



Department of Energy

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

WBS 1.2.9.3
"QA"

NN1.881221.0007

DEC 21 1988

Richard L. Bullock
Technical Project Officer for Yucca Mountain Project
Fenix & Scisson, Inc.
101 Convention Center Drive
Phase II, Suite P-250
M/S 403
Las Vegas, NV 89109

YUCCA MOUNTAIN PROJECT OFFICE (PROJECT OFFICE) QUALITY ASSURANCE (QA) STANDARD DEFICIENCY REPORTS (SDRS) RESULTING FROM AUDIT S89-02 OF FENIX & SCISSON, INC. (F&S) SUPPORT OF THE YUCCA MOUNTAIN PROJECT (NN1-1989-0678)

Enclosed are nine SDRs, Nos. 261 through 269, that were generated during the course of Project Office QA Audit S89-02 of the F&S support of the project.

Provide responses to each SDR by completing blocks 14 through 18 as appropriate on the first page of each SDR. Be advised that the audit checklist references provided on each SDR are for Project Office internal use and should have no bearing on your ability to respond to the cited deficiencies. Copies of the responses are due back to this office within 20 working days from the date of this letter. You are asked to send the original copy of each SDR response to Nita J. Brogan of Science Applications International Corporation (SAIC), Las Vegas, Nevada.

If you have any questions, please contact Wendell B. Mansel of my staff at 794-7945 or Henry H. Caldwell of SAIC at 794-7740.

James Blaylock
James Blaylock
Project Quality Manager
Yucca Mountain Project Office

YMP:JB-1111

Enclosures:
SDRS 261 through 269

8812290079 881221
PDR WASTE
WM-11
PDC

NH03 102.7
WM-11

DEC 21 1988

cc w/encls:

Ralph Stein, HQ (RW-30) FORS
L. H. Barrett, HQ (RW-3) FORS
M. J. Regenda, F&S, Las Vegas, NV
S. H. Klein, SAIC, Las Vegas, NV
H. H. Caldwell, SAIC, Las Vegas, NV
E. P. Ripley, SAIC, Las Vegas, NV
J. W. Estella, SAIC, Las Vegas, NV
J. E. Therien, SAIC, Las Vegas, NV
S. B. Ailes, SAIC, Las Vegas, NV
O. D. Smith, SAIC, Las Vegas, NV
S. R. Dana, SAIC, Las Vegas, NV
W. H. Camp, SAIC, Las Vegas, NV
F. J. Ruth, SAIC, Las Vegas, NV
B. A. Tabaka, SAIC, Las Vegas, NV
N. J. Brogan, SAIC, Las Vegas, NV
K. M. Wolverton, HARZA, Las Vegas, NV
J. J. Holonich, NRC, Washington, D.C.
John Gilray, NRC, Las Vegas, NV
S. W. Zimmerman, NWPO, Carson City, NV
A. L. Langstaff, W, Las Vegas, NV
Robert Clark, W, Washington, D.C.
R. W. Gray, MED, NV
M. B. Blanchard, YMP, NV
W. R. Dixon, YMP, NV
L. P. Skousen, YMP, NV
C. P. Gertz, YMP, NV
N. A. Voltura, YMP, NV
W. B. Mansel, YMP, NV
A. C. Williams, YMP, NV
C. E. Hampton, YMP, NV
E. L. Wilmot, YMP, NV

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date Dec 05, 1988		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2	
3 Discovered During F&S Audit S89-02		3a Identified By P. Ruth		3b Branch Chief Concurrence Date	
5 Organization Fenix & Scisson		6 Person(s) Contacted J. Johnson		4 SDR No. 261 Rev. 0	
7 Response Due Date is 20 Working Days from Date of Transmittal					
8 Requirement (Audit Checklist Reference, if Applicable) (Audit Checklist Item 2-7) F&S NNWSI Quality Assurance Program Plan, Rev. 3, Section 2, "Quality Assurance Program", para. 2.4.1.2, "Personnel selected will have education					
9 Deficiency Although verification of education and experience is stated as being verified, there is no objective evidence on how this was accomplished (i.e., contacting the appropriate university and past employers) for the following Parsons-					
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input type="checkbox"/> Corrective 1. Obtain the appropriate verification of experience for the individuals identified in Block 9.					

11 QAE/Lead Auditor Date <i>James Blaylock</i> 12/12/88	12 Branch Manager Date <i>Blaylock</i> 12/12/88	13 Project Quality Mgr. Date <i>James Blaylock</i> 12/19/88
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14 Remedial/Investigative Action(s)	15 Effective Date

16 Cause of the Condition & Corrective Action to Prevent Recurrence	17 Effective Date

18 Signature/Date

19 Response <input type="checkbox"/> Accept <input type="checkbox"/> Amended Response <input type="checkbox"/> Reject	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response <input type="checkbox"/> Accept <input type="checkbox"/> Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification <input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

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8 Requirement (continued)

and experiece commensurate with the minimum requirements specified in the position description. Relevant education and experience will be verified."

9 Deficiency (continued)

Brinkerhoff personnel:

1. J. Grenia
2. I. Lange
3. T. Frank
4. R. Gast

10 Recommended Actions (continued)

2. Review personnel files of other Parsons-Brinkerhoff personnel to assure that verification of education and experience has been properly documented. Provide results of the review.
3. If additional personnel are identified, take the appropriate corrective action.
4. If personnel are identified that don't meet the education requirements, re-evaluate all work performed by those personnel.

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1 Date Dec 05, 1988	2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2
3 Discovered During F&S Audit S89-02	3a Identified By F. Ruth	3b Branch Chief Concurrence Date	4 SDR No. 262 Rev. 0
5 Organization Fenix & Scisson	6 Person(s) Contacted K. Vacca		7 Response Due Date is 20 Working Days from Date of Transmittal
8 Requirement (Audit Checklist Reference, if Applicable) (Audit Checklist Item 1-7) F&S NNWSI Quality Assurance Program Plan, Rev. 3, Section 2, "Quality Assurance Program", para. 2.4.1.6.4, "Proficiency Evaluation Records -			
9 Deficiency F&S Project Procedure PP-60-01, Rev. 1, "Personnel Selection and Indoctrination" does not include the requirement to prepare Proficiency Evaluation Records as stated in Block 8. The method by which F&S states it			
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective 1. Develop a Proficiency Evaluation Record and make it an attachment to procedure PP-60-01.			

Completed by Organization in Block 5

11 QAE/Lead Auditor Date <i>S. Davis 12/15/88</i>	12 Branch Manager Date <i>Manager 12/15/88</i>	13 Project Quality Mgr. Date <i>James Blaylock 12/19/88</i>
14 Remedial/Investigative Action(s)		15 Effective Date _____
16 Cause of the Condition & Corrective Action to Prevent Recurrence		17 Effective Date _____
18 Signature/Date		

Comp. by Orig. QA Org.

19 Response	<input type="checkbox"/> Accept <input type="checkbox"/> Amended <input type="checkbox"/> Reject <input type="checkbox"/> Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	<input type="checkbox"/> Accept <input type="checkbox"/> Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verifi- cation	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date
22 Remarks			
23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date



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8 Requirement (continued)

Records of proficiency evaluation will include, as a minimum, the name of the evaluated employee, the evaluator, evaluation results, date of evaluation, and the activities covered by the evaluation^W.

9 Deficiency (continued)

will perform proficiency evaluations in procedure (PP-60-01) does not meet the F&S QAPP requirements.

10 Recommended Actions (continued)

2. Revise PP-60-01 to address the requirements of preparing Proficiency Evaluation Records.
3. Prepare Proficiency Evaluation Records for all necessary personnel.
4. For personnel that are evaluated as not proficient in functions to be performed, take the appropriate action.
5. Train appropriate personnel to revised procedural requirements.

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Completed by Originating QA Organization

1 Date Dec 05, 1988		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2	
3 Discovered During F&S Audit S89-02		3a Identified By A. Langstaff	3b Branch Chief Concurrence Date		4 SDR No. 263 Rev. 0
5 Organization Fenix & Scisson		6 Person(s) Contacted R. Bullock		7 Response Due Date is 20 Working Days from Date of Transmittal	
8 Requirement (Audit Checklist Reference, if Applicable) (Audit Checklist Item T-21) F&S Procedure NNWSI-DC-09, Rev. 5, para. 6.2.12, "The engineers shall verify that comments have been resolved/incorporated into the back-check"					
9 Deficiency No documented evidence was provided that interdiscipline checkprint comments had been verified by the engineers to ensure that their comments had been incorporated. A sampling of 11 out of 84 final drawings were examined along					
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective 1. Comply with procedural requirements stated in NNWSI-DC-09, Rev. 5, para. 6.2.12.					
11 QAE/Lead Auditor Date <i>S. Jones</i> 12-12-88		12 Branch Manager Date <i>Atkins Jr</i> 12/12/88		13 Project Quality Mgr. Date <i>James Bleylock</i> 12/19/88	
14 Remedial/Investigative Action(s)					
15 Effective Date _____					
16 Cause of the Condition & Corrective Action to Prevent Recurrence					
17 Effective Date _____					
18 Signature/Date					
19 Response <input type="checkbox"/> Accept <input type="checkbox"/> Amended <input type="checkbox"/> Reject <input type="checkbox"/> Response		QAE/Lead Auditor/Date		Branch Manager/Date	
20 Amended Response <input type="checkbox"/> Accept <input type="checkbox"/> Reject		QAE/Lead Auditor/Date		Branch Manager/Date	
21 Verifi- cation <input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory		QAE/Lead Auditor/Date		Branch Manager/Date	
22 Remarks					
23 QA CLOSURE		QAE/Lead Auditor/Date		Branch Manager/Date	
PQM/Date					

Comp. by Orig. QA Org.

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8 Requirement (continued)

reproductions, and confirm their acceptance of the back-check by signing off the DRN."

9 Deficiency (continued)

with their checkprints, however, DRNs had not been completed per procedural requirements.

10 Recommended Actions (continued)

2. Revise the appropriate procedure(s) so that the back-check prints are maintained as QA records.
3. Develop a plan to investigate the extent of the problem on the remaining 73 drawings. The plan should be provided with response to the SDR.
4. Train appropriate personnel to the requirements identified in Block 8.

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1 Date Dec 05, 1988		2 Severity Level <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2
3 Discovered During F&S Audit S89-02		3a Identified By A. Langstaff S. Smith	3b Branch Chief Concurrence Date	4 SDR No. 264 Rev. 0
5 Organization Fenix & Scisson		6 Person(s) Contacted R. Bullock		7 Response Due Date is 20 Working Days from Date of Transmittal
8 Requirement (Audit Checklist Reference, if Applicable) (Audit Checklist Item T-10b&c) F&S Procedure NNWSI-DC-03, Rev. 5, "Design Analysis", para. 6.3.5, "In order to complete the analysis, the originator may have to make certain assumptions				
9 Deficiency 1. Of the 50 out of 52 design analysis packages reviewed, those assumptions (listed in each package) which will require verification in Title II had not been identified as such.				
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective 1. For each design analysis package, list all assumptions in the "Assumptions Section" and provide a page cross reference for point of use. If no				

Completed by Organization in Block 5

11 QAE/Lead Auditor Date <i>Steve 12-12-88</i>		12 Branch Manager Date <i>Attans for 12/12/88</i>		13 Project Quality Mgr. Date <i>James Blaylock 12/19/88</i>	
14 Remedial/Investigative Action(s)				15 Effective Date _____	
16 Cause of the Condition & Corrective Action to Prevent Recurrence				17 Effective Date _____	
18 Signature/Date					

Comp. by Orig. QA Org.

19 Response <input type="checkbox"/> Accept <input type="checkbox"/> Amended Response <input type="checkbox"/> Reject		QAE/Lead Auditor/Date		Branch Manager/Date	
20 Amended Response <input type="checkbox"/> Accept <input type="checkbox"/> Reject		QAE/Lead Auditor/Date		Branch Manager/Date	
21 Veri- fication <input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory		QAE/Lead Auditor/Date		Branch Manager/Date	
22 Remarks					
23 QA CLOSURE		QAE/Lead Auditor/Date		Branch Manager/Date	
				PQM/Date	



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8 Requirement (continued)

which are not clearly identified or controlled by the design input(s) or other sources of information. These assumptions, along with the basis for the assumptions, must be clearly stated within the analysis. Those assumptions which will require verification as the design proceeds must be identified."

9 Deficiency (continued)

2. Assumptions in design analysis packages are not, in all cases, listed in the "Assumptions Section".

10 Recommended Actions (continued)

assumptions have been used in the analysis, so state in the "Assumption Section".

2. Identify all assumptions which need to be verified as the design proceeds. Document within each design analysis package whether the assumptions require or do not require verification in Title II.

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1 Date Dec 05, 1988		2 Severity Level <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3		Page 1 of 2	
3 Discovered During F&S Audit S89-02		3a Identified By A. Langstaff		3b Branch Chief Concurrence Date	
4 SDR No. 265		Rev. 0			
5 Organization Fenix & Scisson		6 Person(s) Contacted R. Bullock		7 Response Due Date is 20 Working Days from Date of Transmittal	
8 Requirement (Audit Checklist Reference, if Applicable) (Audit Checklist Item T-10a) F&S Procedure NNWSI-DC-03, Rev. 5, "Design Analysis", para. 6.3.2, "The analysis shall identify what design inputs are being used in performance of					
9 Deficiency FS-CA-0071 (Charge Weight and Firing Sequence for Smooth Blasting) lists the sources of design inputs, but does not identify each specific input.					
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input type="checkbox"/> Corrective 1. List specific design inputs as well as the source documents in the analysis.					
11 QAE/Lead Auditor Date <i>S. Jena 12-12-88</i>		12 Branch Manager Date <i>Manager 12/12/88</i>		13 Project Quality Mgr. Date <i>James Blaylock 12/19/88</i>	
14 Remedial/Investigative Action(s) : _____					
15 Effective Date _____					
16 Cause of the Condition & Corrective Action to Prevent Recurrence					
17 Effective Date _____					
18 Signature/Date					
19 Response <input type="checkbox"/> Accept <input type="checkbox"/> Amended Response <input type="checkbox"/> Reject		QAE/Lead Auditor/Date		Branch Manager/Date	
20 Amended Response <input type="checkbox"/> Accept <input type="checkbox"/> Reject		QAE/Lead Auditor/Date		Branch Manager/Date	
21 Verifi- cation <input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory		QAE/Lead Auditor/Date		Branch Manager/Date	
22 Remarks					
23 QA CLOSURE		QAE/Lead Auditor/Date		Branch Manager/Date	
PQM/Date					

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8 Requirement (continued)

the analysis and the source of such inputs..."

10 Recommended Actions (continued)

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1 Date Dec 05, 1988	2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2
3 Discovered During F&S Audit S89-02	3a Identified By K. Wolverton	3b Branch Chief Concurrence Date	4 SDR No. 266 Rev. 0
5 Organization Fenix & Scisson	6 Person(s) Contacted P. Hale/J. Johnson		7 Response Due Date is 20 Working Days from Date of Transmittal
8 Requirement (Audit Checklist Reference, if Applicable) (Audit Checklist Item 1-12) 1. F&S NNWSI Quality Assurance Program Plan, Rev. 3, Section 3, "Scientific Investigation Control And Design Control", para. 3.2.2.1, "Applicable"			
9 Deficiency Contrary to the above, there is no objective evidence to indicate that the F&S Basis for Design (BFD) document, used for Title I design, was reviewed and approved by the F&S QA organization. In addition, there is no evidence to			
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective 1. Revise the appropriate F&S procedure to include the BFD as a controlled document.			

11 GAE/Lead Auditor Date <i>S. Juma 12/15/88</i>	12 Branch Manager Date <i>Adams for 12/15/88</i>	13 Project Quality Mgr. Date <i>James Bleylock 12/19/88</i>
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Completed by Organization in Block 5

14 Remedial/Investigative Action(s)	15 Effective Date _____
16 Cause of the Condition & Corrective Action to Prevent Recurrence	17 Effective Date _____
18 Signature/Date	

Comp. by Orig. QA Org.

19 Response	<input type="checkbox"/> Accept <input type="checkbox"/> Amended <input type="checkbox"/> Reject <input type="checkbox"/> Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	<input type="checkbox"/> Accept <input type="checkbox"/> Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verifi- cation	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date
22 Remarks			
23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date



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8 Requirement (continued)

design input, such as criteria letters, design bases, performance and regulatory requirements, codes, standards, manufacturer's design data, and quality standards, will be identified, documented, and their selection reviewed and approved by F&S Design and the F&S QA organization."

2. F&S procedure NNWSI-DC-15, Rev. 4, "Basis for Design Control", para. 5.5, "Quality Assurance Representative - The QAR is responsible for verifying the criteria of the Basis for Design and that changes thereof, are being adequately controlled".

9 Deficiency (continued)

show that the F&S QAR is verifying that this document is being controlled, nor changes thereto.

10 Recommended Actions (continued)

2. Complete the required reviews and approvals by the F&S QA Organization.
3. Develop a plan to investigate what impact the lack of a QA review and approval has had on the control of design inputs. The plan should be provided with response to the SDR.
4. Train appropriate personnel to revised procedural requirements.

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1 Date Dec 05, 1988	2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3	Page 1 of 3
3 Discovered During F&S Audit S89-02	3a Identified By K. Wolverton	3b Branch Chief Concurrence Date
4 SDR No. 267		Rev. 0
5 Organization Fenix & Scisson	6 Person(s) Contacted B. Chytrowski/J. Grenia/B. Stanley	7 Response Due Date is 20 Working Days from Date of Transmittal
8 Requirement (Audit Checklist Reference, if Applicable) (Audit Checklist Item 1-30) NNWSI QA Plan, NVO-196-17, Rev. 5, Section III, "Scientific Investigation and Design Control":		
9 Deficiency Contrary to the above, F&S NNWSI Quality Assurance Program Plan, Rev. 3, Section 3, para. 3.3.2, exempts commercial software from the documentation requirements stated in Block 8. Therefore, F&S has not documented nor		
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective 1. Revise F&S QAPP, Section 3, para. 3.3, to comply with the latest revision of NNWSI/88-9 and Appendix H requirements.		

Aprvl.

11 QAE/Lead Auditor Date <i>S. Dana 12/15/88</i>	12 Branch Manager Date <i>S. Dana for 12/15/88</i>	13 Project Quality Mgr. Date <i>James Blaylock 12/19/88</i>
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Completed by Organization in Block 5

14 Remedial/Investigative Action(s)	15 Effective Date _____
16 Cause of the Condition & Corrective Action to Prevent Recurrence	17 Effective Date _____
18 Signature/Date	

Comp. by Orig. QA Org.

19 Response	<input type="checkbox"/> Accept <input type="checkbox"/> Amended Response <input type="checkbox"/> Reject	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	<input type="checkbox"/> Accept <input type="checkbox"/> Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verifi- cation	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date
22 Remarks			
23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date



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8 Requirement (continued)

1. Para. 3.3.2

"Documentation of computer software shall include the following, as a minimum:

- o Software Summary;
- o Description of mathematical models and numerical methods;
- o User's manual;
- o Code assessment and support; and
- o Continuing documentation and code listings."

2. Para. 3.3.3

"F&S will institute a software configuration management program appropriate to the projects they conduct and will provide documentation of this program to the Records Management System (RMS). The minimum requirements for this configuration management program will be: (1) the inclusion of a unique identification, including software version numbers whenever feasible, in the output; (2) listing of the software; and (3) a brief chronology of the software versions, including descriptions of the changes made between versions.

9 Deficiency (continued)

obtained documentation from the supplier concerning commercial software used during Title I design activities. Furthermore, none of the commercial software has been verified in accordance with NNWSI-SOP-03-02, Rev. 0, "Software Quality Assurance". During interviews with F&S design personnel, it was stated that all software utilized by F&S during Title I design was commercially produced. It was also stated that they (F&S) had not instituted a software configuration program since they have only utilized commercial software.

10 Recommended Actions (continued)

2. Identify all software used in design activities.
3. Design output based on software identified above should not be used for Title II activities until all corrective actions associated with this SDR are complete and approved by the Project Office.
3. Develop a plan to evaluate all previous design activities to assess any adverse effects on completed activities as well as design activities in process. The plan should be provided with response to the SDR.
4. If any deficiencies are identified, perform corrective action as required.
5. Initiate the configuration management system for computer software utilized to date in accordance with current Project Office requirements.

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1 Date Dec 05, 1988 2 Severity Level 1 2 3 Page 1 of 2

3 Discovered During F&S Audit S89-02 3a Identified By W. Camp 3b Branch Chief Concurrence Date 4 SDR No. 268 Rev. 0

5 Organization Fenix & Scisson 6 Person(s) Contacted H. Jacocks 7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)
(Audit Checklist Item 3-4)
F&S NNWSI Quality Assurance Program Plan, Rev. 3, Section 4, "Procurement Document Control", para. 4.2.3, "Procurement document changes will be subject

9 Deficiency
Contrary to the above requirement, Purchase Order No. SC-LV-88-139 (Parsons-Brinkerhoff) Modifications No. 2 and 3 do not indicate a comprehensive review was performed (including technical review) prior to contract modification

10 Recommended Action(s): Remedial Investigative Corrective
1. Establish a checklist for technical/QA reviews in the existing procedures.
2. Train appropriate personnel to revised procedural requirements.

Aprvl.

11 QAE/Lead Auditor Date *SDW 12-12-88* 12 Branch Manager *Blair for* Date *12/12/88* 13 Project Quality Mgr. Date *James Blaylock 12/19/88*

Completed by Organization in Block 5

14 Remedial/Investigative Action(s) 15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence 17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	<input type="checkbox"/> Accept <input type="checkbox"/> Amended <input type="checkbox"/> Reject Response	QAE/Lead Auditor/Date	Branch Manager/Date
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22 Remarks

23 QA CLOSURE QAE/Lead Auditor/Date Branch Manager/Date PQM/Date



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8 Requirement (continued)

to the same degree of control as utilized in the preparation of the original document. Changes that are made as a result of the bid evaluation or precontract negotiations will be incorporated into the procurement documents. The review of such changes and their effects will be completed and documented prior to contract award."

9 Deficiency (continued)

award. In addition, F&S procedures QAP-4.1(N), Rev. 3, and PP-60-02, Rev. 1, do not have a checklist of review criteria to document results of the review. Reviewed 2 out of 2 purchase orders.

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1 Date Dec 05, 1988	2 Severity Level <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3		Page 1 of 2
3 Discovered During F&S Audit S89-02	3a Identified By A. Langstiff	3b Branch Chief Concurrence Date	4 SDR No. 269 Rev. 0
5 Organization Fenix & Scisson	6 Person(s) Contacted P. Hale		7 Response Due Date is 20 Working Days from Date of Transmittal
8 Requirement (Audit Checklist Reference, if Applicable) F&S Procedure NNWSI-DC-11, Rev. 4, "External Comment Control", para. 6.3, describes steps for resolution of external review comments according to steps 6.3.1 through 6.3.9.			
9 Deficiency There is no objective evidence, such as recording in the Project Control Log, that the Title I 50% Design Review and 100% Technical Assessment Review comments were handled according to procedure DC-11, para. 6.3.			
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input type="checkbox"/> Corrective 1. Revise the appropriate procedure to specifically address how resolution of Technical Assessment Review comments (50% and 100%) are accomplished.			

11 QAE/Lead Auditor Date <i>S. Jones 12-12-88</i>	12 Branch Manager Date <i>Henry for 12/12/88</i>	13 Project Quality Mgr. Date <i>James Blayford 12/19/88</i>
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14 Remedial/Investigative Action(s)	15 Effective Date _____
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16 Cause of the Condition & Corrective Action to Prevent Recurrence	17 Effective Date _____
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18 Signature/Date

19 Response	<input type="checkbox"/> Accept <input type="checkbox"/> Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	<input type="checkbox"/> Accept <input type="checkbox"/> Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Veri- fication	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date
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10 Recommended Actions (continued)

2. Train appropriate personnel to revised procedural requirements.