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

Dear Secretary Perry:

On December 16, 2015, we communicated several concerns regarding the structural degradation and analysis of the H-Canyon Exhaust Tunnel at the Savannah River Site. H-Canyon is an important asset for the defense nuclear complex as a whole. The ventilation system, including the exhaust tunnel, is a safety-class system that is essential to the safe operation of H-Canyon. We continue to review the results of the Department of Energy's (DOE) concrete characterization tests and analysis performed on concrete core samples of the 221-H Personnel Tunnel walls by the Savannah River Site Construction Materials Testing Laboratory, the Savannah River National Laboratory, and the US Army Corps of Engineers Engineering Research and Development Center. Strength tests performed on several of these concrete cores resulted in values below the concrete design strength. Also, periodic DOE concrete inspections of the H-Canyon Exhaust Tunnel have revealed concrete surface degradation exposing aggregate and steel reinforcement.

We are aware that DOE is pursuing a nonlinear analysis of the tunnel to determine if it can perform its post-seismic safety function. Pursuant to 42 U.S.C. §2286b(d), the Board requests a written response and a briefing from DOE within 90 days on the path forward to ensure the continued structural integrity of the H-Canyon Exhaust Tunnel at the Savannah River Site or any alternatives being evaluated to replace the exhaust tunnel.

Yours truly,

Bruce Hamilton Acting Chairman

c: Mr. Joe Olencz

AFFIRMATION OF BOARD VOTING RECORD

SUBJECT: H-Canyon Letter

Doc Control#2018-100-029

The Board, with Board Member(s) Jessie H. Roberson, Daniel J. Santos, Joyce L. Connery *approving*, Board Member(s) Bruce Hamilton *disapproving*, Board Member(s) none *abstaining*, and Board Member(s) none *not participating*, has voted to approve the above document on May 7, 2018.

The votes were recorded as:

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIPATING*	COMMENT	DATE
Bruce Hamilton		\boxtimes			\boxtimes	05/04/18
Jessie H. Roberson	\boxtimes					05/07/18
Daniel J. Santos	\boxtimes					05/04/18
Joyce L. Connery	\boxtimes					05/04/18

*Reason for Not Participating:

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

Executive Secretary 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: Bruce Hamilton

SUBJECT: H-Canyon Letter

Doc Control#2018-100-029

Approved	Disapproved_X	Abstain					
Recusal – Not Participating							
COMMENTS:	Below_X Attached	None					

A ".... written response and a briefing from DOE within 90 days on the path forward to ensure the continued structural integrity of the H-Canyon Exhaust Tunnel at the Savannah River Site or any alternatives being evaluated to replace the exhaust tunnel ..." will not enhance the Board's understanding of the current situation at H-Canyon regarding the adequate protection of the public health and safety.

I therefore disapprove.

Commen Shilton For

Bruce Hamilton

05/04/2018	
Date	

Member voted by email dated May 04, 2018

ARCHIVE: 2018-100-029, H-Canyon Letter

DEFENSE NUCLEAR FACILITIES SAFETY BOARD NOTATIONAL VOTE RESPONSE SHEET

Jessie Roberson FROM:

SUBJECT: H-Canyon Letter

Doc Control#2018-100-029

Approved

Disapproved_____

Abstain

Recusal – Not Participating

COMMENTS:

Below_____ Attached_____ None

_____ Jessie Roberson nay 7,2018 Date

ARCHIVE: 2018-100-029, H-Canyon Letter

DEFENSE NUCLEAR FACILITIES SAFETY BOARD NOTATIONAL VOTE RESPONSE SHEET

FROM: **Daniel J. Santos**

SUBJECT: H-Canyon Letter

Doc Control#2018-100-029

Approved X

Disapproved_____

Abstain

Recusal – Not Participating

COMMENTS:

Below_____Attached_____None_X

a Daniel J. Santos

Date

ARCHIVE: 2018-100-029, H-Canyon Letter

DEFENSE NUCLEAR FACILITIES SAFETY BOARD NOTATIONAL VOTE RESPONSE SHEET

FROM: Joyce Connery

SUBJECT: H-Canyon Letter

Doc Control#2018-100-029

Approved Disapproved_____ Abstain **Recusal** – Not Participating **COMMENTS:** Below Attached None

Connerv 4.20 Date