



Department of Energy

Washington, DC 20585

April 21, 2004

Dr. Sally Benson

[]

Lawrence Berkeley National Laboratory

1 Cyclotron Road

Berkeley, CA 94720

Dear Dr. Benson:

Over the course of the past several months, the Office of Price-Anderson Enforcement (OE), which administers the Price-Anderson Amendments Act (PAAA) nuclear safety enforcement program, has been conducting a limited, informal review of the Lawrence Berkeley National Laboratory (LBNL) Price-Anderson Program. The purpose of this limited review is to provide the Laboratory with substantive guidance on the status of its Price-Anderson screening and reporting program. While our usual practice is to conduct a site visit in connection with PAAA program reviews, we decided to conduct this review as a "table-top" review without a site visit, so as to be as unobtrusive to Laboratory operations as possible while conserving OE staff resources. Nonetheless, we are confident this review will assist LBNL in calibrating its program to the performance of other programs in the Department of Energy (DOE) complex and to the expectations of OE. Your staff has been extremely cooperative in the conduct of this review and we appreciate that level of cooperation. In addition to informal conversations over many weeks, LBNL provided documents related to your Price-Anderson program on two separate occasions. On March 10, 2004, a telephone conference was held to obtain further information and clarification.

Based upon our review, the LBNL program for noncompliance screening and reporting will require significant improvements to achieve the level of excellence we seek for all DOE contractors. While there are several positive elements in the program, a number of weaknesses require attention in order for the program to conform with DOE enforcement policy and implementing procedures regarding the identification and reporting of nuclear safety noncompliances.

The positive attributes of the LBNL Price-Anderson program include the following:

1. LBNL has designated a PAAA Coordinator who is actively involved with the site Radiation Safety Committee, the Radiological Control Manager and the Office of Assessment and Assurance in identifying and reviewing safety issues for Price-Anderson applicability.

2. The process for screening, reporting and tracking nuclear safety noncompliances either into the Noncompliance Tracking System (NTS) or the local tracking system has been formalized in the "PAAA Process Agreement."
3. The PAAA Coordinator maintains a log of issues that have been screened and determined to be PAAA noncompliances, prepares PAAA data sheets to document reportability issues, and prepares and maintains an issue file for matters that are determined to be reportable into the NTS.
4. Matters included in the LBNL log of PAAA noncompliances are tracked to closure by the Coordinator, and the completion of corrective actions and closure of noncompliances appears to be timely.
5. The PAAA Coordinator provided assurances that LBNL will update its PAAA Process Agreement within a short time to reflect changes in the NTS reporting criteria necessitated by the revision of the DOE Occurrence Reporting and Processing System.

The OE review also identified the following areas of weakness that require attention in order for the program to conform with DOE Enforcement Policy and implementing procedures:

1. The LBNL Process Agreement does not require the PAAA coordinator to screen management and independent assessments to identify PAAA noncompliances. Thus, PAAA rule noncompliance and NTS reportability decisions are not documented for noncompliances from these assessments. Such documentation would facilitate identification of programmatic and repetitive issues.
2. A review of LBNL's PAAA Logs indicates that LBNL is not identifying programmatic issues. Virtually all matters identified on the Log as being Price-Anderson related pertain to events.
3. The descriptive language set forth in the PAAA Log, the PAAA Data Sheet and other documents such as the Radiation Safety Committee PAAA Information Summary, focuses exclusively on identifying PAAA events. The language should be modified to ensure a proper focus on precursor conditions or process problems before they result in events.
4. The PAAA Data Sheets utilize unacceptable threshold language as the basis for not reporting issues into the NTS. Specifically, certain screenings inappropriately use as the basis for not reporting that the problem was not safety significant. This is at direct variance with the guidance set forth in the "*DOE Operational Procedures for Identifying, Reporting and Tracking Nuclear Safety Noncompliances*," dated June 1998. LBNL advised in the March 10, 2004, conference call that the guidance in the *DOE Operational Procedures* were in fact being used as reporting thresholds.

Therefore, LBNL's internal guidance and instructions need to be revised in order to conform with the work as it is performed.

5. The BEARS maintenance event (PAAA Log 2003-04) involved an incident of unplanned exposure exceeding 100 mrem. Therefore, in accordance with the June 1998 reporting criteria, this incident should have been reported into the NTS. An assertion was made in the March 10, 2004, conference call that the exposure was expected by some individuals in the workforce or line management. This does not make the exposure planned, however. The governing document, the Rad Work Authorization, did not reflect an anticipation of this exposure and thus, there was no formal planned exposure level for this work.
6. A number of events involving unauthorized entry were identified in the PAAA Events Log and ORPS reports for LBNL. This is an example of a programmatic issue that should have been reported into the NTS. As discussed above, the issue should have been reported without regard to whether it was considered "significant" or whether it was corrected.
7. Similarly, OE identified a series of events at LBNL that involved unauthorized activity, such as unauthorized work or unauthorized steps in an authorized activity. This also appears to be a programmatic noncompliance condition that should be addressed by LBNL and reported into the NTS.
8. A number of assessments reviewed in this program review were incorrectly characterized by LBNL as Independent Assessments in compliance with the requirements of 10 CFR 830.122(j). For example, Division Self Assessments are led by the Division Manager. Since those assessments were led by individuals who have direct responsibility for the area being assessed, they fail to meet the guidelines for Independent Assessment contained in the relevant DOE Guide. In that document, Management Assessment and Independent Assessment Guide, DOE G 414.1A-1, it is stated that, "Independence is defined as not having direct responsibilities in the areas being assessed." Thus, assessments failing to meet this criterion should not be characterized as Independent Assessments, nor will such assessments obtain the benefits of independent assessments. LBNL should undertake to restructure its assessment program to address this noncompliance condition and to assure Independent Assessments are conducted in accordance with DOE standards. This issue is a programmatic noncompliance that should be reported into the NTS.

We hope that these candid comments will assist LBNL in improving its PAAA identification and reporting program. We expect that such enhancements will result in improved nuclear safety at the LBNL site, since that is the primary purpose of the PAAA program. In addition, in the event of a future investigation of noncompliance issues at LBNL, the program improvements discussed above may permit the Office of Price-Anderson Enforcement to exercise discretion with respect to violations of nuclear safety

requirements and to mitigate or forego formal enforcement action. No reply to this letter is required. Please contact me at (301) 903-0100, or have your staff contact Howard Wilchins at (301) 903-0107, if you have any questions.

Sincerely,



Stephen M. Sohinki
Director
Office of Price-Anderson Enforcement

cc: R. Nolan, DOE BSO Manager
N. Landau, DOE BSO PAAA Coordinator
K. Olson, LBNL PAAA Coordinator
R. Orbach, SC-1
D. Michlewicz, SC PAAA Coordinator
M. Cole, SC PAAA Coordinator
A. Kindrick, EH-1
H. Wilchins, EH-6
Docket Clerk, EH-6