

CERTIFIED

MINUTES OF THE ACRS
AD HOC METAL COMPONENTS SUBGROUP
APRIL 15, 1982
WASHINGTON, D. C.

CERTIFIED COPY
DATE ISSUED: June 21, 1982

The ACRS Ad Hoc Metal Components Subgroup met in open executive session to discuss the issue of pressurized thermal shock (PTS) in response to Chairman N. J. Palladino's request of March 25, 1982 (Attachment 1). In his letter, Chairman Palladino requested the ACRS' views on the NRC short-term steps that should be taken by the NRC to lessen the chances of a severe problem occurring because of pressurization following a thermal shock to a pressure vessel. The letter also stated that our critique should be available before publication of the NRC plan which is expected in June 1982.

The ACRS Members present were: M. Bender, Chairman; P. G. Shewmon and R. Axtmann. The ACRS consultants present were E. Abbott, F. Binford, I. Catton, W. Gall, G. Irwin, H. Kouts, M. Wechsler, T. Theofanous and Z. Zudans. Members of the NRC Staff present at the meeting to answer the Subgroup questions were R. Woods, R. Klecker, C. Johnson, and E. Throm. T. Marsten of EPRI was also present and participated in our meeting.

The Federal Register Notice was published on March 29, 1982 and is Attachment 2. The agenda is Attachment 3 and the attendee list is Attachment 4. Handouts at the meeting are attached to the minutes in the ACRS files.

M. Bender, Chairman of the Subgroup, briefly stated the charge of the Ad Hoc Metal Components Subgroup by referring to Chairman N. J. Palladino's letter of March 25, 1982. In addition, he stated that the work of the subgroup should be completed in time for a report to be presented to the full ACRS for approval at the June 1982 Meeting.

M. Bender assigned responsibilities and appointed task leaders for the following areas:

- Z. Zudans, Task Leader, Materials and Fracture Mechanics. Members are G. Irwin, M. Wechsler and W. Gall. This task group will investigate, among many items, the applicability of fracture mechanics analysis and its assumptions and uncertainties. Warm prestressing applicability, affected pressure vessels and weld chemical analysis, irradiation effects on pressure vessel base material and welds, and restoration of degraded materials by annealing. Flaw detection and characterization in the pressure vessel will be addressed.
- H. Kouts, Task Leader, Transient Scenarios. Members are T. Theofanous and I. Catton. W. Bock, ACRS Fellow, is expected to assist in this area. This task group will investigate questions related to the various scenarios that should be analyzed for PTS.
- F. Binford/E. Abbott are assigned the task of investigating the effects of operator actions on PTS.

Roy Woods, NRC, Task Manager of TAP A-49, stated that he is available to provide assistance to our subgroup when requested.

The task group headed by Z. Zudans scheduled a meeting for May 3, 1982, at 2:30 p.m. in Washington, D. C.

The Subgroup suggested that the following issues be discussed at the Subgroup May-meeting:

- The basis of fluence calculation and prediction in the pressure vessel.
- The assumptions and uncertainties in the prediction of pressure vessel life for the Oconee plant.
- Resolution of industry views on the thermal mixing experiments.
- Flaw detection and characterization in pressure vessels.

R. Klecker of the NRC Staff stated that he will provide a list of fluence for the eight affected plants. He will also provide to the Subgroup information on the rate of change of RT_{NDT} with time.

T. Marsten stated that the Germans and the French still do not agree on the effects of nickel alloy in an irradiated environment. The NRC Staff presented to the Subgroup curves of the effects of high- and low-nickel contents in an irradiated environment. These curves will be included in the revised Reg. Guide 1.99. In addition, T. Marsten provided documents WCAP-9311, WCAP-11053 and a Report to ASME SECTION XI Subcommittee on Repairs and Replacements, which relates to pressure vessel annealing.

W. Bock presented to the Subgroup a brief description of the PTS problem. He stated that, in general, an overcooling transient of about 310° F. is necessary to cause damage to the pressure vessel. He further stated that steam line breaks of all sizes do not cause enough cooldown to cause vessel damage for current plants if there is no feedwater to the affected steam generator.

The next Subgroup meeting is planned for May 11-12, 1982 in Washington, D. C. At this meeting the Subgroup will review the PTS matter with the NRC Staff, its consultants, the PWR NSSS vendors and appropriate utilities, EPRI and others with differing opinions on this matter.

The meeting was adjourned.

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NOTE: A complete transcript of the meeting is on file at the NRC Public Document Room at 1717 H St., NW, Washington, DC or can be obtained from Alderson Reporters, 300 - 7th St., SW, Washington, D.C., (202)554-2345.



CHAIRMAN

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

March 25, 1982

Dr. Paul G. Shewmon, Chairman
Advisory Committee on Reactor Safeguards
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Dr. Shewmon:

During the Committee's recent meeting with the Commission, and on other occasions, I have expressed interest in resolving the questions associated with pressurized thermal shock for nuclear power plants. The NRC staff has briefed the Commission on the status of their efforts. I understand that the staff is working on a proposed plan of action which will be forthcoming by about the middle of this year.

I would appreciate an ACRS critique of the staff's program on pressurized thermal shock. I am particularly interested in obtaining your views on short-term steps that should be taken by the NRC to lessen the chances of a severe problem occurring because of pressurization following thermal shock to a pressure vessel. Your critique would appear most valuable if it could be done prior to publication of the NRC plan. In that way the staff will have the advantage of knowing your views before their plan is made final.

By copy of this letter to the EDO, I am asking that NRC staff representatives and their contractors would be available to meet with the Committee or an appropriate Subcommittee to discuss this issue at a mutually convenient time.

Sincerely,

Nunzio J. Palladino
Nunzio J. Palladino

cc: Commissioner Gilinsky
Commissioner Ahearne
Commissioner Roberts
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attachment 1

of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated March 8, 1982, (2) Amendments Nos. 108, 106, and 105 to Licenses Nos. DPR-38, DPR-47 and DPR-55, respectively, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Oconee County Library, 501 West Southbroad Street, Walthalla, South Carolina 29691. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 16th day of March 1982.

For the Nuclear Regulatory Commission,
John F. Stolz,
Chief, Operating Reactors Branch No. 4,
Division of Licensing.

[FR Doc. 82-4341 Filed 3-28-82; 8:45 am]

BILLING CODE 7590-01-01

[Rockwell No. 50-296]

Power Authority of the State of New York; Issuance of Amendment to Facility Operating License

The Nuclear Regulatory Commission (the Commission) has issued Amendment No. 43 to Facility Operating License No. DPR-64, issued to the Power Authority of the State of New York (the licensee), which revised Technical Specifications for operation of the Indian Point Nuclear Generating Unit No. 3 (the facility) located in Buchanan, Westchester County, New York. The amendment is effective as of the date of issuance.

The amendment on a one-time only basis extends the monthly turbine steam stop closure check until March 31, 1982. This basically extends the testing interval by 8 days.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment March 19, 1982, (2) Amendment No. 43 to License No. DPR-64, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the White Plains Public Library, 100 Martine Avenue, White Plains, New York. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 23d day of March 1982.

For the Nuclear Regulatory Commission,
Steven A. Varga,
Chief, Operating Reactors Branch No. 1,
Division of Licensing.

[FR Doc. 82-4342 Filed 3-28-82; 8:45 am]

BILLING CODE 7590-01-01

Advisory Committee on Reactor Safeguards, Subcommittee on Ad Hoc Metal Components Subgroup; Meeting

The ACRS Subcommittee on Ad Hoc Metal Components Subgroup will hold a meeting on April 15, 1982, Room 1167, 1717 H Street, NW., Washington, D.C. The Subcommittee will discuss issues relating to pressurized thermal shock to reactor vessels. In addition, the Subcommittee will review the NRC Staff's program on this matter.

In accordance with the procedures outlined in the Federal Register on Sept.

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 during which the Subcommittee finds it necessary to discuss proprietary information and industrial security. One or more closed sessions may be necessary to discuss such information. (SUNSHINE ACT EXEMPTION 4). 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:

Thursday, April 15, 1982-8:30 a.m. until the conclusion of business.

During the meeting, the Subcommittee, along with any of its consultants who may be present, will exchange views regarding the technical aspects of the pressurized thermal shock matter. In addition, the NRC program on pressurized thermal shock will be reviewed.

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) of the Federal Advisory Committee Act, that it may be necessary to close some portions of this meeting to protect proprietary information and industrial security. The authority for such closure is Exemption (4) to the Sunshine Act, 5 U.S.C. 552b(c)(4).

Dated: March 23, 1982.

John C. Hoyle,
Advisory Committee Management Officer.

[FR Doc. 82-4346 Filed 3-28-82; 8:45 am]

BILLING CODE 7590-01-01

attachment 2

TENTATIVE SCHEDULE
MEETING OF THE ACRS AD HOC
METAL COMPONENT SUBGROUP

April 15, 1982
Washington, DC

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| ✓ I. Chairman Opening Statements, M. Bender | 8:30 - 8:45 |
| ✓ II. Summary of Pressurize Thermal Shock
Issues (PTS), W. Bock | 8:45 - 9:45 |
| III. Important Matters that needs to be considered
on PTS, ACRS Members and Consultants | 9:45 -10:45 |
| BREAK | 10:45 -11:00 |
| IV Assignment of Responsibilities | 11:00 -12:00 |
| V Open Discussions | 12:00 - 1:30 |
| VI Adjournment | 1:30 |

Note: Members of the NRC Staff will be available as observers and answer subcommittee questions.

4-15-82

MEETING ROOM: 1167

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS MEETING
ON
AD HOC METAL COMPONENTS SUBGROUP

PLEASE
PRINT
NAME

ATTENDEES PLEASE SIGN BELOW

NAME	BADGE NO.	AFFILIATION
1. Jane Beach	E0184	Adverse Reporting Co
2. F. I. BINFORD	E0246	ORNL
3. W. R. GALL	E0232	ACRS
4. M. S. WECHSLER	E0194	Univ. State University
5. J. A. & MASTRY	E0220	Florida Power & Light Co.
6. Ron Gamble	E0227	FDS Nuclear
7. PETER K. NAGATA	E0231	EG&G IDAHO
8. William L. SERVER	E0236	EG&G IDAHO
9. THEODORE ALBERTSON	E0240	EPRI
10. R. BOR SURI	E0202	TB & W
11. P. B. Brinkman	E-0225	CE
12. J. J. ...	E0229	Univ of Maryland
13. William Allan	E0170	Teleline Eng. Co
14. Erik ...	E0101	Baltimore Gas & Electric
15. E. Murphy	E0201	42
16. Susan Harris		
17. Jim Curtiss	E0201	W. S. Searle
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MEETING DATE: APRIL 15, 1982

SUBCOMMITTEE MEETING: AD HOC METAL COMPONENTS SUBGROUP

LOCATION: WASHINGTON, DC ROOM 1167

ATTENDANCE LIST

**PLEASE
PRINT**

	NAME	AFFILIATION
1.	L. ERIK TITLAND	B. G. & E.
2.	Ren Gamble	EDS Nuclear
3.	BILL SERVER	EG&G IDAHO
4.	P. K. NAGATA	EG&G IDAHO
5.	BRENT CLAYTON	NRC STAFF
6.	C. Mottis	NRC Staff
7.	J. A. De Mastroy	Florida Power & Light Co
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MEETING DATE: APRIL 15, 1982

SUBCOMMITTEE MEETING: AD HOC METAL COMPONENTS SUBGROUP

LOCATION: WASHINGTON, DC ROOM 1167

ATTENDANCE LIST

PLEASE
PRINT

NAME	AFFILIATION
1. William L. Allan	Teledyne Engineering Services
2. THOMAS W. MARSH	ERRI
3. NOVAK Zyber	NRL/RES
4. R Borsum	TSTW
5. Carl Johnson	MRC
6. Ted Murphy	W
7. EDWARD D THROM	NRC/DSI
8. M.S. Weck	LONG STATE UNIV
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