Please Note: The enclosed letter to DOE documents a Management Meeting conducted on September 7, 2001. The meeting summary highlights are included as Enclosure 1 to the letter. Enclosure 2 provides the agenda of the meeting, Enclosure 3 is the attendance list. Due to the size of Enclosure 4 they are not included in this mailing. If you are interested in viewing or printing the Enclosure, it can be obtained from the NRC website (www.nrc.gov) under the ADAMS icon (or you can go directly to the ADAMS homepage at www.nrc.gov/NRC/ADAMS. If you don not have access to the website and/or are interested in getting a hard copy of Enclosure 4, please contact Ms. Darlene Higgs at 301-415-6711 or e-mail at gdh1@nrc.gov.

ENCLOSURE 1

NRC/DOE Management Meeting Summary

Participants from
DOE Headquarters; DOE YMSCO, Las Vegas, NV;
NRC Headquarters, Rockville, MD; NRC Region 4; and
CNWRA, San Antonio, TX
September 7, 2001, 8:30 AM to 11:45 AM, PST.

The U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Energy (DOE) met on September 7, 2001, to discuss the status of various management and programmatic issues. This meeting summary includes a brief description of the discussions, the meeting agenda (attachment 1), the attendance list (attachment 2), a copy of the meeting handouts (attachment 3), and the list of action items being tracked with their status (attachment 4).

Introductions

Mr. Tim Gunter (DOE) opened that meeting by soliciting opening remarks from the DOE and the NRC. There were no opening remarks provided.

DOE Program/Project Update

Mr. Lake Barrett (DOE) provided an update on various ongoing program activities, including public hearings, the fiscal year 2002 budget, National Academy of Sciences studies, and potential strategies for funding and managing the Program. Dr. Russ Dyer (DOE) provided a project update and stated that DOE recognizes that there is a need to improve its performance, as a potential licensee. He noted that he firmly believes that the technical products produced to support Site Recommendation are scientifically sound. Dr. Stephen Brocoum (DOE) provided an overview of the Site Recommendation process. In response to a question from NRC, Dr. Brocoum (DOE) indicated that DOE is managing the public comment response process with a combined DOE and Bechtel-SAIC staff of 30 – 40 people dedicated to resolving comments.

NRC Program Update

Mr. William Reamer (NRC) provided the NRC Program update and announced that an affirmative NRC Commissioner vote was made on 10CFR63. He stated that information would be available on the NRC's website. The draft Yucca Mountain Review Plan (YMRP) will be modified to be consistent with the final 10 CFR63. He was unable to estimate the date on which the YMRP would be issued. Mr. Reamer noted that DOE's proposed siting guidelines (10CFR963) are being considered by the NRC and indicated that Nye County and the State of Nevada have requested to participate in the concurrence process for the 10CFR963. The NRC is working to provide sufficiency comments by November 1, 2001. The NRC is hosting a workshop with the Native American Tribes in Las Vegas September 26-27, 2001.

Management Issues from QA and KTI Sessions

Ms. Nancy Williams (BSC) provided an overview of the BSC root cause analyses, TSPA-SR

integrity reviews and associated proposed corrective actions. Although the results indicate that there was no impact on the conclusions of TSPA-SR, corrective actions were recommended to prevent recurrence. Ms. Williams provided an overview of the Performance Improvement Transition Plan objectives and content to improve project performance. DOE will keep NRC informed on transition plan status during the bi-weekly meetings with the NRC On-site Representatives.

Significance of Unqualified Data and Software

Dr. Robert Andrews (BSC) provided a summary of the impact assessment results for unqualified data and software. The impact assessments concluded that there were no impacts of having used unqualified data and software on TSPA-SR. Mr. John Greeves (NRC) requested that Dr. Andrews interface with members of his technical staff and answer NRC questions that may arise on the impact analysis documented in DOE's August 31, 2001 letter.

The NRC summarized issues from the QA Meeting held the previous day. The NRC noted that the DOE/BSC material presented was informative and that the proposed transition plan seemed appropriate. However, the NRC re-stated their concern with DOE's ability to effectively implement a successful QA program based on past performance.

Mr. Tim Gunter (DOE) provided the list of action items from the QA Meeting held the previous day. These action items have been included in the QA meeting summary.

OCRWM Concerns Program

Dr. Dyer provided an overview of OCRWM's employee concerns program. DOE will continue to brief the NRC on the status of final resolutions of the employee concerns. In response to a NRC question, DOE agreed to provide additional information on the process for employee feedback on quality concerns investigations. DOE also agreed to have more detailed discussions on the results of the Morgan Lewis employee concerns report.

Action Item Status

The following new action items were agreed to during the meeting:

- 1. NRC requests follow-up discussion with DOE and NRC staff regarding specific examples in the presentation on impact assessment of unqualified data and software
- 2. NRC requests follow-up discussion in the next management meeting on the OCRWM concerns program, specifically how feedback is provided to employees.

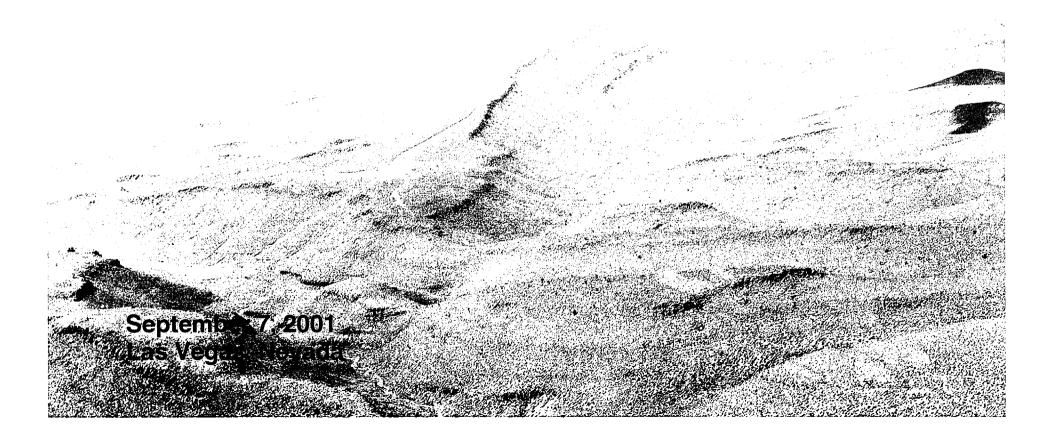
The complete list of all action items status is provided as Attachment 4.





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

DOE/NRC Quarterly Management Meeting



Agenda

DOE/NRC Quarterly Management Meeting

September 7, 2001

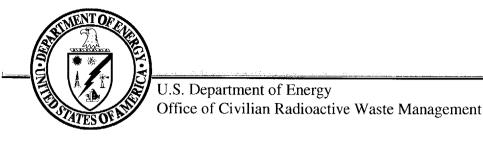
DOE Hillshire Atrium Room

Las Vegas, Nevada

8:30 AM - 11:45 AM (PDT)

And via Videoconference to:

U. S. NRC Room O-3B4 11545 Rocky Rockville, M	ille Pike	U. S. NRC Region IV 611 Ryan Place Drive Arlington, TX	CNWRA, SWRI Building 189, Room 6220 Colebra Road San Antonio, TX	A103
8:30 AM	Introductions		ALL	,
8:40 AM	 DOE Program/Project Update Program Update Project Update Steps to Site Recommendation 		DOE Barr Dyer Broo	ett
9:00 AM	NRC Program Update			
9:15 AM	 Management Issues from QA and KTI Sessions Root Cause Status of TSPA-SR Issues Corrective Action Significance of Unqualified Data and Software 		N. W N. W N. W	E Villiams Villiams Villiams rews
10:30 AM	Break		ALI	4
10:45 AM	OCRWM Concerns Program Update			r
11:15 AM	Action Item Status			E/NRC
11:30 AM	Closing Remarks			
11:45 AM	Adjourn			





Steps to Site Recommendation

Presented to:

DOE/NRC Quarterly Management Meeting

Presented by:

Dr. Stephan J. Brocoum
Assistant Manager, Office of Licensing and Regulatory Compliance
Yucca Mountain Project Office
Office of Civilian Radioactive Waste Management

Septemb**er 7, 2001**). Las Vegas, Nevada

Introduction

- DOE is proceeding toward a possible site recommendation in early 2002
 - Consideration hearings are in process
 - Technical basis supporting a possible recommendation is available to interested parties
 - Comments from external parties being received and processed
 - Currently scheduled technical exchanges on NRC's Key Technical Issues (KTIs) have been completed
 - all KTI subissues are closed or closed pending the additional information documented in the KTI agreements
 - Quality concerns raised by the NRC and the Department are being addressed

Site Recommendation Process Status

- In the June 13, 2001 NRC/DOE Management meeting, YMSCO reported on the technical basis for a possible site recommendation and the documentation available for NRC's sufficiency review
- On August 21,2001 DOE made the Preliminary Site Suitability Evaluation available
 - Addresses requirements of DOE's proposed 10 CFR
 Part 963 and EPA's final rule (40 CFR Part 197)
- On August 21, 2001 DOE announced public hearings on the Secretary's consideration of a possible site recommendation to the President
 - Hearings scheduled September 5, 12, and 13, 2001



Relationships of SR Documentation

Views of states & legislatures Potential SR decision NRC sufficiency comments DOE responses to views Additional information Final regulations Impact analyses Site Characterization Program - Science and Technology Products SR Consideration SSPA - 2 volumes Analyses for high- and low Hearings Additional quantified PSSE POST-CLOSURE* Mean dose curves for highrequirements Proposed 10 CFR Part 963 and low-temperature Criteria evaluations Sensitivity studies operating modes Disruptive events scenario Human intrusion scenario TSPA method High-temperature TSPA-SR operating mode Sensitivity studies Mean dose curves Nominal scenario high-temperature operating Waste form and packaging requirements Data important to safety Repository description *Pre-closure not shown here YM S&ER NWPA TSPA-SR results

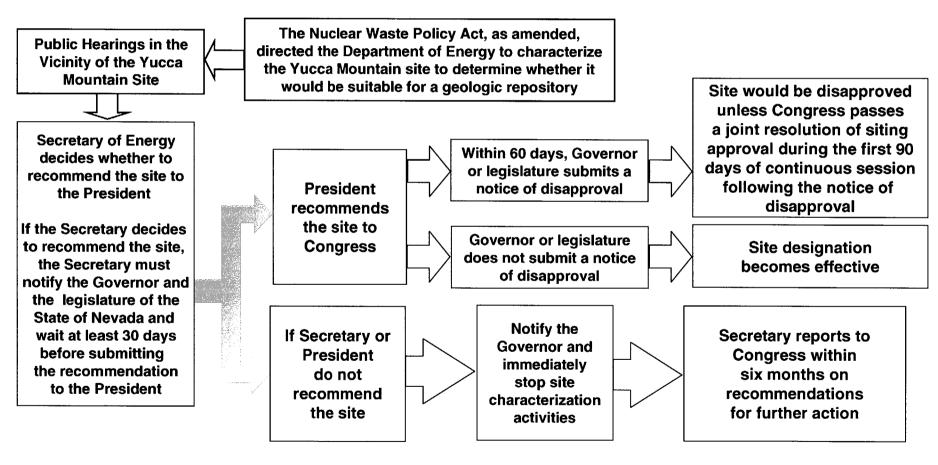


Site Recommendation Process Future Actions

- Complete consideration hearings
- Complete public comment process and evaluate comments
- Finalize 10 CFR Part 963 after NRC concurrence
- NRC issues preliminary sufficiency comments
- Secretary notifies Governor if he decides to recommend the Yucca Mountain site
- Secretary submits recommendation and supporting documentation to the President



Site Recommendation Process Defined by the Nuclear Waste Policy Act



Summary

- Technical documentation is in support of a possible site recommendation
- Although improvements are clearly needed in the implementation of our quality program for proceeding with a potential license application, there have been no significant impacts to the results of our Total System Performance Assessment for SR
- Significant Progress has been made in addressing NRC's KTIs
 - DOE is presently developing a multi-year plan that focuses on addressing KTI agreements

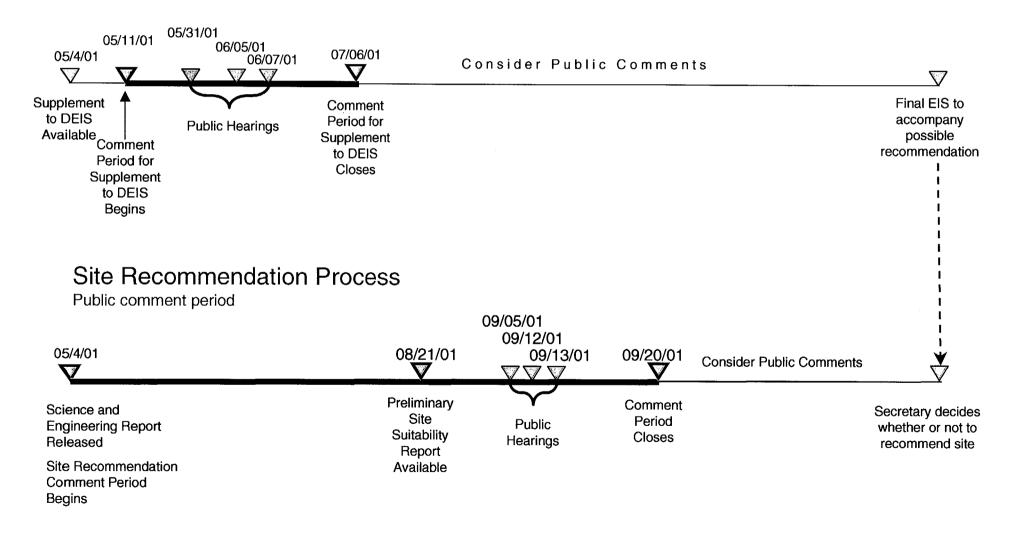


Backup

YMP Public Involvement Opportunities in 2001

Environmental Impact Statement

Public comment period



Site Recommendation Documentation Structure

Fee Adequacy THE ST Supplement Survey TSLCC BUILD IN nteractions **Technical** Issues Key Comments Sufficiency Potential Secretarial Recommendation Recommendation Evaluation Suitability Analysis & Modeling Reports Presidential Comment Document Supplemental Science & Performance Summary Potential Preliminary Preclosure Process Model Reports Safety Evaluation **TSPA-SR** Engineering Science and Analyses Report Repository Safety Strategy Site Description Documents Description Total System Performance Assessment Draft Environmental Impact Statement Final Environmental Impact Statement Environmental Impact Statement Nuclear Regulatory Commission Issue Resolution Status Report System Description Document Saturated Zone Total System Life Cycle Cost Engineered Barrier System Analysis/Model Report Process Model Report Site Recommendation Secretary of Energy Unsaturated Zone Waste Package Waste Form S-1 SB SZ SZ TSLCC TSPA UZ AMR DEIS EBS EIS FEIS FEIS NRC PMR

Supporting Documentation & Processes

Repository Design Description
Design Basis Events Definition
Engineered Barriers Materials Selection
Design Alternatives & Selection
Advanced Conceptual Design
Design Requirements & Criteria

Site Characterization Investigations & Regional Studies Analogue Studies Quality Assurance Program

Natural & Manmade

Technical Update Report

Process Model Reports
Integrated Site Model
UZ Flow & Transport
Near-Field Environment
EBS Degradation
WP Degradation
SZ Flow & Transport
Biosphere
Disruptive Events

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Site Characterization Program - Science and Technology Products



Attachment 4

DOE/NRC Management Meeting Action Items

Num	Action Item	Status	Remarks	LAP Lead	Tech Lead
01/09-01	NRC requests followup discussion with DOE and NRC staff regarding specific examples in the presentation on impact assessment of unqualified data and software.	New			
01/09-02	NRC requests followup discussion in the next management meeting on the OCRWM concerns program, specifically how feedback is provided to employees.	New			
01/06-01	NRC requests specific dates for DOE's SR schedule. DOE set an internal goal of providing this within two weeks [combined with previous action #01/04-01].	Complete	The information was provided to the NRC by Letter dated July 3, 2001.		
01/06-02	DOE will provide the results of the management action plan, including the root-cause analysis, at least one month before NRC provides sufficiency comments.	Complete	The results of the management action plan will be available by August 29, 2001 and briefed at the September 6-7, 2001 QA and Mangement meetings. The management plan was briefed at the September meetings (including the root cause analyses). The root cause analyses have been provided to the ORs, but will also be formally transmitted to the NRC. (Transmitted on 9/12/01)		
01/06-03	DOE will provide a written response to NRC's May 17 letter that will include two attachments: (a) a copy of the management action plan; and (b) point-by-point responses to NRC's QA and performance assessment issues.	Complete	Written response to NRC's May 17, 2001 letter was provided to the NRC by Letter dated July 6, 2001.		
01/06-04	DOE's unqualified data and software impact analysis will include the SSPA, or explain why the SSPA is not included [combined with previous action #00/09-01].	Complete	The analyses was completed by August 15, 2001. The NRC was briefed during the September 6-7, 2001 QA and Management Meetings. This information was also transmitted to the NRC by letter on August 31, 2001.	·	

Attachment 4

DOE/NRC Management Meeting Action Items

Num	Action Item	Status	Remarks	LAP Lead	Tech Lead
01/06-05	DOE will update NRC on OCRWM Employee Concerns Program within 30 days.	Complete	DOE provided a briefing by telephone to the NRC management on the results of the Morgan - Lewis survey when the survey was completed. Also, DOE provided an update of the OCRWM Employee Concerns Program during the September 7, 2001 Management Meeting.	·	
01/04-01	DOE will provide NRC with information on its modified SR process, schedule, and document architecture at a meeting to be held in the mid-May to early June time frame.	Complete	Completed during June 13, 2001 Management Meeting. (See also item 01/06-01 where the NRC asked for more specific dates.)		
01/04-03	NRC will provide DOE with information on its transition to an Integrated Sub-Issue (ISI) framework and its Integrated Issue Resolution Status Report at a meeting to be scheduled.	In Progress	This will be completed following issuance of the YMRP (which is the appropriate time to provide the information).		
00/12-01	NRC will follow-up with DOE on Employee Concerns Program as part of transition.	Complete	The NRC On-Site Representative monitors the Employee's Concerns Program as part of routine oversight, and briefs NRC management on the results. NRC has held follow up discussions on this subject.		

Attachment 4

DOE/NRC Management Meeting Action Items

Num	Action Item	Status	Remarks	LAP Lead	Tech Lead
	DOE will provide, in writing to NRC, the status of Data Qualification and Verification and Software Qualification in March of 2001.		Status is periodically provided to ORs and at Management or QA Meetings. Although formal written transmittal was to be provided in March 2001, this item was originally scheduled contingent upon a December 2000 SRCR submittal. Based on changes to program schedule, this has been delayed. DOE agreed in the April 18, 2001 Management Meeting, to provide NRC by May 17, 2001 a date by which an analysis of any impact and significance of unqualified data and software will be provided. This item was expanded to include the status of model validation issues. DOE provided the status of model validation issues and the impact assessment of unqualified data and software to the NRC on August 31, 2001. (See 01/06-04.)		
00/04-05	DOE and NRC agreed to establish a consolidated list of commitments and open items and develop a process to track which open items are closed, closed pending confirmation, or open. The status of this effort will be reported at future management meetings	In Progress	There was a demonstration of CIRS database and commitment management system on 11/21/00 to demonstrate DOE open item management. Also, KTI status was discussed at the December 20, 2000 and prior to the April 18, 2001 Management Meeting. NRC will provide the OITS report to DOE in the near future. At the September 7, 2001 management meeting, it was agreed to add an agenda item for the next KTI breakout.		

Public Comments

Ms. Judy Treichel (Nevada Nuclear Task Force) commented that it would be helpful if DOE would send an acknowledgement to the commentors on various DOE documents confirming receipt of their comment(s). Also, Ms. Treichel noted that commentors providing their comments by e-mail are experiencing difficulties with DOE e-mail addresses that contain an underscore. DOE will look into both issues.

Closing Remarks

There were no additional closing remarks provided. The meeting was adjourned.

Keng Stablein William Reamer

Division of Waste Management

Office, of Nuclear Material

Safety and Safeguards

U.S. Nuclear Regulatory Commission

Regulatory Interactions and

will. Til

Policy Development Team

Yucca Mountain Site

Characterization Office

U.S. Department of Energy

Nancy Slater Thompson by direction 9/14/2001

Regulatory Coordination Division

Office of Civilian Radioactive

Waste Management

U.S. Department of Energy

ENCLOSURE 2

Agenda

DOE/NRC Quarterly Management Meeting

September 7, 2001

DOE Hillshire Atrium Room

Las Vegas, Nevada

8:30 AM - 11:45 AM (PDT)

And via Videoconference to:

U.S. NRC

U.S. NRC

CNWRA, SWRI

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Room O-3B4		Region IV	Building 189,	
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Rockville, M	D	Arlington, TX	San Antonio,	TX
8:30 AM	Introductions			ALL
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8:40 AM	DOE Program/			· -
	 Program Up 			Barrett
	 Project Upd 	ate		Dyer
	Steps to Site	Recommendation		Brocoum
9:00 AM	NRC Program Update			NRC
9:15 AM	Managamant Is	sues from QA and KTI Sess	ions	DOE
7.13 AWI	• Root Cause	sues Irom QA and KII 5css	IOIIS	N. Williams
		D. CD I		N. Williams
	_	PA-SR Issues		
	• Corrective A			N. Williams
	 Significance 	of Unqualified Data and So	oftware	Andrews
10.20 ANA	Dunale			ALL
10:30 AM	Break			ALL
10:45 AM	OCRWM Conc	erns Program Update		Dyer
		1		·
11:15 AM	Action Item Status			DOE/NRC
11:30 AM	30 AM Closing Remarks			All
11 45 435	4 7'			A 11
11:45 AM	Adjourn			All



LIST OF ATTENDEES

NRC/DOE MANAGEMENT MEETING SEPTEMBER 7, 2001

U.S. NUCLEAR REGULATORY COMMISSION O3B-4

NAME	ORG	PHONE NO.	E-MAIL
Chris Einberg	DOE/HQ	202-586-8869	Christian. Einberg @ Ha. Post.
MANNY COMPA	NRC	301-415-6074	MMCLQ NRC. GOV.
TED CAMEN	NRC	31-415-6634	thele une En
James Firth	NRC	301-415-6628	jrfz@nrc.gov
Thomas Essix	NRC	301-415-7238	the@nrc.gov
Lake Barrett	Doc	202586-6850	Lak. Garrett @ Rw-dre. g
SANDRA WASTLER	NRC	301-415-8733	SW1@ pRC. 60U
Nancy Stater Thompson	DOE	222-586-9322	Manay Slatera rusces
DAVID SIEFKED	B5C	(202) 479-2104	David . Sixther & rw. doe. go
Larry Saraka	BS C	202-488-6745	Larry. Sarakaerw. due. gov
ROBMACDOUGALL	Boc	202,479,2122	Larry. Sarahaltw. due. gov ROBERT, MACDOUGALL B. RW. DOE, GOV
STEVE HANAUER	DOE	202-586-3547	steve. hanaver
Tim McCartin	NRC	301 415 7285	tim3 enrc. gov
Stan ECHOLS	winston & street	2023715777	fechols e ainston, com
2MKrich	Exclon Nudea	1630-657-2813	vod. krich o exclosio rp. con
Rod McCullun	NGI	202-739-8082	rxm Onei.org
Garrett Smith	Nec	301-415-1724	gas@nrc.gov
DAN FEHRINGIZR	NUTEB	703-235-9132	febringer@nutub.yov
King Stablein	NRC	301-415-7445	NKS@NRC,GOV
Edward & Baker	NRC/AAA		ETBONDC. GOV
Twagne T. London	DO E/06,C	202-586-6975	dwayne. longon@ liq.doe.gov
1000	1		

ATTENDANCE LIST DOE - NRC Quarterly Management Meeting Atrium Room, 1551 Hillshire Drive, Las Vegas, Nevada September 7, 1998

Name	Organization	Telephone
EVON TIESENHOUSEN	CHARK COUNTY	702 455-5184
Susav Lynch	State of NEUA da	775-687-3744
Don BECKMEN	BSC,	702-285-4592
Maril Gil	DOE/OLRC/YMP	702 794-5578
1666 Gamble	MTS/BouzAller	702-794-1440
Roberta Stambaugh	BSC/LAP	702-295-5319
ROBERT HASSON	Nas	702-794-5023
Kristi Hodges	NQS	702-794-1464
DONALD T. KRISHA	Bsc	702-295-6242
WILLIAM BOYLE	90E	702-7945506
Judy Treichel	NV NWTF	702-248-1127
Steve Frishman	State of AV	775-687-3744
S.J. CEREGHINO	BSC	702-295-4251
SAM HOBBS	B 5C	702-295-6620
DEVVIS P. WULLOAMS	DOF/YM/OL3RC	702 794-5326
TIM GUNTER	ಾತ '	
KEN HESS	B5C	702-295-0502
STEPHEN BROCOUM	DOE	702 794 - 1359
MANCY WILLIAMS	BSC	702-295-5143
Russ Dyer	Dof	702-794-1300
Vehn Greeves	NRC	301 415 7437

ATTENDANCE LIST

DOE - NRC Quarterly Management Meeting Atrium Room, 1551 Hillshire Drive, Las Vegas, Nevada September 7, 1998

Name	Organization	Telephone
Bill Reamer	NRC	301-415-6537
RM. LATTA	NRC	702-794-5048
BILL BELKE	NRC	702-794-5047
ali Haghi	BSC/Duke	702 - 295 - 5318
Ma (Whogling	Myo Ctor. Por Alicen	360-943-5620
SUZY MELLINGTON	Dod/4mseo	102-194-1454
B John Garrick	ACNW	949 497 6802
JennivieveNovero	BSC-Licensing	702.295.5312
Veronica Corneil	BSC-Licensing	702-295-5342
IRENE NAVIS	Clark County	102-455-5129
Robert Andrews	8sC	702-295-
Kon Knownson	BSC	702-295-5321
		:

ATTENDANCE LIST

DOE - NRC Quarterly Management Meeting Atrium Room, 1551 Hillshire Drive, Las Vegas, Nevada September 7, 1998

Name	Organization	Telephone
Charles Haughne	v BBC-baa	x51680
Marty Bryan	BSC-LAP	5 6273
Bob Bradbury	MTS	794-5424
Sieve Schwermann	32 as	5-0440
GARY Smith	DOE CORREYN Program	5-0297
GARY Smoth ALAN KUSI	BSC - SR	5-4761
Richard Tolt	MTS	794-1381
Jack Gallagher	DOE CONCERNS PROGRAM	
4	7	

SEP-07-01 12:11 FROM: CNWRA-BLDG.189....A

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES MEETING ATTENDANCE

SUBJECT OF MEETING NRC/DOE Quarterly Management Meeting						
DATE: Self. 7, 200	DATE: Self. 7, 2001 LOCATION: SIOP I BILG. 189 VTC					
PERSON	ORGANIZATION	TITLE/FUNCTION	TELEPHONE NUMBER			
Asad Chowdhury	CNWRA	Manager-MGFE	210-522-5151			
Wes Patrick	CNWRA	V-P CNWRA	210-522-5158			
BRUCE MAGRITO	Carvas	Die QA	210-522-5149			
Bodhi Sofen	CNWNA	Fech. Div.	210-213-2325			
Tom Trbovich	SWRI/QUURD	Staff Scientist	210-2:55.3145			

ENCLOSURE 4





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

Significance of Unqualified Data and Software



Outline

- Objectives and Approach for Data Qualification Impact Assessments
- Summary of Data Qualification Results and Impact Assessments
- Summary of Software Qualification Results and Impact Assessments
- Summary of Supplemental Science and Performance Analyses (SSPA) Data and Software Qualification Impact Assessment



Objectives and Approach for Data Qualification Impact Assessments

- Qualify Data Tracking Numbers (DTNs) used in support of Analysis/Model Reports (AMRs) supporting TSPA-SR Rev. 00, ICN 01
- For those DTNs not qualified as of 8/22/01 conduct impact assessments at 3 levels of use of information
 - Impact of input DTN on output from AMR
 - Impact of output from AMR on input to TSPA-SR
 - Impact of input to TSPA-SR on output from TSPA-SR
- Develop series of questions for each of above levels and have responsible individuals and managers evaluate impacts

Summary of Results of Data Qualification Impact Assessments

- 50 unique unqualified DTNs unqualified as of 8/22/01, used in 28 AMRs
 - 61 impact assessments conducted due to repeat usage in multiple AMRs
- Of the 61 impact assessments
 - 41 (67%) were determined not to significantly affect the output of the AMR
 - 49 (80%) were determined not to significantly affect the input to TSPA-SR
 - 61 (100%) were determined not to significantly affect the output from TSPA-SR



Example Explanation for Insignificance of DTN on TSPA Output

SZ colloid facilitated transport AMR

- 3 unqualified DTNs provide basis for colloid transport in fractured volcanic units
- DTNs affect irreversibly sorbed radionuclides on colloids
- Irreversible colloid transport is less significant than noncolloidal transport of Tc and Np during regulatory time period
- Delay of transport through alluvium is more significant than delay in fractured volcanics
- Dose is not sensitive to colloid transport in fractured volcanic units



Summary of Results of Software Qualification and Impact Assessments

- 98% of all software codes used in support of TSPA-SR have been qualified
 - The 80% software qualification commitment has been met
- Seven unique software codes (and one platform variant) required assessments for impact to TSPA-SR
 - Software impact assessments, based on testing the software used in the analysis, have concluded that there is no impact on having used unqualified software
- Single use software routines and macros used in 10 AMRs have been reviewed. No changes were required in the software, therefore there is no impact on their output (DR-39)

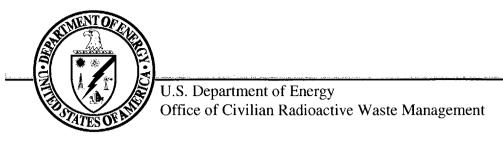
Impact of Unqualified Data and Software on Supplemental Science Performance Analyses (SSPA) Results

- SSPA used some data (literature and preliminary data) and software (modifications from baselined software) for its analyses
- SSPA was conducted, in part, to provide insights and test significance of models and parameters used in TSPA-SR (as documented in Technical Work Plan)
- As such, unqualified data and software used in SSPA may be considered corroborative in nature
- If data and software are used in subsequent AMR revisions, they will be appropriately qualified in accordance with applicable procedures

Summary

- DOE provided summary of impact assessments of unqualified data and software to NRC on 8/31/01
- Impact assessments concluded there was no impact of having used unqualified data or software in the production of TSPA-SR
- Impact assessments were attached to letter
- Impacts of unqualified data and software on SSPA results were consistent with the scope and objectives of the analyses documented in SSPA







Management Issues From QA and KTI Sessions

Presented to:

Nuclear Regulatory Commission Quarterly Management Meeting

Presented by:

Nancy Williams

Manager of Projects

Bechtel SAIC Company, LLC

September 7, 2001, Las Vegas, NV.

Management Issues From QA and KTI Sessions

- Root Cause
- Status of TSPA-SR Issues
- Corrective Action



Root Cause Results

- RCA performed on the 2 CAR's and on NRC identified TSPA-SR issues
- Root Causes, Common Causes, and Generic Causes determined
- Current cultural bias indications in Root Cause Analysis
 - activity vs. results
 - schedule vs. quality
 - blame vs. accountability
- Specific corrective actions recommended for all causes



Status of TSPA-SR Issues

Technical Integrity of TSPA-SR, REV 0

- TSPA-SR, Rev 0 potentially impacted by:
 - TSPA Vertical Review Discrepancies
 - Model Validation Findings (CAR-001)
 - Software Verification Findings (CAR-002)
 - Data Quality Concerns



Status of TSPA-SR Issues

(continued)

TSPA Discrepancies

- Impact Assessment Complete
- Documentation Nearly Complete
- No Impact on Conclusions

Software Verification

- Impact Assessment Complete
- No Impact on Conclusions

Data Qualification

- Impact Assessment Complete
- No Impact on Conclusions

Model Validation

- Impact Assessment in process
- No Impact on Results to date (forecast completion 9/10/01)

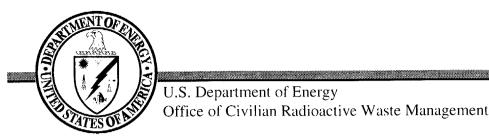


Corrective Action

- Joint DOE/BSC comprehensive plan for transition to desired "Nuclear Culture"
 - Specifically addresses Root Cause Analysis recommended corrective actions

Additionally address:

- Potential adverse trends associated with the in-process reviews on S&ER, PSSE, and SSPA
- ISMS deficiency (2001)
- Results of Self Assessments performed over the last 6 months
- Lessons Learned from previous corrective actions
- QAMA review results
- Modeled after proven performance improvement plans associated with NRC 'Watch List" plant shutdowns





Presented to:

DOE/NRC Quarterly Management Meeting

Presented by:

Dr. J. Russell Dyer

Project Manager

Yucca Mountain Project Office

Office of Civilian Radioactive Waste Management

September 7, 2001 Las Vegas, Nevada

Background

- NRC expressed interest in OCRWM Concerns Program during contractor transition at the December 20, 2000 Management Meeting
 - At the April 18, 2001 Management Meeting, DOE indicated that the project was still evaluating the OCRWM Concerns Program exit interview results
 - On June 13, 2001 DOE provided metrics on OCRWM Concerns Program at NRC/DOE Management Meeting



Contract Transition Interview Data

- 1931 employees completed OCRWM Concerns Program transition interview process: Jan. 4 - Feb. 9, 2001
 - 1659 employees from M&O (TRW) and subcontractors
 - 128 employees from USGS and subcontractors
 - 144 employees from the National Laboratories

Number of Concerns Received at Transition - 1/4/01 to 2/9/01

- 142 Total Concerns, of which:
 - » 41 = Management
 - \Rightarrow 49 = Quality
 - > 12 = SCWE
 - 40 = Personnel Policy; Worker Safety; Environment/Health



Status Through August-2001:

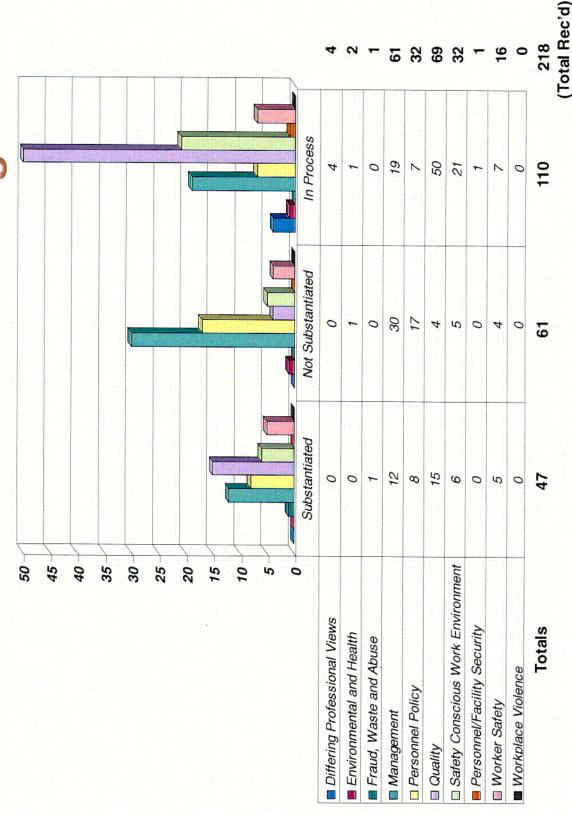
- Employees Continue to use OCRWM Concerns Program
 - 142 Concerns received Jan Feb. 2001
 - 47 Concerns received Feb. 12 through May 30, 2001
 - 29 Concerns received June-2001 through August 31, 2001
 - 218 Concerns Submitted Through August 31, 2001

Ten Concern Categories and Number of Concerns:

- Differing Professional Views (4)
- Environmental and Health Issues (2)
- Fraud, Waste and Abuse (1)
- Management Issues (61)
- Personnel Policy Issues (32)
- Quality Issues (69)
- Safety Conscious Work Environment Issues (32)
- Personnel or Facility Security Issues (1)
- Worker Safety Issues (16)
- Workplace Violence (0)



Status of Concerns Jan. - Aug. 2001



YUCCA MOUNTAIN PROJECT

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Selected Concern Categories:

- Management Concern:
 - <u>Definition</u> Related to a management policy, budget allocation and/or use of personnel/resources
 - 41 Management Concerns January to February 9
 - 14 Management Concerns Feb. 12 to May 31, 2001
 - 6 Management Concerns June to August 31, 2001
 - Review Results Through August 31, 2001
 - » 12 Management Concerns Substantiated
 - 30 Management Concerns <u>Not</u> Substantiated
 - 3 19 Management Concerns in management review process



Selected Concern Categories (Continued):

— Quality Concern:

- <u>Definition</u> Condition alleging that activities have not met either technical or quality requirements regarding:
 - The radiological health and safety of workers and/or the public;
 - Work that either provides direct input to the license application or the radiological safety sections of the EIS.
 - 3 49 Quality Concerns January to February 9, 2001
 - 3 12 Quality Concerns February 12 to May 31, 2001
 - » 8 Quality Concerns June 1 to August 31, 2001

Review Results through August 31, 2001

- » 15 Quality Concerns Substantiated related to Software quality issues (CAR: BSC-01-C-002)
- y 4 Quality Concerns Not Substantiated
- 50 Quality Concerns in OCRWM Concerns Program review process



- Selected Concern Categories (Continued):
 - Safety Conscious Work Environment (SCWE) Concerns
 - Definition A concern alleging harassment, intimidation, retaliation or discrimination (HIRD) or any other act of reprisal by management, supervision or a coworker regarding an employee's efforts to raise a concern or document a work-related issue for resolution. (Ref. NRC Policy Statement dated May 14, 1996)
 - 12 SCWE Issues January to February 9, 2001
 - 14 SCWE Issues February 12 to May 31, 2001
 - 6 SCWE Issues June to August 31, 2001

Review Results Through August 31, 2001:

- » 6 SCWE Concerns Substantiated
- » 5 SCWE Concerns <u>Not</u> Substantiated
- 21 SCWE Concerns in Concerns Program review process



- Actions on Substantiated SCWE Concerns
- Concern No. 1: Sexual Harassment
 - Having reviewed the OCP Final Report, BSC Management:
 - Returned Concernee to Project on temporary assignment
 - Is completing internal review to address the Final Report
 - Will report final management actions to OCP



- Actions on Substantiated SCWE Concerns
- Concern No. 2: Harassment and Intimidation
 - Having reviewed the OCP Final Report, BSC Management:
 - » Addressed employment actions with subcontractor and received assurance of future job referrals for affected employee
 - » Is completing internal review to address the Final Report
 - » Final BSC action will be reported to OCP



- Actions on Substantiated SCWE Concerns
- Concern No. 3: Hostile Work Environment
 - Having reviewed the OCP Final Report, BSC Management:
 - Conducted team building sessions in affected organization
 - Providing additional training to address organization's needs
 - Is completing internal review to address the Final Report
 - Final BSC action will be reported to OCP



- Actions on Substantiated SCWE Concerns
- Concern Nos. 4-6: Hostile Work Environment
 - Note: Three (3) concerns in same organizational area/supervisor
 - In Dec. 2001 job interviews, BSC decided not to extend offer to incumbent supervisor
 - During Concerns Program review in Feb. 2001, notified that supervisor not staying on Project
 - Concerns Program continues to monitor this functional area's work environment; Feedback from Concernees remains positive



- Summary/Conclusion:
 - Employees continue to use OCRWM Concerns Program (OCP)
 - OCRWM continues to review/address concerns
 - To date, 109 concerns have been formally reviewed:
 - Includes <u>all</u> types of Concerns, of which:
 - 3 12 Management Substantiated; 30 Not Substantiated = 42
 - » 15 Quality Substantiated; 4 Not Substantiated = 19
 - » 6 SCWE Substantiated; 5 Not Substantiated = 11
 - 36 Remaining Concerns were either: Personnel Policy, Worker Safety, Fraud, Waste and Abuse, or Environment and Health

SUMMARY:

Number of Concerns Received as of August 31, 2001 = 218

» Balance of 110 are in review; Projected completion is within the next 4 - 6 months

Safety-Conscious Work Environment (SCWE)

- To ensure continued improvement of the SCWE,
 OCRWM retained the firm of Morgan Lewis
 - Morgan Lewis completed SCWE survey of OCRWM, including the QA organization
 - NRC management has been advised of survey results
 - OCRWM/YMP employees have been advised of survey results
 - Survey conclusions and recommendations will be used to enhance DOE/BSC initiatives for SCWE training



Safety-Conscious Work Environment

Path Forward

- Address in DOE/BSC Performance Improvement Transition Plan
- Communications
 - Develop communications program to convey management expectations for:
 - » Problem and concern identification through supervisors
 - » Problem and concern identification through use of available programs
 - » Condition/Issue Identification and Reporting/Resolution System (CIRS)
 - » Deficiency Reports
 - » Corrective Action Reports
 - » Improving communications and available programs

Safety-Conscious Work Environment

Path Forward (Continued)

- Training
 - Develop multilevel training program for workers and supervisors/managers covering:
 - Management expectations for employee problem concern identification appropriate and inappropriate behavior
 - » Protected activities as defined by the NRC
 - » Employee/Employer responsibilities
- Program Enhancements
 - Evaluate effectiveness and identify need for enhancements to existing programs (CIRS, Deficiency Reports, etc.) to improve employee accessibility and use
- Metrics
 - Measure effectiveness of above initiatives

