

March 8, 2000

MEMORANDUM TO: Edwin M Hackett, Acting Chief  
Materials Engineering Branch  
Division of Engineering Technology  
Office of Nuclear Regulatory Research

FROM: Wallace E. Norris  
Materials Engineering Branch  
Division of Engineering Technology  
Office of Nuclear Regulatory Research

SUBJECT: TRIP REPORT FROM THE MEETING OF ASME SECTION XI  
SUBGROUP ON WATER-COOLED SYSTEMS (SG/WCS) ON  
MARCH 1, 2000

The referenced meeting was held at the Adams Mark Hotel and Convention Center, Daytona Beach, FL, on March 1, 2000. Reports on the items considered the most significant are contained in the attachments to this memorandum. Information on all SG/WCS items is available in the writer's file. Note Item D, IWA-5250 Rewrite under II, Technical Items. This item to permit through-wall leakage in all piping classes will be brought to the cognizant committees in Toronto.

Attachments: As stated

March 8, 2000

MEMORANDUM TO: Edwin M Hackett, Acting Chief  
Materials Engineering Branch  
Division of Engineering Technology  
Office of Nuclear Regulatory Research

FROM: Wallace E. Norris  
Materials Engineering Branch  
Division of Engineering Technology  
Office of Nuclear Regulatory Research

SUBJECT: TRIP REPORT FROM THE MEETING OF ASME SECTION XI  
SUBGROUP ON WATER-COOLED SYSTEMS (SG/WCS) ON  
MARCH 1, 2000

The referenced meeting was held at the Adams Mark Hotel and Convention Center, Daytona Beach, FL, on March 1, 2000. Reports on the items considered the most significant are contained in the attachments to this memorandum. Information on all SG/WCS items is available in the writer's file. Note Item D, IWA-5250 Rewrite under II, Technical Items. This item to permit through-wall leakage in all piping classes will be brought to the cognizant committees in Toronto.

Attachments: As stated

Distribution:

G. Millman  
H. Graves  
W. Bateman  
K. Wichman  
R. Hermann  
H. Ashar  
M. Modes  
T. McLellan

MEB R/F

DOCUMENT NAME: A:\SG\_WCS8.WPD

COMMITTEE: ASME SECTION XI SUBGROUP ON WATER-COOLED SYSTEMS  
(SG/WCS)

DATE OF MEETING: March 1, 2000

NRC MEMBER: WALLACE NORRIS

MEETING ATTENDED BY: WALLACE NORRIS

## I. ADMINISTRATIVE

A. The next WG/MC meeting is scheduled during the week of May 15, 2000 in Toronto, Ontario. The SG/WCS will meet on Wednesday, May 17, at 8:30 a.m.

### B. IR-7 NRC REPORT

The following items were reported to SG (see Attachment 1):

- (1) Availability of February 8, 2000, ACRS recommendation to the Commission that the 120-month interval update requirement be retained.
- (2) Office review of draft Regulatory Guides 1.84, 1.147, and the new OM Code Case guide is nearly complete.
- (3) The NRC Standards Program Website is available.
- (4) Michael E. Mayfield has been appointed NRC Standards Executive.
- (5) NRC staff guidance on risk-informed activities is available on the NRC homepage. The Commission approved the staff's plan to risk-inform 10 CFR Part 50.
- (6) The 12<sup>th</sup> Annual Regulatory Information Conference is scheduled for March 27-29, 2000, at the Capitol Hilton in Washington, DC.

## II. TECHNICAL ITEMS

### A. IR-9, CODE CASES

A. SG/WCS 99-11, Incorporation of Code Cases N-586, "Alternative Additional Examination Requirements for Class 1, 2, and 3 Piping," and N-615, "Has not yet been published," into IWX-2430, Additional Examinations

This action would revise all of the -2430 paragraphs to permit an engineering evaluation for determining the scope of additional examinations, and to provide criteria for deferring the additional examinations if the items are not accessible during normal operation. No action was taken at the meeting. However, after considerable discussion of the issues, the committee requested that I investigate the frequency of requests prior to end of outages to defer additional examinations until next outage.

This information will be considered at the Toronto meeting.

B. SG/WCS 97-27, Code Case N-XXX, Table IWB-2500-1, Footnotes

This action item had been opened by the TG Optimization to address inaccessibility. However, investigation showed that most plant configurations are 60-100% examinable. Thus, the SG made a determination to close out this item, and let licensees with specific examination problems seek relief.

C. SG/WCS 98-04, Code Revision, Exemption Criteria for Components in Exempt Lines

This item clarifies IWC-1221, Components within RHR, ECC, and CHR Systems or Portions of Systems, and IWC-1222, Components within Systems or Portions of Systems Other Than RHR, ECC, and CHR Systems. It was not clear to some licensees in all cases what portions of piping and components were examinable. The main problem seems to be heat exchangers. The intent of these paragraphs is that piping NPS 4" and smaller and any components in that pipe be exempt from examination. These paragraphs were rewritten in an attempt to make it more clear.

D. Proposed Rewrite of IWA-5250, Corrective Actions, SG/WCS 00-02, ISI 99-32

Frank Schaff made a presentation regarding the status of this action. He noted that it could be interpreted that certain provisions in the Winter 72 Addenda permitted leakage, which were later changed in the Winter 74 Addenda to not permit through-wall leakage. Because leakage was permitted at one time and because through-wall leakage for low-energy Class 3 systems has been accepted, Frank believes a case can be made for accepting through-wall leakage in all piping classes. He intends to bring item back to committee at next meeting for discussion and vote.

- Draft Final Amendment to 10 CFR 50.55a

- (1) September 22, 1999: Final rule published incorporating by reference the 1995 Edition with the 1996 Addenda.
- (2) December 1, 1999: Advisory Committee on Reactor Safeguards (ACRS) subcommittee hearing on proposal to eliminate the 120-month update.
- (3) December 2, 1999: ACRS full committee hearing on proposal to eliminate the 120-month update.
- (4) December 8, 1999: ACRS recommends that Commission retain 120-month update.

The ACRS's recommendation to the Commission: "We recommend that the Commission adopt Option 2 proposed by the staff and retain the 120-month update requirement for ISI and IST programs in 10 CFR 50.55a." In its letter, the ACRS stated, "...because assurance of the integrity of the reactor coolant pressure boundary and the containment is one of the cornerstones of the NRC regulatory system, ISI and IST programs have been required to provide additional assurance, through application of the defense-in-depth philosophy, of the integrity of these barriers and to compensate for uncertainties."

- (5) January 14, 2000: Staff submits SECY-00-0011 to Commission recommending that the 120-month update provision in § 50.55a be replaced with a baseline consisting of the 1995 Edition with the 1996 Addenda as currently incorporated into the regulations.
- (6) March 24, 2000 (tentative): Commission Briefing scheduled to discuss issues relative to elimination of the 120-month interval update.

- Revision to Regulatory Guides 1.84, 1.147, and Draft OM Guide

NRC review of final draft of proposed guides is scheduled to be completed by mid-March 2000. The briefing is anticipated for late April 2000. Based on a review of the latest procedural requirements, NRC legal staff have determined that Footnote 6 to 10 CFR 50.55a must contain the latest regulatory guide revision which has been approved for use by the NRC. This means that the guides must be accompanied by a rule which, in this case, modifies the footnote indicating the latest guides will be Revision 32 for RG 1.84, Revision 13 for RG 1.147, and Revision 0 for the OM regulatory guide. The rule has been drafted and will be transmitted to OMB for review and approval shortly. The guides are expected to be published in the Federal Register for public comment in late May 2000. The Committee to Review Generic Requirements (CRGR) has requested that the staff provide a briefing on the "new regulatory guide process."

Staff review of Supplements 4, 5, and 6, 1998 Edition, has begun. These supplements will comprise Revision 33 to Regulatory Guide 1.84 and Revision 14 to Regulatory Guide 1.147.

- NRC Standards Program Website

The NRC Standards Program website is available. This website supports NRC's strategy to increase involvement by licensees and others in its regulatory development process consistent with the National Technology and Transfer Act of 1995. The NRC strategy encourages industry to develop codes, standards and guides that NRC can endorse and industry can carry out. Compiled on this website is information on NRC's participation in the development and use of consensus standards. Our goal is for this information to broaden understanding of the NRC Standards Program and for this site to simplify access to other related information.

Seven information categories are available: Program Review, Reference Documents, Standards Developing Organizations (SDOs), Representatives on SDO Committees, Consensus Standards Used by NRC, Consensus Standards Being Reviewed For Use, and Feedback (comments on the website are encouraged).

The website address is:

<http://nrcweb.nrc.gov/NRC/REFERENCE/STANDARDS/index.html>

- New NRC Standards Executive

Mr. John Craig has been assigned to the Office of the Executive Director for Operations. Mr. Michael E. Mayfield, Acting Director, Division of Engineering Technology, Office of Nuclear Regulatory Research, has been appointed by Chairman Richard A. Meserve to replace Mr. Craig as the NRC Standards Executive.

#### Risk-Informed Activities

The staff is still giving high priority to risk-informed activities, including IST, ISI, QA, technical specifications (TSs), and risk-informing 10 CFR Part 50. The NRC staff's guidance on risk-informed activities are available on the NRC homepage.

#### *Risk-Informed Inservice Inspection*

The NRC staff has completed its review of the EPRI risk-informed ISI Topical Report which was submitted by the Electric Power Research Institute (EPRI) by letter dated July 29, 1999. On October 28, 1999, the staff issued the safety evaluation (SE) which discusses the adequacy of the EPRI methodology for developing a risk-informed inservice inspection program, and indicates its applicability and implementation at individual plants. The staff has found that this topical report is acceptable for referencing in licensing applications to the extent specified and under the limitations delineated in the report and the associated NRC safety evaluation. Licensees who follow the approved methodology and the template developed jointly by the staff and the industry can send an abbreviated submittal and expect an expedited staff review.

On February 11, 2000, the staff authorized an alternative to ASME Section XI Code requirements for the Browns Ferry Nuclear Plant Unit 3. This relief authorized the licensee to implement a RI-ISI program for piping beginning with an outage scheduled to start on April 16, 2000. The alternative applies to Class 1, 2 and 3 piping systems and decreases the number of weld inspections by approximately 55% over the 10-year inspection interval. Browns Ferry 3 is the second BWR to receive authorization for use of RI-ISI. The previously authorized RI-ISI program for Vermont Yankee applied only to Class I piping. The staff has received the James FitzPatrick, South Texas, and Turkey Point RI-ISI submittals and is expecting 2-4 additional submittals in the next 2-3 months.

#### *Risk-informing 10 CFR Part 50*

The Commission recently approved the staff's plan to risk-inform the scope of 10 CFR Part 50 regulations for the

reactor program. A January 31, 2000, Staff Requirements Memorandum (SRM) provided Commission direction regarding the staff proposal for a rulemaking plan for risk-informing special treatment requirements (described in SECY 99-256, dated October 29, 1999). The alternative special treatment requirements would vary the treatment applied to structures, systems, and components on the basis of their safety significance using a risk-informed categorization method. Current special treatment requirements are deterministic based and go beyond industry-established requirements to provide additional confidence that equipment is capable of meeting its functional requirements (e.g., equipment qualification).

In March, the staff will issue an Advance Notice of Proposed Rulemaking that seeks public comment on the direction, scope, and the effects of risk-informing the reactor regulatory program. The Commission believes that this effort will enhance public safety by allowing licensees and the NRC to focus resources on the most significant safety issues. By focusing on the most risk significant safety issues, this rulemaking will inherently provide a voluntary means to reduce regulatory burden and to improve efficiency and effectiveness. An alternative regulatory infrastructure will permit licensees to reduce special treatment requirements for those structures, systems, and components that do not contribute appreciably to safety. The Commission intends to solicit stakeholder input, interactions, and discussion throughout the rulemaking process.

A meeting with industry and stakeholders was held on February 23, 2000, to continue the technical dialogue on special treatment requirements. A meeting with industry and stakeholders was held on February 24, 2000, to discuss changes to the body of the Part 50 regulations to incorporate risk-informed attributes.

#### Regulatory Information Conference

The 12th Annual Regulatory Information Conference is scheduled for March 27, 28, and 29, 2000, at the Capitol Hilton Hotel in Washington D.C. Complete information about the conference can be found on the external RIC 2000 web site at:

COMMITTEE NUMBERS	ITEM IDENTIFIER	SUMMARY	SG/WCS VOTE	NORRIS VOTE
SG WCS 97-27	Code Case N-XXX	Motion to close item Code Case X-XXX, Table IWB-2500-1, Footnotes Passed Unanimously	Y	Y
SG WCS 98-04	Code Revision	Exemption Criteria for Components in Exempt Lines, Passed Unanimously	Y	Y
SGWCS 97-26	Code Case N-XXX	Proposed Code Case N-XXX, "Alternative Requirements to Categories B-G-2, B-G-2, and C-D Bolting Examination Methods and Selection Criteria, and Corresponding Code Changes	Y	Y
SGWCS IR-10	Inquiry IN 00-002	Inquiry (Question 1; Question 2 was withdrawn) on Code Case N-577, "Risk-Informed Requirements for Class 1, 2, and 3 Piping, Method A," Note 1 to Table 1, regarding length of examination volume. For those configurations without a counterbore, the Note does not apply. The item passed with two abstentions (they had not had time to consider the item).	Y	Y
SGWCS IR-10	Inquiry IN 00-004	Examination Category B-K, Welded Attachments for Vessel, Piping, Pumps, and Valves; Examination Category C-C, Welded Attachments for Vessel, Piping, Pumps, and Valves; Passed unanimously; Discussions between Throckmorton, Belew, Pendleton, and Davis - these are meaningless examinations.	Y	Y