## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

[Recommendation 2009-2]

## Los Alamos National Laboratory Plutonium Facility Seismic Safety

**AGENCY:** Defense Nuclear Facilities Safety Board.

**ACTION:** Notice, recommendation; correction.

SUMMARY: The Defense Nuclear Facilities Safety Board published a document in the Federal Register of November 2, 2009, concerning recommendation 2009–2 to the Secretary of Energy pursuant to 42 U.S.C. 2286a(a)(5) which identifies the need to execute both immediate and long-term actions that can reduce the risk posed by a seismic event at the Plutonium Facility at Los Alamos National Laboratory. The previous notice omitted the recommendation. The notice now includes the recommendation.

**DATES:** Comments, data, views, or arguments concerning the recommendation are due on or before December 7, 2009.

ADDRESSES: Send comments, data, views, or arguments concerning this recommendation to: Defense Nuclear Faculties Safety Board, 625 Indiana Avenue, NW., Suite 700, Washington, DC 20004–2001.

## FOR FURTHER INFORMATION CONTACT: Brian Grosner or Andrew L. Thibadeau at the address above or telephone number (202–694–7000).

### Correction

In the **Federal Register** of November 2, 2009, in FR Doc. E9–26304, on page 56595, immediately following the signature block, the recommendation should read as follows:

Dated: November 2, 2009.

John E. Mansfield, Vice Chairman

# Recommendation 2009–2 to the Secretary of Energy

Los Alamos National Laboratory Plutonium Facility Seismic Safety

Pursuant to 42 U.S.C. 2286a(a)(5) Atomic Energy Act of 1954, as Amended *Dated:* October 26, 2009.

## Background

The Defense Nuclear Facilities Safety Board (Board) is concerned about the potential consequences of seismic events at Los Alamos National Laboratory's (LANL) Plutonium Facility and the adequacy of the safety strategy currently being pursued to address these events. In particular, the mitigated offsite consequences predicated on a seismically induced large fire at this operating nuclear facility exceed the Department of Energy's (DOE) Evaluation Guideline by more than two orders of magnitude. The Board believes this situation warrants immediate attention and action.

The Plutonium Facility has operated for more than a decade with a 1996 Final Safety Analysis Report as its safety basis. DOE issued Title 10, Code of Federal Regulations, Part 830, Nuclear Safety Management, in January 2001, requiring contractors for all its existing facilities to submit a Documented Safety Analysis (DSA). Ultimately, a DSA for the Plutonium Facility was submitted by LANL and approved by the National Nuclear Security Administration's (NNSA) Los Alamos Site Office (LASO) through a Safety Evaluation Report (SER) in December 2008. The DSA identifies an array of planned future upgrades to improve the safety posture of the facility. However, both the DSA and SER rely inappropriately on planned seismic upgrades to safety systems that (1) will not be implemented for many years and (2) are not sufficient to address adequately the bounding seismic accident scenarios. The only safety feature that can be credited for these accident scenarios is the passive confinement provided by the facility structure. Additionally, appropriate compensatory measures to protect public and worker health and safety have not been identified. As a result, a major deficiency in the facility's safety basis exists.

The safety strategy approved by LASO is based on the assumption that future upgrades to reinforce the support stands for a limited set of "high-risk gloveboxes (including those containing ignition sources, such as furnaces) will prevent a large fire from occurring after a seismic event. While planned seismic upgrades to high-risk gloveboxes will provide some safety benefit in the future, the Board believes the critical NNSA assumption that these upgrades are adequate is flawed and, as a result, the current safety strategy is not defensible for the following reasons. Not all ignition sources inside high-risk gloveboxes are seismically secured to the glovebox shell; therefore, fires could still result from ignition sources toppling inside gloveboxes during a seismic event, even if the gloveboxes themselves do not topple. Additionally, ignition sources that could initiate postseismic fires exist outside of gloveboxes targeted for seismic upgrades. DOE must take steps to develop a defensible

seismic safety strategy for the Plutonium Facility.

Near-term actions and compensatory measures to reduce significantly the consequences of seismically induced events will likely involve operating the facility with restrictions on material-atrisk, removing inventory from susceptible locations or storing material in robust containers, and reducing the likelihood of a fire following a seismic event by identifying and implementing appropriate safety measures. Consistent with the Board's Recommendation 2004-2, Active Confinement Systems, one long-term strategy that could provide effective mitigation for seismic events involves upgrading the facility's confinement ventilation system to meet seismic performance category 3 criteria. This strategy would allow the confinement ventilation system to reduce reliably the consequences of a seismically induced event by many orders of magnitude to acceptably low

In a letter to the Board dated June 16, 2009, the NNSA Administrator rejected the implementation of some upgrades identified to address performance gaps uncovered during execution of the Implementation Plan for Recommendation 2004–2 for the Plutonium Facility's confinement ventilation system on the grounds that these upgrades were not required under the current DSA/SER strategy. LASO's present position is that upgrades to ensure post-seismic operability for active confinement ventilation may be desirable, but LASO does not expect to develop the information necessary to make a decision (e.g., cost, scope, and mitigation benefits) until mid-fiscal year 2011. The Board believes that NNSA's current safety strategy is flawed and does not obviate the need for a seismically qualified safety class active confinement ventilation system at its Plutonium Facility.

Given the magnitude of the potential consequences to the public, the Board believes DOE must develop expeditiously a defensible safety strategy for seismically induced events at the Plutonium Facility and a credible plan for implementing this strategy. DOE's response must include definite, measurable, and immediate means to substantially reduce the potential consequences at the site boundary. Implementation of a sound safety strategy must be pursued on an urgent basis.

#### Recommendation

In this context, and in recognition of the fact that LANL's Plutonium Facility has been designated as the center for plutonium operations in the complex, which includes the manufacture of pits for weapon assemblies, the Board recommends that DOE:

- 1. Implement near-term actions and compensatory measures to reduce significantly the consequences of seismically induced events, including clear identification of consequence reduction targets/goals, schedule, and implementation methods. In planning for and completing these actions and compensatory measures, DOE should be guided by the need for immediate actions and mindful of the provisions of 42 U.S.C. 2286d(f)(1) regarding implementation timelines.
- 2. Develop and implement an acceptable safety strategy for seismically induced events that includes the following elements:
- a. A technically justifiable decision logic and criteria for evaluating and selecting safety-class structures, systems, and components that can effectively prevent or mitigate the consequences of seismic events to acceptably low values.
- b. The seismic analysis approach for structures, systems, and components required to implement the seismic safety strategy.
- c. A prioritized plan and schedule, including quarterly briefs to the Board for the next 12 months, for seismic analyses, necessary upgrades, and other actions to implement the seismic safety strategy.

The severity of the problems that are the subject of this Recommendation and the urgency to remediate them argue forcefully for the Secretary to avail himself of the authority under the Atomic Energy Act (U.S.C. 2286d(e)) to "implement any such recommendation (or part of any such recommendation) before, on, or after the date on which the Secretary transmits the implementation plan to the Board under this subsection."

#### John E. Mansfield, Ph.D.,

Vice Chairman.

#### **DEPARTMENT OF ENERGY**

## Federal Energy Regulatory Commission

[Project No. 12462-020]

Indian River Power Supply, LLC; Notice of Application for Amendment of Exemption, Soliciting Comments, Motions To Intervene, and Protests, and Mandatory Terms and Conditions

October 30, 2009.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Type of Application:* Amendment of exemption.

b. Project No.: 12462-020.

c. Date Filed: August 5, 2009.

d. *Applicant:* Indian River Power Supply, LLC.

e. Name of Project: Indian River. f. Location: Westfield River, in the Town of Russell, Hampden County, Massachusetts

g. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791a–825r.

h. Applicant Contact: Mr. Peter B. Clark, Manager, P.O. Box 149, 823 Bay Road, Hamilton, Massachusetts, (978) 468–3999.

i. FERC Contact: Jeremy Jessup, Jeremy.Jessup@ferc.gov, (202) 502–6779.

j. Deadline for filing comments, motions to intervene and protest: November 30, 2009.

All documents (original and eight copies) should be filed with: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426.

The Commission's Rules of Practice and Procedure require all intervenors filing documents with the Commission to serve a copy of that document on each person whose name appears on the official service list for the project. Further, if an intervenor files comments or documents with the Commission relating to the merits of an issue that may affect the responsibilities of a particular resource agency, they must also serve a copy of the document on that resource agency. A copy of any motion to intervene must also be served upon each representative of the Applicant specified in the particular application.

k. Description of Request: Indian River Power Supply, LLC, proposes to rehabilitate the project's existing generating Unit 1. The rehabilitated unit would have an installed capacity of 800 kW and a hydraulic capacity of 428 cfs. The rehabilitation would result in a total installed capacity of 1,600 kW and a total hydraulic capacity of 856 cfs for the Indian River Project.

l. Location of the Application: The filing is available for inspection and reproduction at the Commission's Public Reference Room, located at 888 First Street, NE., Room 2A, Washington, DC 20426 or by calling (202) 502-8371. This filing may also be viewed on the Commission's Web site at http://ferc.gov using the "eLibrary" link. Enter the docket number excluding the last three digits in the docket number field to access the document. You may also register online at http://www.ferc.gov/ docsfiling/esubscription.asp to be notified via e-mail of new filings and issuances related to this or other pending projects. For assistance, call 1-866-208-3676 or e-mail FERCOnlineSupport@ferc.gov, for TTY, call (202) 502-8659. A copy is also available for inspection and reproduction at the address in item (h) above.

m. Individuals desiring to be included on the Commission's mailing list should so indicate by writing to the Secretary of the Commission.

- n. Comments, Protests, or Motions to Intervene: Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of Rules of Practice and Procedure, 18 CFR 385.210, .211, .214. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.
- o. Any filing must bear in all capital letters the title "COMMENTS", "PROTEST", "MOTION TO INTERVENE", or "MANDATORY TERMS AND CONDITIONS" as applicable, and the Project Number of the particular application to which the filing refers.
- p. Agency Comments: Federal, State, and local agencies are invited to file comments on the described application. A copy of the application may be obtained by agencies directly from the Applicant. If an agency does not file comments within the time specified for filing comments, it will be presumed to have no comments. One copy of an agency's comments must also be sent to the Applicant's representatives.
- q. Comments, protests and interventions may be filed electronically via the Internet in lieu of paper. See, 18 CFR 385.2001(a)(I)(iii) and the instructions on the Commission's Web