



The Deputy Secretary of Energy

Washington, DC 20585

September 3, 2013

The Honorable Peter S. Winokur  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Ave., NW  
Washington, DC 20004-2901

Dear Mr. Chairman:

This letter is in response to your July 17 letter requesting a schedule for completion of the Los Alamos National Laboratory Plutonium Facility (PF-4) Alternate Seismic Analysis.

The National Nuclear Security Administration (NNSA) has completed two major analysis efforts, a *dynamic linear analysis* and a *static nonlinear pushover analysis*. In my September 28, 2012, letter to the Defense Nuclear Facilities Safety Board (DNFSB), I committed NNSA to conducting a *modal loading analysis*, the alternate analysis, of the PF-4 facility to augment the previous analyses. NNSA believes this alternate analysis will be helpful in understanding further the seismic integrity of the PF-4 facility and providing assurance that all of its structural elements that require updating are identified.

NNSA has consulted with the DNFSB throughout this process to ensure that the assumptions and methodologies underpinning the modal loading analysis are appropriate and well documented. The PF-4 Alternate Seismic Analysis is scheduled to be completed December 16, 2013. The schedule, which outlines the path to completion, is being provided as an enclosure to this letter.

NNSA recognizes that there may be some challenges to maintaining the schedule due to the developmental nature of the work and the potential need to implement changes due to the independent review process. If the schedule changes for any reason, NNSA will promptly communicate that to the DNFSB.

If you have any questions on this matter, please contact Mr. James J. McConnell at (202) 586-8246.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Dan Poneman".

Daniel B. Poneman

Enclosure

cc: E. Held, NA-1  
D. Poneman, S-2  
M. Campagnone, HS-1.1



ID	Task Mode	Task Name	Start	Finish	October 1		November 21		January 11		March 1		April 21		June 11		August 1		September 21		November 1					
					9/9	9/30	10/21	11/11	12/2	12/23	1/13	2/3	2/24	3/17	4/7	4/28	5/19	6/9	6/30	7/21	8/11	9/1	9/22	10/13	11/3	11/24
1	✈	Prepare Project Work Plan	Thu 9/27/12	Wed 11/14/12	[Gantt bar from 9/27 to 11/14]																					
2	✈	Milestone 1: Review documents and prior analysis	Thu 9/27/12	Wed 11/28/12	[Gantt bar from 9/27 to 11/28]																					
3	✈	Milestone 2: Identify structural components and key parameters	Thu 11/29/12	Thu 1/31/13	[Gantt bar from 11/29 to 1/31]																					
4	✈	Milestone 3a: Prepare analysis and evaluation criteria	Fri 2/1/13	Wed 4/17/13	[Gantt bar from 2/1 to 4/17]																					
5	✈	Milestone 4: Characterize structural component behavior and establish component-level analysis procedures	Wed 3/13/13	Tue 6/11/13	[Gantt bar from 3/13 to 6/11]																					
6	✈	Milestone 6: Perform individual component nonpushover analyses, and develop and validate component-level models for pushover	Wed 6/12/13	Fri 8/30/13	[Gantt bar from 6/12 to 8/30]																					
7	✈	Milestone 7: Validate the adaptive nonlinear modal pushover analysis methodology	Mon 7/22/13	Fri 9/6/13	[Gantt bar from 7/22 to 9/6]																					
8	✈	Milestone 7a: Column Capital Analysis	Thu 8/1/13	Sun 10/27/13	[Gantt bar from 8/1 to 10/27]																					
9	✈	Milestone 8: Develop modal pushover model and perform UB and LB, and sensitivity study cases to failure	Thu 8/1/13	Fri 10/11/13	[Gantt bar from 8/1 to 10/11]																					
10	✈	Milestone 9: Identify structural elements requiring upgrade to meet PC-3 requirements and recommend modifications.	Fri 10/11/13	Sat 11/9/13	[Gantt bar from 10/11 to 11/9]																					
11	✈	Milestone 14: Perform fragility analyses. Present results, incorporate reviewer's comments, and finalize the report.	Sun 10/27/13	Mon 12/16/13	[Gantt bar from 10/27 to 12/16]																					
12	✈	DOE Review	Wed 6/12/13	Mon 12/16/13	[Gantt bar from 6/12 to 12/16]																					
13	✈	Prepare final draft report and project and software QA	Wed 6/12/13	Mon 12/16/13	[Gantt bar from 6/12 to 12/16]																					
14	✈	Project Management	Wed 11/14/12	Mon 12/16/13	[Gantt bar from 11/14 to 12/16]																					
15	✈	Other tasks not covered in milestones	Wed 6/12/13	Mon 12/16/13	[Gantt bar from 6/12 to 12/16]																					