of Energy, 9700 S. Cass Ave., Argonne, Illinois
T	54	Kazrhisa Mori, Executive Managing Director, Japan Atomic Industrial Forum
U	55	T. E. Tipton, Mgr., Licensing & Regulatory Affairs, GPU Service Cor., 100 Interface Parkway, Parsippany, New Jersey 07054
	56	No respondent assigned to this number.
U	57	S. W. Shields, Sr. V. Pres., Nuclear Division, Public Service Indiana, P. O. Box 190, New Washington, Indiana 47162
U	58	James W. Cook, V. Pres., Consumer Power Co., 1945 W. Parnell Rd., Jackson, Michigan 49201
G	59	Adiar F. Montgomery, Chairman, Committee on Environmental Affairs, National Science Foundation, Washington, DC 20550
U	60	J. S. Abel, Director of Nuclear Licensing, Commonwealth Edison, 1 First National Plaza, Chicago, Illinois 60690
G	61	James H. Rathlesberger, Special Asst. to Asst. Sec., U. S. Dept. of Interior, Office of the Secretary, Washington, DC 20240
G	62	Lawrence Schmidt, Chief, Office of Environmental Review, New Jersey Dept. of Environmental Protection, P. O. Box 1390, Trenton, New Jersey
G	63	L. M. Mills, Mgr., Nuclear Regulation & Safety, Tennessee Valley Authority, 400 Chestnut St., Chattanooga, Tennessee 37401

Category Code	NRC Number	Responding Organization or Individual and Location
G	64	Robert C. Embry, Jr., Asst. Sec., U. S. Dept. of Housing and Urban Development, Washington, DC 20410
U	65	Donald W. Edwards, Director, Operational Projects & Licensing, Yankee Atomic Electric Company, 20 Turnpike Road, Westborough, Massachusetts
F	66	J. Gaunt, Attache, Atomic Energy, British Embassy, 3100 Massachusetts Ave., Washington, DC
G	67	E. Gunter Arndt, Office of Standards Development, Nuclear Regulatory Commission, Washington, DC
C	68	R. B. Bradbury, Chief Licensing Engineer, Stone & Webster Engineering Corporation, 245 Summer Street, Boston, Massachusetts
G	69	Ella Grasso, Governor, State of Connecticut, Hartford, Connecticut
C	70	C. R. Fisher, Director, Licensing Division, General Atomic Company, P. O. Box 81608, San Diego, California (Supplement to previous comments, under NRC Number 32).

NOTE: COMMENT LETTER No. 66 WAS INADVERTANTLY NOT INCLUDED IN THIS COMMENT ANALYSIS AND COMMENT LETTERS No. 71, 73, 74, and 75 ARRIVED TOO LATE FOR INCLUSION. THE VIEWS IN THESE LATE LETTERS WILL BE CONSIDERED TO THE EXTENT POSSIBLE.

G	71	William E. Davis, Deputy Commissioner, New York State Energy Office, Rockefeller Plaza, Albany, New York
	72	No respondent assigned to this number.
T	73	Carl Walske, President, Atomic Industrial Forum, Inc., 7101 Wisconsin Avenue, Washington, DC
G	74	Ruth C. Clusen, Assistant Secretary for Environment, U. S. Department of Energy, Washington, DC
I	75	Catherine Quigg, Research Director, Pollution & Environmental Problems, Inc., Box 309, Palatine, Illinois

Notes:

1. On behalf of Pennsylvania Electric Company (PENELEC), Metropolitan Edison Company (Met-Ed), Jersey Central Power & Light Company (JCP&L), and GPU Service Corporation. The four companies are subsidiaries of General Public Utilities Corporation (GPU).

Notes: (cont'd)

2. On behalf of Boston Edison Company, Duke Power Company, Jersey Central Power & Light, Metropolitan Edison Company, Northeast Utilities, Pennsylvania Electric, and Texas Utilities Generating Company.

3. On behalf of the Township of Lower Alloways Creek, Salem County, New Jersey.

Enclosure B

RESPONSES (BY CATEGORY)* TO NRC ADVANCE NOTICE OF RULEMAKING:
REVISION OF REACTOR SITING CRITERIA, 45FR50350, JULY 29, 1980

ELECTRIC UTILITY INDUSTRY (U)

NRC Number	
9	Nebraska Public Power District
19	San Diego Gas & Electric Company
36	Washington Public Power Supply System
37	Consolidated Edison Company of New York, Inc.
48	Pacific Gas & Electric Utility Company
49	Portland General Electric Company
55	GPU Service Corporation [1]
57	Public Service Indiana
58	Consumer Power Company
60	Commonwealth Edison
40	Middle South Services, Inc.
42	Debevoise & Leiberman (law)[2]
65	Yankee Atomic Electric Company

CONSULTING FIRMS - EQUIPMENT SUPPLIERS (C)

27	Tetra Tech, Inc.
31	Harza Engineering Company
32	General Atomic Company
70	General Atomic Company (additional detailed comments)
33	Bechtel Power Corporation
41	Envirosphere Company
44	Burns & Roe, Inc.
47	Stone & Webster Engineering Corporation

NRC Number	CONSULTING FIRMS - EQUIPMENT SUPPLIERS (C) (cont'd)
68	Stone & Wesbster Engineering Corporation (deailed comments)
50	Westinghouse Electric Corporation
	TRADE ASSOCIATIONS -TECHNICAL SOCIETIES (T)
21	American Nuclear Society
26	Scientists & Engineers for Secure Energy
45	Atomic Industrial Forum
52	Atomic Industrial Forum (additional information)
73	Atomic Industrial Forum (additional detailed comments)
34	Edison Electric Institute
35	Japan Atomic Industrial Forum
54	Japan Atomic Industrial Forum (additional detailed comments)
22	Federation of Electric Power Companies of Japan
51	New York Public Interest Research Group
	FEDERAL-STATE AGENCIES (G)
17	State of Alaska
2	New Jersey Department of Community Affairs
1	Alaska State Clearinghouse
24	Bonneville Power Administration (Department of Energy)
25	Illinois Commerce Commission
28	Illinois Commission on Atomic Energy
53	Argonne National Laboratory (Department of Energy)
61	Department of Interior
62	New Jersey Department of Environmental Protection
63	Tennessee Valley Authority
39	Departmentof Housing and Urban Development

NRC Number	FEDERAL-STATE AGENCIES (G) (cont'd)
59	National Science Foundation
30	Valore, McAllister, Aron, Westmoreland & Vesper (law)[3]
64	Department of Housing & Urban Development
67	Nuclear Regulatory Commission
69	State of Connecticut
71	State of New York (Energy Office)
74	Department of Energy
	INDIVIDUAL COMMENTERS (I)
3	Prof. Michael Greenberg, Rutgers University
4	F. J. Twogood, P.E., Millville, New Jersey
5	Niels K. Kistrup, Edison, New Jersey
6	Robert G. Pfahler, Paoli, Pennsylvania
7	Charles W. Rowley, Sand Springs, Okalahoma
8	W. J. Quapp, P.E., Idaho Falls, Idaho
10	Vicki Funderburk, Charlotte, North Carolina
11	Judy Walker, Charlotte, North Carolina
12	Jill S. Baylor, Charlotte, North Carolina
13	Mary Burch, Matthews, North Carolina
14	Betty H. Walker, Charlotte, North Carolina
15	Mark Hugo, Omaha, Nebraska
16	Robert P. Shively, Stockerton, Pennsylvania
18	Lawrence J. Winker, Pittsburgh, Pennsylvania
23	Lynn Rice, Juneau, Alaska
38	J. N. Vance, Ann Arbor, Michigan

NRC Number	INDIVIDUAL COMMENTERS (I)
39	Prof. J. O. Mingle, Kansas State University
43	Jim Scott, Sugarland, Texas
75	Catherine Quigg, Palatine, Illinois
	FOREIGN GOVERNMENTS (F)
66	United Kingdom

legend

U - electric utility industry

C - consulting firms

T - trade associations

G - federal/state agencies

I - individual commenters

F - foreign governments

*A few respondents do not fall strictly within a specific category but have been classified to facilitate grouping.