SUMMARY OF
NRC/DOE QUARTERLY QUALITY ASSURANCE MEETING
October 16, 2002

Introduction:

This NRC/DOE Quarterly Quality Assurance (QA) Meeting for the Yucca Mountain Project (YMP) was held on October 16, 2002, in Las Vegas, Nevada, with video and audio connection to the NRC Headquarters Office in Rockville, Maryland and audio connection to the Center for Nuclear Waste Regulatory Analyses in San Antonio, Texas. Participants included representatives from the NRC, DOE, Bechtel SAIC Co. LLC (BSC), and the State of Nevada. Copies of the agenda and a list of attendees are attached as Enclosures 1 and 2 respectively.

The meeting was convened with opening remarks from Dr. Margaret Chu (DOE). Dr. Chu emphasized the importance of the DOE QA Program and thanked all DOE and BSC staff for their efforts to improve the implementation of this process. She mentioned that QA is a key element in the Management Improvement Initiative (MII). Dr. Chu also indicated that she is pleased with the progress, but there is a long way to go. Additionally, she stated that she would like to see future QA meetings focus on working issues and develop specific action items much like the current Key Technical Issues meetings and technical exchanges.

Dr. Chu introduced Dennis Brown as the new Director of the Office of Quality Assurance (OQA). Mr. Brown provided a brief description of his background that included ten years of experience in the commercial nuclear industry in the area of QA auditing and surveillance activities. He was also QA Director at the Waste Isolation Pilot Plant (WIPP) for over 5 years and has past experience with the YMP QA program. He noted that many of the QA problems that WIPP had are the same or similar to those being experienced at YMP. He plans to focus on fully implementing the QA procedures, to have OQA staff get more involved with line staff to implement procedures, and to work toward resolution of data and software issues. He stated that for DOE to have confidence in its technical products the data must be qualified and software must be appropriately verified and validated.

Presentations:

Ram Murthy (DOE) presented the OQA Quality Assurance Program Status, including recent audit and surveillance activities, and the status of the trend program. A copy of this presentation is provided in Enclosure 3.

Tom Matula (NRC) asked if Technical Error Reports (TERs) are being integrated into the trend program. Mr. Murthy said that all TERs submitted to OQA trend coordinator have been entered into the trend database and the data is being evaluated. The results of the evaluation will be reflected in the next Trend Report. Mr. Matula also asked if the timeliness requirements for

ENCLOSURE

closing TERs are proceduralized. BSC stated that procedure AP-15.3Q is being revised to include timeliness requirements related to dispositioning TERs. Also, with regards to the OQA Action Item QA 0207-01 from the July 2002 Quarterly QA meeting, it was clarified that Deficiency Identification and Referrals (DIR) were not being captured as individual inputs to the OQA Trend Program. Mr. Murthy stated that DIRs will be incorporated, as appropriate, in future trend reports.

Mr. Matula inquired about the use of unqualified data to support Key Technical Issue (KTI) agreement resolutions. Joe Ziegler (DOE) said that when doing risk sensitivity studies for issue resolutions, DOE uses the best information available, but the data may not be qualified. However, data used for license application (LA) will be appropriately qualified. Mr. Matula noted that DOE has stated its intent to issue, by the end of October 2002, a position paper on the use of unqualified data to support KTI agreement resolution. Mr. Matula asked to what extent OQA has been involved in the development of the DOE position paper. Mr. Murthy said that DOE OQA has not been involved in the development of the DOE position paper. However, Messrs. Ziegler and Brown (DOE) stated that OQA would be involved in review of the position paper.

Robert Latta (NRC) cited a recent OQA trend report that indicated that failures to implement procedures are increasing. Ken Hess (BSC) said that the issue is isolated. However, BSC has been encouraged by the increase in frequency of project personnel actively identifying possible deficiencies and that non-compliance was being addressed. Mr. Hess also indicated that BSC is not satisfied with procedure compliance but that an increasing trend indicates that compliance issues are being self identified and brought forward.

Larry Campbell (NRC) requested DOE OQA to provide the basis for delaying the annual audit of the Yucca Mountain Site Characterization Office (YMSCO). Mr. Campbell stated that the last audit report, YMSCO-ARC-01 -14, indicated that this organization was not effectively implementing the QA program. Further, Mr. Campbell stated that typically, audit frequencies are shortened rather than lengthened when adverse conditions are identified in an organization. Mr. Murthy explained that he agreed to delay the audit at the request of the YMSCO Project Manager because of various MII implementation reasons including the timing of the audit. Mr. Murthy also stated that the deficiencies identified in the previous audit have been verified and closed and that he approved delaying the audit for 3 months, as MII itself is a comprehensive action plan that needs to be accomplished. The audit has been rescheduled to be performed in December of this year. Mr. Brown (DOE) asked if any surveillances had been performed since the audit and Mr. Murthy said no. Mr. Brown stated that he would review the basis for the audit being delayed, and if appropriate generate a Deficiency Report (DR).

Dr. Gene Runkle (DOE) then presented an overview of MII implementation relative to QA programs and process (Enclosure 4). Dr. Runkle described the primary objectives of this improvement area as: 1) defining and clarifying roles and responsibilities, and 2) focusing on

quality at the working level where quality must be built into the products and not inspected-in. He also described progress on the QA program, review of the Quality Assurance Requirements Document (QARD), and project procedures. Dr. Runkle indicated that certain documents recently produced under the MII have been provided to the NRC's On-site Representatives. William Reamer (NRC) asked if those documents would be available to the public; Dr. Runkle replied yes.

Mr. Matula (NRC) reminded DOE that during the quarterly QA Meeting held in July 2002, DOE agreed to provide QARD revisions that reduce commitments to NRC for review and comment prior to implementation. DOE acknowledged this agreement. Dr. Chu (DOE) emphasized that the goal of MII is to clarify project procedures, determine how to best implement them, and then to facilitate their implementation.

During the discussion of the review of the QARD, Mr. Campbell (NRC) discussed that the draft NRC Yucca Mountain Review Plan issued in 1989 was for scientific investigation and site characterization activities and that the 2002 draft was applicable for the QA program to be submitted should DOE submit a license application. Further, Mr. Campbell pointed out that certain editions of NQA-1 (e.g., the 1983 edition) had been accepted by the NRC and that certain later editions may have changed, deleted, or made certain provisions non-mandatory. Specifically, Mr. Campbell cautioned the use of certain editions of NQA-1 that may have reduced provisions of NQA-1-1983.

Susan Lynch (State of Nevada) asked Janet Schlueter (NRC) if the NRC would be providing any more detailed comments on the MII than those contained in the October 3, 2002, letter from NRC to DOE. Ms. Schlueter briefly described the comments in the letter but said that there were no plans by NRC to provide any further detailed comments.

Russell Fray (BSC) made the next presentation on the BSC procedure action plan (Enclosure 5). The objective of the BSC procedure action plan is to improve efficiency of current processes, define procedure hierarchy, and establish separate DOE and BSC procedure sets. Mr. Fray stated that the procedure on TERs is currently in review. Mr. Campbell (NRC) noted that the lessons learned from the projects 1999 procedure revision activity should be taken into account. Mr. Latta (NRC) also mentioned that some recent procedure changes affecting Office of Civilian Radioactive Waste Management (OCRWM) activities have not been reviewed and concurred on by OQA. Robert Hasson, a representative from a DOE contractor, Navarro Quality Services, stated that this issue is being reviewed for a potential DR. Mr. Murthy (DOE) stated that OQA has scheduled a surveillance on the procedure preparation activities.

Mr. Fray (BSC) also made a presentation concerning the status of Corrective Action Reports (CARs) and stand-down activities (Enclosure 6). Mr. Fray indicated that eight of the 12 corrective actions described in the MII have been completed. The remaining four are 1) self-identification of model validation problems; 2) self-assessments of model development for LA;

3) evaluation of Bin 3 model impacts, and; 4) development of performance indicators. The CARs being addressed involve: 1) model validation; 2) software development; 3) training requirements and job functions; 4) preservation of records on electronic media, and; 5) tracers, fluids, and materials not recorded on required forms. Mr. Fray also discussed the site operations stand-down, related to a near-miss electrical incident that occurred in March 2002 at the Yucca Mountain site. This stand-down has been completed by issuance of a comprehensive recovery plan and the implementation of a new site operations management approach.

Mr. Murthy (DOE) gave a presentation on the verification of CARs (Enclosure 7). DOE's conclusion within this area is that corrective actions verified to date are satisfactory. Mr. Murthy stated that this a phased approach and should not be construed as final verification.

Mr. Matula (NRC) asked why software validation issues were documented on TERs rather than on DRs. Mr. Fray (BSC) said that TERs are used to document minor editorial errors while DRs are used to document non-compliance with QARD requirements.

Regarding software procedure status, Mr. Fray stated that new procedures will be piloted and put through a dry run before training of project staff on those procedures is completed. Mr. Fray also stated that based on the results of an ongoing BSC software surveillance, senior management is evaluating a decision to require all LA supporting codes to be re-tested as part of the new verification and validation process. Mr. Reamer (NRC) asked when, as a result of the software surveillance, DOE senior management would make a decision regarding the review of all computer codes supporting LA. Mr. Fray stated that this decision would be made in November 2002.

Mr. Campbell (NRC) asked for the definition of a Software Deficiency Notification (SDN), and if these documents are trended. Mr. Fray replied that these reports identify minor inconsistencies in software codes and that an impact evaluation is required for SDNs. Depending on the results of the impact evaluation, a DR may be written and the condition would be entered into the trend database. With respect to the CAR on degradation of electronic media, Mr. Campbell (NRC) asked if any of the electronic records were used to support either site recommendation or if they would be used for LA? In response to this question, DOE indicated that some of the electronic records could have been used to support SR and/or LA. However, DOE also indicated that they believe that hard copies of many of these records may exist.

Mr. Matula (NRC) inquired as to the possibility of having copies of all CARs and DRs initiated by both DOE and BSC formally submitted to NRC. Mr. Ziegler (DOE) stated that copies of CARS and DRs are now provided to the NRC On-site Representatives.

Don Krisha (BSC) then gave a short explanation as to the differences between non-QA and QA related stand-downs, when a DR or CAR would be issued, and the ability of BSC's QA organization to stop work if a QA related issue is not properly addressed by management.

Emily Cooper (DOE) gave a presentation on the status of the self-assessment (SA) program (Enclosure 8). The SA program has made progress by revising SA procedures, designating organizational points of contact, developing an SA handbook and new or improved training, screening of SA reports, providing SA mentoring, and by developing SA performance indicators. Ms. Cooper also described the results of recent SAs, and the program's goals for enhancements including incorporation of guidance derived from commercial nuclear experience.

Susan Lynch (State of Nevada) requested copies of DOE/BSC self-assessment reports. Mr. Ziegler (DOE) said they would consider these requests and noted that the self-assessments reports are not public documents.

Mr. Krisha (BSC) gave a status update of BSC's QA program (Enclosure 9). In FY02, 44 QA surveillances were completed and the FY03 first quarter schedule has been issued. The focus of surveillances is on repetitive past problems, real-time critical activities, and on any requested topic. Mr. Krisha also gave a status update on BSC's audit program. In FY02 36 external audits were completed and the FY03 first quarter schedule has been issued. Approval by the OCRWM senior management to perform internal audits was received in July 2002, and the first internal audit, regarding records management and document control, was conducted in early October 2002. The FY03 internal audit schedule has been issued.

Action Item:

Tim Gunter, DOE, presented the status of the action items from the past meetings. In addition, two new action items were agreed to:

1. DOE review the reasons for OQA delaying their audit of YMSCO, and whether a DR should be issued on that issue.
2. DOE is to consider the State of Nevada's request for copies of all self- assessment reports.

The current status of the action items is shown in Enclosure 10.

Closing Remarks:

None.

Date 11/8/02
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