



**Department of Energy**  
Washington, DC 20585

QA: QA

**FEB 26 2003**

S. L. Sethi  
Bechtel SAIC Company, LLC  
1180 Town Center Drive, M/S 423  
Las Vegas, NV 89144

**ISSUANCE OF DEFICIENCY REPORT (DR) BSC(O)-03-D-094 REGARDING  
PRELIMINARY DESIGN DRAWINGS**

Enclosed is DR BSC(O)-03-D-094 generated as a result of OQA Surveillance OQA-SI-03-015.

Please provide a response to this deficiency that meet the applicable requirements of Administrative Procedure (AP) 16.1Q, *Management of Conditions Adverse to Quality*. Send the original of your response to Deborah G. Opielowski, Navarro Quality Services, P.O. Box 364629, Mail Stop 455, North Las Vegas, Nevada 89036-8629. Initial response to the DR is due ten working days from the date of this letter. Any extension to the due date must be requested in accordance with AP-16.1Q.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or James V. Voigt at (702) 794-1487.

*James Blaylock for*  
R. Dennis Brown, Director  
Office of Quality Assurance

OQA:JB-0735

Enclosure:  
DR BSC(O)-03-D-094



Printed with soy ink on recycled paper

U1MSS07  
wm11

FEB 26 2003

cc w/encl:

N. K. Stablein, NRC, Rockville, MD  
Robert Latta, NRC, Las Vegas, NV (2 cys)  
S. W. Lynch, State of Nevada, Carson City, NV  
L. W. Bradshaw, Nye County, Pahrump, NV  
D. T. Krishna, BSC, Las Vegas, NV  
W. J. Glasser, NQS, Las Vegas, NV  
D. G. Opielowski, NQS, Las Vegas, NV  
J. V. Voigt, NQS, Las Vegas, NV  
W. J. Arthur, III, DOE/ORD (RW-2W), Las Vegas, NV  
W. J. Boyle, DOE/ORD (RW-40W), Las Vegas, NV  
E. R. Cooper, DOE/ORD (RW-40W), Las Vegas, NV  
B. M. Terrell, DOE/ORD (RW-40W), Las Vegas, NV

NM5507  
WMI

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.

ORIGINAL  
HHS & PRD STAMP

8 ☒ Deficiency Report  
☐ Corrective Action Report

No BSC(O)-03-D-094

Page 1 of \_\_\_\_

QA QA

DEFICIENCY REPORT/CORRECTIVE ACTION REPORT

1. Controlling Document. (Document ID and Revision or Date)  
AP-3 13Q, Rev 3, ICN 1, Design Control & AP-3.24Q, Rev 0, ICN 5, Drawings

2. Related Report No  
Surveillance Number OQA-SI-03-015

3 Responsible Organization:  
Bechtel SAIC Company, L.L.C. (BSC)  
Plant Engineering - Repository Design Project

4 Discussed With  
Preston McDaniel, Larry Abernathy, Frank Basamanowicz, & Daniel Tunney

5. Requirement.

- (1) AP-3 13Q, Section 5 1.4(b) states that the conceptual design outcome is a "validated Technical Requirements Baseline, as defined in the DOE requirements hierarchy and the BSC contract, and serving as the basis for engineering products developed in subsequent phases "
- (2) AP-3 24Q Section 5 2 3 f) states "Prepare the drawing in sufficient detail as to purpose, method, references and units such that a person technically qualified in the subject can understand the documents and verify their adequacy without recourse to the Originator..." and
- (3) The QARD, Section 3 2.1 D states "Design input based on assumptions that require confirmation shall be identified and controlled as the design proceeds "

6 Description of Condition:

Background. The following drawings were reviewed and were presented as part of the preliminary design that will be used as inputs for license application

110-P10-CS10-00100-000-00A - Dry Facility #1 General Arrangement Ground Floor Plan, Revision A  
110-P10-CS10-00200-000-00A - Dry Facility #1 General Arrangement Operating Floor Plan, Revision A  
110-P10-CS10-00300-000-00A - Dry Facility #1 General Arrangement Upper Floor Plan, Revision A  
110-P10-CS10-00400-000-00A - Dry Facility #1 General Arrangement Roof Plan, Revision A  
110-P10-CS10-04000-000-00A - Dry Facility #1 Ground Floor Perspective Looking Northeast, Revision A  
110-P10-CS10-04100-000-00A - Dry Facility #1 Operating Floor Perspective Looking Northeast, Revision A  
110-P10-CS10-04200-000-00A - Dry Facility #1 Upper Floor Perspective Looking Northeast, Revision A  
110-P10-CS10-04300-000-00A - Dry Facility #1 Overall Building Perspective Looking Northeast, Revision A  
140-P10-CST0-00100-000-00A - Transporter Receipt Building General Arrangement Ground Floor Plan, Revision A  
140-P10-CST0-00200-000-00A - Transporter Receipt Building General Arrangement Upper Plan, Revision A  
140-P10-CST0-04000-000-00A - Transporter Receipt Building Ground Floor Plan Perspective Looking Northeast, Revision A and  
140-P10-CST0-04100-000-00A - Transporter Receipt Building Overall Building Perspective Looking Northeast, Revision A

Continued on Page 2

Has work been stopped? ☐ Yes ☒ No

7. Initiator  
James V. Voigt

*James V. Voigt* 2-18-03

Printed Name

Signature

Date

9 Does a stop work condition exist?

☐ Yes ☒ No ☐ N/A

If Yes, Check One

☐ A

☐ B

☐ C

☐ D

10 Recommended Actions  
None

11 QAR Review  
James V. Voigt

*James V. Voigt* 2-18-03

Printed Name

Signature

Date

12 Response Due Date

10 Working days after issuance.

13 QAM Issuance Approval.

R. Dennis Brown

*James Blaylock Jr*

2/26/03

Printed Name

Signature

Date

14. Corrective Actions Verified/Closure

15 QAM Closure Approval

QAR Printed Name

Signature

Date

Printed Name

Signature

Date

**OFFICE OF  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.**

☒ DR/CAR/QO  
☐ SWO

No. BSC(O)-03-D-094Page 2 of

QA QA

**CONDITION ADVERSE TO QUALITY CONTINUATION PAGE**

It was noted that the conceptual design and associated technical baseline had not been approved at the time the reviewed preliminary drawings were published as complete. The technical baseline products are being developed in parallel with the preliminary design. The Technical Baseline was formally approved by the Change Control Board on 1/20/03, and thus, was not formally used as the basis for the preliminary drawings reviewed during this surveillance, i.e., were not defined in the DIRS. Therefore, preliminary design is proceeding prior to formalization of the conceptual design thus circumventing the design process governed by AP-3.13Q. Preliminary design, as described in AP-3.13Q, is a design phase subsequent to the conceptual design, with the preliminary drawings being based on the Conceptual Design output. The preliminary drawings reviewed were developed prior to the completion of conceptual design, and objective evidence did not support these drawings being based on Conceptual Design output information.

Deficiency - Contrary to the requirements cited in Block #5 above:

- (1) Approved conceptual design products were not referenced as inputs to the preliminary drawings reviewed;
- (2) DOE Technical reviewers were unable to verify drawing technical adequacy due to lack of applicable referenced design inputs both on the drawing and in the DIRS database; and
- (3) Many of the drawing design inputs as defined in the informally maintained design support binder are draft, preliminary or incomplete inputs or assumptions, requiring latter confirmation which are not adequately or formally controlled.