Bruce Hamilton, Chairman Jessie H. Roberson Joyce L. Connery

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Washington, DC 20004-2901



The Honorable James Richard Perry Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585-1000

Dear Secretary Perry:

We received a letter from the Department of Energy's Office of River Protection (ORP) on May 15, 2019, providing notification that DOE has resolved a technical issue related to the design of the pulse-jet mixer (PJM) control system. DOE opened the technical issue, in part, because of concerns raised by the Board regarding (a) the system's ability to prevent frequent overblows in process tanks within the Pretreatment Facility at Hanford's Waste Treatment and Immobilization Plant (WTP), and (b) whether frequent overblows could potentially damage the process vessels and related equipment. ORP's letter documents substantial work, including full-scale testing, performed by DOE to ensure that the PJM control system will work. DOE has made design changes and performed structural analyses that show that PJM overblows, if they occur, will not damage the process vessels or other installed equipment, as currently designed. Based on the results of the testing, DOE determined that the technical issue is resolved.

We acknowledge the work performed by DOE and note that it strengthens the technical foundation for use of PJM systems in black cells. We will continue to follow the design process as DOE further matures it.

Yours truly,

Bruce Hamilton Chairman

c: Mr. William I. White Mr. Brian T. Vance Mr. Langdon Holton Mr. Joe Olencz

AFFIRMATION OF BOARD VOTING RECORD

SUBJECT: Hanford	WTP	PJM	Resolution	Letter

Doc Control#: 2020-100-0005

The Board acted on the above document on 11/14/2019. The document was Approved.

The votes were recorded as:

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIPATING	COMMENT	DATE
Bruce Hamilton	✓					11/14/2019
Jessie H. Roberson	~					11/14/2019
Joyce L. Connery	✓					11/13/2019

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

Micholas Moore

Executive Secretary to the Board

Attachments:

- 1. Voting Summary
- 2. Board Member Vote Sheets

DEFENSE NUCLEAR FACILITIES SAFETY BOARD NOTATIONAL VOTE RESPONSE SHEET

FROM:	Bruce Hamilton	
SUBJECT:	Hanford WTP PJM Resolution Letter	
Doc Control	#2020-100-005	
Approved	X Disapproved	Abstain
Recusal – No	ot Participating	
COMMENT	S: Below Attached M	None X

Bruce Hamilton
14 NOV ZO19

Date

DEFENSE NUCLEAR FACILITIES SAFETY BOARD NOTATIONAL VOTE RESPONSE SHEET

FROM:	Jessie Roberson	
SUBJECT:	Hanford WTP PJM Resolution Letter	
Doc Control	#2020-100-005	*
	- a	
Approved	Disapproved	Abstain
Recusal – No	ot Participating	
COMMENT	S: Below Attached	None

Jessie Roberson

Mov 14 2019

Date

DEFENSE NUCLEAR FACILITIES SAFETY BOARD NOTATIONAL VOTE RESPONSE SHEET

FROM:	Joyce L. Connery	
SUBJECT:	Hanford WTP PJM Resolution Lett	er
Doc Control	#2020-100-005	
Approved	Disapproved	Abstain
COMMENT	ot Participating S: Below Attached	None

Joyce L. Connery

November 13, 2019

Date