



Department of Energy

Washington, DC 20585

May 29, 2003

Mr. Martin J. Virgilio, Director
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Two White Flint North
Rockville, MD 20852

Dear Mr. Virgilio:

I am submitting this letter in response to the request made during the April 30, 2003, U.S. Nuclear Regulatory Commission (NRC)/U.S. Department of Energy (DOE) Quarterly Management Meeting. The Office of Civilian Radioactive Waste Management (OCRWM) leadership team is pleased to provide details of the actions being taken to ensure that our license application meets NRC expectations for completeness, accuracy, and compliance with quality assurance requirements. My team and I strongly believe that the management improvements currently underway – in areas such as procedural compliance, corrective action programs, individual accountability, and safety conscious work environment – are means to that end.

I have recognized the need to change our focus and improve our processes to meet rigorous NRC licensing requirements. The elevation of the Project Manager position at the Office of Repository Development in Las Vegas to a Deputy Director position vests greater authority and accountability directly into this line organization. This change, along with a Program-wide functional realignment and the implementation of our Management Improvement Initiatives, establishes the conditions in which our objectives can best be achieved. The Federal and contractor leadership team has shared our vision, expectations, and commitments with all employees to help us achieve the desired improvement.

License Application

OCRWM is committed to submitting a license application that complies with 10 Code of Federal Regulations Part 63 and in which data, software, and models used in our safety analyses meet or exceed applicable quality assurance requirements. To that end, my leadership team and I will continue to aggressively work to establish metrics and management processes to aid in accomplishing our goals.

The Office of Repository Development conducts Monthly Operating Reviews, in which progress is assessed and managers are held accountable for performance. The NRC onsite representatives observe these meetings. At these reviews, a progress assessment that encompasses the five major components of our pre-licensing technical work is used to describe performance:



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- Key technical issue (KTI) agreement closure
- License application document production
- Preclosure safety assessment
- Total system performance assessment
- Design for license application.

Reporting the status and percentage complete allows each component to be assessed independently and forms an integrated picture of overall performance. This assessment methodology ensures that the rate of progress is measured against consistent indicators over time.

We are also tracking the current state of completion of data qualification, computer code qualification, and model validation. Progress in these areas is monitored and reported at the Monthly Operating Reviews, where management attention is focused on areas of concern. The enclosure to this letter provides an example of information prepared for the Monthly Operating Review, showing both percentage-complete status by component and the status of data qualification, computer code qualification, and model validation.

In addition to strengthening the management processes needed to assess status and focus on problems, we are improving the approach to completing the technical work called for in the KTI agreements. I believe that the commitments embodied in these agreements and further enhancements of the KTI analyses are keys to facilitating NRC review of our license application. For example, one enhancement under consideration is to group related agreement items, identify common threads and underlying questions, and develop integrated, in-depth responses to related issues. Such an approach should result in better products and accelerated resolution of KTI agreements. We will present our planned approach, showing the grouping of KTI agreements and the reschedule for submittal of agreement responses, to NRC by June 30, 2003.

Procedural Compliance

Procedural compliance is a critical element of our continued improvement process. We are working to strengthen line management ownership of procedures in the spirit of building quality in as opposed to inspecting it in. We are establishing performance indicators and trend reporting to support our improvement efforts. We are committed to responding to instances of non-compliance with timely and effective corrective action, and will evaluate the types and significance of violations and take actions to address recurring problems. We will have an effective trend report by September 30, 2003, that will allow us to monitor procedural compliance trends, identify causes of non-compliance, and take prompt corrective action as necessary.

We are currently streamlining the review and revision process for procedures through enhancements to the governing Administrative Procedure 5.1Q, *Procedure Preparation, Review, and Approval*. This will be completed and implemented by July 30, 2003. When this procedure has been updated, we will screen other procedures for needed improvements, starting with a prioritized mission-critical subset.

Corrective Action Program

We will have a single, improved Corrective Action Program implemented by September 30, 2003. The Corrective Action Program includes self-assessment and lessons-learned components as well as methods to identify and correct adverse conditions. Goals under this improved program will be to prepare and approve 90 percent of corrective actions within 30 days of initiation for deficiency reports (DRs) and corrective action reports (CARs); to complete the corrective actions for DRs in fewer than 60 days on average; and to complete the corrective actions for CARs in fewer than 100 days on average.

Based on ongoing tracking, there has been a decrease in the average age of open DRs and CARs. The monthly number of deficiency report closures has increased, and the numbers of DR and CAR weekly late actions has decreased.

Safety Conscious Work Environment (SCWE)

Our goal and responsibility is to create an environment in which employees freely raise safety issues without fear of harassment, intimidation, retaliation, or discrimination (HIRD) and receive a timely, effective, and respectful response. In March and April 2003, an internal, limited-sample survey was performed to monitor progress to date in developing a safety conscious work environment. This has established an initial indicator against which improvement can be measured. These internal surveys will be performed on a quarterly basis and the results will be made available to NRC.

The OCRWM and the BSC Concerns Programs are improving the timeliness of investigating concerns. Based on nuclear industry practices, targets of 30 days to investigate routine concerns and respond to the concerned individual and 90 days for complex or HIRD-related issues were established. Currently, the concerns program is averaging 17 days to investigate and respond to routine concerns and 63 days for complex and HIRD concerns. The overall average time to investigate and respond to an employee concern in calendar year 2003 is 27 days, a significant improvement over the 111-day average for calendar year 2002.

We have conducted Program-wide management and employee training to build a common understanding of SCWE. The recent survey found that employees now have a much improved understanding of SCWE and its importance to the Program. However, the results indicated that continued effort is needed to fully instill this culture. We are planning to implement additional training to increase managers' effectiveness in receiving and acting upon concerns. SCWE is also a topic for continuing discussion in quarterly meetings jointly led by DOE and contractor senior management. Supervisors and staff are encouraged to continue these discussions and to return with feedback for senior management. I believe that sustaining internal discussions of this crucial aspect of nuclear culture, coupled with the formal mechanisms that have been put in place, are the most effective way to instill and maintain a safety conscious work environment.

The Management Improvement Initiative recognized the need to measure progress more systematically. Therefore, in addition to quarterly internal surveys, we plan to have external experts conduct annual Program-wide surveys, the first of which is planned for this summer.

The results of these activities will be evaluated and applied to foster continuous improvement in SCWE.

Accountability

Individual accountability is the key to achieving the outcomes identified in the preceding sections of this letter. OCRWM has responded to performance problems with appropriate action and has recognized good performance. The Monthly Operating Review is a good tool for measuring progress and ensuring managers are accountable for performance in their work areas.

We are continuing to strengthen mechanisms to hold individuals accountable for the quality, timeliness, effectiveness, procedural compliance, and safety of their work products and processes. Individuals and organizations will have performance criteria for these elements built into their appraisals and evaluations. Demonstrated actions that exceed these expectations will be recognized. Failure to meet these expectations will be addressed vigorously. We will provide a report to employees semi-annually to highlight successes, communicate lessons learned, and underscore our commitment to accountability.

We now have a stronger organization whose fundamental objective is to demonstrate that a permanent repository at Yucca Mountain will meet NRC's requirements. We will continue to report our progress to NRC at Quarterly Meetings. Please feel free to request additional details about the actions described in this letter. We look forward to continuing our pre-licensing interactions and appreciate NRC's ongoing feedback on our progress.

Sincerely,



Dr. Margaret S. Y. Chu, Director
Office of Civilian Radioactive
Waste Management

Enclosure

cc:

J. R. Schlueter, NRC, Rockville, MD
C. W. Reamer, NRC, Rockville, MD
D. D. Chamberlain, NRC, Arlington, TX
R. M. Latta, NRC, Las Vegas, NV
J. D. Parrott, NRC, Las Vegas, NV
John Greeves, NRC, Rockville, MD
H. J. Larson, ACNW, Rockville, MD
W. D. Barnard, NWTRB, Arlington, VA
W. C. Patrick, CNWRA, San Antonio, TX
Steve Kraft, NEI, Washington, DC
J. H. Kessler, EPRI, Palo Alto, CA
J. R. Egan, Egan & Associates, McLean, VA
M. J. Apted, Monitor Scientific, LLC, Denver, CO
R. R. Loux, State of Nevada, Carson City, NV
Marjorie Paslov Thomas, State of Nevada, Carson City, NV
Alan Kalt, Churchill County, Fallon, NV
Irene Navis, Clark County, Las Vegas, NV
George McCorkell, Esmeralda County, Goldfield, NV
Leonard Fiorenzi, Eureka County, Eureka, NV
Andrew Remus, Inyo County, Independence, CA
Michael King, Inyo County, Edmonds, WA
Mickey Yarbrow, Lander County, Battle Mountain, NV
Spencer Hafen, Lincoln County, Pioche, NV
Linda Mathias, Mineral County, Hawthorne, NV
L. W. Bradshaw, Nye County, Pahrump, NV
David Chavez, Nye County, Tonopah, NV
Josie Larson, White Pine County, Ely, NV
R. I. Holden, National Congress of American Indians, Washington, DC
Allen Ambler, Nevada Indian Environmental Coalition, Fallon, NV

ENCLOSURE:
Monthly Operating Review Progress Assessment Materials

- Percentage-complete status for five major pre-licensing components
- Status of data qualification, code qualification, and model validation

Management Assessment of Progress Toward LA

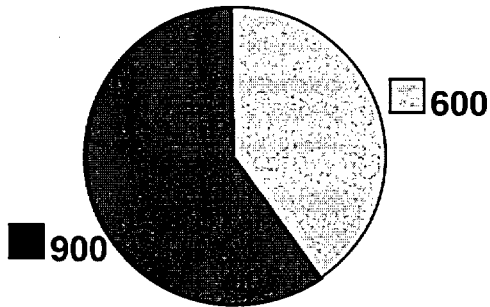
<u>Component</u>	<u>% Complete</u>	<u>Weight</u>
• KTI Agreement Closure	26%	10%
• LA Document	5%	20%
• Preclosure Safety Assessment	12%	10%
• TSPA-LA	25%	30%
• Design	12%	30%
TOTAL % COMPLETE	16%	

ORD MOR Report as of 4/28/03

Status of LA Data, Codes, and Models

Data (Estimate)

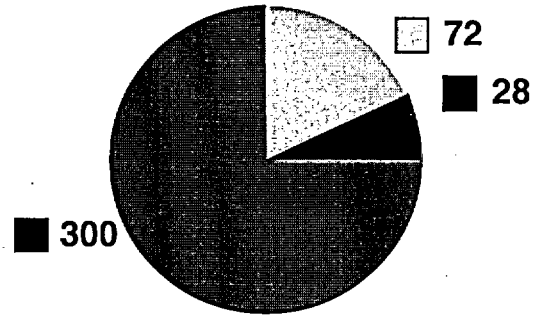
□ Unqualified ■ Qualified



Total Dataset (i.e. DTNs): 1,500
Qualified: 900 (60%)

Codes (Estimate)

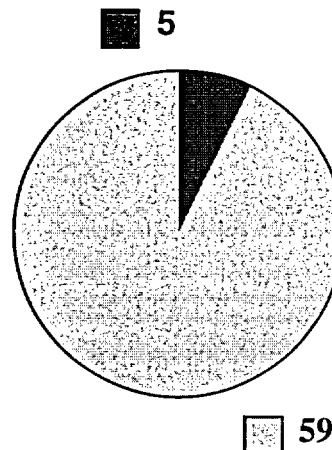
□ Unqualified ■ Qualified



Total Codes: 400
Qualified = 300 (75%)
Submitted for, or Completed, V&V = 28 (7%)
Under Development = 72 (18%)

Models to Support License Application

□ Incomplete ■ Complete



Total Model Reports Directly Supporting LA = 64
Total Model Reports Completed = 5 (8%)