



Reynolds Electrical & Engineering Co., Inc.

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IN REPLY REFER TO:

580-01-673

WBS 1.2.9.1
QA: N/A

JUL 15 1994

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Yucca Mountain Site
Characterization Office
U.S. Department of Energy
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YUCCA MOUNTAIN SITE CHARACTERIZATION (YMP) PROGRESS REPORT (SCPB: N/A)

Enclosed is the June YMP Progress Report for Reynolds Electrical & Engineering Co., Inc.'s participation in the YMP. The Variance Analysis Reports are not enclosed and will be submitted under separate cover.

If you have any questions, please contact Dean L. Knight at 794-7400.

Bruce Sandell For DLK

Daniel L. Koss, Manager
Yucca Mountain Project Division
YMP Technical Project Officer

DLK:SEW:L94241:1k

Enclosures

1. Progress Report (9 pages)
2. Cost/Full-Time Equivalent Report (1 page)

cy w/encls.

Information Services Center, M/S 408
M. M. Martin, M&O, M/S 423

cy w/encl. 1

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Robert M. Nelson, Jr.

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J. J. Brogan, SAIC, M/S 517/T-12
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S. C. Smith, SAIC, M/S 517/T-10
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REYNOLDS ELECTRICAL & ENGINEERING CO., INC.
(REECo)

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT (YMP)

JUNE 1994 - PROGRESS REPORT

REECo has no reportable Level 0 or Level 1 Milestones.

WASTE PACKAGE (1.2.2)

PROGRESS DURING REPORTING PERIOD:

Work Breakdown Structure (WBS) 1.2.2.2.4

Task: Fran Ridge Phase II (Job Package 93-10A)

Continued excavation activities (60 percent complete); began sampling activities.

DELIVERABLES:

None.

ISSUES AND CONCERNS:

None.

SITE (1.2.3)

PROGRESS DURING REPORTING PERIOD:

WBS 1.2.3.5

Task: USW SD-9 (Job Package 94-07)

Currently coring with 6-inch core bit at 1459.11 feet.

Task: USW SD-12 (Job Package 94-04)

Presently reaming 12 1/4-inch hole at 1062.48 feet, with 4 3/8-inch core hole at 1065.74 feet.

Task: Maintenance & Operations

Continued to provide technical support, equipment checks, and repairs to the U.S. Geological Survey (USGS) Integrated Data Acquisition System (IDAS) Prototype System.

| <u>Deliverable</u> | <u>Due Date</u> | <u>Expected Date</u> | <u>Completed Date</u> | <u>Comments</u> |
|---|-----------------|----------------------|-----------------------|---|
| Drilling of SD-12 Borehole | | | | Operations ongoing. |
| Drilling of NRG-77A Borehole | | | | Completed March 10, 1994. |
| Drilling of Ramp Boreholes NRG-8A, 8B, 8C | | | | No activity at this time. |
| Drilling of Ramp Boreholes NRG-2C and NRG-2D, Phase I | | | | Phase I completed February 10, 1994. |
| Drilling of SD-9 Borehole | | | | Started drilling operation on May 5, 1994. Operations ongoing. |
| Support testing and completion on UZ-16 and UZ-14 | | | | Testing support ongoing on UZ-16. No testing activity on UZ-14 at this time. Drilling phase completed May 16, 1994. |
| Support pump testing activities at the C-Hole Complex | | | | Phase I completed January 21, 1994. No activity at this time. |
| Drilling of UZ-7A Borehole | | | | No activity at this time. |

DELIVERABLES:

None.

ISSUES AND CONCERNS:

None.

EXPLOATORY STUDIES (1.2.6)
PROGRESS DURING REPORTING PERIOD:

WBS 1.2.6.1

Task: Exploratory Studies Facility (ESF)

Continued administrative support for ESF activities to include planning, scheduling, and management.

Task: ESF North Portal Pad & Facilities (Job Package 92-20)

Dry Core Drilling in Test Alcove #1: Drillers maintaining standby status (Participated in Colorado exercise). Scientist installing temperature and barometric pressure transducers in all three holes.

Underground Electrical Ductbanks: Encasement completed. Began pulling string in preparation for cable pulling activities. Finished conduit installation to power center stubups. Installed remaining PVC piping under transformer and power center pad locations. Poured remaining duct under transformer and power center pad locations. Backfilling over UG power center encasement completed.

Sanitary Sewer Line: Completed compacting and backfilling laterals. Continued working on the two 75-foot runs for Building 5009. Began accumulation information for sewer through grouting/cement pour. Continued working on line installation and testing at manholes.

Water line - J-13 to Booster: Completed center loading and final grading.

Fire Water Line and Potable Water Line: Excavated approximately 80 feet in northwest corner of pad. Re-submitted shop sketches of rebar for multiple pipe encasement by North Portal. Excavated approximately 200 feet of trench for the eastern-most line. Finished excavating the western-most line (50 Feet). Completed excavation of central pad trench. Excavated trench directly south of portal entrance. Began fabricating and installing rebar for encasement above trench—bringing the total to 57 feet to be encased. Installed 100 feet of line in central pad ditch.

Task: Construction of C-Well Complex (Job Package 92-21)

C-Well Discharge Pipeline: Evaluated drawings to produce proposed schedule for discharge basin. Began mobilization of equipment and stripping soil. Completed excavation of basin. Completed hauling imported gravel from Fran Ridge Borrow Pit.

Procurement Actions

1.2.6

RFP 158-MM-94/PR 35-JAW-01-4 for Transformers: RFP issuance was delayed because of specifications. RFP was issued on June 13, 1994. Received request for clarification from one potential offeror. Request was sent to the Control Department on June 15, 1994. Amendment #1 was issued on June 28, 1994. Closing time changed to 4 p.m., July 15, 1994, because of amendment.

RFP 177-MM-94/PR 1-RK-01-4 for water storage tanks was canceled. Original RFP 63-MM-94 was canceled. New solicitation has been synopsisized and RFP is in preparation/review cycle. RFP was issued on June 27, 1994. A pre-proposal conference is scheduled for July 14, 1994, with a closing time for receipt of proposal set for 4 p.m., July 28, 1994.

Tunnel Boring Machine (TBM) 924-YCA-01-3 TBM Modification for Mapping Gantry: Modification No. 5 to 924-YAC-01-4 was approved and a oral award was given to Construction & Tunneling Services, Inc., (CTS) on June 23, 1994. Copies of the modification were sent to CTS for signature and are due back in Contract Administration Department by July 6, 1994. Delivery of all items are due not later than December 15, 1994. A request has been made to expedite the delivery of two rock drills, to be located in the tail shield, to the TBM. According to CTS, they should be able to get us a firm delivery date for the two drills not later than Wednesday, July 6, 1994. It appears delivery will be eight to nine weeks, but CTS does not want to be committed to that time period until they confirm it with their subcontractor.

Procurement Actions

1.2.3

Capital Equipment Purchase Order (PO) 955-YAC-01-4 (RFP 83-BG-94/PR 3-TMM-01-4) for a Rotary Drill Rig: Closed at 4 p.m. on April 5, 1994. Three proposals were received. Evaluations have been completed. Proposed Capital Equipment Purchases Order is in the review cycle and is currently with the Procurement Department Review Committee.

DELIVERABLES:

The 69KV power line to the ESF was Completed May 16, 1994.

ISSUES AND CONCERNS:

None.

TEST FACILITIES (1.2.7)

PROGRESS DURING REPORTING PERIOD:

Task: Field Operations Support

Continued support services to participants and maintenance of YMP utilized facilities, utilities, equipment, and roads in Area 25.

Continued logistical and tour support for Department of Energy (DOE) Yucca Mountain Site Characterization Office (YMSCO) staff. Thirteen tours and one Open House was held during this period. Support included, but was not limited to, arrangements for buses, registration of guests, coordination of lunches/beverages, medical service, furniture, and mechanical service. Continued preparations for upcoming tours.

DELIVERABLES:

None.

ISSUES AND CONCERNS:

None.

PROJECT MANAGEMENT (1.2.9)

PROGRESS DURING REPORTING PERIOD:

WBS 1.2.9

Task: Technical Project Office Management/Project Control

Continued normal administrative level of effort support. Continued status and update of Planning and Control System (PACS); supported ESF construction and drilling activities and completed cost estimates as required.

DELIVERABLES:

None.

ISSUES AND CONCERNS:

None.

QUALITY ASSURANCE (1.2.11)

PROGRESS DURING REPORTING PERIOD:

WBS 1.2.11

Task: Quality Assurance (QA)

Conducted Audit No. REECo-008-94 of REECo subcontractor, Kiewit/PB. The audit resulted in the issuance of seven Deficiency Notices in the areas of Procurement Document Control, Control of Purchased Items and Services, and Nonconformance Control.

Traveled to Washington, D.C., to give a presentation at the Nuclear Regulatory Commission (NRC) Meeting concerning the responsibilities of REECo subcontractor Kiewit/PB.

The QA Department provided support for the certification process on the Batch Plant.

DELIVERABLES:

None.

ISSUES AND CONCERNS:

None.

WBS 1.2.12

Task: Records Capture, RIDS, Controlled Documents

Continued the administration and management of records capture, Records Inventory and Disposition Schedule (RIDS), and distribution and maintenance of controlled documents.

DELIVERABLES:

None.

ISSUES AND CONCERNS:

None.

ENVIRONMENT, SAFETY & HEALTH (1.2.13)

PROGRESS DURING REPORTING PERIOD:

WBS 1.2.13

Task: Safety & Occupational Health

Provided medical, occupational safety, industrial hygiene, and fire protection support.

Occupational Safety personnel conducted 11 safety surveillances bringing the total to 61 safety surveillances. Six compliance follow-up inspections were conducted bringing the total to 29 inspections. Forty-nine safety findings were accomplished bringing the total to 149 corrective action plans for the period. Conducted and completed two type "C" investigations during the month bringing the total to 16. Full industrial hygiene services continue to be provided for the Yucca Mountain Project. Daily work activities are evaluated and monitored for health hazard concerns.

Measured air quality and noise levels during survey operations of the North Portal Starter Tunnel (NPST) at Main CS 1+30 by three Raytheon Services Nevada personnel. Surveyors were near a jackhammer operation. At the theodolite position, noise was 97 dBa and dust was 6.1-8.0 mg/m³. At the prism rod handler position, dust was 16.2 mg/m³. Hearing protection and dust masks were worn. The 3M 9920 dust mask is recommended; the Moldex 3400 is not.

Measured air quality and noise levels during preparation, cleaning, and mud pour operations of the left gripper assembly in the invert at Main CS 1+50-2+00 of the NPST. During cleaning, the air lance generated 101 dBa and 1.5-7.5 mg/m³ at the mud vibrator.

Measured air quality during troweling operations by Kiewit/PB personnel to smooth the top of the right gripper assembly after a mud pour from Main CS 1+50 to CS 2+00 of the NPST. No problems noted.

DELIVERABLES:

None.

ISSUES AND CONCERNS:

None.

SUPPORT SERVICES (1.2.15)

PROGRESS DURING REPORTING PERIOD:

WBS 1.2.15

Task: Administrative Support and Training

Continued to provide procurement, logistical, and information management administrative level of effort support; continued support services to various YMP participants.

Continued to provide information management level of effort support for REECo, DOE/YMSCO, and other project participants; administer the YMP training program requirements; and direct logistical support to YMP participants in Area 25, including support personnel and communications, vehicles, equipment, and supplies.

Staffed the YMP Technical Information Display presented at the Eighth Annual International Conference on Geochronology in Berkeley, California; the American Association of Petroleum Geologists 1994 Annual Meeting in Denver, Colorado; and the YMP Institutional Affairs Display and the Office of Civilian Radioactive Waste Management Display at the American Nuclear Society Meeting in New Orleans, Louisiana. Participated as committee members of the American Nuclear Society Program and Power Division Committee and Public Acceptance Subcommittees. Served on the DOE Quality Improvement Seminar Program committee.

Assisted in 14 tours; acquired a 3-ton box bed truck which will be used by Science Applications International Corporation (SAIC) at Borehole SB-1 to store test equipment, samples, etc.; and arranged to have debris, scrap metal, etc., cleared from three abandoned drill holes. Arranged for R. Skiers, Health Protection Department, to hold a training session concerning the methods for cleaning up and disposing of rodent feces which resulted in three construction laborers becoming certified to perform this task.

Disseminated a draft copy of the General Underground Training Lesson Plan for review and comment and completed modifications to the draft Tunnel Access Procedure and distributed for review.

Task: Site Characterization Plan (SCP) Reference Library and Database

Continued distribution and database maintenance for the SCP and Progress Reports. Distributed two copies of the SCP.

DELIVERABLES:

None.

ISSUES AND CONCERNS:

None.