



Section D

Spent Nuclear Fuel

PROJECT MANAGERS

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SUMMARY

The Spent Nuclear Fuel (SNF) mission consists of the Spent Nuclear Fuel Project (SNFP) WBS 1.3.1.1 (Project Baseline Summary [PBS] WM01) and the subsequent Canister Storage Building (CSB) Operations Project WBS 1.3.2.1 (PBS WM02), which does not start until FY 2004.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of December 31, 2000. All other information is as of January 26, 2001.

Fiscal year-to-date milestone performance (EA, HQ, and RL) showed that three out of four milestones were completed late and one milestone is overdue.

The Milestone Achievement details, found following the cost and schedule variance analysis, provide further information on all milestone types.

NOTABLE ACCOMPLISHMENTS

Canister Storage Building (CSB) Activities — Completed installation and testing of CSB ventilation American Society of Mechanical Engineers (ASME) Code N509 compliant back draft dampers on January 12, 2001 ahead of schedule.

Spent Nuclear Fuel Project organization — Completed initial demobilization of startup phase project team. Will continue to draw down existing staff, improve skill mix, train increase in staff, and meet client expectations and FH strategic goals. Assembled construction project team under James Crocker and commenced construction activities in K East.

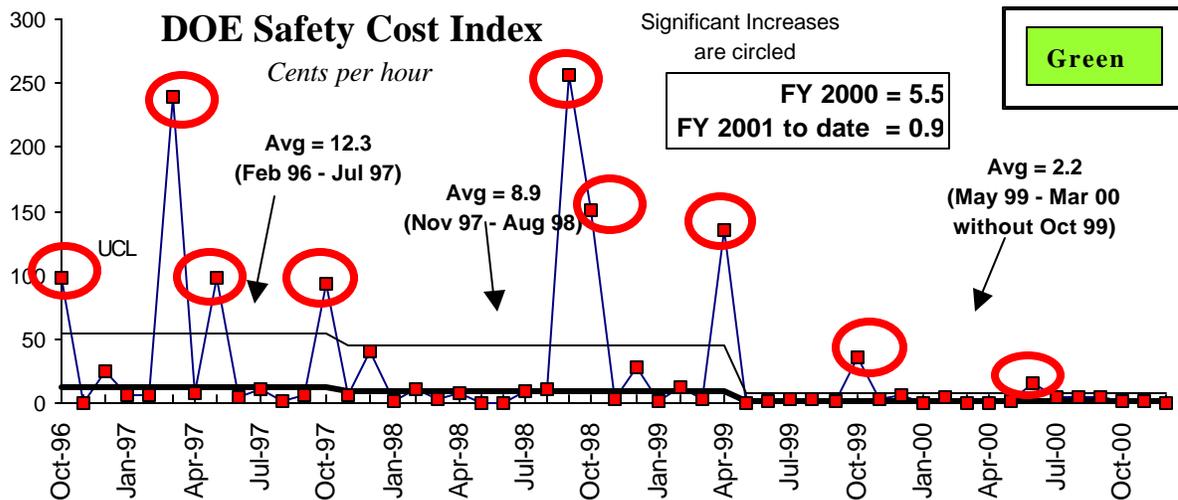
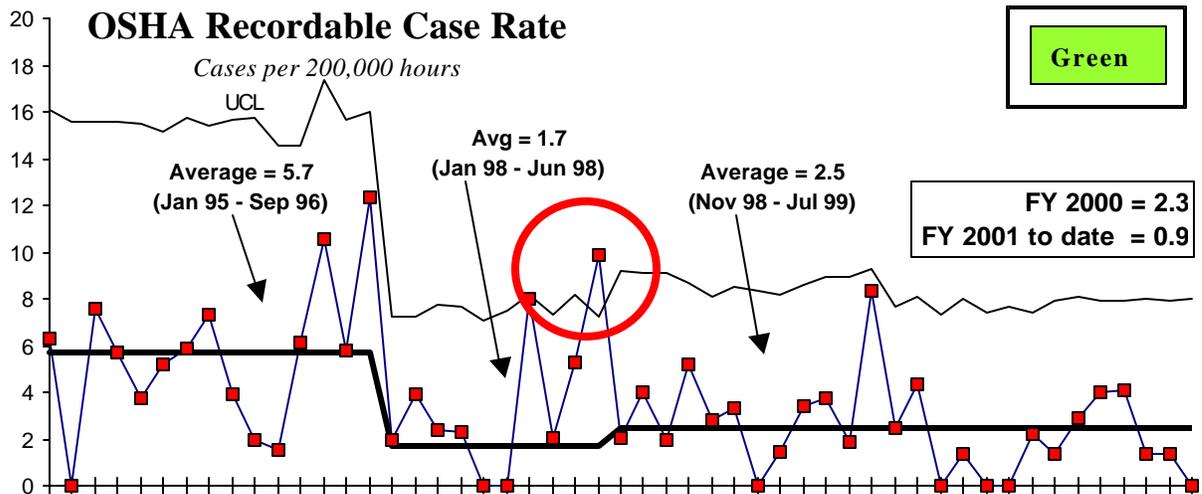
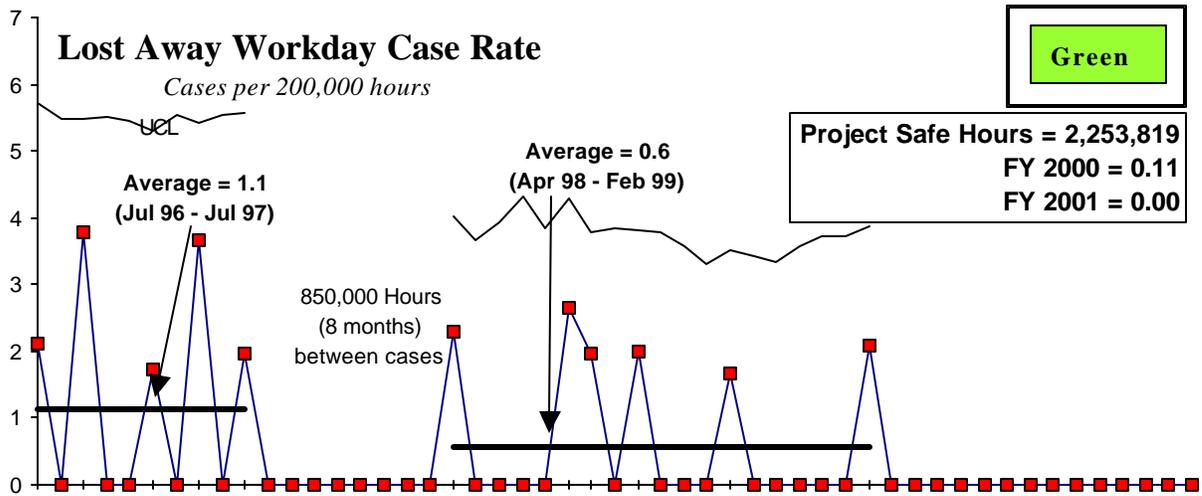
Fuel Movement Activities — Completed loading of an additional six multi-canister overpack (MCO) fuel storage baskets. Completed loading these baskets into the second MCO. Shipment of the second MCO is planned for the week of January 29. Initiated unrestricted operations in Bay 1 at the Cold Vacuum Drying (CVD) Facility.

MCO Production Rate Improvement Activities — Identified funding for upgrades to K West to increase production activities. Commenced project delivery work to procure and install process improvements into K West Basin.

SAFETY

The project achieved over 2.2 million safe work hours. No Lost Away Workday Cases have been reported in the last fourteen months.

SNF OSHA Recordable Case Rate continues to improve, currently at FH goal level. There has been a significant improvement in Lost/Restricted workday case rate.

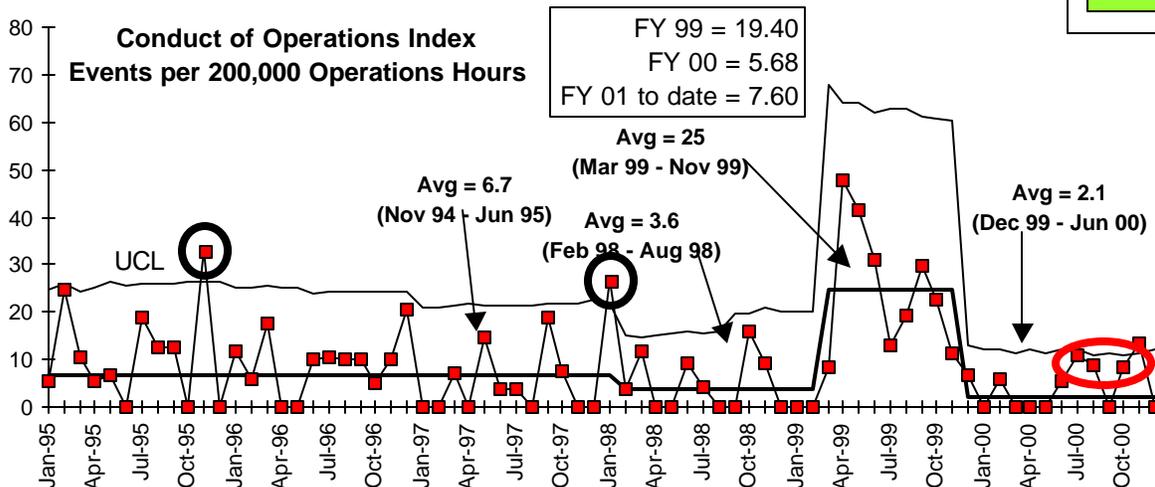


ISMS STATUS

Nothing to report at this time.

CONDUCT OF OPERATIONS

Green



The increase in the number of events for FY 2000 is indicative of the SNF Project transition from construction and testing to operations. During the period, the project completed two new nuclear facilities and refurbished one existing facility. All three of these nuclear facilities were thoroughly tested and went through several Operational Readiness Reviews prior to the commencement of operations. As a result of the knowledge gained during the transition to operations, many actions have been taken and are in progress to improve and monitor the conduct of operations at all four SNF Project facilities as the project safely moves into a more focused and efficient operation.

BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Green

Alternate Fuel Transfer Strategy (AFTS) — The AFTS will move fuel from the K East (KE) Basin to the K West (KW) Basin for processing in lieu of processing fuel in the KE Basin as currently baselined. This strategy will greatly reduce worker radiation exposure (physical), safety risks, and increase the confidence level that the life cycle cost and schedule objectives can be achieved. This strategy will reduce the complexity of the process and the safety envelope.

- A Baseline Change Request was submitted to RL on November 29, 2000, for the AFTS.
- Need decision from DOE prior to point of no return on baseline spending.

Opportunities for Improvement

Green

Multi-Canister Overpack (MCO) Production Rate Improvements — The Spent Nuclear Fuel Project is currently analyzing the reduction of fuel processing, loading, and drying times in an effort to meet and improve the baseline schedule for MCO processing.

- Twenty-four hour/seven days a week operations at K West Basin scheduled to start July 2001 (baseline originally planned for September 1, 2001).
- Two (8x9) shifts scheduled to start mid February 2001.

UPCOMING ACTIVITIES

- Shipment of the second MCO is planned for the week of January 29.
- Continue MCO shipments through FY 2001.
- Move K West Basin to two (2) shifts a day (8x9s) February 2001.
- Complete definitive design for KE Integrated Water Treatment System (IWTS)/Sludge loadout system by April 2001.
- Submit Annual Debris Report to U. S. Department of Ecology and Environmental Protection Agency (EPA) in May 2001.
- Initiate KW Basin spent nuclear fuel canister cleaning operations August 2001.
- Move K West Basin to 3 shifts a day/7 days a week July 2001.

MILESTONE ACHIEVEMENT

Green

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	0	0	1	0	0	0	0	1
DOE-HQ	0	0	0	0	0	0	0	0
RI	0	0	2	1	0	1	0	4
Total Project	0	0	3	1	0	1	0	5

Only TPA/EA milestones and all FY2001 overdue and forecast late milestones are addressed in this report. Milestones overdue are deleted from the Milestone Exception Report once they are completed. The following chart summarizes the FY2001 TPA/EA milestone achievement and a Milestone Exception Report follows. The last milestone table summarizes the first six months of FY 2002 TPA/EA milestones.

FY 2001 Tri-Party Agreement / EA Milestones as of January 26, 2001

Number	Milestone Title	Status
M-34-16 (S00-01-900)	"Initiate Removal of K West Basin Spent Nuclear Fuel"	Due 11/30/00 – Completed one week late.
M-34-06-T01 (S04-99-521)	"Initiate K West Basin Spent Nuclear Fuel Canister Cleaning Operations"	Due 12/31/00 – Forecast late, August 31, 2001. Yellow
M-34-05-T01 (S04-01-515)	"Submit DOE Approved Report Debris to Ecology/EPA"	Due 05/31/2001 – On schedule.

DNFSB Commitments

Nothing to report at this time.

MILESTONE EXCEPTION REPORT

<u>Number/WBS Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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Overdue – 1

S04-99-521 RL	Start K West Canister Cleaning Operations	12/31/00	8/31/01
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1.3.1

Cause: Suspended design last summer to simplify system and reduce costs. SNF Project made a project management decision to defer work to FY 2001 and focus on near-term critical path items.

Impact: No impact to any other SNF Project baseline schedule activities or TPA/DNFSB milestones.

Corrective Action: Currently in design and on schedule; to be started by 8/31/01.

Forecast Late – 0

FY 2002 Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-34-14B-T01 (S06-97-012)	"Complete KE Basin Cask Facility Mods"	Due 02/28/2002 On Schedule
M-34-12 (S04-97-621)	"Complete Construction of K East Basin Integrated Water Treatment System (IWTS) to Support Spent Nuclear Fuel Removal"	Due 03/31/2002 On Schedule
M-34-13B-T01 (S04-98-356)	"Complete Construction & Installation of K East Basin Spent Nuclear Fuel Retrieval System (FRS)"	Due 03/31/2002 On Schedule

DNFSB Commitments

Nothing to report at this time.

PERFORMANCE OBJECTIVE

Move Fuel Away from the River

Expectation: Remove spent fuel from K Basins

- Move first MCO of SNF from KW Basin and transport to the CVDF for processing by December 7, 2000 (TPA M34-16)
 - Completed on schedule
- Move 116 Metric Tons Heavy Metal from K West Basin by end of FY 2001
 - Status: On schedule

FY 2001 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS – (\$000)

Green

By PBS	FYTD								PEM	EAC
	BCWS	BCWP	ACWP	SV	%	CV	%			
PBS WM01 Spent Nuclear WBS 1.3 Fuel Project	\$ 31,477	\$ 31,270	\$ 44,620	\$ (206)	-1%	\$ (13,349)	-43%	\$ 189,762	\$ 189,762	
Total	\$ 31,477	\$ 31,270	\$ 44,620	\$ (206)	-1%	\$ (13,349)	-43%	\$ 189,762	\$ 189,762	

Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM).

Note: Above data includes RL contract for Steam.

FY TO DATE SCHEDULE / COST PERFORMANCE

Schedule variance is within approved threshold.

The unfavorable cost variance of \$13.3 million (43 percent) is due to additional facility start up and engineering required to resolve first-of-a-kind equipment issues at K Basins and the Cold Vacuum Drying Facility and subsequent extension of the Operational Readiness Review process. A staff demobilization plan will be implemented to bring costs in line with the baseline.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

Schedule Variance Analysis: (-\$0.2M)

Spent Nuclear Fuel Project — 1.3.1/ WM01

Description /Cause: None.

Impact: None.

Corrective Action: None.

Cost Variance Analysis: (-\$13.3M)

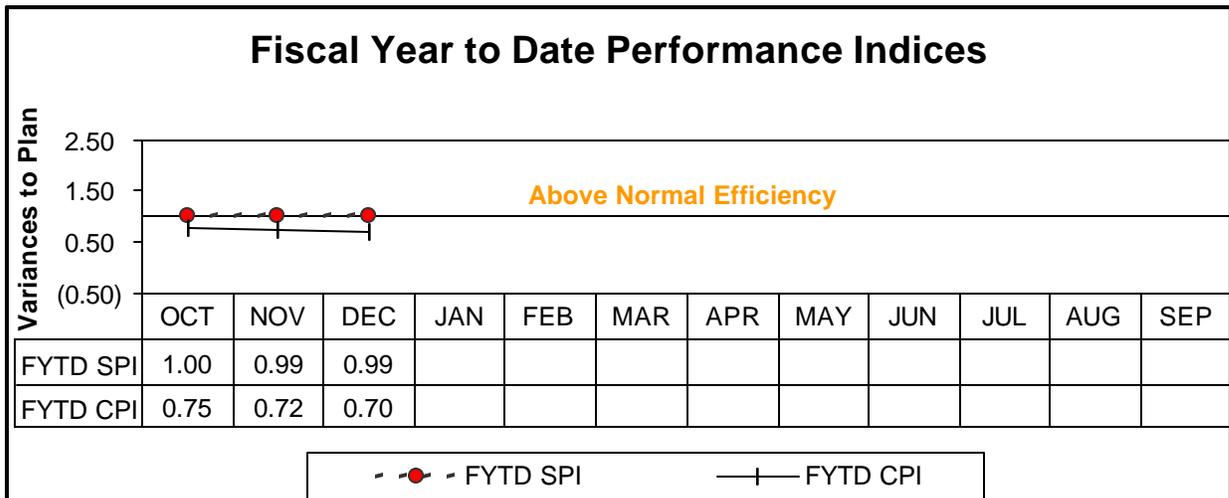
Spent Nuclear Fuel Project — 1.3.1/WM01

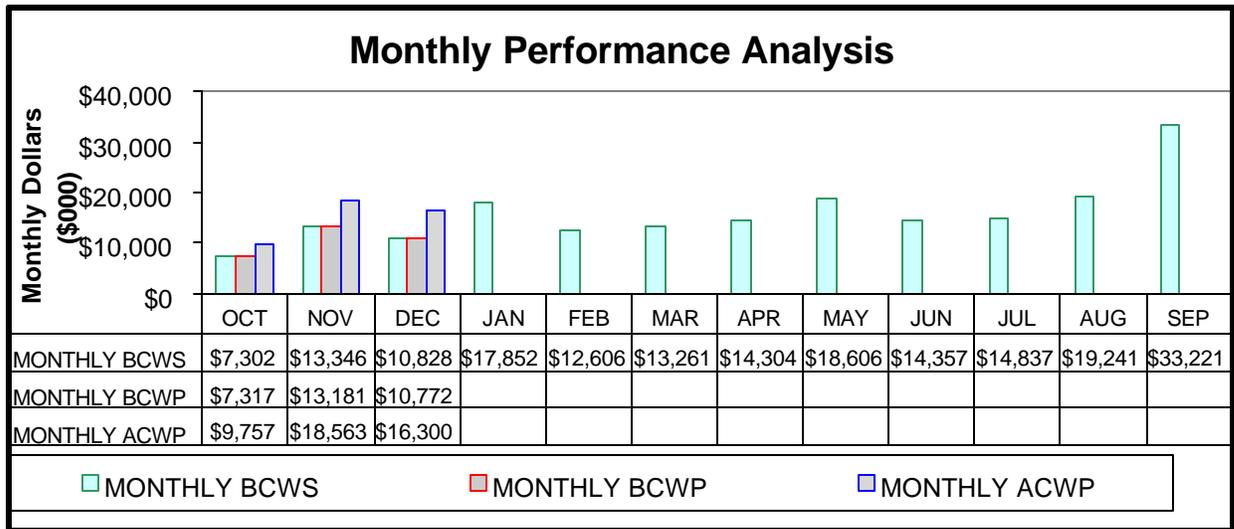
Description/Cause: The unfavorable cost variance was due to additional startup and engineering required to resolve first-of-a-kind equipment issues at the K Basins and CVD facility, and subsequent extension of the Operational Readiness Review process.

Impact: Costs will exceed plan without taking corrective action described below.

Corrective Action: A staff demobilization plan has been developed to bring costs in line with the baseline. The demobilization plan will be initiated following the start of fuel movement.

SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)





FUNDS MANAGEMENT FUNDS VS SPENDING FORECAST (\$000) FY 2001 TO DATE

	Project Completion *			Post 2006 *			Line Items *		
	Funds	FYSF	Variance	Funds	FYSF	Variance	Funds	FYSF	Variance
The River									
1.3 Spent Nuclear Fuel									
WM01 Operating	\$ 188,071	\$ 183,400	\$ 4,671				\$ 16	\$ 16	\$ -
Line Item									
Total Spent Nuclear Fuel Operating	\$ 188,071	\$ 183,400	\$ 4,671						
Total Spent Nuclear Fuel Line Item							\$ 16	\$ 16	\$ -

* Control Point

ISSUES

Technical Issues

Issue: Nothing to report at this time.

Impacts: None.

Corrective Action: None at this time.

Regulatory Issues

Issue: CSB Operations — The Washington State Department of Health (WDOH) agreed to interim operating conditions that will allow the CSB to receive spent nuclear fuel prior to replacement of two backdraft dampers on the main ventilation exhaust system that do not meet the American Society of Mechanical Engineers (ASME) N509 code.

Impacts: WDOH also agreed to a number of deviations with stipulated conditions from the N509 code for operation of the CSB.

Corrective Action: The CSB backdraft dampers were successfully replaced and tested on January 12, 2001, which is ahead of the February 13, 2001 deadline.

Issue: KW Basin Canister Cleaning System — The EPA disapproved the request to extend the Tri-Party Agreement target date for the KW Basin canister cleaning system.

Impacts: The target date of December 31, 2000, was missed.

Corrective Action: The canister cleaning system will be operational by August 31, 2001, without impact to operations or other Tri-Party Agreement milestones. *(No further status to be provided.)*

Issue: Milestone Status — The Tri-Party Agreement milestone M-34-16, "Initiate Removal of K West Basin Spent Nuclear Fuel" was not met.

Impacts: The due date was November 30, 2000; the first fuel was removed from the KW Basin on December 7, 2000.

Corrective Action: The EPA intends to use its enforcement discretion on this issue. *(No further status to be provided.)*

External and DOE Issues and DOE Requests

Issue: Nothing to report.

Impacts: None at this time.

Corrective Action: None at this time.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS (\$000)

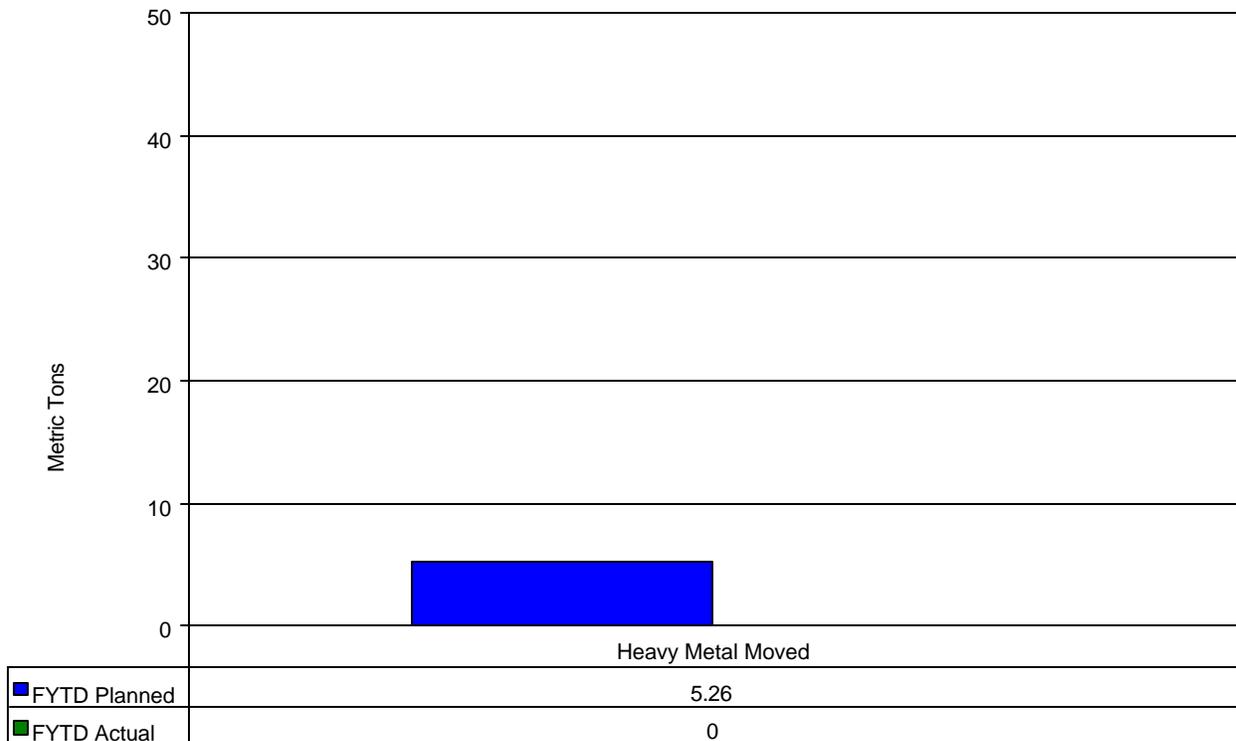
PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	COST IMPACT \$000	S	T	DATE TO CCB	CCB APR'VD	RL	APR'VD	CURRENT STATUS
SNF-2001-003	11/13/00	SNF Alternate Fuel Transfer Strategy	N	Y	Y	12/6/00	12/6/00			Appv'd by CCB Conditionally on close of action items
SNF-2001-004	11/14/00	WM02/CP02 Revision Planning Basis - Continuing CSB Operations	N	Y	N	1/3/01	1/3/01			Submitted to RL for final appr'v'l
SNF-2001-009	12/28/00	FY 2001 Fee Reduction to 90% (FH-2001-002)	-1030	Y	Y	12/28/00	12/28/00			Apprv'd. RI signature not req'd.
ADVANCE WORK AUTHORIZATIONS										
		Nothing to report at this time.								

KEY INTEGRATION ACTIVITIES

- SNF final disposition interface activities, including Office of Civilian Radiation Waste Management (OCRWM) Quality Assurance Program implementation, are ongoing with the National SNF Program.
- The SNF Project and Waste Management Project continued preparations for K Basins' sludge removal and Shippingport (PA) Pressurized Water Reactor Core 2 SNF removal.
- Neutron Radiography Facility Training Research and Isotope Production General Atomics (TRIGA) and Fast Flux Test Facility (FFTF) SNF relocation planning is ongoing with the FFTF Project.
- The SNF Project and Bechtel Hanford, Inc. worked together on shipping requirements for SNF discovered during upcoming 105F and 105H reactor basins deactivation.

HEAVY METAL MOVED

SNF Moved to Dry Storage as of December 31, 2000



Heavy Metal Moved: Within + / - 10 percent of planned.