



Department of Energy
Under Secretary for Nuclear Security
Administrator, National Nuclear Security Administration
Washington, DC 20585



March 15, 2023

The Honorable Joyce L. Connery
Chair, Defense Nuclear Facilities Safety Board
625 Indiana Avenue NW, Suite 700
Washington, DC 20004

Dear Chair Connery:

This letter is provided on behalf of the Secretary in response to your July 26, 2022, letter expressing concern about the structural adequacy of the 296-H stack. In your letter, the Defense Nuclear Facilities Safety Board (DNFSB/Board) identified that the Department of Energy's National Nuclear Security Administration (DOE/NNSA) Savannah River Field Office (SRFO) has not established a defensible technical basis in the Combined Tritium Facility (CTF) Documented Safety Analysis (DSA) Revision 0 for its conclusion that the potential collapse of the 296-H stack would not impact the 217-H vault during a natural phenomenon hazard (NPH) event, such as an earthquake, tornado, or high winds.

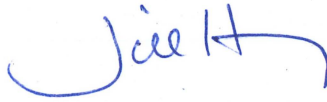
Savannah River Nuclear Solutions (SRNS) is scheduled to submit CTF DSA Revision 1 in Fiscal Year 2023. This revision is being developed with direction from SRFO and will provide a formal technical basis that evaluates the consequences of the 296-H stack impacting the 217-H vault. The current draft of CTF DSA Revision 1 demonstrates that consequences from an NPH event are below the evaluation guideline (EG) threshold and that no safety class controls will be required. In the hypothetical evaluation scenario, the 296-H stack will not survive an NPH event and will fall, impact the 217-H vault, and initiate a fire that will release tritium. Once SRNS submits CTF DSA Revision 1 for approval, SRFO, as the Safety Basis Approval Authority, has the specific responsibility to ensure the review and approval process represents all DOE entities with interest in the facility and considers commitments made to agencies outside of DOE. As such, DOE will address the Board's concerns regarding the potential collapse of the 296-H stack. Consistent with the requirements of DOE-STD-1104-2016, *Review and Approval of Nuclear Facility Safety Basis and Safety Design Basis Documents*, this review will specifically evaluate the adequacy of the consequence evaluation and control selection.

In the interim, SRNS will continue to operate under the SRFO approved and implemented Tritium Facilities Safety Analysis Report, which demonstrates the consequences of the 296-H stack hitting the vault are below the EG threshold for Safety Class controls. Therefore, no additional controls are required and the facilities remain in a safe configuration.

DOE/NNSA is committed to continuous improvement to assure that hazards are addressed by the Safety Basis. NNSA understands the concerns outlined in your letter and SRNS, in consultation with SRFO, is actively investigating feasible options to improve the Safety Basis and further reduce risk.

We appreciate the DNFSB's observations and we will continue to keep the Board and its staff informed. If you have any questions, please contact Mr. Jason Armstrong, Savannah River Field Office Manager, at (803) 208-3689.

Sincerely,

A handwritten signature in blue ink that reads "Jill H". The signature is stylized with a large, sweeping initial "J" and a horizontal line extending from the end of the "H".

Jill Hruby