

Mr. Chairman, Madame Vice Chair, Members of the Board. Good afternoon. My name is John Eschenberg and I am the Federal Project Director for the Uranium Processing Facility at the Y-12 National Security Complex.

Thank you for this opportunity for the National Nuclear Security Administration and our contractor, B&W Y-12 to meet with you today to discuss these critical issues as we move forward in building a new Uranium Processing Facility for our nation. We believe this Project is the critical next step in modernization of the Y-12 National Security Complex and our Uranium Center of Excellence: a critical step that must be conducted in a disciplined and rigorous manner while being open and transparent.

I particularly want to thank you for convening this public meeting just minutes away from the nation's original and existing uranium processing facilities at the Y-12 site in Oak Ridge, Tennessee. We strongly regard the Board's mission and share the common goal of ensuring adequate protection of public and worker health and safety and the environment at defense nuclear facilities.

Ironically enough, it was 70 years ago – almost to this very day on September 19, 1942 – that General Leslie Groves made the decision to locate the first processing plants of the Manhattan Project here in East Tennessee. This historic decision was made just two days after General Groves was given the assignment to head the Manhattan Project.

Oak Ridge and the facilities that were built there were born with that decision --- a decision that aided our nation in ending a terrible war just 3 years later in 1945 and in many more ways over the following decades.

Today, I stand before you, 70 years later, as we embark on one of the most important projects the Department since that time --- building a modern Uranium Processing Facility --- a facility that is urgently needed to maintain our nation's nuclear security posture.

This modernization effort will accelerate the transition out of our original World War II-era facilities --- most notably Building 9212, which has served as America's uranium processing hub for nearly 70 years. Our suite of uranium processing capabilities is nearing the end of their useful life and simply cannot meet the nation's future, critical nuclear security needs.

The consensus is clear – we must build UPF to ensure our nation's nuclear deterrent, fuel our Navy's submarines and aircraft carriers, and continue our commitment to dismantle and reprocess old nuclear weapons --- many of which came to us from the former Soviet Union -- for use today in peacetime missions, such as fueling our next generation commercial power reactors, research reactors and in medical isotopes – aiding in the treatment and fight against cancer and other life-threatening illnesses.

The Department has greatly improved its performance in managing and delivering large first-of-a-kind projects. It is fair to acknowledge that we – that is both the Department and our contractors -- have learned many tough lessons over the last decade managing these pioneering projects. The Uranium Processing Facility Project is our opportunity to put these tough lessons in to application – and that is just what we are doing.

We are fully committed to these foundational tenants:

Our most basic tenant is that we have employed a Safety-in-Design precept, whereby, appropriate and conservative safety structures, systems and components are selected early in design.

Using this precept, we have developed a robust Safety Design Strategy that is used by our design engineers, safety analysis development teams, and integrated project teams to ensure that safety is integrated into design early in the design process. The goal is to minimize the potential for costly changes in the later phases of the project.

Our Safety Design Strategy is updated throughout the design process as necessary. The depth and breadth of the information has improved as the project has advanced from conceptual to preliminary design and it will continue to advance, as needed, through final design. As the design matures, the safety analysis will become more precise in its identification of necessary controls and programs to ensure an adequate level of safety to protect the workers, public and the environment.

We will have robust upfront project funding with an aggressive allowance for project contingency

We have put into place a comprehensive program to mature the application of process technologies – through design, development, and deployment – using scaled, prototypic and full scale equipment, and

We will have a sufficiently mature and detailed design before establishing the project's cost and schedule baseline.

Now, within these foundational tenants we have experienced challenges.

In particular, our early approach to project management and combination of critical decision points (CD-2/3) led us to stop work on the PSDR and begin developing separate PDSA submittals. We later revisited that decision and returned to developing the required PSDR ultimately delaying its initial submission by 1 year.

We did not do a good job of developing a credible schedule of safety basis deliverables that was well integrated with the project's design and engineering efforts. We did not have sufficient staff with the requisite skill sets in conducting safety analysis and working with individual design teams. Our initial effort to develop a comprehensive PSDR created a situation where unnecessary gaps were created between the safety

analysis and the overall maturity of the design. Since we have strengthened the project's team with a proven leader in safety analysis, developed an integrated schedule of safety and design deliverables, and are improving the federal oversight.

In keeping with our basic tenant to be protective of safety, health and the environment, early in the calendar year, we elected to prioritize installation of the Building 9212 operations over the others. This decision was made as Building 9212 represents the greatest risk to our workers and the greatest risk to our program. This shift in focus, although it reduces the detailed design burden, has impacted our ability to advance the overall facility design.

And, we have identified a space management and fit issue that has necessitated significant structural modifications and several internal reconfigurations to ensure that the areas designated for process equipment and our ability to operate and maintain them are sufficient.

These circumstances have created the need to replan the remaining design and engineering effort and that will likely extend the timeline to sufficiently mature design before establishing a credible baseline. The contractor is scheduled to deliver the full engineering replan effort by mid-fall. This extension of engineering efforts will enable the safety basis to synchronize with the design basis, closing all but the smallest of expected gaps. NNSA is planning a comprehensive review of the engineering replan and the factors that led to its necessity.

Design challenges like these, although undesirable, are manageable provided we stay true to our foundational tenants thereby assuring integration of safety into design.

NNSA remains fully committed to executing the project soundly and in a deliberate manner. Again, the Uranium Processing Facility Project is our opportunity to put these tough lessons in to application – and that is just what we doing.

We're committed to accelerating the move out of these original World War II facilities and into a new Uranium Processing Facility that is robust, modern, safe, secure and designed to meet the country's uranium processing needs into the next century.

Thank you for the opportunity to be here and we look forward to your questions.