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CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

CORRECTIVE ACTION REQUEST

CAR No. 93-3

Associated AR,SR,NCR NO. Audit 93-1

PART 1: DESCRIPTION OF CONDITION ADVERSE TO QUALITY

Contrary to TOP 18, Revision 2, Change 0, Paragraph 7.4.2, CNWRA Document 93-002 (Draft) was generated and presented in March 1993. This document reported results of a test case using the Code "UDEC" without the software being base-lined or a request for variance being generated or acted on.

T.C. Trbovich

Initiated by: Thomas C. Trbovich

Date: May 7, 1993

PART 2: PROPOSED ACTION

Responsible Element Manager: B. Sagar

a) Root Cause: See Attached

b) Corrective Action to Preclude Recurrence: See Attached

Target Date for Completion: June 21, 1993

Response provided by: *P. J. Jansen*

Date: 5/21/93

PART 3: APPROVAL

Comments/Instructions: *Copy of this CAR & proposed actions should be sent to the CNWRA Code Custodian.*

Director of QA: *Shirley Mahoney*

Date: 5/21/93

PART 4: VERIFICATION OF CORRECTIVE ACTION IMPLEMENTATION

1. UDEC Code was put under CNWRA Configuration Management 8/13/93.
2. CNWRA TOP-018, REV 0 became effective 8/27/93. There have been 2 minor changes on 10/15/93 (Chg 1) and 11/16/93 (Chg 2).

Verified by: *Shirley Mahoney*

Date: 12/30/93

Response to CAR 93-3

Root Cause: The root cause of this condition is that paragraph 7.4.2 of TOP-018 does not accurately reflect the intent or understanding of the author of TOP-018, Rev. 2, of the Element Managers, or of the Configuration Control Board regarding reports and publications which involve analyses and calculations using computer codes. The intent of the CNWRA is that calculations and conclusions important-to-licensing will be performed utilizing baselined codes. Calculations and conclusions involving assessment or development of codes, or incidental calculations not important-to-licensing need not be performed using baselined codes.

Remedial action: Reports and publications issued since the effective date of TOP-018, Revision 2 (11/23/92) will be reviewed by CNWRA Element Managers to determine if any codes were used in important-to-licensing calculations and conclusions. If any cases are identified, the configuration of the affected codes at the time of the activity reported on will be established and baselined to the extent practical. Appropriate documentation shall be developed to tie the code configuration to the corresponding calculations and conclusions. Until corrective action is completed, the intent of the CNWRA, as expressed in the Root Cause, shall be followed. Review documentation for affected reports and publications shall include evidence that this intent has been followed.

Corrective Action to Preclude Recurrence: TOP-018 shall be changed or revised to clarify the intent of the CNWRA regarding when codes shall be or need not be baselined.

Target date for Completion: June 21, 1993

MEMORANDUM

June 10, 1993

TO: W. Patrick
CNWRA Directors ✓
CNWRA Element Managers

FROM: P. Mackin

SUBJECT: Response to CAR 93-3: Results of Investigation into the use of Unconfigured Codes in Calculations Reported in Publications

In response to CAR 93-3, CNWRA Directors and Element Managers were asked to examine CNWRA publications submitted subsequent to the date of the most recent revision of TOP-018 (11/23/92) to determine if any unconfigured codes were used in analyses or calculations related to licensing issues.

Results of this examination are as follows:

- No publications were identified in which such use was made of unconfigured codes.
- A determination is required as to whether the CNWRA Research Program Semi-Annual Reports should be considered as containing analyses or calculations important to licensing. I recommend that, as reports of incremental progress in our research program, they not be considered important to licensing.
- There were some instances wherein work completed previous to the 11/23/92 revision to TOP-018 was not published by the NRC until after the revision. The question has been posed as to whether the requirements of the revised procedure should be applied retroactively to these documents. I recommend that such retroactive application not be done.

I propose that these results and recommendations be discussed jointly by the CNWRA Configuration Control Board and the Director for Quality Assurance. Subsequent to this discussion, it should be possible to document completion of action in response to CAR 93-3 or to specify additional steps required to complete such action.

cc:

R. Brient
A. DeWispelare

MEMORANDUM

June 21, 1993

To: B. Mabrito

From: B. Sagar, Acting Manager *Budli*
 Performance Assessment & Hydrologic Transport

Subject: Request for Delay in Revision of TOP-018

The subject software configuration management procedure is being extensively revised to incorporate the changes agreed to in the last CCB meeting and the recommendations of the audit team. Mark Muller and Bob Brient have been working together with input from Bob Baca to decide on specific changes. At present, the planned modifications are approximately 50 percent complete. Most of the changes made to-date deal with simplifying/condensing the document, restructuring certain subsections, and clarifying requirements. Changes yet to be made include refining the applicability of the procedure and incorporating software verification and validation requirements for better consistency with the Appendix B requirements of 10CFR50.

We are presently behind schedule, primarily because of time commitments to competing CNWRA activities such as OPS/Project plan preparation, semi-annual report preparation, and completion of PA project milestones due in June. Consequently, we are requesting your approval for the following new schedule for completion of the revision: (1) complete draft procedure by 7/30/93, (2) complete internal review and issue procedure by 8/15/93.

APPROVAL: *B. E. Mabrito* 6/22/93
 B. E. Mabrito Date

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Distributions:
W. Patrick
Director
Element mgmt
R. Brient
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MEMORANDUM

August 16, 1993

To: Bruce Mabrito

From: Robert G. Baca *RG Baca*
PA&HT

Subject: Request for Short Delay to Finalize Revision 2 of TOP-018

The subject revised procedure has gone through detailed technical reviews by representatives of the IMS, RDCO, GS, EBS and WSE&I Elements. These technical reviews produced extensive comments, many of which, have been difficult to resolve. We are presently behind schedule in preparing responses to the comments and resolving key issues related to procedure implementation. Much of the delay in completing the TOP on schedule has been due to the voluminous nature of the review comments and my time commitments to other CNWRA activities such as the technical support to the NRC interactions with the NAS Committee on the Yucca Mountain standards, staff evaluations meetings, etc.

Consequently, I am requesting your approval for a short delay to 8/27/93. This will provide sufficient time to complete the resolution of comments with the technical reviewers as well as complete the programmatic review.

APPROVAL: *Bruce Mabrito* 8/18/93
B.E. Mabrito Date

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- CC: R. Brient* *EMs*
- B. Sagar*
- W. Patark*
- R. Johnson*
- H. Garcia*
- J. Russell*
- P. Mackin*