

AUG 13 1990

MEMORANDUM FOR: James M. Taylor  
Executive Director  
for Operations

FROM: Edward L. Jordan, Chairman  
Committee to Review Generic Requirements

SUBJECT: FINAL (REVISED) MINUTES OF CRGR MEETING NUMBER 177

The Committee to review Generic Requirements (CRGR) meet on Wednesday, January 10, 1990 from 1:00-3:00 p.m. A list of attendees for this meeting is enclosed (Enclosure 1). The following items were addressed at the meeting:

1. The Committee continued its review of the NUBARG backfitting appeal on the use of nuclear heat for hydrostatic testing in BWR's. The Committee had previously reviewed this matter at Meetings 172, 174 and 175 and had provided the EDO with a recommended response to the NUBARG appeal. At this meeting the Committee developed additional recommendations for the EDO in areas not explicitly addressed in the recommended response to NUBARG. This matter is discussed in Enclosure 2.
2. Jerry Wilson and Owen Gormley (RES) presented for CRGR review a proposed draft Revision 3 to Regulatory Guide 1.33 on quality assurance in operating plants. The Committee recommended against issuance of the proposed revision. This matter is discussed in Enclosure 3.
3. Due to schedule problems the Committee cancelled a planned briefing on a proposed rule on emergency preparedness relating to Part 52 licensing for nuclear power plants. (The briefing was to have been preparatory in nature, preceding actual review at a future meeting.)

In accordance with the EDO's July 18, 1983 directive concerning "Feedback and Closure of CRGR Reviews," a written response is required from the cognizant office to report agreement or disagreement with the CRGR recommendations in these minutes. The response, which is required within five working days after receipt of these minutes, is to be forwarded to the CRGR Chairman and if there is disagreement with CRGR recommendations, to the EDO for decisionmaking.

It should be noted that preliminary minutes of CRGR Meeting No. 177 were provided to CRGR members on June 7, 1990 for comment. A comment was received to the effect that an issue sheet for nuclear hydrotesting should not be attached to Enclosure 2. These final minutes have been revised to reflect that comment by removing the issue sheet.

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James M. Taylor

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Questions concerning these meeting minutes should be referred to Dennis Allison (492-4148).

Original Signed by:  
E L. Jordan

Edward L. Jordan, Chairman  
Committee to Review Generic  
Requirements

Enclosures:  
As stated

cc w/enclosures:  
Commission (5)  
SECY  
J. Lieberman  
P. Norry  
D. Williams  
Regional Administrators  
CRGR Members

Distribution w/o enc.  
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R. Bosnak            W. Minners  
B. Morris            T. King  
J. Wilson            O. Gormley  
J. Richardson        P. Randall  
R. Hermann           E. Jordan  
J. Heltemes          J. Conran  
D. Allison  
D. Ross

CFC	: AEOD: CRGR	: AEOD: DD	: C/CRGR: AEOD	:	:	:
NAME	: DA111son: sm	: DRoss	: E. Jordan	:	:	:
DATE	: 08/6/90	: 08/13/90	: 08/13/90	:	:	:

OFFICIAL RECORD COPY

ATTENDANCE LIST  
FOR  
CRGR MEETING NO. 177

January 10, 1990

CRGR MEMBERS

E. Jordan  
J. Moore  
J. Sniezek  
B. Morris (for D. Ross)  
L. Reyes  
R. Cunningham (for G. Arlotto)

NRC STAFF

J. Heltemes  
D. Allison  
M. Taylor  
K. Wichman  
C. Y. Cheng  
W. Scott  
S. Hoffman  
J. Wilson  
O. Gormley  
J. Spraul

Enclosure 2 to the Minutes of CRGR Meeting No. 177  
NUBARG Backfitting Appeal on the Use of Nuclear Heat  
for BWR Hydrostatic Testing

January 10, 1990

TOPIC

The Committee continued its review of the NUBARG backfitting appeal on the use of nuclear heat for hydrostatic testing in BWRs. The Committee had previously reviewed this matter at Meetings 172, 174 and 175 and had provided the EDO with a recommended response to the NUBARG appeal. At this meeting the Committee developed additional recommendations for the EDO in areas not explicitly addressed in the recommended response to NUBARG.

BACKGROUND

1. The Committee's recommended response to NUBARG was transmitted by a memorandum dated January 2, 1990 from E. Jordan to J. Taylor.
2. The Committee considered further in this meeting questions/issues that were raised in the course of the discussions at previous meetings of the NUBARG nuclear hydrotest appeal but were not addressed explicitly in the recommended response to NUBARG referred to in (1) above.

CONCLUSIONS/RECOMMENDATIONS

As a result of the discussions at this meeting of the residual nuclear hydrotest topics identified in the attachment, the Committee made the following recommendations to complete NRC action on the NUBARG appeal:

1. The final response to NUBARG issued by the EDO should be released publicly in accordance with normal procedures (special distribution to licensees by separate generic communication is not recommended).
2. The recommended EDO response to the NUBARG appeal (Background Item 1. above) acknowledged ambiguities and apparent inconsistencies in regulations and associated guidance documents pertinent to the nuclear hydrotest issue, and indicated that these would be clarified by the staff. In that regard:
  - a. The CRGR recommended that RES prepare an amendment to 10 CFR 50.55a, as well as to Appendix G to 10 CFR Part 50, to eliminate ambiguities and inconsistencies in the applicable generic legal requirements.
  - b. The CRGR recommended that NRR prepare guidance for use by NRC inspectors and technical reviewers to clarify staff intent with regard to specific nuclear hydrotest practices. The principal points to be addressed in preparing this guidance are:

- i. Use of nuclear heat for verification of repairs done to correct leakage found during required hydrotests.

(Some licensees, although they do not use nuclear heat for the initial hydrotesting required following an outage, apparently do verify during normal power ascension the leak tightness of repairs done to correct leakage found during that initial hydrotest.)

- ii. Inclusion of a non-condensable gas bubble in the reactor coolant system during required hydrotesting.

(Some licensees apparently do not vent the reactor vessel head area following installation of the head during refueling or other major outages, leading to a compressed non-condensable gas bubble during required hydrotests. Although the CRGR had no safety concern with this practice, depending on the size of such a bubble, this could be viewed as a conflict with the staff's intent that hydrotesting should be done water-solid.)

- iii. Criticality of the reactor core prior to or during hydrotesting.

(The question of prohibiting core criticality prior to or during hydrotesting was left unresolved in the discussion of this nuclear hydrotest practice at this meeting. One view expressed was that, conservatively, core criticality should be prohibited until after successful completion of hydrotesting that demonstrated the integrity of the reactor coolant boundary. Another view was that such a prohibition might unnecessarily preclude flexibility in plant operations that could be beneficial to safety in some circumstances; if such practice is to be prohibited, therefore, there should first be a review to determine if any beneficial practices would be precluded. This matter should be given further consideration in connection with recommended rulemaking activities referred to in 2.a. above.)

It was noted during the discussions that, although the staff did not believe any licensees were using nuclear heat to conduct hydrostatic testing, a complete survey to ensure that this was the case had not been conducted. Publication of the guidance to inspectors and reviewers should obviate any need to do so.

- c. The CRGR recommended that NRR revise the BWR standard technical specifications to indicate that, when it is necessary to conduct a hydrostatic test slightly above 200°F in order to satisfy brittle fracture requirements, the test may be performed before installation of the containment vessel head in order to achieve a better inspection. (Several specific plant technical specifications already have this provision.) The "Bases" for the proposed standard technical specifications should emphasize the central importance of obtaining a good inspection during hydrotests and consider any added risk to the public due to the testing.

It was noted that NRR was in the process of checking to see if there were any technical specifications which might allow critical operation at low temperature with the containment vessel head removed. If so, the issue would be investigated further to determine whether the technical specifications should be revised to prohibit critical operation of low temperature with the containment vessel head removed.

Enclosure 3 to the Minutes of CRGR Meeting No. 177  
Draft Revision 3 to the Regulatory Guide 1.33 on  
QA in Operating Plants

January 10, 1990

TOPIC

Jerry Wilson (RES) and Owen Gormley (RES) presented the subject draft revision for CRGR review. A copy of the slides used in the presentation is provided as an attachment to this enclosure.

Generic Letter 83-28 had promulgated new staff positions that resulted from the Salem ATWS events. It applied to plants that had operating licenses or had submitted operating license applications at the time it was published (1983). This applicability had captured all existing commercial power reactors. The basic purpose of the proposed revision was to state that the same provisions promulgated in Generic Letter 83-28 would be applicable to future commercial power reactors such as advanced reactors and standard designs under review or planned for review. Generic Safety Issue (GSI) 75 called for making the positions applicable to future plants. The work scope of TMI Action Items I.B.1.1(6) and I.B.1.1(7) had been subsumed within GSI-75.

In addition, the proposed revision would state that the provisions of a future generic letter and a future bulletin would be applicable to future commercial power reactors (assuming that the future bulletin and letter were issued before the regulatory guide was issued).

BACKGROUND

The package submitted by the staff for CRGR review of this matter was transmitted by a memorandum dated December 11, 1989 from E. Beckjord to E. Jordan. The package included:

1. Draft Regulatory Guide and Regulatory Analysis
2. Supplementary Information in accordance with the CRGR Charter

CONCLUSIONS/RECOMMENDATIONS

The Committee recommended against issuance of the proposed revision. The Committee recommended that the Generic Safety Issue be closed administratively without issuing the proposed revision. The matter had already been handled for existing plants and, for future plants, would be handled in the review process. The following points were noted during the discussion:

1. The proposed revision would have changed only the parts of Regulatory Guide 1.33 that were specific to this issue. The remainder of the guide

would have remained unchanged. This would give the undesirable impression of re-endorsing those remaining parts at a time when they were known to be in need of revision.

2. It would take some time to develop revisions to the remainder of the guide (discussed in item 2 above); however, this could be done and the entire guide could be properly revised before future plants would begin operation.
3. The Committee understood that the Nuclear Utility Task Action Committee Vendor Equipment Technical Information Program (NUTAC/VETIP) would be employed at current plants as well as future plants as a means of assuring that licensees obtain current technical information on safety-related equipment.
4. There was a need for the staff to continue pressing for industry revision of ANS 3.2-1988 in this area.

# REVISION 3 TO REG GUIDE 1.33

## OBJECTIVES:

- EXPEDITIOUSLY RESOLVE GSI 75
- MAKE CURRENT SALEM ATWS GUIDANCE APPLICABLE TO APPLICATIONS RECEIVED AFTER THE ISSUE DATE OF GL 83-28 (July 8, 1983)

## GSI - 75 GENERIC IMPLICATIONS OF ATWS EVENTS AT SALEM - QA

- The resolution to Subtask 1 of GSI 75 is to be addressed. Revise Reg. Guide 1.33 "Quality Assurance Program Requirements (Operations)" to contain more detailed guidance for operational QA programs. The Staff will consider Backfitting this Reg. Guide Revision. The work scope of TMI items I.B.I.I (6) and I.B.I.I (7) relative to the revision of Reg. Guide 1.33 has been subsumed by this generic issue subtask

## SCOPES OF GUIDE AND STANDARD

- ANSI N 18.7 -1976/ANS 3.2  
Administrative Controls and Quality Assurance  
for the Operational Phase of Nuclear Power  
Plants
- Reg. Guide 1.33  
Quality Assurance Program Requirements  
(Operations)
  - Addresses the same scope
  - Endorses ANSI N 18.7/ANS 3.2

## WHAT IS REQUIRED TO RESOLVE THE GENERIC ISSUE

- Review the Salem ATWS Task Force Report -- NUREG 1000, to identify QA and administrative control shortcomings
- Interview some Task Force Members and other "gray beards" to identify other concerns not expressed in the report (Heltemes, Baranowski, Minners, Starostecki, Graves, Kendall)
- Review I.B.I.I (6)&(7) and referenced documents for any other requirements which need to be addressed

## RESOLUTION OF THE GENERIC ISSUE FINDINGS

- GL 83-28 Comprehensive re. Salem ATWS
  - Detailed specification of administrative controls to be added within scope of R.G. 1.33
- TMI items I.B.I.I too vague to help and overtaken by changes in policy
- NUREG 1000 not critical of ANSI 18.7 -1976/ANS 3.2
  - The problem was implementation

# RESOLUTION OF THE GENERIC ISSUE NUREG 1000 NOT CRITICAL OF QA GUIDANCE

- Quotes from NUREG 1000 on adequacy of QA guidance
  - The QA program to which many licensees are committed is based on an old version of Regulatory Guide 1.33 which referenced less detailed procedures than ANSI 18.7 - 1976, with fewer and less stringent criteria.
  - Except that the 1972 version of ANSI 18.7 is not as good as the 1976 version, the QA requirements appear to be adequate, if properly implemented.

## ACTION TO RESOLVE THE GENERIC ISSUE

- Objectives of the revision
  - Minimum revision to R.G. 1.33 to add only Salem ATWS to the existing Reg. Guide
  - Changes only for Salem ATWS or to correct errors of fact
  - Maintain wording and familiarity in mind of user

**ROUTING AND TRANSMITTAL SLIP**

Date

5/9/94

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PDR		
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Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

**REMARKS**

This previous Central File material can now be made publicly available.

*MATERIAL RELATED TO CR6R  
MEETING NO. 177*

*CC (LIST ONLY) JEAN RATAJE,  
PDR L STREET*

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

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MATERIAL RELATED TO CRGR MEETING NO. 177  
TO BE MADE PUBLICLY AVAILABLE

1. MEMO FOR J. TAYLOR FROM E. JORDAN DATED 8-13-90  
SUBJECT: MINUTES OF CRGR MEETING NUMBER 177  
INCLUDING THE FOLLOWING ENCLOSURES WHICH WERE NOT  
PREVIOUSLY RELEASED:

a. ENCLOSURE 2

A SUMMARY OF DISCUSSIONS OF A ~~PROPOSED~~ NUBARG  
Backfitting Appeal on the Use of Nuclear Heat  
of BWR Hydrostatic Testing

b. ENCLOSURE 3

A SUMMARY OF DISCUSSIONS OF A ~~PROPOSED~~ Draft  
Rev. 3 to Reg. Guide 1.33 on QA in Operating  
Plants

c. ENCLOSURE \_\_\_\_\_

A SUMMARY OF ~~DISCUSSIONS~~ OF A ~~PROPOSED~~

2. MEMO FOR <sup>J. Taylor</sup> ~~E. JORDAN~~ FROM E. Jordan DATED 1-2-90  
FORWARDING REVIEW MATERIALS ~~ON A PROPOSED~~ Response  
to NUBARG Appeal Regarding System Hydrostatic +  
Leakage Testing.

3. MEMO FOR E JORDAN FROM E. Beckford DATED 12-11-89  
FORWARDING REVIEW MATERIALS ON A ~~PROPOSED~~ Draft RG  
1.33, Rev. 3 on QA in Operating Plants

4. MEMO FOR E JORDAN FROM \_\_\_\_\_ DATED \_\_\_\_\_  
FORWARDING REVIEW MATERIALS ON A ~~PROPOSED~~