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AUG 04 1993

Mr. Dwight E. Shelor, Associate Director  
for Systems and Compliance  
Office of Civilian Radioactive Waste Management  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585

Dear Mr. Shelor:

SUBJECT: OBSERVATION AUDIT OF REYNOLDS ELECTRICAL & ENGINEERING CO., INC.

I am transmitting the U.S. Nuclear Regulatory Commission Observation Audit Report 93-11 of the U.S. Department of Energy, Office of Civilian Radioactive Waste Management (OCRWM), Yucca Mountain Quality Assurance Division (YMQAD) quality assurance (QA) audit of the Reynolds Electrical & Engineering Co., Inc. (REECo) QA program. The audit, YMP-93-12, was conducted from June 21 through 25, 1993, in Las Vegas, Nevada and at the Nevada Test Site in Mercury, Nevada. The audit evaluated the adequacy and effectiveness of the REECo QA program in seven programmatic areas. The audit did not include any technical specialists since the audit did not include any technical issues. The State of Nevada participated as an observer at this audit.

The NRC staff evaluated the YMQAD audit to gain confidence that YMQAD and REECo are properly implementing the requirements of their QA programs. The NRC staff based its evaluation of the YMQAD audit process and the REECo QA program on direct observations of the auditors; discussions with audit team and REECo personnel; and reviews of the audit plan, the audit checklists, and other pertinent documents.

The NRC staff has determined that Audit YMP-93-12 was useful and effective. The audit was well organized and conducted in a thorough and professional manner with minimal logistic delays. The audit team was well qualified in the QA discipline, and its assignments and checklist items were adequately described in the audit plan.

The NRC staff agrees with the YMQAD audit team's preliminary findings that the REECo QA program generally has adequate controls in place and that the overall implementation of the REECo QA program is effective. The REECo QA program was adequate in six of the seven programmatic areas audited; the procurement area was unsatisfactory; and a segment of one of the areas pertaining to shotcrete (Portland Cement concrete pneumatically projected at high velocity onto a prepared surface) was unsatisfactory. Eleven preliminary Corrective Action Requests (CARs) were issued by the YMQAD audit team; seven against the REECo QA program and four against the QA program of the Civilian Radioactive Waste Management System Management and Operating Contractor (M&O). None of the preliminary CARs identified by the YMQAD audit team are significant in terms of the overall REECo and M&O QA programs or pose a condition that may impact safety or waste isolation. Although the NRC staff agrees that none of the

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deficiencies identified, if appropriately resolved, will have a detrimental effect on the high-level waste repository, the NRC staff is concerned about the timeliness of both identification and resolution of deficiencies. The progress of site activities demands that deficiencies be identified early in the work process, preferably by the first line quality organization(s), and effective corrective actions be taken to avoid detrimental effects on work in progress. In view of the aforementioned NRC staff concerns, and the problems that have surfaced during this audit, it is the NRC staff's position that DOE needs to address these problems and take timely corrective action in order to preclude additional problems from occurring during the construction phase. If appropriate, reviews and analyses should be performed to demonstrate that end products are acceptable for use without rework.

OCRWM should continue to closely monitor implementation of the REECo and M&O QA programs to ensure that the deficiencies identified during this audit are corrected in a timely manner and that future QA program implementation is effective. The NRC staff expects to participate in this monitoring as observers and may perform its own independent audits at a later date to assess the implementation of the REECo QA program.

A written response to this letter or the enclosed report is not required. If you have any questions, please call William Belke of my staff on (301) 504-2445.

Sincerely,

*JS/*

Joseph J. Holonich, Director  
Repository Licensing and Quality  
Assurance Project Directorate  
Division of High-Level Waste Management  
Office of Nuclear Material Safety and  
Safeguards

Enclosure: As stated

- cc: R. Loux, State of Nevada
- T. J. Hickey, Nevada Legislative Committee
- C. Gertz, DOE/NV
- M. Murphy, Nye County, NV
- M. Baughman, Lincoln County, NV
- D. Bechtel, Clark County, NV
- D. Weigel, GAO
- P. Niedzielski-Eichner, Nye County, NV
- B. Mettam, Inyo County, CA
- V. Poe, Mineral County, NV
- F. Sperry, White Pine County, NV
- R. Williams, Lander County, NV
- L. Fiorenzi, Eureka County, NV
- L. Vaughan II, Esmeralda County, NV
- C. Schank, Churchill County, NV
- L. Bradshaw, Nye County, NV

OFC	HLPD	E	HLPD	E	HLPD			
NAME	WBelke		KHooks		JHolonich			
DATE	08/3/93		08/1/93		08/4/93			

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Mr. Dwight E. Shelor

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SUBJECT; OBSERVATION AUDIT OF REYNOLDS ELECTRICAL & ENGINEERING CO., INC.

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