

CERTIFIED

ACRS-1942
PDR-8/30/82

MINUTES
OF THE ACRS SUBCOMMITTEE MEETING
ON ADVANCED REACTORS
JANUARY 6, 1982
WASHINGTON, D.C.

CERTIFIED
ISSUED FEB. 5, 1982

The ACRS Subcommittee on Advanced Reactors met on January 6, 1982 in Washington, D.C., to discuss the FY 1983 NRC Safety Research Programs pertaining to advanced reactors which include LMFBRs and HTGRs.

The entire meeting was closed as required by Sunshine Act Exemptions (2), (6), and (9)b.

The agenda, Federal Register Notice and attendee list are attached. Handouts at the meeting are attached to the office copy of this meeting.

Dr. M. Carbon in his opening remarks stated that he would like to obtain responses from the Staff to the following items:

- o Information necessary to complete the Section on Advanced Reactors in the proposed report to Congress.
- o Results of ongoing research programs.
- o Comments on the adequacy of the \$10.5 M FY 1983 budget as compared to the Staff's proposal of \$21 M requested four months ago.
- o Comments regarding the status of the new issues identified in NUREG-0795.
- o Discussion on heterogeneous vs. homogeneous core for the CRBR.
- o How the \$10.5 M and \$2.5 M are being allocated for the LMFBR and HTGR programs respectively.

DESIGNATED ORIGINAL

Certified By

BJR

B208010063

R. Curtis, NRC/RES, discussed the FY 83 fast reactor program. He stated that the major thrust of the program is the continuation of support of CRBR licensing. Out of the \$10.5 M budget, about \$7.5-8 M will be spent on the CRBR effort. Major cost items are: 1) transition phase modeling tests and other tests for SIMMER verification, \$2 M; 2) completion of balance of plant modeling and analysis of design basis accidents, and natural convection, \$1.5 M; and 3) analysis of accident energetics from CDAs, \$1.0 M.

RES has proposed new programs for the Fast Reactor program for FY 83. R. Curtis stated that the CRBR project has not yet approved the program, except for the program element that will develop the site suitability source terms. Some of the elements of the program are listed below:

- o Development of a basis for regulations on occupational radiation protection at LMFBRs, and for human factors review of LMFBRs.
- o Evaluation of the potential for mechanical defects as accident-initiators.

C. Kelber, NRC/RES, stated that all research in support of large LMFBRs (commercial-size) has been stopped.

R. Curtis stated that the advance reactor FY 82 RES budget was \$5 M. In addition, he stated that some generic research with LMFBR applicability has been performed at various national laboratories. These programs

involved LWR work with LMFBR application. These programs included balance of plant modeling, LWR aerosol release and transport, containment analysis, core-melt technology including retention, and core-debris behavior.

W. Morris, NRC/NRR, discussed technical assistance programs. The four major areas receiving NRR support are: 1) calculations using SSC and COMMIX codes to confirm heat-removal capability in the natural circulation mode, 2) programs to determine the capability of CRBR containment to accommodate CDA, 3) programs in PRA and reliability analyses and 4) programs to determine CRBR primary system ability to accommodate a CDA.

W. Morris identified the CRBR licensing milestones. He expects the ACRS to review the site evaluation report in July 1982, and the CP in March 1983. The CP issuance is expected in June 1984.

The research staff presented topics in accident analysis, out-of pile, and in-pile experiments.

R. Foulds, NRC/RES, discussed the HTGR Safety Research Program. The Staff is developing a program that will provide continuing support for the Fort St. Vrain generating plant and develop NRC licensing capability in this area for future HTGR applications.

Mr. Foulds also noted that there seems to be some interest from the industry to build an HTGR-steam cycle/cogeneration plant. The assumptions are that

the lead plant utility and site will be identified in FY 82-83, PSAR to be submitted in 1985 and construction to be complete in 1993. The staff should be prepared to handle this licensing possibility.

A meeting of the Advanced Reactor Subcommittee meeting was scheduled for January 21-22, 1982, at Argonne National Laboratory, Argonne, Illinois.

PROPOSED AGENDA FOR ACRS SUB-COMMITTEE MEETING
ON ADVANCED REACTORS - JAN. 6, 1982
WASHINGTON, D.C.
ROOM 1167

<u>TIME</u>	<u>SUBJECT</u>	<u>SPEAKER</u>
3:00 - 3:15 pm	Introduction (LMFRB)	Curtis
3:15 - 3:35 pm	RES-TA Coordination	Morris
3:35 - 3:50 PM	Accident Analysis	Wood
3:50 - 4:10 pm	CDA Energetics and Debris Coolability Experiments	Wright
4:38 - 5:04 pm	Containment Threat Experiments	Walker
5:04 - 5:40 pm	Gas Reactor Program	Foulds
5:40 - 5:50 pm	Summary	Curtis

To: All Speakers
O. E. Bassett
C. N. Kelber
Branch Chiefs

Name: Task Group No. 20 of the NSF
Advisory Council
Place: National Science Foundation, Rm. 523,
1800 G Street, N.W., Washington, D.C.
20550

Date: Friday, January 8, 1982
Time: 9:00 a.m. to 5:00 p.m.

Type of Meeting: Open

Contact Person: Ms. Jeanne Hudson,
Executive Secretary of the NSF Advisory
Council, National Science Foundation, Rm.
518, 1800 G Street NW., Washington, D.C.
20550. Telephone: 202/357-6419.

Purpose of Task Group: The purpose of the
Task Group, composed of members of the
NSF Advisory Council, is to provide the full
Advisory Council with a mechanism to
consider numerous issues of interest to the
Council that have been assigned by the
National Science Foundation.

Summary Minutes: May be obtained from the
contact person at above stated address.

Agenda: The Task Group is asked to provide
a clear and concise statement of the
relationship of Foundation programs to
DOD R&D activities, together with
recommendations about how NSF can
better coordinate its programs with those
of the defense research agencies.

M. Rebecca Winkler,

Committee Management Coordinator.

December 16, 1981.

(FR Doc. 81-36347 Filed 12-18-81; 8:45 am)

BILLING CODE 1555-01-01

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards, Subcommittee on Advanced Reactors; Meeting

The ACRS Subcommittee on
Advanced Reactors will hold a meeting
on January 6, 1982, Room 1167, 1717 H
Street, NW, Washington, DC. The
Subcommittee will discuss the fiscal
year 1983 NRC Safety Research
Programs pertaining to advanced
reactors.

In accordance with the procedures
outlined in the Federal Register on
September 30, 1981, (46 FR 47903), oral
or written statements may be presented
by members of the public, recordings
will be permitted only during those
portions of the meeting when a
transcript is being kept, and questions
may be asked only by members of the
Subcommittee, its consultants, and Staff.
Persons desiring to make oral
statements should notify the Designated
Federal Employee as far in advance as
practicable so that appropriate
arrangements can be made to allow the
necessary time during the meeting for
such statements.

The entire meeting will be open to
public attendance except for those
sessions of this meeting that may be
closed to discuss the NRC Safety

Research Program as required (Sunshine
Act Exemptions (2), (6), and (9)b). To the
extent practicable, these closed sessions
will be held so as to minimize
inconvenience to members of the public
in attendance.

The agenda for subject meeting shall
be as follows:

*Wednesday, January 8, 1982—3:00 p.m. until
the conclusion of business*

During the initial portion of the meeting,
the Subcommittee, along with any of its
consultants who may be present, will
exchange preliminary views regarding
matters to be considered during the balance
of the meeting.

The Subcommittee will then hear
presentations by and hold discussions
with representatives of the NRC Staff,
their consultants, and other interested
persons regarding the topics to be
discussed.

Further information regarding topics
to be discussed, whether the meeting
has been cancelled or rescheduled, the
Chairman's ruling on requests for the
opportunity to present oral statements
and the time allotted therefor can be
obtained by a prepaid telephone call to
the cognizant Designated Federal
Employee, Mr. Elpidio Igne (telephone
202/634-1414) between 8:15 a.m. and
5:00 p.m., est.

I have determined, in accordance with
subsection 10(d) Pub. L. 92-463 that it
may be necessary to close sessions of
the meeting as noted above to discuss
matters which relate solely to the
internal personnel rules and practices of
the agency (Exemption (2)), to discuss
information of a personal nature, the
disclosure of which would constitute a
clearly unwarranted invasion of
personal privacy (Exemption (6)), and to
discuss preliminary information the
release of which would be likely to
significantly frustrate the Committee in
the performance of its statutory function
(Exemption (9)b). The authority for such
closure are Exemptions (2), (6), and (9)b
to the Sunshine Act, 5 U.S.C.
552B(c)(2)(B)(9)b.

Dated: December 16, 1981.

John C. Hoyle,

Advisory Committee, Management Officer.

(FR Doc. 81-36402 Filed 12-18-81; 8:45 am)

BILLING CODE 7530-01-01

Advisory Committee on Reactor Safeguards, Subcommittee on Human Factors; Meeting

The ACRS Subcommittee on Human
Factors will hold a meeting on January
5, 1982, Room 1046, 1717 H Street, NW,
Washington, DC. The Subcommittee will
continue its review of documents
produced by NRC's Division of Human

Factors Safety including NUREG-0700,
"Guidelines for Control Room Design
Review", NUREG-0801, "Evaluation
Criteria for Detailed Control Room
Design Review", and NUREG-0835,
"Human Factors Acceptance Criteria for
the Safety Parameter Display System".

In accordance with the procedures
outlined in the Federal Register on
September 30, 1981 (46 FR 47903), oral or
written statements may be presented by
members of the public, recordings will
be permitted only during those portions
of the meeting when a transcript is being
kept, and questions may be asked only
by members of the Subcommittee, its
consultants, and Staff. Persons desiring
to make oral statements should notify
the Designated Federal Employee as far
in advance as practicable so that
appropriate arrangements can be made
to allow the necessary time during the
meeting for such statements.

The entire meeting will be open to
public attendance.

The agenda for subject meeting shall
be as follows:

Tuesday, January 6, 1982

8:30 a.m. until the conclusion of business.

During the initial portion of the
meeting, the Subcommittee, along with
any of its consultants who may be
present, will exchange preliminary
views regarding matters to be
considered during the balance of the
meeting.

The Subcommittee will then hear
presentations by and hold discussions
with representatives of the NRC Staff,
their consultants, and other interested
persons regarding this review.

Further information about topics to be
discussed, whether the meeting has
been cancelled or rescheduled, the
Chairman's ruling on requests for the
opportunity to present oral statements
and the time allotted therefor can be
obtained by a prepaid telephone call to
the cognizant Designated Federal
Employee, Richard Major (telephone
202/634-1414) between 8:15 a.m. and
5:00 p.m., est.

Dated: December 16, 1981.

John C. Hoyle,

Advisory Committee Management Officer.

(FR Doc. 81-36400 Filed 12-18-81; 8:45 am)

BILLING CODE 7510-01-01

Advisory Committee on Reactor Safeguards, Subcommittee on Reliability and Probabilistic Assessment; Meeting

The ACRS Subcommittee on the
Reliability and Probabilistic Assessment
will hold a meeting on January 5, 1982,

MEETING DATE: JANUARY 6, 1981

SUBCOMMITTEE MEETING: ADVANCED REACTORS

LOCATION: Room 1167, 1717 H St. NW, Washington, D.C.

ATTENDANCE LIST

PLEASE
PRINT

NAME	AFFILIATION
1. Bob Curtis	NRC / RES
2. R. L. Wright	NRC - RES
3. P. M. Wood	NRC - RES
4. T. J. WALKER	NRC - RES
5. L. S. Tong	NRC - RES
6. G. R. BURDICK	NRC / DRA / RES
7. P. J. FILBY	NRC - RES
8. Rob Walley	DOE - RRT
9. Bill Morris	NRC - NRR - ORBR PD
10. O. E. Bassett	NRC - RES - DAE
11. Brad Burson	NRC - RES - DAE
12. R. T. Curtis	NRC - RES - DAE
13. C. Kehler	NRC / RES
14. R. Foueds	NRC
15. J. C. MARK	ACRS MEMBER
16. M. CARBON	ACRS MEMBER
17. W. MATHIS	ACRS MEMBER
18. E. IGNE	ACRS STAFF
19.	
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ADVISORY COMMITTEE ON REACTOR SAFEGUARDS MEETING
ON
ADVANCED REACTORS

January 6, 1982

Jms.

ATTENDEES PLEASE SIGN BELOW

PLEASE
PRINT
NAME

	BADGE NO.	AFFILIATION
1 James B Graham	E-0161	General Atomic
2 Rob Woolley		
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