



Department of Energy

Nevada Operations Office
P. O. Box 98518
Las Vegas, NV 89193-8518

WBS 1.2.9.3
QA

FEB 21 1990

Robert F. Pritchett
Technical Project Officer for Yucca Mountain Project
Reynolds Electrical &
Engineering Co., Inc.
P.O. Box 98521
Las Vegas, NV 89193-8521

ACCEPTANCE OF AMENDED RESPONSE TO STANDARD DEFICIENCY REPORT (SDR) 452,
REVISION 0, RESULTING FROM YUCCA MOUNTAIN PROJECT OFFICE (PROJECT OFFICE)
QUALITY ASSURANCE (QA) AUDIT 89-05 OF REYNOLDS ELECTRICAL & ENGINEERING CO.,
INC. (REECO)

The Project Office QA staff has evaluated and accepted your amended response
to SDR 452, Revision 0, generated as a result of Project Office QA Audit 89-05
of REECO. The SDR will be closed after verification of satisfactory
completion of the specified corrective actions. A copy of the SDR is enclosed
for your information.

Verification of completion of your corrective action will be performed after
the effective dates that were provided. Any extension to these due dates must
be requested in writing with appropriate justification prior to the due date.
Please send copies of the extension request to Nita J. Brogan, Science
Applications International Corporation (SAIC), 101 Convention Center Drive,
Las Vegas, Nevada 89109, and Ralph W. Gray, U.S. Department of Energy,
P.O. Box 98518, Las Vegas, Nevada 89193.

If you have any questions, please contact Robert B. Constable of my staff
at 794-7945, or Frank J. Kratzinger of SAIC at (702) 794-7163.

Donald G. Horton, Director
Quality Assurance Division
Yucca Mountain Project Office

YMP:RBC-2078

Enclosure:
SDR 452, Revision 0

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FOR WASTE
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FULL TEXT ASCII SCAN

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ORIGINAL

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YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization	1 Date 9/26/89		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 3	
	3 Discovered During Audit 89-5		3a Identified By M.R. Diaz		4 SDR No. 452 Rev. 0	
	5 Organization REECo		6 Person(s) Contacted A. Tonda/M. Fox		7 Response Due Date is 20 Working Days from Date of Transmittal	
	8 Requirement (Audit Checklist Reference, if Applicable) QP 18.0, Rev. 6, Para. 6.2.1 states, "Internal and external audits shall be scheduled in a manner such that the audits shall be initiated as early in the life of the activities as practical, consistent with the schedule for					
	9 Deficiency Some of the audit requirements as detailed in item 8 above have not been implemented accordingly such as: AUDIT REECo-001-89					
Completed by Organization in Block 5	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective 1. Remedial - Review all the QA records generated by the Audit REECo-001-89 to ensure that they contain requirements stipulated in REECo's					
	11 QAE/Lead Auditor/Date <i>William H. Camp 10/12/89</i>		12 Division Manager/Date <i>Dick Hedger 10-12-89</i>		13 Project Quality Mgr./Date <i>James Blaylock 10/12/89</i>	
Completed by Org. QA Org.	14 Remedial/Investigative Action(s) (see attached response)				15 Effective Date 12/15/89	
	16 Cause of the Condition & Corrective Action to Prevent Recurrence (SEE ATTACHED RESPONSE)				17 Effective Date 1/31/89 <i>90</i> <i>mf</i>	
	18 Signature/Date <i>W. Camp 11/8/89</i>					
Comp. by Orig. QA Org.	19 Response Accepted		QAE/Lead Auditor/Date <i>Frank [Signature] 1/30/90</i>		Division Manager/Date <i>[Signature] 1/30/90</i>	
	20 Corrective Action Verif. Satisfactory		QAE/Lead Auditor/Date		Division Manager/Date	
	21 Remarks		Project Quality Mgr./Date <i>[Signature] 1/30/90</i>			
	22 QA CLOSURE		QAE/Lead Auditor/Date		Division Manager/Date	

Equipment Amended Response 11-11-89 - MP 38-1267
 Rec'd Amended Response, Std'd 1/21/90 - RFP: GAF: 6:05:pm
 Rec'd Review Amended Response, Std'd 1/26/90 - 573-CI-216

ENCLOSURE

YMP() STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

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SDR No. 452

Rev. 0

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8 Requirement (continued)

accomplishing the activity to assure timely implementation of quality assurance requirements."

Para. 6.4.3 states in part, "The Lead Auditor shall complete the Auditor/Survey Plan which shall contain the following:

- o -----
- o _____
- o Date of audit plan"

QP 17.0, Rev. 4, Para. 4.1.2 states in part, "A completed QA record is a document signed and dated by the originator."

QP 18, Rev. 6, Para. 6.4.4 states in part, "The audit team shall prepare an Audit/Survey Checklist."

Para. 6.5.5 states, "The auditor(s) shall document the objective evidence reviewed on the checklist."

568-DOC-115, Rev. 7, Para. 1.5 states in part, "The audit report shall include the following information:

- o Identification of the auditors
- o Identification of persons contacted during audit activities
- o Description of each reported adverse audit finding in sufficient detail to enable corrective action to be taken by the audited organization."

QP 18.0, Rev. 6, Para. 6.6.1.1 states in part, "The audit report shall consist of the QA Audit/Survey Plan, QA Audit/Survey Report and Audit Finding Reports."

Para. 6.6.3 states in part, "For Audit Reports which contain AFRs the report cover memo shall require management of the audited organization to submit to the PQAM a written response to each AFR within thirty (30) days after receipt of the audit report."

Para. 7.1 states, "Audit/Survey Plan, Audit/Survey Checklist, Audit/Survey Report, Audit/Finding Report, Audit Log, Evaluation Report, all correspondence relating to the audits and other documents generated by the implementation of this procedure are considered QA Records and shall be controlled and maintained in accordance with QP 17.0."

YMPC STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

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Page 3 of 3

9 Deficiency (continued)

- a. An audit schedule has not been developed. However, one audit has been performed and others should be performed in the near future.
- b. Date of audit plan of REECO-001-89 is missing.
- c. Signature on Audit Plan done by L. Lykens is missing. Therefore, the validity of the document as a QA record does not exist.
- d. Signature on Checklists done by A. Tonda are missing. Therefore, the validity of the documents as QA records does not exist.
- e. Objective evidence of the items found acceptable were not documented on the checklists. Therefore, these documents do not contain all required data.
- f. Audit report did not include the identification of the auditors, identification of persons contacted during audit activities.
- g. Audit report did not provide a description of each reported adverse audit finding in sufficient detail and to allow to group them - based on each criteria of the REECO's QAPP - in order to produce a comprehensive trend analysis.
- h. The Audit Plan was not included with the Audit Report.
- i. Audit response was requested by September 1, 1989. However, an extension was requested and approved but this method is not recognized by the procedure as acceptable.
- j. Extension report was requested one week after due date of response.

10 Recommended Actions (continued)

568-DOC-115, Rev. 7 and implementing procedures.

2. Corrective - Develop an audit schedule to assure timely implementation of quality assurance requirements in areas such as: organization, training, document control, QA Records, corrective action.
3. Corrective - Revise audit procedure in order to include missing requirements addressed by REECO's QAPP.
4. Corrective - Retrain appropriate QA personnel to inform them of the revised procedural requirements.

PRC
2/21/90



Reynolds Electrical & Engineering Co., Inc.

Post Office Box 98521 • Las Vegas, NV 89193-8521

IN REPLY REFER TO:

RESPONSE TO SDR 452 OF DOE AUDIT 89-5

14 REMEDIAL/INVESTIGATIVE ACTIONS - REECo YMP QA shall perform a review of those QA Records that were generated by REECo's Audit, REECo-001-89, and where applicable, the records shall be corrected to include the appropriate entries as required by QAPP 568-DOC-115 and the implementing procedures. The actions to be taken are as noted below:

- a. An audit schedule for 1989 did, in fact, exist and was transmitted to the Quality Assurance Verification Manager, SAIC under cover of letter, number 510-01-34, dated 1/21/89. This schedule was further amended by letter number 510-01-150. Additionally, due to the comprehensive nature of the Project audit, an audit schedule for the balance of 1989 would be counterproductive. An audit schedule for 1990 will be developed.
- b. The audit plan of REECo Audit REECo-001-89 will be corrected to include the date of the audit plan and resubmitted to QA Records.
- c. The audit plan of REECo Audit REECo-001-89 will be validated by an authorized individual and resubmitted to QA Records.
- d. The audit checklists for REECo Audit REECo-001-89 will be validated by an authorized individual and resubmitted to QA Records.
- e. At the time of the audit, identification of objective evidence for acceptable items was not documented, due to a misunderstanding of the procedure. The procedure was misinterpreted to require comments in the status block of the checklist for unacceptable items only.
- f. The auditors are identified on the QA Audit/Survey Plan, form RE-7230 (12/88). By definition, provided in QP 18.0, ¶ 6.6.1.1, "The audit report shall consist of the QA Audit/Survey Plan, QA Audit/Survey Report and Audit/Survey Finding Reports, as applicable". Therefore, because the QA Audit/Survey Plan is by definition a part of the "audit report" the auditors are identified in the "audit report". The QA Audit/Survey Plan and QA Audit/Survey report were transmitted to distribution separately. As to the persons contacted, they will be added to all future audit finding reports.
- g. Due to the inordinate number of discrepancies, 59 of 86 requirements reviewed, it was determined that the overall finding was a failure to effectively implement the YMP QA Program

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Requirements by the audited organization. Therefore, it would have been counterproductive to write 59 QA Audit/Survey Finding Reports. There was no trend of unacceptable implementation of individual requirements, i.e., repetitive nonconformances or failure to comply with specific individual requirements. Therefore, the trend if any would be failure to implement the QA Program, as documented in our Trend Analysis Database.

- h. As stated in f above the QA Audit/Survey Plan and the QA Audit/Survey Report were transmitted to distribution separately. Again, the audit file contains the QA Audit/Survey Plan and the QA Audit/Survey Report and all related documentation.
- i. Procedure QP 18.0, Rev. 6, will be revised to allow the audited organization to request an extension of time for responding when required.
- j. REECO YMP QA takes exception with the deficiency 9.j, identified in SDR 452. Item 9.j states, "Extension report was requested one week after due date of response." A review of the audit file disclosed that Operations Equipment had requested the extension within the allotted time, as noted by their memo dated 8/30/89, requesting the response due date to be extended to 9/15/89. This coupled with the fact that their response was required 9/1/89, as noted by the QA Audit/Survey Finding Report, shows that the request was made prior to the due date as stated in the SDR. As such, no action will be taken on item 9.j of the SDR. However procedure QP 18.0 will be revised to allow extensions to be made, as identified in our response to SDR 452, item 9.i.

15 EFFECTIVE DATE: 12/15/89

16.1 CAUSE - Except for those items identified in our response above, to which we take exception, the cause of this deficiency is addressed within the body of our response to each individual finding identified in SDR 452, i.e., incomplete and inadequate training of audit personnel to QP 18.0.

16.2 CORRECTIVE ACTION TO PREVENT RECURRENCE - An audit schedule for 1990 will be developed for auditing those organizations performing work related to YMP activities that fall within the purview of the YMP QA Program.

REECO YMP Procedure QP 18.0 and Audit/Survey Forms will be revised to include those requirements of QAPP 568-DOC-115 that are missing and to provide the necessary clarifications.

QA Audit Personnel will be retrained to the revised procedure.

17 EFFECTIVE DATE: - 1/31/89



Reynolds Electrical & Engineering Co., Inc.

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PAGE 1 of 2
ATTACH. # 2
Page 1 of 2

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2/2/90

IN REPLY REFER TO

* AMENDED RESPONSE TO SDR 452 OF DOE AUDIT 89-5

- 14 REMEDIAL/INVESTIGATIVE ACTIONS - REECO YMP QA shall perform a review of those QA Records that were generated by REECO's Audit, REECO-001-89, and where applicable, the records shall be corrected to include the appropriate entries as required by QAPP 568-DOC-115 and the implementing procedures. The actions to be taken are as noted below:
- a. An audit schedule for 1989 did, in fact, exist and was transmitted to the Quality Assurance Verification Manager, SAIC under cover of letter, number 510-01-34, dated 1/21/89. This schedule was further amended by letter number 510-01-150. Additionally, due to the comprehensive nature of the Project audit, an audit schedule for the balance of 1989 would be counterproductive. An audit schedule for 1990 will be developed.
 - b. The audit plan of REECO Audit REECO-001-89 will be corrected to include the date of the audit plan and resubmitted to QA Records.
 - * c. The audit plan of REECO Audit REECO-001-89 has been authenticated by R. L. Lykens and resubmitted to QA Records.
 - * d. The audit checklists for REECO Audit REECO-001-89 have been authenticated by Anthony Tonda and resubmitted to QA Records.
 - e. At the time of the audit, identification of objective evidence for acceptable items was not documented, due to a misunderstanding of the procedure. The procedure was misinterpreted to require comments in the status block of the checklist for unacceptable items only.
 - * f. The auditors are identified on the QA Audit/Survey Plan, form RE-7230 (12/88). By definition, provided in QP 18.0, ¶ 6.6.1.1, "The audit report shall consist of the QA Audit/Survey Plan, QA Audit/Survey Report and Audit/Survey Finding Reports, as applicable". Therefore, because the QA Audit/Survey Plan is by definition a part of the "audit report" the auditors are identified in the "audit report". The QA Audit/Survey Plan and QA Audit/Survey report were transmitted to distribution separately. As to the persons contacted, they have been added to the audit finding report.
 - g. Due to the inordinate number of discrepancies, 59 of 86 requirements reviewed, it was determined that the overall finding was a failure to effectively implement the YMP QA Program

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Requirements by the audited organization. Therefore, it would have been counterproductive to write 59 QA Audit/Survey Finding Reports. There was no trend of unacceptable implementation of individual requirements, i.e., repetitive nonconformances or failure to comply with specific individual requirements. Therefore, the trend if any would be failure to implement the QA Program, as documented in our Trend Analysis Database.

- h. As stated in f above the QA Audit/Survey Plan and the QA Audit/Survey Report were transmitted to distribution separately. Again, the audit file contains the QA Audit/Survey Plan and the QA Audit/Survey Report and all related documentation.
- i. Procedure QP 18.0, Rev. 6, will be revised to allow the audited organization to request an extension of time for responding when required.
- j. REECO YMP QA takes exception with the deficiency 9.j, identified in SDR 452. Item 9.j states, "Extension report was requested one week after due date of response." A review of the audit file disclosed that Operations Equipment had requested the extension within the allotted time, as noted by their memo dated 8/30/89, requesting the response due date to be extended to 9/15/89. This coupled with the fact that their response was required 9/1/89, as noted by the QA Audit/Survey Finding Report, shows that the request was made prior to the due date as stated in the SDR. As such, no action will be taken on item 9.j of the SDR. However procedure QP 18.0 will be revised to allow extensions to be made, as identified in our response to SDR 452, item 9.i.

15 EFFECTIVE DATE: 12/15/89

16.1 CAUSE - Except for those items identified in our response above, to which we take exception, the cause of this deficiency is addressed within the body of our response to each individual finding identified in SDR 452, i.e., incomplete and inadequate training of audit personnel to QP 18.0.

16.2 CORRECTIVE ACTION TO PREVENT RECURRENCE - An audit schedule for 1990 will be developed for auditing those organizations performing work related to YMP activities that fall within the purview of the YMP QA Program.

REECO YMP Procedure QP 18.0 and Audit/Survey Forms will be revised to include those requirements of QAPP 568-DOC-115 that are missing and to provide the necessary clarifications.

QA Audit Personnel will be retrained to the revised procedure.

17 EFFECTIVE DATE: - 1/31/90

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Reynolds Electrical & Engineering Co., Inc.

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IN REPLY REFER TO

REVISED AMENDED RESPONSE TO SDR 452 OF DOE AUDIT 89-5

* Denotes Amended Response

* * Denotes Revision to Amended Response

14 REMEDIAL/INVESTIGATIVE ACTIONS - REECo YMP QA shall perform a review of those QA Records that were generated by REECo's Audit, REECo-001-89, and where applicable, the records shall be corrected to include the appropriate entries as required by QAPP 568-DOC-115 and the implementing procedures. The actions to be taken are as noted below:

a. An audit schedule for 1989 did, in fact, exist and was transmitted to the Quality Assurance Verification Manager, SAIC under cover of letter, number 510-01-34, dated 1/21/89. This schedule was further amended by letter number 510-01-150. Additionally, due to the comprehensive nature of the Project audit, an audit schedule for the balance of 1989 would be counterproductive. An audit schedule for 1990 will be developed.

* * The Audit Schedule for 1990 has been issued and was sent to Mr. V. Dale Hedges of SAIC under letter number 580-01-157, dated December 13, 1989

b. The audit plan of REECo Audit REECo-001-89 will be corrected to include the date of the audit plan and resubmitted to QA Records.

* c. The audit plan of REECo Audit REECo-001-89 has been authenticated by R. L. Lykens and resubmitted to QA Records.

* d. The audit checklists for REECo Audit REECo-001-89 have been authenticated by Anthony Tonda and resubmitted to QA Records.

e. At the time of the audit, identification of objective evidence for acceptable items was not documented, due to a misunderstanding of the procedure. The procedure was misinterpreted to require comments in the status block of the checklist for unacceptable items only.

* * The procedure misinterpretation was by Messrs. A. Tonda and R. L. Lykens. Mr. R. L. Lykens has been transferred to the Weapons division of REECo and no longer has responsibility for REECo Audits. Mr. Tonda was assigned to revise QP 18.0. As a result of his revising the procedure, it is considered sufficient evidence

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that he understands comments are required on the checklists for documenting objective evidence of both acceptable items as well as unacceptable items, as required by QP 18.0, Rev. 6.

- * f. The auditors are identified on the QA Audit/Survey Plan, form RE-7230 (12/88). By definition, provided in QP 18.0, ¶ 6.6.1.1, "The audit report shall consist of the QA Audit/Survey Plan, QA Audit/Survey Report and Audit/Survey Finding Reports, as applicable". Therefore, because the QA Audit/Survey Plan is by definition a part of the "audit report" the auditors are identified in the "audit report". The QA Audit/Survey Plan and QA Audit/Survey report were transmitted to distribution separately. As to the persons contacted, they have been added to the audit finding report.
- g. Due to the inordinate number of discrepancies, 59 of 86 requirements reviewed, it was determined that the overall finding was a failure to effectively implement the YMP QA Program Requirements by the audited organization. Therefore, it would have been counterproductive to write 59 QA Audit/Survey Finding Reports. There was no trend of unacceptable implementation of individual requirements, i.e., repetitive nonconformances or failure to comply with specific individual requirements. Therefore, the trend if any would be failure to implement the QA Program, as documented in our Trend Analysis Database.
- * * The audited organization, in their response, identified the cause of the finding as a lack of management attention. They have responded to each of the individual findings collectively and have committed to provide detailed indoctrination and training for management personnel. In addition, the audited organization has committed to revise and develop department implementing procedures and to implement the current approved YMP QA Program and Procedures. See attached AFR and Response of audited organization.
- h. As stated in f above the QA Audit/Survey Plan and the QA Audit/Survey Report were transmitted to distribution separately. Again, the audit file contains the QA Audit/Survey Plan and the QA Audit/Survey Report and all related documentation.
- i. Procedure QP 18.0, Rev. 6, will be revised to allow the audited organization to request an extension of time for responding when required.
- * * QP 18.0 Rev. 6 has been revised and is in the approval cycle. It is expected that QP 18.0, Rev. 7 will be issued by January 31, 1990.
- j. REECo YMP QA takes exception with the deficiency 9.j, identified in SDR 452. Item 9.j states, "Extension report was requested one week after due date of response." A review of the audit file disclosed that Operations Equipment had requested the extension

within the allotted time, as noted by their memo dated 8/30/89, requesting the response due date to be extended to 9/15/89. This coupled with the fact that their response was required 9/1/89, as noted by the QA Audit/Survey Finding Report, shows that the request was made prior to the due date as stated in the SDR. As such, no action will be taken on item 9.j of the SDR. However procedure QP 18.0 will be revised to allow extensions to be made, as identified in our response to SDR 452, item 9.i.

15 EFFECTIVE DATE: 2/28/90

16.1 CAUSE - Except for those items identified in our response above, to which we take exception, the cause of this deficiency is addressed within the body of our response to each individual finding identified in SDR 452, i.e., incomplete and inadequate training of audit personnel to QP 18.0.

16.2 CORRECTIVE ACTION TO PREVENT RECURRENCE - An audit schedule for 1990 will be developed for auditing those organizations performing work related to YMP activities that fall within the purview of the YMP QA Program.

REECO YMP Procedure QP 18.0 and Audit/Survey Forms will be revised to include those requirements of QAPP 568-DOC-115 that are missing and to provide the necessary clarifications.

QA Audit Personnel will be retrained to the revised procedure.

17 EFFECTIVE DATE: - 1/31/90

Robert F. Pritchett

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FEB 21 1990

cc w/encl:

Ralph Stein, HQ (RW-30) FORS
D. E. Shelor, HQ (RW-3) FORS
M. A. Fox, REECo, Las Vegas, NV
F. J. Kratzinger, SAIC, Las Vegas, NV, 517/T-06
J. H. Nelson, SAIC, Las Vegas, NV, 517/T-04
C. H. Prater, SAIC, Las Vegas, NV 517/T-06
S. W. Zimmerman, NWPO, Carson City, NV
J. E. Kennedy, NRC, Washington, DC ~~XXXXXXXXXX~~

cc w/o encl:

N. J. Brogan, SAIC, Las Vegas, NV, 517/T-22
J. W. Gilray, NRC, Las Vegas, NV