Hanford Reach
Hanford Site Employee News
September 15, 2003

FFTF, PFP partner on deactivation work

Michele Gerber, *Fluor Hanford*
Karin Nickola, *Fluor Hanford*

Fluor Hanford has sent the first cask of "unspent" fuel from the Fast Flux Test Facility to Hanford's Plutonium Finishing Plant. Consolidating these casks of fuel at PFP is both a security matter and a cost-saving measure.

Work associated with transporting casks to PFP is challenging to orchestrate because of the coordination required between the two facilities, as well as the security surrounding transportation. Plans call for transporting seven more casks of fuel from FFTF to PFP by January 2004.

A cask is loaded into the Cask Loading Station at the Fast Flux Test Facility Service Building in preparation for receiving unspent fuel.

Coordination the key

Efforts to move casks of fuel from FFTF to PFP began last winter when the two facilities formed the "FFTF Offload Project." PFP project team members include special assets director Tom Halverson and project manager Jim W. Kelly. FFTF project team members include program manager Pat Schweiger, asset management team lead Wiley Witherspoon and project engineer Dan Arrigoni.

"Close internal coordination, as well as coordination with our Department of Energy customer and subcontractors, have been critical in our efforts to safely complete multiple fuel shipments," said Fluor Hanford's Jim W. Kelly. "I'd like to thank the procedures organization and plant forces, including riggers and teamsters, and many others in both the PFP and FFTF organizations, as well as Jim Spets of DOE."

The Plutonium Finishing Plant receives the first of eight interim storage casks from FFTF.

Additionally, many of PFP's safety-basis documents were updated, along with receiving and surveillance documents. And infrastructure improvements, including the construction of a storage pad, were made. Kelly thanked the employees on the project for adding these tasks to their already full workloads.

"We're off to a good start and fully anticipate meeting our January deadline," said Fluor Hanford's Wiley Witherspoon. "We're moving at a good pace, while working safely. We also remain in close contact with Protection Technology Hanford, Hanford's security contractor, to ensure everything is done within security guidelines."

Continued on page 2.

Fuel movement

Fluor Hanford's contract with the Department of Energy calls for the FFTF team to off-load, wash, dry and place a total of 81 fuel assemblies into interim storage by January 22, 2004. Of these fuel assemblies, approximately one-third are highly irradiated or "spent" fuel.

Eighteen casks of spent fuel were moved out of FFTF and onto the facility's interim storage pad in the 1990s. Since the fuel off-load process resumed in April, Fluor Hanford crews have moved four more casks — containing seven spent fuel assemblies each — out of the reactor and onto the same pad. These casks will eventually be transported from FFTF to Hanford's Canister Storage Building in the 200 East Area — then sent to a National Geologic Repository along with Hanford's vitrified high-level waste.

The casks being transported to PFP contain unspent fuel assemblies — either partially irradiated or un-irradiated "green" fuel assemblies — transferred to FFTF for storage in 1994 and 1995 when Hanford's 308 Building was closed down. These casks can only remain at the facility a short time. PFP has a mandate from DOE to ship out its inventory of special nuclear material by the end of September 2005 and dismantle its Protected Area by December 2005.

Late in 2004, fuel assemblies in three of the eight casks at PFP will be shipped to Hanford's Canister Storage Building for interim storage. Plans call for loading fuel assemblies in the other five casks at PFP into appropriate containers to be shipped to DOE's Savannah River Site. ■