

**ENCLOSURE 7**



U.S. Department of Energy  
Office of Civilian Radioactive Waste Management



# Status of Model Validation and Software Corrective Action Reports, CARs 1 and 2

Presented to:  
**DOE/NRC Quarterly Quality Assurance Meeting**

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# **Model Validation Corrective Action Report BSC-01-C-001**

- **Status**

- **Complete amended response accepted by Office of Quality Assurance (OQA) on May 1, 2002**
- **New Analysis and Model procedures were developed (AP-SIII.9Q and AP-SIII.10Q) and were effective on December 21, 2001**
- **Self-assessments will be conducted by the Chief Science Office during the development and validation of the License Application model as an on-going effort**
- **\_\_\_\_\_ of corrective actions completed and verified**



# Software Corrective Action Report

## BSC-01-C-002

- **Status**

- Complete amended response accepted by DOE OQA on June 11, 2002
- Procedures are drafted and being coordinated within BSC. Will be effective on October 1, 2002
- BSC self-assessment on software stand-down exemption process completed
- BSC Quality Assurance will conduct surveillance of baselined software by September 30, 2002
- \_\_\_\_\_ of corrective actions completed and verified



# Software Corrective Action Report

## BSC-01-C-002

(Continued)

- **Software stand-down exemption process**
  - Software stand-down exemption process placed to allow continued software development while detailed corrective actions were being developed
- **Self-assessment on exemption process**
  - **Purpose**
    - ♦ Evaluate the implementation of the stand-down exemption process by each organization involved in the software development process
  - **Scope**
    - ♦ The self-assessment evaluated a sample (15) of the 53 codes being developed under exemption from stand-down
    - ♦ Qualification documents for 4 codes include in the sample were evaluated



# Software Corrective Action Report

## BSC-01-C-002

(Continued)

### – Findings

- ♦ No conditions adverse to quality associated with software development were identified
- ♦ AP-SI.1Q, *Software Management*, is being followed and responsible managers are providing additional management oversight
- ♦ Lessons Learned generated to address management of the exemption process



YUCCA MOUNTAIN PROJECT

# Software Corrective Action Report

## BSC-01-C-002

(Continued)

- **Status on requirements to lift the software stand-down**
  - **Root cause evaluation (completed)**
  - **Requires implementation of actions to preclude recurrence**
    - ◆ **Establish clear accountability for procedural compliance (8/1/02)**
    - ◆ **Revised/new procedures will be issued by August 30, 2002**
    - ◆ **Training to new procedures (9/1/02-9/30/02)**
    - ◆ **Will be effective October 1, 2002)**
  - **Software configuration management tool operational by October 1, 2002**



# **Software Corrective Action Report**

## **BSC-01-C-002**

(Continued)

- **BSC QA surveillance - additional assurance of baselined software integrity**
  - **Purpose:**
    - ♦ **Surveillance will be performed on a sample of the baselined software to independently verify software functionality**
  - **Status**
    - ♦ **Prepare the surveillance plan and complete surveillance by September 30, 2002**



**YUCCA MOUNTAIN PROJECT**