



CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES QUALITY ASSURANCE SURVEILLANCE REPORT

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PROJECT NO: 20-5708-760

REPORT NO: 96-16

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SURVEILLANCE SCOPE: Total System Performance Assessment and Integration KTI Activities

REFERENCE DOCUMENTS: Current PMPR, FY96 Operations Plans (Since FY97 plans have not yet been released.)

STARTING DATE: October 17, 1996

ENDING DATE: October 25, 1996

QA REPRESENTATIVE: R. D. Brient *RD*

PERSONS CONDUCTING TEST/EXAM/ACTIVITY: R. Baca, R. Manteufel, R. Janetzke, S. Mohanty, A. DeWispelare

SATISFACTORY FINDINGS:

Task 1 - Technical Assistance: Current activities include the Phase 1 Sensitivity Analysis and the Detailed Review of DOE's TSPA 1995. Other KTI teams will also contribute to the detailed review, however these activities fall under the other KTIs and will be evaluated under separate surveillance activities. For activities within the Performance Assessment element, both the sensitivity analysis and the detailed review involve the same analyses; the report for the sensitivity analysis being more detailed and scheduled earlier. Scientific Notebook 190 documents these activities, and was reviewed. This notebook was started in early September, 1996 to record TPA code estimates of the complimentary cumulative distribution function for various repository scenarios. The software used is a modification of the TPA code that was used in CNWRA Iterative Performance Assessment (IPA) Phase 2. The code has not been controlled under TOP-018 because a major revision to TPA is identified in Operations Plans, with a new user manual to be issued in August 1997. The notebook includes appropriate initial and in-process entries, and identifies the code changes from that used in IPA Phase 2. The notebook includes disks for the TPA runs, and several tapes are included by reference. The notebook appears to satisfy QAP-001 requirements.

Task 2 - TPA Code Development: A Software Requirements Description (SRD) for TPA version 3.0 has been drafted and was reviewed to provide the investigators with feedback on its suitability in meeting TOP-018. The SRD has been written along TOP-018, section 5.3.2 requirements, so all of the required information topics are addressed. The SRD version number (i.e., 3.0) should be identified, particularly to distinguish between this version in process and any other versions.

The SRD treats TPA, with all of its modules, as a single configuration item. Several software items (EBSPAC, MULTIFLO, etc) operate (i) as modules of TPA and (ii) as stand-alone codes. Since small differences may exist between the modules of TPA and their stand-alone counterparts, the stand-alone software are considered separate configuration items. These are being developed and controlled under other KTIs.

Task 3 - CDOCS Technology/Documentation Transfer: This activity was closed out as of October 1, 1996, and has no current activity.

Task 4 - Licensing Support System Pilot Program: The prototype Web-site for the LSS was developed and IM 20-5708-764-610 delivered in late September, 1996. Current activities, and through the balance of FY97 are to maintain the Web-site and accumulate operations comments. This program relies primarily on off-the-shelf software, with a small amount of code written for interfaces. Since it is a prototype, TOP-018 was not applicable. A Scientific Notebook was not used, however, a loose leaf notebook has been kept which includes correspondence, background information, and demonstration view-graphs. While the IM provides an adequate description of the LSSPP, the loose leaf notebook should be considered for capture in QA records as helpful supplementary information.

Personnel qualification were verified for R. Baca, R. Manteufel, S. Mohanty, A. DeWispelare, R. Marshall

UNSATISFACTORY FINDINGS: none
NONCONFORMANCE REPORT NO: none

ATTACHMENTS: none

RECOMMENDATIONS/ACTIONS: Revise the draft SRD to clearly identify the TPA version number.

APPROVED:

B. Mabrito
CNWRA DIRECTOR OF QUALITY ASSURANCE

DATE:

10/30/96

DISTRIBUTION:

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