The Waste Treatment Plant project holds enormous importance for the Nation, the region, and the Department of Energy. The Department attaches the highest priority to the successful, safe completion of this project, on budget and on schedule. This hearing comes at an opportune time, as we prepare to pivot from a design-construct approach to a construct-commission approach to project management at Hanford. In preparing for this transition, we have sought input from several in-depth, independent technical and management reviews, and have worked diligently to resolve important issues.

The Secretary and I are strongly committed to continuous improvement in the execution of our capital projects. As the Department’s Senior Acquisition Executive, I take full responsibility for delivering our projects, adhering to technical, cost and schedule baselines, and assuring the safety and reliability of our operations. Safety is not just a top priority for the Department, but an essential element of the design, construction, and operations of each of our capital projects. As the largest, most complex project in our portfolio, the WTP has fully engaged the time and energy of the senior leadership of the Department. It represents the cornerstone of the Department’s efforts to address the hazards posed by over 53 million gallons of wastes remaining in aging tanks at Hanford. Many of these tanks have already served well beyond their original design lifetime.

The Secretary and I are also committed to assuring that the Department is providing the resources necessary to complete the WTP successfully. I want to identify some specific examples where we have engaged:

- **DOE complex-wide support.** We have taken several actions to provide the appropriate resources, including the following: 1) assigned two senior individuals in the Department to lead Construction Project Reviews of WTP; 2) recruited an experienced project manager from the Office of Science, with a strong track record in successfully delivering projects, to serve as the Federal Project Director; and 3) directed that Departmental resources from across the complex – the labs, production facilities, and site offices -- be made available to assist with WTP project and technical matters.

- **Obtaining Bechtel corporate resources.** We have had a number of discussions with the Chairman and key executives of Bechtel to seek their full commitment to providing the resources and focus needed to successfully complete this project. Bechtel responded by assigning to WTP a project director with an established successful record in nuclear, chemical, and DOE projects and operating facilities.
• **Technical reviews.** After the most recent peer review of the WTP, the Department chartered a technical review of the WTP (1) to determine whether technical issues identified in a previous review of the process technology were adequately resolved; (2) to review the technical design against contract requirements; and (3) to identify potential improvements to WTP that could result in a net reduction in the Hanford tank waste mission life-cycle cost or schedule duration. That review has just been completed, and a copy of that report has been recently provided to the Board.

• **Consideration of commissioning/operational needs.** We have taken steps to bring a heightened level of focus, discipline and support to the WTP Federal Project Director and to the Tank Farm Federal Project Director as we transition the WTP project from its design/construct phase to the construct/commission phase. This means completing design and focusing on construction and transition to operations, including the systems for emptying the tanks and delivering the wastes to the WTP. The WTP Federal Project Director has the full support of the Assistant Secretary of Energy for Environmental Management and direct access to me as the Deputy Secretary. We are working together closely to identify not only project needs, but also site office needs to prepare successfully to begin WTP operations by 2019.

An enormous task lies before us. As illustrated by the issues to be considered at this public meeting, there are a number of concerns that the Department must address to assure the public and the Board that we are constructing, and will commission, a facility that can be safely operated. I am committed to addressing the concerns identified by the Board, and welcome the opportunity afforded by this public hearing to do so.

Indeed, without the kind of transparency this hearing provides, our activities cannot gain the full confidence of the public, or fully explain our efforts to those present today and to the surrounding community. This process itself, and the feedback these hearings provide, will strengthen the Department’s efforts to do the Nation’s work, while keeping all eyes on continued improvement, excellence and safety. It also supports our efforts to serve as good stewards of taxpayer resources, and to fulfill our moral and legal obligations to remediate the environmental legacy of our past nuclear operations.

Only through our collective efforts will this project safely and successfully complete its mission to remove the threat of Hanford’s radioactive tank waste, and to protect the public and nearby Columbia River for this and succeeding generations.
STATEMENT BY DALE E. KNUTSON, FEDERAL PROJECT DIRECTOR, WASTE TREATMENT AND IMMOBILIZATION PLANT

Thank you for inviting me to provide remarks today. I would like to share my time with my colleague and the Tank Farms Federal Project Director, Stacy Charboneau, who will provide brief remarks regarding the tank farms project and those aspects relevant to this week’s hearing.

On June 1, at the request of the Secretary of Energy, I assumed the role of Federal Project Director for the Waste Treatment and Immobilization Plant. This plant is the cornerstone to Hanford’s tank waste cleanup mission and vital to removing the threat posed by Hanford’s 53 million gallons of radioactive tank waste. As the FPD I am responsible and accountable to the taxpayer, as well as the Acquisition Executive/Program Secretarial Officer. It is my job and duty to execute the project and ensure it meets safety requirements, technical, cost and schedule performance baselines, and that when complete, it will operate safely, and efficiently to successfully perform its mission.

I’ve been the WTP FPD for just over 120 days. When I accepted this job, I made a commitment to the Deputy Secretary that I would prepare an assessment of the project and deliver that assessment to him by September 30, 2010 – which I have done. As part of developing that assessment, and as the FPD, I immersed myself in this project, working to assure myself that we are developing a safe, effective and efficient plant, that our work is technically adequate and that we are ready to pivot our focus towards commissioning. Over the next two days, you will be reviewing the technical and programmatic details that I’ve had the opportunity to assess over the past four months. Right now, I want to take a few minutes to give you the highlights of my assessment report, defining the big picture of where we are and where we are going on this project.

First, we now have a strong structure in place to obtain the necessary team members for this project. That’s important as we begin pivoting focus and allows us to pull from a variety of resources across the Department, as well as industry.

The WTP project has a long history of internal and external reviews, and from those reviews a substantial list of recommendations has emerged. I can say with confidence, every recommendation made to date has been considered, most have been accepted, and all are being or have been appropriately dispositioned. As part of my review of External Flowsheet Review Team recommendations, we included the assessment of residual risk. Remaining uncertainties and risks have been identified, and actions are being taken to provide additional confidence in system performance and gain operational knowledge prior to commissioning. The commitment for large-scale testing for pulse-jet mixers is an example of DOE’s approach to managing residual risk.

As part of the maturation of the project, the definitive design and safety design basis has evolved with the overarching philosophy and logic that a heightened degree of conservatism is appropriate during conceptual phases before details are available. As a natural progression of the project, the level of conservatism has been appropriately refined as testing is completed, the design matured,
issues resolved, and more information became available through, among other avenues, external reviews.

The last Construction Project Review concluded that “the WTP can be delivered at the total project cost if an accelerated funding profile is adopted, no new major technical issues emerge, and the project is proactively managed.” That is the first time that such a conclusion has been made on this project from an external source. These external reviews provide us with valuable information, highlighting areas of strength and areas that require more attention, and we will continue conducting these reviews throughout the project – the next is scheduled for November of this year.

At the request of the Secretary and Assistant Secretary for Environmental Management, a Tank Waste Subcommittee was formed under the Environmental Management Advisory Board. Their first task was to assess closure of WTP technical issues raised in 2005 by an External Flowsheet Review Team. The subcommittee recently completed their assessment and determined that those technical issues were closed, and remaining technical risk is sufficiently low to allow a shift in focus towards commissioning.

Safety remains a priority for the project and at the Construction site. Late in September the Department’s Office of Health, Safety and Security notified ORP and Bechtel that it had certified the contractor in the Department’s Voluntary Protection Program at the Star level; the highest such level awarded.

In closing, I want to stress that the safety of our workers and the public and protection of the environment will always be our first priority. We are structured to access and utilize the appropriate team members to safely bring this plant into operations. We are working closely to ensure integration with the Tank Farms to support operations. We remain focused and committed to addressing and resolving all technical issues and ensuring this plant is built to safely carry out its mission – removing the threat of Hanford’s liquid tank waste.

I welcome this opportunity to update the Board and the public on the progress being made toward completing design activities on the WTP and pivoting the project to a construction and commissioning focus.

I’d like to now turn the floor over to Stacy Charboneau.
STATEMENT BY STACY CHARBONEAU, FEDERAL PROJECT DIRECTOR,
TANK FARMS

I, too, welcome the opportunity to address the Board today and provide assurance that the Tank Farms Project is working hand-in-hand with the Waste Treatment Plant Project, aligning our efforts to commission and operate the Waste Treatment Plant in order to complete the Hanford Tank Waste cleanup. The safe delivery of over 53 million gallons of waste, currently stored as sludge, saltcake, and liquids in 177 underground storage tanks, to the Waste Treatment Plant, will require extensive infrastructure including modifications to existing facilities and construction of new facilities to complete the tank waste treatment mission.

The requirements for additional facility modifications or new facilities at tank farms necessary to achieve waste feed delivery requirements will be determined after the convergence of two major efforts currently underway. The first is the tank farms pumping and mixing studies and the second is the WTP waste acceptance criteria data quality objectives process.

The ability to adequately mix and sample waste to meet the WTP acceptance requirements is being evaluated and will need to be demonstrated, as detailed in the Tank Farms Project Technology Development Roadmap. While this testing is currently underway, the extent of testing will be determined based on the waste acceptance criteria requirements, as refined through the data quality objective process and closure of the WTP technical issues. It is an integrated process, and both WTP and Tank Farms personnel are participating.

The Tank Farms Project has worked closely with the Waste Treatment Plant Project to address and close technical issues regarding waste feed to the WTP. Currently, no added acceptance criteria on waste feed delivery are expected due to mixing concerns. Further, waste particle size and density criteria are satisfied by adhering to the existing Interface Control Document (ICD-19) waste acceptance criteria on maximum critical velocity. The sampling of each feed batch will ensure that feed delivered to WTP meets the acceptance criteria and remains below the material at risk assumptions in the Safety Basis. Any changes to the WTP Criticality Safety Evaluation Report that impact feed delivery will be coordinated with the Tank Farms Project to ensure the changes are attainable.

DOE and its contractors have systems in place to ensure control of safety-related design activities, required to implement solutions, and facilitate development of appropriate safety related structures, systems, and components. And to reiterate Mr. Knutson’s statement, as the Tank Farms Federal Project Director, it is my job and duty to execute the project and ensure it meets safety requirements, technical, cost and schedule performance baselines, and that when complete, these structures, systems, and components will operate safely, and efficiently to successfully complete the mission.

I am energized to move the River Protection Project to the next phase as we plan for commissioning these complex nuclear facilities, and look forward to our discussions during the Waste Feed Preparation Panel later today.