

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001



August 25, 2000

Mr. Steven Brocoum, Assistant Manager
for Licensing and Regulatory Compliance
Yucca Mountain Site Characterization Office
Office of Civilian Radioactive Waste Management
U. S. Department of Energy
P.O. Box 30307
North Las Vegas, NV 89036-0307

SUBJECT: MINUTES OF THE JUNE 15, 2000, MANAGEMENT MEETING

Dear Mr. Brocoum:

Enclosed are the minutes of the June 15, 2000, Management Meeting between the U.S. Department of Energy (DOE) and the U.S. Nuclear Regulatory Commission (NRC) to discuss the status of various management and programmatic issues concerning Yucca Mountain, Nevada. The meeting minutes consist of the meeting minutes summary, agenda, attendance list, and the presentation material noted as enclosures 1, 2, 3 and 4, respectively.

The meeting was held at NRC Headquarters in Rockville, MD with participation by video conference at DOE facilities in Las Vegas, NV and Washington, DC and the Center for Nuclear Waste Regulatory Analyses in San Antonio, TX.

The meeting resulted in a good exchange of information and views between DOE and NRC. No response to this letter is required. If you have any questions regarding the enclosed meeting minutes, please contact Manny Comar of my staff. He can be reached on (301) 415-6074.

Sincerely,

A handwritten signature in cursive script that reads "King Stablein".

N. King Stablein, Acting Chief
High-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosures: Summary Highlights
Agenda
Attendance List
Briefing Materials

cc: See attached list

Letter to S. Brocoum from N. King Stablein dated: August 25, 2000

cc: R. Loux, State of Nevada
S. Frishman, State of Nevada
L. Barrett, DOE/Wash, DC
A. Brownstein, DOE/Wash, DC
S. Hanauer, DOE/Wash, DC
C. Einberg, DOE/Wash, DC
J. Carlson, DOE/Wash, DC
N. Slater, DOE/Wash, DC
A. Gil, DOE/Las Vegas, NV
R. Dyer, YMPO
S. Brocoum, YMPO
R. Clark, YMPO
C. Hanlon, YMPO
T. Gunter, YMPO
G. Dials, M&O
J. Bailey, M&O
D. Wilkins, M&O
M. Voegelé, M&O
S. Echols, Winston & Strawn
B. Price, Nevada Legislative Committee
J. Meder, Nevada Legislative Counsel Bureau
D. Bechtel, Clark County, NV
E. von Tiesenhausen, Clark County, NV
A. Kalt, Churchill County, NV
G. McCorkell, Esmeralda County, NV
L. Fiorenzi, Eureka County, NV
A. Remus, Inyo County, CA
B. Duke, Lander County, NV
J. Pitts, Lincoln County, NV
J. Wallis, Mineral County, NV
L. Bradshaw, Nye County, NV
M. Murphy, Nye County, NV
J. McKnight, Nye County, NV
B. Ott, White Pine County, NV
D. Weigel, GAO
W. Barnard, NWTRB
R. Holden, NCAI
C. Williams, NIEC
R. Arnold, Pahrump County, NV
J. Lyznicky, AMA
R. Clark, EPA
F. Marcinowski, EPA
R. Anderson, NEI
R. McCullum, NEI
S. Kraft, NEI
J. Kessler, EPRI
R. Wallace, USGS
R. Craig, USGS
W. Booth, Engineering Svcs, LTD
J. Curtiss, Winston & Strawn

ENCLOSURE 1

Summary Highlights
of
NRC/DOE Management Meeting
DOE Yucca Mountain Site Characterization Office, Las Vegas, Nevada
NRC Headquarters, Rockville MD
DOE Headquarters, Washington, D. C.
CNWRA San Antonio, Texas
June 15, 2000

The U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Energy (DOE) met on June 15, 2000 to discuss the status of various management and programmatic issues. Major topics included:

- the upcoming Technical Exchanges on resolution of Key Technical Issues (KTI);
- the basis for the NRC sufficiency review of the Site Recommendation Consideration Report (SRCR);
- the DOE Condition Identification Reporting/Resolution System (CIRS); and
- the status of model information being provided to the NRC in the form of Process Model Reports (PMRs) and Analysis Model Reports (AMRs).

The meeting summary includes a brief description of the presentations, the meeting agenda (attachment 1), the attendance list (attachment 2), and a copy of meeting handouts (attachment 3).

Opening Remarks

Mr. Joe Holonich (NRC) and Mr. Lake Barrett (DOE) made brief opening remarks. The NRC emphasized its continued interest in quality assurance (QA). There were no opening remarks by the Affected Units of Local Government or other parties.

NRC Program Status

Mr. Bill Reamer (NRC) briefly described the Waste Management Division reorganization and presented the NRC program update. Proposed changes to 10 CFR Part 63 have been provided to the Commissioners and the Yucca Mountain Review Plan is still under development. NRC expects the plan to be made available for public comment in September 2000. Recommendations on the NRC's concurrence process on DOE's revised siting guidelines (10 CFR Part 963) have been made to the Commissioners and a decision is expected by the end of June.

The NRC sufficiency review of the SRCR will build on the strategy presented at the March 27-29, 2000 Advisory Committee on Nuclear Waste meeting. The NRC reaffirmed that the review will be based on existing data as well as DOE's plans and commitments to collect more. The NRC staff plans to provide the sufficiency review strategy to the Commission by the end of June and anticipates that the review will be complete within 6 months after receipt of the SRCR. The NRC emphasized that the sufficiency review is not a comprehensive licensing review. The sufficiency review will be tied to Key Technical Issues and will be used to determine whether there are significant open issues that need to be addressed prior to issuance of the Site Recommendation. The NRC and DOE agreed that the upcoming Technical Exchanges should be more focused on issue resolution and closure.

The Dry Transfer System review should be completed in July and the Interim Storage Safety Analysis Report (SAR) assessment report will be completed in November. Schedule delays were the result of shifting work priorities to accommodate higher priority work within NRC.

DOE Program Update

Mr. Don Horton (DOE) presented the DOE Program Update and addressed program metrics. He also discussed the Conditions Identification Reporting/Resolution System (CIRS), emphasizing that the CIRS provides a single place for identifying and tracking conditions/issues to closure.

Yucca Mountain Project Status

Dr. Stephan Brocoum (DOE) presented the Yucca Mountain Project status, including repository milestones. DOE emphasized that the license application schedule depends on the budget. The current schedule is for System Design Descriptions to be sent to NRC beginning in July. DOE anticipates issuing the draft Repository Safety Strategy, Revision 4, in time to discuss it at the August 1-2, 2000 Nuclear Waste Technical Review Board meeting.

DOE reiterated their position that documents supporting the SRCR, rather than the SRCR itself, should be the basis for the NRC's sufficiency comments. Preliminary AMRs are being transmitted to NRC. DOE agreed to provide draft PMRs, as necessary, to the NRC for observation audit preparation.

Remarks by Interested Parties

Ms. Judy Treichel of the Nevada Nuclear Waste Task Force (NNWTF) indicated that the NNWTF is not on the distribution list for AMRs and PMRs and would like to be able to request and receive portions of these documents.

NEI asked the NRC about the November 24, 1999 DOE letter to the NRC and its proposed path forward for sufficiency review as well as whether the NRC planned a response to the letter. The ensuing discussion indicated that the process outlined in the letter supports NRC's process of providing comments.

Summary /Closing Remarks

Neither DOE nor NRC made any formal closing remarks.

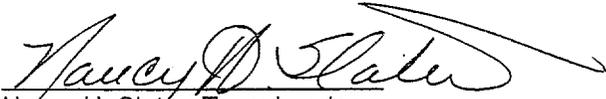
Commitments:

No commitments were made at the meeting.

Action Items:

1. DOE will provide NRC with early copies of PMRs, as necessary, facilitate effective observation audits.
2. DOE will evaluate the possibility electronically distributing AMRs/PMRs to NRC and stakeholders.
3. DOE and NRC will focus the technical exchange meetings to resolve technical issues.
4. The next NRC/DOE Quality Assurance will be September 26, 2000, and the next NRC/DOE Management Meeting will be September 27, 2000. Both meetings will be held in Las Vegas, Nevada.


Manny M. Comar
Division of Waste Management
Office of Nuclear Material
Safety and Safeguards
U.S. Nuclear Regulatory Commission


Nancy H. Slater, Team Leader
Regulatory Coordination Division
Office of Civilian Radioactive
Waste Management
U.S. Department of Energy

ENCLOSURE 2

AGENDA
NRC/DOE MANAGEMENT/QUALITY ASSURANCE MEETING
NRC Headquarters, Rockville, MD., with video conference to
DOE, Hillshire Drive, Las Vegas, Nevada; and DOE Headquarters, Room 7F091
and Center for Nuclear Waste Regulatory Analyses, San Antonio, Texas
June 15, 2000, 2:00 PM to 3:45 PM (EDT)

2:00 PM	Introductory Comments John Greeves Lake Barrett	All NRC DOE
2:15 PM	NRC Program Update Status: - 10 CFR 63 - Yucca Mountain Review Plan - Concurrence Process for 10 CFR 963 - Sufficiency Review - Central Interim Storage Safety Analysis Report Division of Waste Management Reorganization	NRC
2:45 PM	DOE Program Update Status of Program - SR/CR and FEIS Status of SR/LA Integrated Schedule Status of 10 CFR Part 963	DOE
3:10 PM	Yucca Mountain Project Status PMR/AMR Status	DOE
3:30 PM	Closing Remarks	ALL
3:45 PM	Adjourn	ALL

ENCLOSURE 3

Attendees
6/15/2000
NRC/DOE Management Meeting
DOE Headquarters (Forrestal Building)

Name	Phone
Chris Einberg	202-586-8869
Anita Capoferri	202-586-8135
Nick Dinunzio	202-586-8953

ENCLOSURE 4

DRY TRANSFER SYSTEM (DTS) AND CENTRALIZED INTERIM STORAGE FACILITY (CISF) NRC MILESTONES

DTS

DTS Topical Safety Analysis Report submitted to NRC	September 1996
NRC issues Request for Additional Information (RAI) No. 1	July 1998
DOE responds to RAI No. 1	January 1999
NRC issues RAI No. 2	June 1999
DOE responds to RAI No. 2	September 1999
CNWRA final input to SER	February 2000
NRC issues final SER	July 2000

CISF

DOE submits CISF Topical Safety Analysis Report (TSAR)	May 1997
NRC issues RAI	March 1998
DOE submits RAI response	June 1998
DOE submits Revision 1 of TSAR and revised RAI responses	September 1998
CNWRA submits final Assessment Report (AR) to NRC	August 2000
NRC issues final AR	November 2000



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

Status of Major OCRWM Objectives

Presented to:

NRC DOE Management Meeting

Presented by:

**Stephan J. Brocoum, Assistant Manager
Office of Licensing and Regulatory Compliance
Yucca Mountain Site Characterization Project**

June 15, 2000

**YUCCA
MOUNTAIN
PROJECT**

Outline

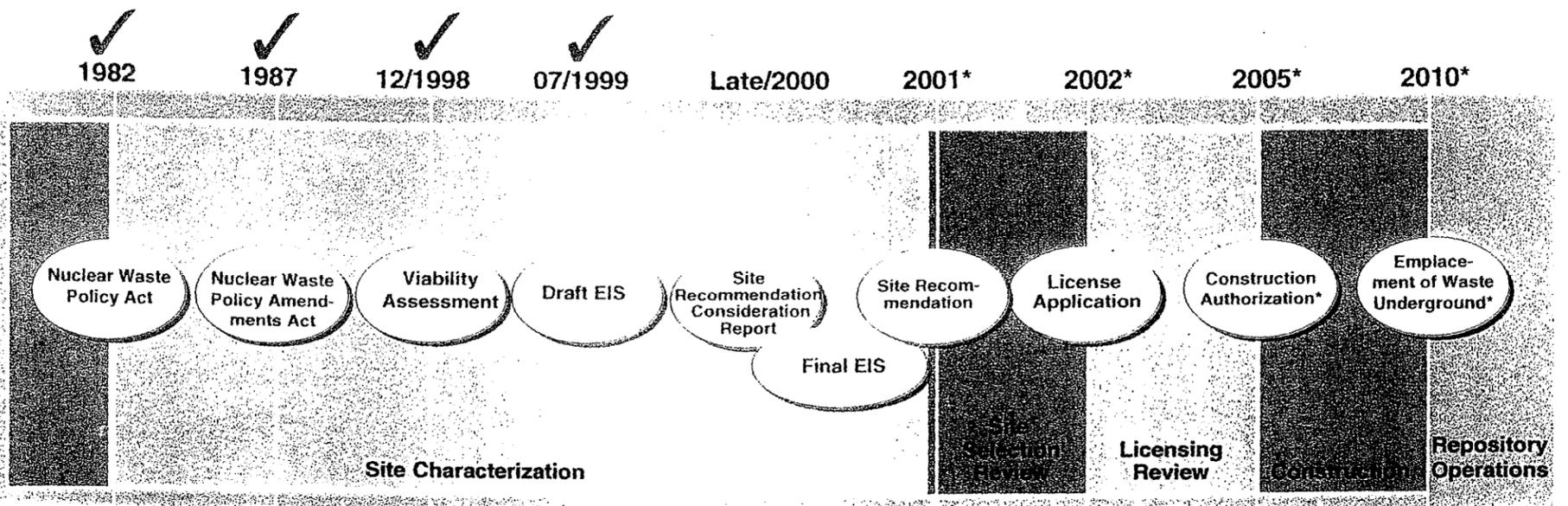
Major Near Term Milestones

Status of the Site Recommendation Consideration Report

Status of Documentation Available for NRC's Sufficiency Review

Status of the Environmental Impact Statement Process

Repository Milestones



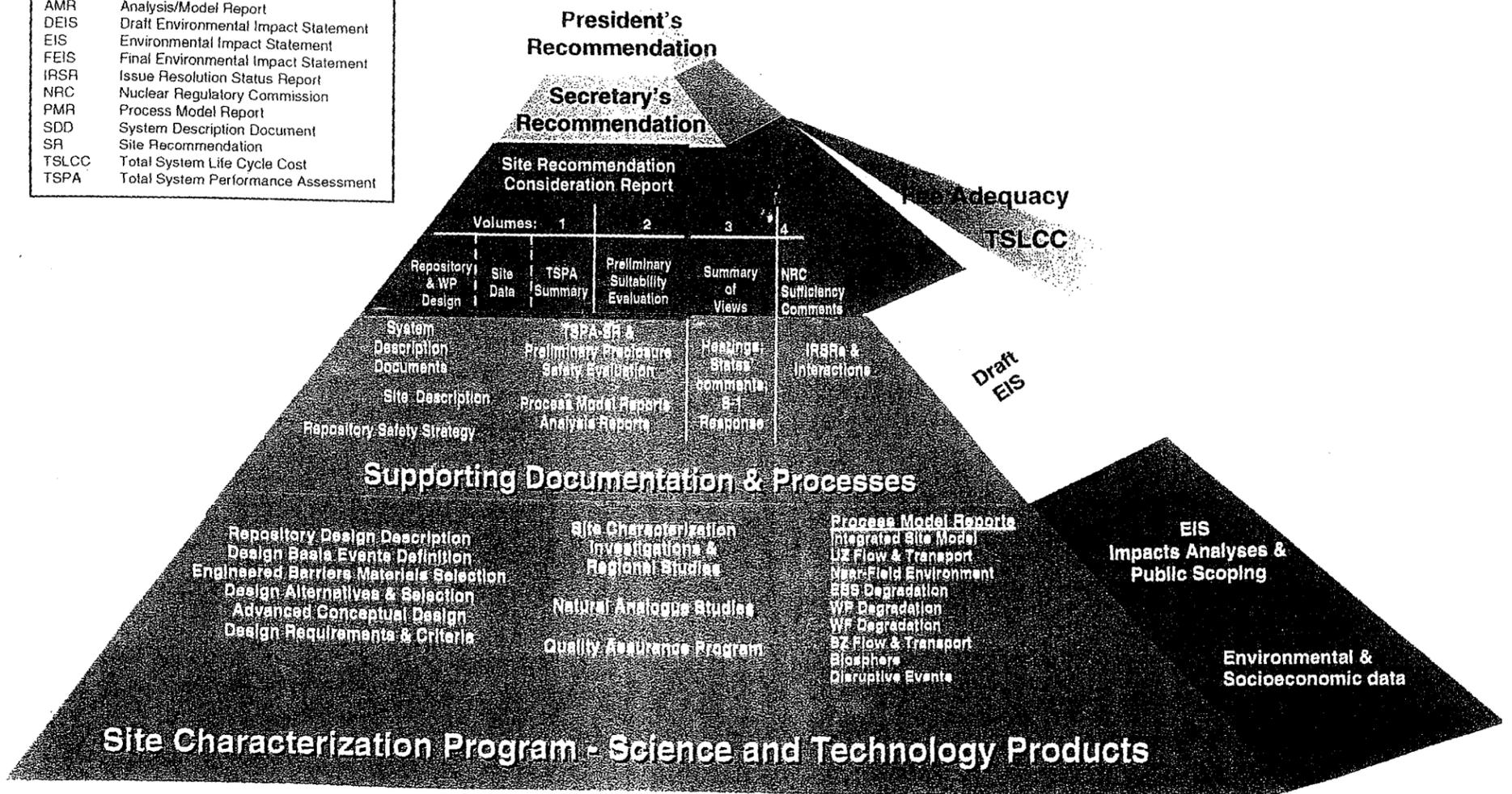
*If site is approved and budget supports schedule.

Status of Site Recommendation Consideration Report

Site Recommendation Structure

Supporting Documentation

AMR	Analysis/Model Report
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
FEIS	Final Environmental Impact Statement
IRSR	Issue Resolution Status Report
NRC	Nuclear Regulatory Commission
PMR	Process Model Report
SDD	System Description Document
SR	Site Recommendation
TSLCC	Total System Life Cycle Cost
TSPA	Total System Performance Assessment



SRCR Status Supporting Documentation

Rev 0 AMR status

111 of 121 Rev 0 AMRs are complete as of June 5, 2000

Selected AMRs will be updated as necessary through Interim Change Notices (ICNs) to reflect

- **new data and analysis**
- **design evolution**
- **traceability to TSPA-SR Rev 0**

Rev 0 PMR status

1 PMR is complete (conditions resolved)

- **Integrated Site Model**

8 PMRs have been accepted by DOE with conditions

SRCR Status Supporting Documentation

(continued)

TSPA-SR Rev 0 to be released October 2000

TSPA-SR Rev 0 will be updated for SR to reflect major changes to supporting AMRs and assure consistency with the technical basis for SR

Another iteration of TSPA is planned for LA

24 System Description Documents (SDDs) for SRCR are scheduled to be completed in July 2000

SDDs will be updated and expanded to incorporate greater design detail and additional engineering analyses for the LA

32 Additional SDDs are planned to be developed to support the LA

The SRCR is scheduled for public release in late 2000

SRCR Status - RSS Status

Rev 4 of the RSS will provide the technical basis for selecting the principal factors for the postclosure safety case

The documented basis for the postclosure safety case presented in RSS Rev 4 should:

Provide an understanding of the relative importance of the NRC's KTI sub-issues in the context of the principal factors

Facilitate resolution of KTI sub-issues related to non-principal factors

Provide a basis to focus DOE-NRC interactions on factors most important to postclosure performance

Due date for transmittal to DOE, August 2000

SRCR Status

New Data and Analysis Traceability

Technical Update reports will be prepared to accompany the SRCR and SR to provide

Summary of the most current information

An assessment of its relevance to the technical basis for SRCR

Where information is documented

If major changes occur that affect the TSPA-SR, the PMRs and AMRs will be revised (Rev. 1)

PMRs and AMRs are expected to be revised to support the LA

Status of Documentation Available for Nuclear Regulatory Commission (NRC) Supplementary Review

NRC's Sufficiency Review General Approach

November 24, 1999, letter to the NRC, DOE proposed to make technical reports available to NRC to support their sufficiency review:

Total System Performance Assessment (TSPA-SR)

Process Model Reports (9 total)

Analysis and Modeling Reports (121 total)

System Description Documents (24 total)

Preliminary Preclosure Safety Assessment

Yucca Mountain Site Description

April 24, 2000 NRC/DOE Technical Exchange meeting

NRC agreed in principal the general approach presented in the November 24, 1999 letter

NRC's Sufficiency Review Status of technical Basis

Documents to be provided to the Nuclear Regulatory Commission:

Formally Transmitted

- PMR-1
- AMRs-105

To Be Provided (when complete):

- All 9 PMRs and 121 AMRs
- 24 System Description Documents
- Total System Performance Assessment (TSPA-SR)
- Preliminary Preclosure Safety Assessment
- Yucca Mountain Site Description

NRC's Sufficiency Review Tentative Schedule for Interactions

TSPA-SR Methods & Assumptions	6/6-7/00
UZ Flow & Transport PMR*	7/12-13/00
Disruptive Events - Seismic	7/18-20/00
SZ Flow & Transport PMR**	7/27/00
Biosphere PMR	8/29/00
Disruptive Events - Igneous	8/30-31/00
EBS Degradation, Flow & Transport PM and Near-Field Environment PMR	9/6-7/00
Waste Package & Waste Form PMR	10/11-12/00
Surface & Subsurface Design SDDs	10/24/00
Repository Safety Strategy/KTI Resolution Status Meeting	11/7-8/00

* UZ in Berkeley

** SZ in Albuquerque

DEIS Public Availability

Multiple Formats:

Hard Copy

CD-ROM

Internet (www.ymp.gov)

Draft EIS distributed to more than 3,500 government officials, environmental groups, stakeholders and general public.

Copies of the Draft EIS and references available in public reading rooms.

Non-copyrighted references also available on the Project's Internet Web site.

Environmental Impact Statement

U.S. Department of Energy
Yucca Mountain Project
Bureau of Reclamation
Bureau of Land Management
Bureau of Indian Affairs
Bureau of Ocean Energy Management

Draft
Environmental
Impact Statement



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Final
Environmental Impact Statement
for
the
Yucca Mountain Waste Disposal
Facility
Environmental Impact Statement
Final Report



Comment Process

- **Comment documents are scanned into an electronic comment data base**
- **Documents are reviewed to identify specific comments**
- **Comments are assigned a category for response**
- **Responses are drafted (changes to the document are identified)**
- **Responses are reviewed at several levels for accuracy and consistency**

EIS Comment/Response Database

Comment Documents received: 2,302 as of May 31, 2000

Comments received ~11,117

Comments sorted into 27 Bins

Purpose and Need (672)	Cultural Resources (71)
NEPA (1,945)	Environmental Justice/Native American (380)
Alternatives (1,613)	Human Health and Safety (211)
No-Action Alternative (69)	Hydrology/Geology (509)
Program/Project Issues (233)	Land Use (35)
Cumulative Impacts (190)	Noise (7)
Mitigation (424)	Regulations (88)
Accidents (77)	Socioeconomics (223)
TSPA (600)	SNF/HLW (141)
Engineering (191)	Transportation (2,838)
Aesthetics (19)	Utilities (15)
Air Quality/Climate (46)	Waste Management (18)
Biology and Soils (95)	Special Comments (10)
	Outside Scope (397)

Status of Public Comments

Comment Breakdown

15% Alternatives

26% Transportation

17% NEPA process

42% Remaining 24 Categories

Comments will be addressed and appropriate changes incorporated in the final EIS

A Comment Response Document will be a part of the final EIS

Summary

- **Primary focus for the remainder of 2000 is completion of the SRCR and its technical basis for**
- **The SRCR technical basis continues to be made available to NRC as it is completed and accepted by DOE**
 - **NRC will be advised of any subsequent updates to the technical basis**
- **NRC/DOE interactions are intended to focus on the technical basis for a possible site recommendation**
- **NEPA process will lead from the DEIS to the FEIS which will accompany the SR**



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

Program Metrics and Condition/Issue Identification and Reporting/Resolution System (CIRS)

Presented to:

DOE / NRC Quarterly Management Meeting

Presented by:

**Donald G. Horton, Deputy Project Manager
Yucca Mountain Site Characterization Office**

June 15, 2000

**YUCCA
MOUNTAIN
PROJECT**

Overview

- **Program Metrics**
 - **Monthly Performance Indicators Report**
- **Condition/Issue Identification and Reporting/Resolution System (CIRS)**

Program Metrics

YUCCA MOUNTAIN PROJECT

Monthly Performance Indicators Report

Civilian Radioactive Waste Management System • Management and Operating Contractor

May 2000



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

Performance Metrics

- **The Monthly Performance Indicators Report has been issued since September 1999**

A “Nuclear Culture” Initiative

- **Indicators are divided as follows:**

Safety

Quality

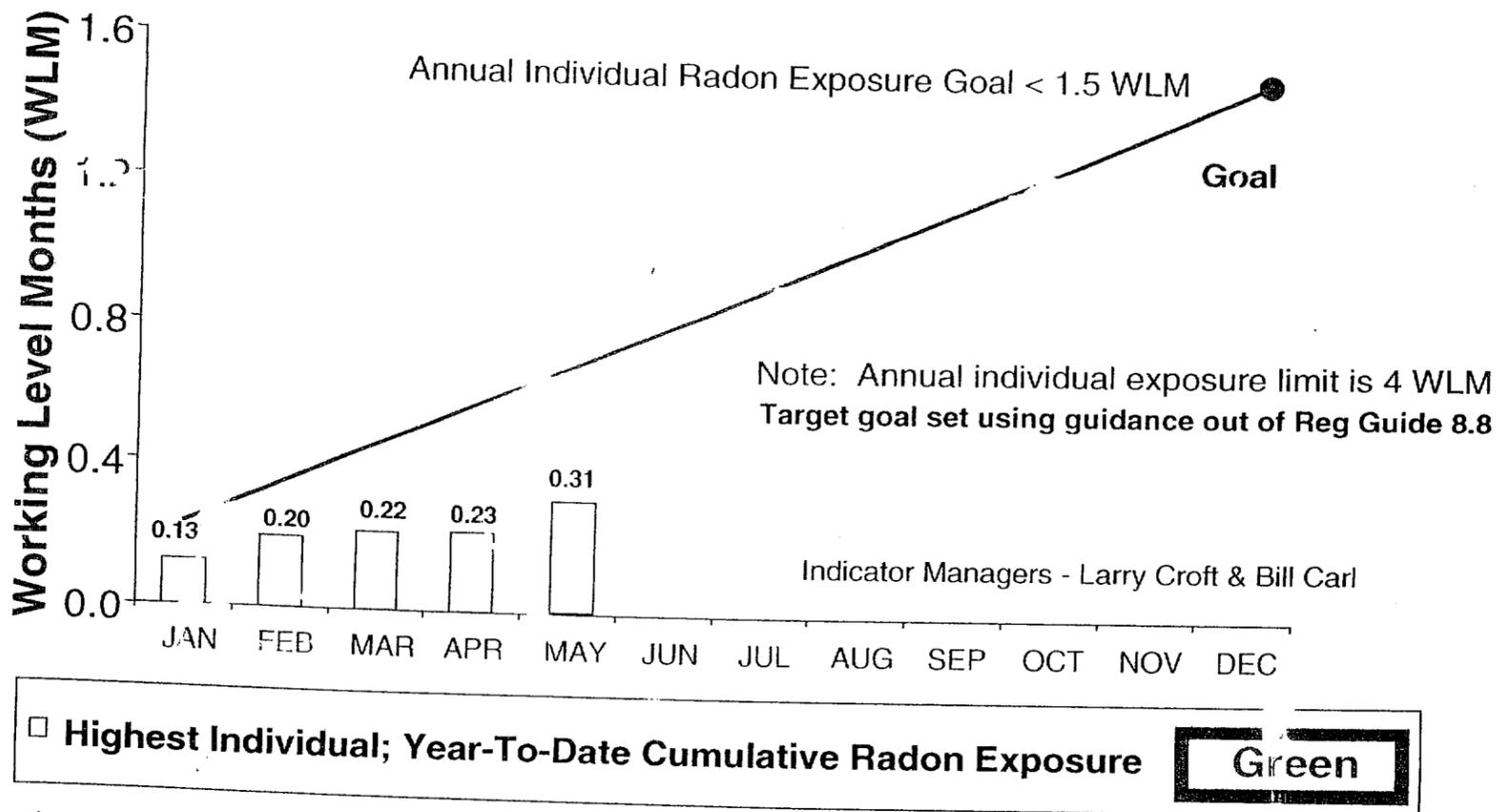
Production

Project Control

DOE Measures

Program Metrics - Examples

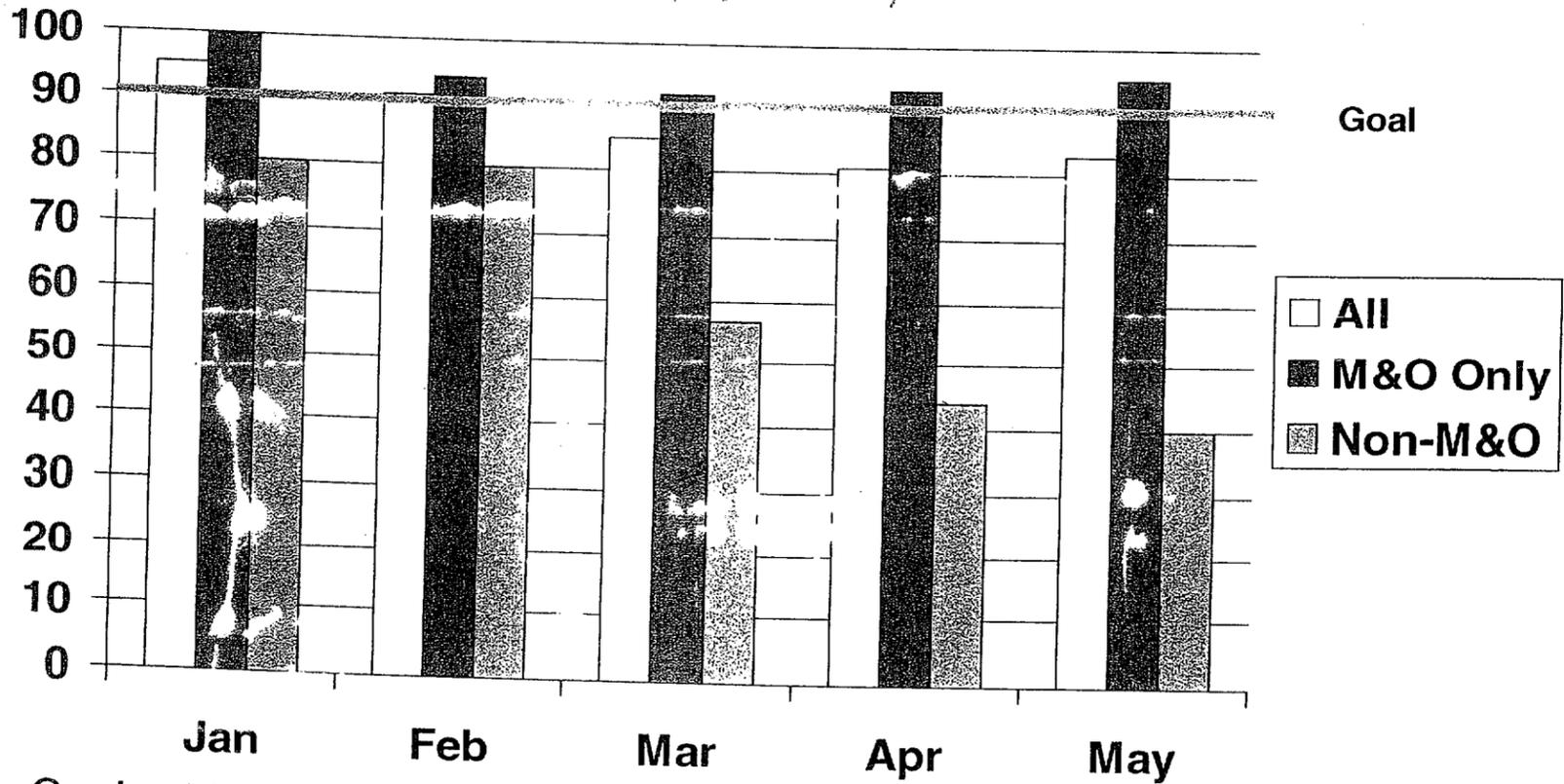
2000 Estimated Annual Individual Radon Exposure Compared to ALARA Goals



Program Metrics - Examples

(continued)

Percent of FY00 Deficiencies Closed Within 100 Days (By Month)



Goal = 90% of FY00 deficiencies closed within 100 days. Yellow

Indicator Manager - Mary Franks

Program Metrics

(continued)

- **Additional/refined indicators are developed on an ongoing basis**
- **Currently developing additional goals to improve performance**
- **Report provided to NRC Onsite Representatives monthly**
- **Electronic version now available internally for Project use**
 - **Internet access is planned (except for cost data)**

Conditions for Identification and Removal of Contaminated Soil (CRS)



Background for CIRS Development

- **QAMA recommendations**

- Need an issues management system to effectively monitor and track issues to ensure that they are addressed and closed in a timely manner

- Process should include evaluation of recommendations from internal and external groups, results from QA audits, peer reviews, self-assessments, other issues

- **DOE Office of Oversight recommendations**

- Opportunity for improvement using common deficiency tracking system to collect findings

- **NEI comments on commitments**

- **Project Nuclear Culture Initiative**

- Improvement needed for problem identification and resolution effectiveness

What Is CIRRS?

Condition/Issue Identification and Reporting/Resolution System

Tool for identifying, evaluating, tracking, and resolving conditions/issues

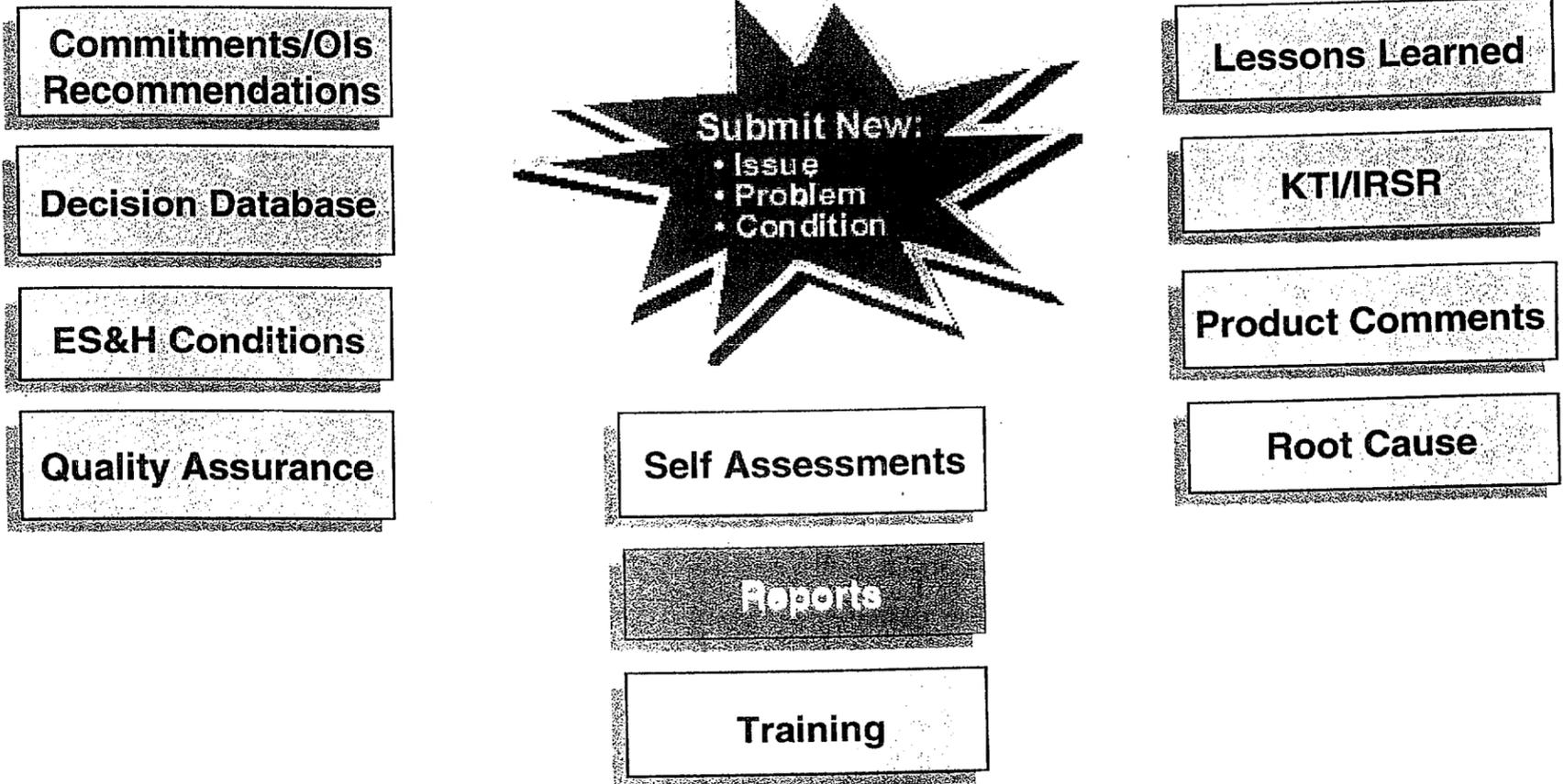
- **Condition**
 - Requirement or expectation not met
- **Issue**
 - Concern that requires evaluation to determine what should be done



Used to propose, evaluate, track, and implement (as appropriate) opportunities for improvement

CIRS

Condition/Issue Identification and Reporting/Resolution System



Why CIRS?

Provides management tool for issue management

Supports Nuclear Culture Initiative

“Problem Identification and Resolution”



NUCLEAR CULTURE

A Commitment to Excellence

Supports ISM Core Function

“Provide Feedback and Continuous Improvement”



The Department of Energy's

Integrated Safety Management Program

Why CIRIS?

(Continued)

- **Establish one place to document conditions/issues**
- **Provide management evaluation of conditions/issues**
 - Screening
 - Categorization
 - Trending
- **Integrate processes that status/track conditions/issues**

