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UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, D. C. 20555

P. Tam
Staff Engineer

SUBJECT: CERTIFICATION OF THE MINUTES OF THE ACRS SUBCOMMITTEE MEETING ON PLANT ARRANGEMENTS - WASHINGTON, DC - FEBRUARY 20 & 21, 1980

I hereby certify that, to the best of my knowledge and belief, the minutes for the subject meeting, issued March 6, 1980, are an accurate record of the proceedings for that meeting.

M. Bender, Chairman
Plant Arrangements Subcommittee

4-3-80
(DATE

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MINUTES OF THE ACRS PLANT ARRANGEMENTS SUBCOMMITTEE MEETING
February 20-21, 1980
Washington, D.C. 20555

The ACRS Plant Arrangements Subcommittee met in open session on February 20-21, 1980 at 1717 H St., N.W. Washington, D.C. The purpose of the meeting was:

1. To hear presentations by the Staff and Sandia Laboratories on Phase 1 of the Systems Interaction Methodology Applications Program, and to review the objective and goal of the program.
2. To review and recommend actions on the 13 generic items assigned to the Subcommittee. (See below for listing).

Notice of the meeting was published in the Federal Register on February 5, 1980.. Copies of the notice, meeting attendees list, and meeting schedule are included as Attachments 1, 2 and 3 respectively. Documents received before and during the meeting are listed in Attachment 4, and one copy of each has been filed in the ACRS office. No written statement was submitted, and no request for oral statements was made by members of the public.

Executive Session

Mr. Bender, Subcommittee Chairman, convened the meeting at 11:30 A.M., introduced the ACRS members and consultants (Attachment 2) who were present, and indicated that John C. McKinley was the Designated Federal Employee for the meeting. Mr. Peter Tam of the ACRS Staff was also present. He stated that the meeting was being conducted in accordance with the Federal Advisory Committee Act and the Government in the Sunshine Act. He further stated that portions of the meeting may be closed to discuss security matters (Note: the entire meeting was conducted in open session).

CERTIFIED
4/3/80

Mr. Bender briefly described the background of the Systems Interaction study: Some time ago, the ACRS identified a need to better understand systems interactions, and as a result, the regulatory staff initiation work at Sandia Laboratories to develop methodology for systems studies. The meeting would provide opportunity for the Subcommittee to review the work that has been done.

Meeting with NRC Staff and Status of Task - J. Angelo

Mr. Angelo described the historical background that led to the initiation of the Sandia work. Phase I of the Systems Interaction Methodology Applications Program was performed in the latter part of 1978 and all of 1979, culminating in the draft report (provided to the Subcommittee prior to the meeting). The report will be published in final form in March of this year. Mr. Bender asked how the Sandia technique differed from the fault tree technique in WASH-1400 (The "Rasmussen Report"), Mr. Angelo said that the latter is general and broad in scope but the former is a "narrow deep cut" into the systems interaction problem. Also, WASH-1400 studied large accidents but the Sandia effort did not assume the occurrence of accidents - it assumed normal operating mode and searched for interactions that may lead to worse conditions. The Staff believes that the ACRS concern for the systems interaction issue was from a day-to-day operations perspective.

Management and Technical Overview - S. Hanauer

Mr. Hanauer said that the Staff is not sure if it would actually draw fault trees on each plant. To date, the Sandia study has pointed out about a dozen items which show some potential for changes in the Standard Review Plan (SRP). However, the major result of the effort is a methodology of studying systems interaction in general. The scope of Phase I of the work has been limited by available funds. Furthermore, the Staff restricted its review to available technology two years ago (pre TMI-2 incident). As a result, issues such as human factors play only a

minor role in Phase I of the program.

Mr. Hanauer requested Subcommittee comments on the Sandia work, but not an ACRS letter. He indicated that the Staff will, in the near future, issue a report describing how it would use the methodology in the licensing process.

Discussion With Sandia Laboratories

Introduction - Mr. D. McCloskey

The objectives of the program are: to develop a methodology for conducting a disciplined and systematic review of nuclear power plant systems which will facilitate identification and evaluation of systems interactions which affect the likelihood of core damage, and to use the methodology to assess the SRP to determine its completeness in identifying and evaluating a limited range of systems interactions.

Overview of Study - J. Hickman

Systems interaction is defined as an event or sequence of events causing two or more components to fail to perform their function, thus increasing the likelihood of an undesired event. The scope was limited to the study of normal conditions and incidents of moderate frequency. The methodology consists of three steps:

1. Identification of important systems using fault tree analysis.
2. Identification of potential interactions by matching commonalities* using the SETS computer code, and
3. Evaluation of interaction by specific case review.

Mr. Bender asked how the methodology is different from the WASH-1400 methodology. Mr. Hickman said that the Sandia methodology is more systematic.

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* "Commonalities" is the term used to denote linking characteristics between components, e.g. physical proximity, shared motive power, control, actuation, cooling, lubrication.

Mr. Arnold asked if there is anyone in the Sandia group who is familiar with plant as-built conditions, and if experts of all disciplines are represented in the group. Mr. Hickman said that experts of all areas have been included in the group. As for obtaining plant as-built conditions, Sandia used the P&IDs, visited the plant, and consulted with the utility on details of plant components.

Fault Tree Development - Mr. W. Cramond

Fault trees form the basis for the systems interaction analysis. The three basic function fault trees describing conditions potentially leading to unacceptable core damage are: failure to achieve or maintain reactor subcriticality, failure to remove decay heat, and failure of the reactor coolant system pressure boundary.

The purpose of the fault trees is to model the combinations of components which, if failed, would result in loss of any of the above three functions and by assumption result in the potential for unacceptable core damage. Each fault tree is developed from the function at the top of the tree to specific components at the bottom of the tree that are directly applicable to the failure of that function. Only those parts of systems which affect the undesired top event are included. Not all systems are identified explicitly or modelled in their entirety.

The three basic function fault trees which would lead to unacceptable core damage through an "Or" gate is shown in pp. 16 of the Sandia handout.

The necessary systems and success criteria for each basic function vary depending on the operational mode of the plant at the time of the occurrence which challenges the plant system to shutdown. Five of the six possible plant modes were studied. Four occurrence categories are defined. This results in twenty potential combinations to be modelled and analyzed for each basic function. These are shown on P. 13 of the Sandia handout.

These twenty combinations of modes and occurrences coupled with the three functions result in sixty potentially different fault trees. Due to similarities between the sixty cases, only 20 distinct fault trees were needed. (These are listed on P. 18 of the handout.) These are the foundation for further analysis.

The most significant potential interacions are those that involve all the events of a cut set.* This would indicate that there exists a potential for a single failure which would compromise the performance of a given plant function. (The prevention of single failures is the philosophy that dominates the Standard Review Plan and its completeness in the evaluation of potential single failures is considered of principal importance.)

Once the interactions had been grouped, questions used to evaluate the Standard Review Plan were formulated.
These questions (e.g., "Does the plan prevent the common location of train A of system Q, train B of system Q, and system R?") were then answered through detailed review of the Standard Review Plan. The first step involved review of the SRP section which addressed the specific systems. The second step was the review of SRP sections dealing with support systems and general design. The review process on any given question was stopped when a specific statement dealing with an interaction was found.

The output of this task was a list of the important potential interactions and their coverage in the Standard Review Plan and its supporting documents. Specific statements which preclude certain interactions were documented. If the only reference to a potential interaction was in inference to a general statement, e.g., no single failure shall prevent operation of a system, it was documented as such.

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* A cut-set is a combination of component events in the fault tree whose occurrence would cause the top event.

Finally, potential interactions not mentioned in any manner were pointed out.

The most significant potential interaction found at the exemplary facility involves the pressurizer power operated relief valves. These valves share a common location with their isolation valves. If a pressurizer relief valve were to fail open and also leak (spray), it could potentially fail its own isolation valve.

The reactor protection system did not appear to be subject to interactions within the scope of the program. The system is highly redundant.

Results - J. Hickman

The draft report will be modified to accommodate peer review comments, but th re will be no changes in the analysis itself. Also, lessons learned from the TMI-2 incident may have some input into the final report. Dr. Mark asked if Sandia had identified, using the methodology, new areas of systems interaction. Mr. Hickman said that the work was a qualitative study, and gave no specific answer.

Mr. Angelo added that Phase 2 may start next month (March), but may be delayed by other things such as the TMI implementation plan.

Executive Session

Mr. Epler pointed out that the exemplary plant, Watts Bar, is not an operating plant. Thus, Sandia would have necessarily done more of its work from drawings than from as-built handware conditions. Mr. Bender said he felt the same.

Mr. Bender said that in general, the nuclear industry is too dependent on the regulators telling it what to do, rather than taking its own initiative.

Mr. Epler said that from experience (such as the Brown Ferry fire, TMI-2 incident etc.), testing activities are hazardous in that they have caused a number of

undesirable events. The Sandia work does not account for such. He indicated that he did not believe this methodology would tell much more than is already known because of such limitations. Mr. Moeller and Mr. Ray added that they agreed with Mr. Epler, and that they doubted if the methodology would even reveal known systems interactions. Furthermore, Sandia may have been using the same methodology as was used in the past to evaluate the exemplary facility against systems interactions; Mr. Moeller did not see the present Sandia approach as being innovative. Mr. Zudans said that the methodology amounted to "summarize everything that you already know and see what else that suggests." The system interactions are fed in to the methodology i.e. they are defined a priori as input.

Mr. Bender said that the scope of the program was too constrained to start with (the program was limited to the study of normal operations), and Sandia has accepted all design objectives as being true. He is not enthusiastic about Phase 2 of the program until Sandia can produce something more useful in Phase I. Namely, the study should show that there are lines of defense; in the absence of such, there is little or no value.

Mr. Lawroski said that the work should involve more people with actual plant experience than it does now.

Mr. Hanauer indicated that he was disappointed the program has not done more, but that the Sandia work was just to supply a "matrix for a number of studies", while the IREP (Integrated Reliability Evaluation Program) would supply the event-tree type of matrix. Neither of these matrices by itself is an analysis - they are just methods.

Mr. Bender summed up saying that despite the large number of negative criticisms, the Subcommittee did not say that the Sandia work is not usable. Sandia needs to demonstrate Phase I more before proceeding further in the program. When asked by Mr. Bender for votes, no member or consultant suggested that the work should be discontinued. Mr. Moeller stated that many believe that accidents in the future will probably occur as the result of unexpected events. Since systems interactions may be a major source of unexpected events, the Sandia work is important in this sense.

(The meeting was recessed at 5:40 P.M., to be reconvened the following day.)

Discussion With NRC Staff on 13 Generic Items

(The ACRS has assigned 13 generic items to this Subcommittee for review. A copy of the generic items letter No. 7 is filed with these minutes. The numbers of the items below refer to numbers in the letter.)

6. Fuel Storage Pool Design Basis

8. Protection Against Industrial Sabotage

70. Design Features to Control Sabotage

Mr. Durst of the Research Staff reported that a major project at Sandia covers all three items. The heart of the project is to extend the SETS code to permit vital area identification. The SNUPP plants are being used for this study and findings have actually caused design changes at SNUPPS (no specific example given). Mr. Durst indicated that he will have Sandia and the Staff brief appropriate ACRS groups on the results of this project.

Mr. Lawroski mentioned that Mr. Michelson (ACRS consultant) wrote a report indicating that badly vulnerable plants might be sabotaged. Mr. Durst said that points raised by Mr. Michelson will be addressed by the Sandia group. No further details were discussed.

The Subcommittee discussed the merits of building spent fuel storage pools underground but did not go into details nor come to any conclusion. The Subcommittee is concerned about sabotage of the pool. Mr. Durst said that two Sandia reports, to be published in April will address concerns covered by items 6, 8, and 70.

Currently, items 6 and 8 are classified as "resolved" on the basis of Reg. Guides 1.13, "Spent Fuel Storage Pool Design Basis", and 1.17, "Protection of N-Plants Against Industrial Sabotage". Item 70 is classified as "resolution pending". Mr. Lawroski indicated that it is implementation of Reg. Guide positions that always causes problems. He suggested that items 6 and 8 be left in their current classification unless the Sandia reports say otherwise. The Subcommittee and Mr. Bender did not object to this suggestion.

Mr. Bender pointed out that the fact that item 70 remains on the "resolution pending" list seems to contradict the classification of item 8. Mr. Ray said that maybe item 8 should be reclassified as unresolved on such contradictions. Mr. Allen of the Staff reported that since publication of 10 CFR 73.55, Reg. Guide 1.17 was no longer used for licensing reviews. At the disclosure of this information, Mr. Bender said that the basis on which this item is considered resolved is no longer valid. (The Subcommittee, however, did not make any statement at this point to reclassify any of items 6, 8 and 70).

30. ECCS Capability of Current and Older Plants

60. BWR and PWR Primary Coolant Pump Overspeed During LOCA

62. ECCS Capability of Future Plants

No discussion. Items transferred to ECCS Subcommittee.

52. Safety Related Interfaces Between Reactor Island and Balance-of-Plant

Questions have been raised concerning both standardized balance-of-plant and NSSS on the one hand and custom-designed structures and components on the other. The Staff, in its report NUREG-0102 (Interfaces for Standard Design), has identified the safety related interfaces of licensing concern. Recommendations of this report have been incorporated into the SRP (Reg. Guide 1.70).

The Subcommittee agreed to, on the basis of the SRP, to leave this item in its current status, "resolved".

58. Non-Random Multiple Failures

The Subcommittee realized that this item ties in to other generic items such as anticipated transients without scram (ATWS), reliability of AC and DC power sources. As a result, the Subcommittee decided to leave this item in its current status, "resolution pending".

23. Quality Group Classification for Pressure Retaining Components

Reg. Guide 1.26 covers this item but the incident at TMI-2 prompted the Staff to reconsider the classification system. The Subcommittee concluded that even though this item is considered "resolved", it may have to be reclassified if the Staff initiated new actions. Currently, there is no Staff activity in this area except thoughts.

22. Seismic Design of Steamlines

Reg. Guide 1.29, "Seismic Design Classification", covers this item. New plants do not have problems meeting the requirements in this guide but older plants have not been designed accordingly. On the basis of this Reg. Guide, the Subcommittee decided that this item should retain its current status, "resolved."

28. Protection Against Pipe Whip

Reg. Guide 1.46, SRP 3.61, and 3.62 address this item. Plants built prior

to issuance of these documents may not have met these requirements and the Staff expects the Systematic Evaluation Program would show how closely these older plants conform and what fixes are needed. For these older plants, the issue of pipe restraint is probably one that is going to be difficult to deal with. The methods that might have to be used are likely to be less conservative than instantaneous pipe break.

41. Seismic Category 1 Requirements for Auxiliary Systems

The Subcommittee recognized that this is covered by Reg. Guide 1.26 and 1.29, and did not see any need to change its present status, "resolved."

73. Vessel Support Structures

A possible consequence of the instantaneous double-ended pipe break postulated to occur in certain large pipes of PWRs is the asymmetric loading of the reactor pressure vessel support structures. The magnitude and effects of such loads on the pressure vessel should be determined to establish if such loads adversely affect the predicted course of a LOCA. If analysis indicates that the results are unacceptable, appropriate corrective action should be taken. A potential effect is pressure vessel movement due to blowdown jet forces at the location of the rupture, transient differential pressure in the annular region between the vessel and the shield, and transient differential pressures across the core barrel within the reactor vessel.

The Staff informed the Subcommittee that Brookhaven National Lab. will publish a report in April on the study of combination of dynamic loads. Plants under construction are being designed and constructed against asymmetric load.

The Subcommittee recommended that this item retain its present status, "resolution pending".

Mr. Bender then asked the consultants to submit any further comments in writing and adjourned the meeting at 3:30 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. 20555 or can be obtained from International Verbatim Reporters, Inc., Suite 107, 449 South Capitol Street, S.W. Washington, D. C. 20002 (202-484-3550.)

NW, Washington, D.C. 20550. Telephone (202) 632-7880.

All interested agencies, organizations or persons desiring to submit comments or suggestions for consideration during the preparation of the draft EIS should contact Mr. Randall by March 31, 1980.

For the National Science Foundation.

Francis S. Johnson,

*Assistant Director for Astronomical, Atmospheric, Earth, and Ocean Sciences.*

January 30, 1980.

[FR Doc. 80-3836 Filed 2-4-80; 8:45 am]

BILLING CODE 7555-01-M

## NUCLEAR REGULATORY COMMISSION

### Advisory Committee on Reactor Safeguards; Subcommittee on Plant Arrangements; Meeting

The ACRS Subcommittee on Plant Arrangements will hold a meeting February 20-21, 1980 in Room 1046, 1717 H St., NW, Washington, DC 20555. Notice of this meeting was published January 22, 1980.

In accordance with the procedures outlined in the Federal Register on October 1, 1979, (44 FR 56408), 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 agenda for subject meeting shall be as follows: *Wednesday, February 20, 1980—11:00 a.m. until the conclusion of business.* The Subcommittee will discuss with the NRC Staff and their contractor, Sandia Laboratories, the recently completed "Final Report (Draft) on Phase I of Generic Task No. A-17, Systems Interaction in Nuclear Power Plants." *Thursday, February 21, 1980—8:30 a.m. until the conclusion of business.* The Subcommittee will discuss the status of various generic items contained in the ACRS March 21, 1979 report, "Status of Generic Items Relating to Light-Water Reactors: Report No. 7."

In addition, it may be necessary for the Subcommittee to hold one or more closed sessions for the purpose of exploring matters involving proprietary information. I have determined, in accordance with Subsection 10(d) of the Federal Advisory Committee Act (Pub. L. 92-463), that, should such sessions be required, it is necessary to close these sessions to protect proprietary information. See 5 U.S.C. 552b(c)(4).

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. John C. McKinley (telephone 202/634-3265) between 8:15 a.m. ad 5:00 p.m., EST.

Dated: January 30, 1980.

John C. Hoyle,

*Advisory Committee Management Officer.*

[FR Doc. 80-3845 Filed 2-4-80; 8:45 am]

BILLING CODE 7590-01-M

## POSTAL RATE COMMISSION

### Briefing the Governors on Structure and Functions of the Commission

February 1, 1980.

Notice is hereby given that the Postal Rate Commission will brief the governors of the U.S. Postal Service on the structure and functions of the Commission. The briefing will be at 6:00 p.m., on Tuesday, February 5, 1980, in the Commission's Hearing Room, 2000 L Street NW., Room 500, Washington, D.C.

David F. Harris,

*Secretary.*

[FR Doc. 80-3828 Filed 2-4-80; 8:45 am]

BILLING CODE 7715-01-M

## DEPARTMENT OF TRANSPORTATION

### National Highway Traffic Safety Administration

### Midas Series 2000 Motorhomes; Public Meeting Cancelled

A public proceeding scheduled for 10 a.m., February 5, 1980, in Room 2230, Department of Transportation Building, 400 Seventh Street, S.W., Washington, D.C. 20590, with respect to an initial determination of noncompliance with Federal Motor Vehicle Safety Standards Nos. 207, 208, and 210 in Series 2000 Motorhomes manufactured by Midas-International Corp. is cancelled. The company has announced its intent to file a Noncompliance Report pursuant to 49 CFR Part 573 not later than February 8, 1980.

(Sec. 152, Pub. L. 93-492, 88 Stat. 1470 (15 U.S.C. 1412); delegation of authority at 49 CFR 1.51 and 49 CFR 501.8)

Issued on February 1, 1980.

Lynn L. Bradford,

*Associate Administrator for Enforcement.*

[FR Doc. 80-3794 Filed 2-1-80; 2:59 pm]

BILLING CODE 4910-59-M

## DEPARTMENT OF THE TREASURY

### Office of the Secretary

[Dept. Circular Public Debt Series—No. 7-80]

### Treasury Bonds of 2005-2010; Auction

January 31, 1980.

#### 1. Invitation for Tenders

1.1. The Secretary of the Treasury, under the authority of the Second Liberty Bond Act, as amended, invites tenders for approximately $2,000,000,000 of United States securities, designated Treasury Bonds of 2005-2010 (CUSIP No. 912810 CM 8). The securities will be sold at auction with bidding on the basis of yield. Payment will be required at the price equivalent of the bid yield of each accepted tender. The interest rate on the securities and the price equivalent of each accepted bid will be determined in the manner described below. Additional amounts of these securities may be issued to Government accounts and Federal Reserve Banks for their own account in exchange for maturing Treasury securities. Additional amounts of the new securities may also be issued at the average price to Federal Reserve Banks, as agents for foreign and international monetary authorities, to the extent that the aggregate amount of tenders for such accounts exceeds the aggregate amount of maturing securities held by them.

#### 2. Description of Securities

2.1 The securities will be dated February 15, 1980, and will bear interest from that date, payable on a semiannual basis on August 15, 1980, and each subsequent 6 months on February 15 and August 15, until the principal becomes payable. They will mature February 15, 2010, but may be redeemed at the option of the United States on and after February 15, 2005, in whole or in part, at par and accrued interest on any interest payment date or dates, on 4 months' notice of call given in such manner as the Secretary of the Treasury shall prescribe. In case of partial call, the securities to be redeemed will be determined by such method as may be prescribed by the Secretary of the Treasury. Interest on the securities called for redemption shall cease on the date of redemption specified in the notice of call.

# PROPOSED SUMMARY

## ACRS SUBCOMMITTEE MEETING ON PLANT ARRANGEMENTS
## WASHINGTON, DC
## FEBRUARY 20 & 21, 1980

ATTENDEES:

ACRS

M. Bender, Chairman
J. Ebersole
S. Lawroski
J. Mark
D. Moeller
J. Ray
H. Etherington
J. Arnold, ACRS Consultant
E. Epler, ACRS Consultant
S. Saunders, ACRS Consultant
E. Rodabaugh, ACRS Consultant (21st only)
Z. Zudans, ACRS Consultant
J. McKinley, Designated Federal Employee
P. Tam, ACRS Staff

SANDIA LABORATORIES

S. Hatch
W. Cramond
G. Boyd
D. McCloskey
J. Hickman

BECHTEL CORPORATION

W. House, II

IVRI REPORTERS

S. Corsanico
E. Aguirre
B. Munevar

NRC STAFF

J. Durst
G. Zech
R. Bosnak
R. Mattu
S. Hou
W. Lanning
T. Allen
E. Quinn
A. Sinisgalli
T. Michaels
J. Norberg
T. Scarbrough
D. Fischer
J. Angelo
S. Hanauer
J. Zwolinski

DUKE POWER COMPANY

S. Rose

TENNESSEE VALLEY AUTHORITY

D. Simpson

BABCOCK & WILCOX

R. Borsum

TENTATIVE DETAILED SCHEDULE
ACRS PLANT ARRANGEMENTS SUBCOMMITTEE
ROOM 1046, 1717 H St., NW
WASHINGTON, DC
FEBRUARY 20 & 21, 1980

| | APPROXIMATE TIME |
|---|---|
| EXECUTIVE SESSION (OPEN) | 11:00 a.m. |
| - Introductory Statement (M. Bender, Subcommittee Chairman) | |
| - Discussion of Agenda (Subcommittee and Consultants) | |
| MEETING WITH NRC STAFF AND SANDIA LABORATORIES TO DISCUSS PHASE I, SYSTEMS INTERACTION METHODOLOGY APPLICATIONS PROGRAM | |
| - Status of Task (J. Angelo) | 11:05 a.m. |
| - Management and Technical Overview (S. Hanauer) | 11:20 a.m. |
| ° objectives | |
| ° scope | |
| - Introduction (Sandia Labs.) | 11:50 a.m. |
| ° definition of systems interactions | |
| ° systems interaction problem | |
| ° methodology | |
| - Fault Tree Development (Sandia Labs.) Chapter 2 | 12:10 p.m. |
| ********** LUNCH ********** | 12:30 p.m. - 1:30 p.m. |
| - Fault Tree Analysis Techniques (Sandia Labs.) Chapter 3 | 1:30 p.m. |
| - Analysis Results (Sandia Labs.) | 2:45 p.m. |
| ° reactor coolant pressure boundary } Chapters 4, 5, 6 | |
| ° decay heat removal function } | |
| ° reactor subcriticality function } | |
| - Results and Conclusions (Sandia Labs.) | 3:15 p.m. |
| - General Discussion (NRC Staff and Sandia Labs.) | 3:45 p.m. |
| ° future of program, follow-on work | |
| ADJOURNMENT. | 5:15 p.m. |

FEBRUARY 21, 1980

The Subcommittee will discuss the status of various generic items contained in the Committee's March 21, 1979, "Status of Generic Items Relating to Light-Water Reactors: Report No. 7."

| | APPROXIMATE TIME |
|---|---|
| PLANT ARRANGEMENTS/SAFEGUARDS AND SECURITY RELATED ITEMS | 8:30 a.m. |
| *6. Fuel Storage Pool Design Bases | |
| *8. Protection Against Industrial Sabotage | |
| *70. Design Features to Control Sabotage | |
| PLANT ARRANGEMENTS/ECCS RELATED ITEMS | 10:00 a.m. |
| *30. ECCS Capability of Current and Older Plants | |
| *60. BWR and PWR Primary Coolant Pump Overspeed During LOCA | |
| *62. ECCS Capability for Future Plants | |
| PLANT ARRANGEMENTS RELATED ITEMS | 11:00 a.m. |
| *52. Safety Related Interfaces Between Reactor Island and Balance-of-Plants | |
| *58. Non-Random Multiple Failures | |
| *23. Quality Group Classification for Pressure Retaining Components | |
| ********** LUNCH ********** | 12:00 noon - 1:00 p.m. |
| COMBINATION OF DYNAMIC LOADS RELATED ITEMS | 1:00 p.m. |
| *22. Seismic Design of Steam Line | |
| *28. Protection Against Pipe Whip | |
| *41. Seismic Category 1 Requirements for Auxiliary Systems | |
| *73. Vessel Support Structures | |
| ADJOURNMENT | 3:00 p.m. |

* Refers to item number in the Committee's Generic Items Report No. 7.

ATTACHMENT 4

## LIST OF DOCUMENTS RECEIVED

1. J. Angelo's view graphs on status of Task Action Plan A-17.
2. S. Hanauer's view graphs on "Reliability Engineering and Risk Assessment".
3. Sandia Laboratories (D. McCloskey, J. Hickman, W. Cramond, G. Boyd) view graphs on "Systems Interaction Methodology Applications Program".
4. J. Durst's view graphs on "N-Power Plant Design Concepts for Sabotage Protection."
5. J. Durst's handout, "Program Plan N-Power Plant Design Concepts for Sabotage Protection".
6. ACRS letter, "Status of Generic Items Relating to Light-Water Reactors: Report No. 7".
7. Sandia Draft Report, "Phase I, Systems Interaction Methodology Applications Program".
8. Memo,R. Major to M. Bender, background material for this meeting.

The above documents were "handouts" at the Feb. 20-21 meeting. If you desire to obtain any of these documents, you may contact the ACRS office.