



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



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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
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ORIGINAL
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8 Deficiency Report
 Corrective Action Report
 No BSC(O)-03-D-094
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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
 QAR Printed Name Signature Date

15 QAM Closure Approval
 Printed Name Signature Date

**OFFICE OF
CIVILIAN RADIOACTIVE WASTE MANAGEMENT
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DR/CAR/QO
 SWO

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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.