

AFFIRMATION OF BOARD VOTING RECORD

SUBJECT: Review of the Pantex Unreviewed Safety Question and Potential Inadequacy of the Safety Analysis Processes

Doc Control#2015-068

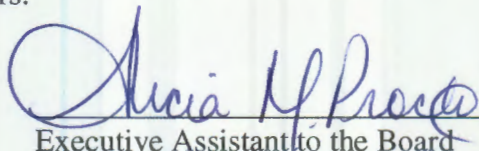
The Board, with Board Member(s) Sean Sullivan *approving*, Board Member(s) Jessie H. Roberson, Daniel J. Santos *disapproving*, Board Member(s) none *abstaining*, and Board Member(s) none *recusing*, have voted to disapprove the above document on May 11, 2015.

The votes were recorded as:

	APRVD	DISAPRVD	ABSTAIN	RECUSAL	<u>NO</u> <u>VOTE*</u>	COMMENT	DATE
Jessie H. Roberson	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	05/11/2015
Sean Sullivan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	05/11/2015
Daniel J. Santos	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	05/08/2015

*Reason for "No Vote

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Board Members.


Executive Assistant to the Board

Attachments:

1. Voting Summary
2. Board Member Vote Sheets

cc: Board Members
OGC
OGM Records Officer
OTD

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

NOTATIONAL VOTE RESPONSE SHEET

FROM: Jessie H. Roberson

SUBJECT: Review of the Pantex Unreviewed Safety Question and Potential Inadequacy of the Safety Analysis Processes

Doc Control# 2015-068

Approved _____

Disapproved

Abstain _____

Recusal – Not Participating _____

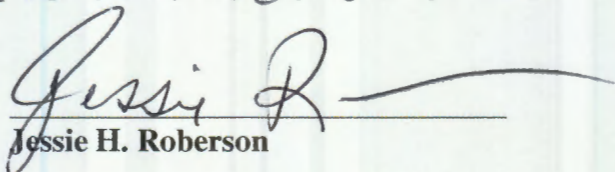
COMMENTS:

Below

Attached _____

None _____

Consistent with my previous comments on this proposed communication, I do not believe we have defined what the expectations are for an advice communication. The Board must clearly address and define for the Department what the expectations are when rendering advice versus a recommendation or a reporting requirement.


Jessie H. Roberson

May 11, 2015
Date

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

NOTATIONAL VOTE RESPONSE SHEET

FROM: Sean Sullivan

SUBJECT: Review of the Pantex Unreviewed Safety Question and Potential Inadequacy of the Safety Analysis Processes

Doc Control# 2015-068

Approved X **Disapproved** _____ **Abstain** _____

Recusal – Not Participating _____

COMMENTS: **Below** X **Attached** _____ **None** _____

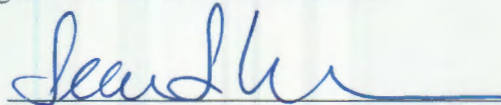
I approve of the advice given to the Administrator in the letter that is the subject of this vote. I write to provide additional thoughts on the vexing issue of defining “mature” as that word applies to new information affecting the safety basis of nuclear explosive operations.

10 CFR Part 830 requires that the Pantex contractor take certain actions upon being “made aware of a potential inadequacy” in a documented safety analysis. Typically those actions will result in a stoppage of operations. While the common axiom “better safe than sorry” always applies in nuclear explosives work, it is equally true that the work performed is necessary for national security and interruptions should therefore be reasonably minimized. The Pantex contractor balances these competing concerns through a local procedure requiring that new information be “mature” before invoking the 10 CFR Part 830 requirements. However, since “mature” is not well-defined, for any given circumstance the word can essentially mean whatever any analyst or other decision-maker within the contractor or Federal organization wants it to mean.

One solution would be for NNSA to provide further guidance on when new information should be considered actionable. I suspect, however, that it will prove difficult to provide written guidance without introducing new ambiguities. For example, take the case in which input comes from a Design Agency (Los Alamos National Laboratory, Sandia National Laboratories, or Lawrence Livermore National Laboratory). Weapon Response Summary Documents (WRSD) may require updating as a result of experiments or other research conducted by the Design Agency (DA). The process for developing the new information may take many months or perhaps years as numerous experiments or computer model runs are conducted. Identifying the point in the process where new information is nature necessarily takes expert judgment. It will be difficult, if not impossible, for NNSA to provide definitive guidance on a process that relies upon expert judgment.

Currently, expert judgment is applied by the DA and transmitted to the Pantex contractor through the Engineering Authorization System (EAS). The EAS has its own administrative protocol, a protocol that necessarily takes time for higher level DA review and approval. Meanwhile, the Pantex contractor is generally aware of the fact that new information is under development because the DA, appropriately, coordinates with the Pantex contractor to ensure that the DA's analysis closely models actual work conditions. Further defining this process in local procedures has three potential outcomes, none of which can be appropriate in all circumstances: 1) the Pantex contractor can, as it currently does, await formal notification from the DA, thereby delaying action even though it is aware of a potential issue; or 2) the Pantex contractor can act before receiving the benefit of the DA's expert judgment; or 3) the DA's administrative review and approval protocol can be shortened or hastened, potentially leading to errors.

The appropriate course of action will necessarily vary on a case-by-case basis. The appropriate course must ensure that prudent, risk-informed decisions are made at every step and that any risk is ultimately accepted with the full knowledge of, and concurrence by, NNSA. Because the process should vary from one case to another, and because expert judgment will play a role, the process will contain ambiguities. Therefore, the optimal process should be designed to ensure that NNSA engages early and often, with appropriate internal NNSA discussion and approval, up to and including the Program Secretarial Officer. Feedback to the Pantex workforce and DA personnel should occur so that all concerned understand how safety was appropriately balanced with mission execution. Drafting the procedures to implement such a process will require more than simply attempting to further define the meaning of "mature new information."



Sean Sullivan

5/11/15

Date

Lotus Smith

From: Daniel J. Santos
Sent: Friday, May 08, 2015 8:18 AM
To: Lotus Smith
Subject: RE: Notational Vote: Doc#2015-068 Review of the Pantex Unreviewed Safety Question and Potential Inadequacy of the Safety Analysis Processes

Disapproved without comments.

From: [Lotus Smith](#)
Sent: 5/7/2015 2:28 PM
To: [Daniel J. Santos](#); [Jessie Roberson](#); [Sean Sullivan](#)
Cc: [Alicia Proctor](#); [Lotus Smith](#)
Subject: Notational Vote: Doc#2015-068 Review of the Pantex Unreviewed Safety Question and Potential Inadequacy of the Safety Analysis Processes

This email is an electronic record of Notational Vote. Voting ballot will follow shortly. Also, accepting electronic votes.

**DEFENSE NUCLEAR FACILITIES SAFETY BOARD
NOTATIONAL VOTE RESPONSE SHEET**

FROM: Members of the Board
SUBJECT: Review of the Pantex Unreviewed Safety Question and Potential Inadequacy of the Safety Analysis Processes

Doc#2015-068 Review of the Pantex Unreviewed Safety Question and Potential Inadequacy of the Safety Analysis Processes

Approved _____
Disapproved _____
Abstain _____
Recusal – Not Participating _____

COMMENTS:

Below _____
Attached _____
None _____

Lotus Smith
Executive Secretary
Office of the Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Ave, NW, STE 700
Washington, DC 20004

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