Fiscal Year 1999 Multi-Year Work Plan Advanced Reactors Transition Program

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Advanced Reactors Transition Program

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A.1.0 Technical Baseline

The MYWP technical baseline describes the work to be accomplished by the Project and the technical standards which govern that work.

A.1.1 Mission Statement

The Advanced Reactors Transition (ART) has two missions. One, funded by DOE-EM is to transition assigned, surplus facilities to a safe and compliant, low-cost, stable, deactivated condition (requiring minimal surveillance and maintenance) pending eventual reuse or D&D. Facilities to be transitioned include the 309 Building / Plutonium Recycle Test Reactor (PRTR) and Nuclear Energy (NE) Legacy Facilities.

The second mission, funded by DOE-NE, is to maintain the Fast Flux Test Facility (FFTF) and affiliated 400 Area buildings in a safe and compliant standby condition. The condition of the plant hardware, software and personnel is to be preserved in a manner not to preclude a plant restart.

A.1.2 Boundary Diagram with Major Facilities

The following table identifies the major facilities that interface with this Project. The left column of the table identifies the major facilities that generate waste, materials, or infrastructure for this Project. The right column of the table identifies the major facilities that will receive waste and materials from this Project. The center column lists the major facilities managed by this Project.

Table A-1 Advanced Reactors Transition Project Boundary Diagram

Major Input Interfaces	Project Facilities	Major Output Interfaces
External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces 3717B CP General Purpose Shop Electrical Distribution System General Purpose Shops Misc Rad Labs S600 Electrical Distribution S600 General Purpose Office S600 General Purpose Shop S600 General Purpose Warehouse S600 Telecommunications System Telecommunications System	FFTF 309 Facility NE Legacy Facilities	External Interfaces Hazardous Waste Disposal Contracts Offsite Landfill Hanford Site Environmental System Interfaces 200 Interim Storage Area (ISA) 222-S Laboratory 242A 300 Area Treated Effluent Disposal Facility Central Waste Complex Double Shell Tank (DST) System Low-Level Waste Burial Grounds PFP Sanitary Landfill

A.1.3 Facility Responsibility Assignment Matrix

This section provides a table that identifies the sub-projects, major facilities, and the life cycle assignments.

Table A-2 Facility Responsibility Assignment Matrix

Facility	Life Cycle Phase *								
	Program Planning	Pre Conceptual	Conceptual	Execute			O&M	Close Out	
				Design	Construction	Turnover		Post Ops	D&D
FFTF	RL-MS01						RL-MS01	RL-MS01	RL-ER06
								RL-ER05	RL-ER07
309 Facility	RL-TP11							RL-TP11	RL-ER06
								RL-ER05	
INF Legacy Facilities	RL-TP11							RL-TP11	RL-ER05

* RL PBS Identifier Index:

- RL-MS01 - FFTF Project
- RL-ER05 - Surveillance and Maintenance
- RL-ER06 - Decontamination & Decommissioning
- RL-ER07 - Long Term Surveillance and Maintenance
- RL-TP11 - Advanced Reactors Transition

A.1.4 Project Planning Assumptions

This section contains the issues that affect the project. These include project specific issues, as well as site-level issues that have been assigned to the project for resolution. It also contains the assumptions that are used as a basis for the development of project plans until the issues are formally resolved with records of decision. The "Champion" column determines if the Project has lead responsibility or is an affected participant. If the champion belongs to the Project, the Project has the lead. If not, the Project is an affected participant. Project plans include appropriate activities and resources for resolving these issues.

Table A-3 Project Issues And Assumptions

	ISSUE	PLANNING ASSUMPTION	CHAMPION
1	<u>TPA Milestone Will Not Be Met</u> Because the FFTF has been placed in 'standby', work required in order to achieve TPA Milestones is not being performed and is not presently scheduled.	Submitted TPA change requests will be approved, placing the affected milestones 'in abeyance' until after a mission decision is made.	Farabee Kios
2	<u>Sodium Disposition</u> Potential use as a neutralization agent for tank waste is projected to be beyond 2015.	Interim storage in the 400 Area and Central Waste Complex (CWC) until Tank Waste treatment processes are defined. RL will include consideration of NaOH product in future privatization contracts.	Farabee Kios

A.1.5 Risk Management

Mission Risk Management Plans are not available at this time, however, detailed risk analysis can be found in the following documents:

- PBS Level, Risk Data Tables, Section C.1.1
- PBS Level, Risk Evaluation Narrative, Section D.1.6
- Unit of Analysis Level, current PPL and IPL located on Hanford shared area: \ap014\pbs

A.1.6 Technical Issues Management List

This section identifies the site-level issues and planning assumptions from Section A.1.4 that have been assigned to

the project for resolution. This section is used to delineate the site-level issues and planning assumptions from the project specific issues and planning assumptions.

Table A-4 Site Technical Issues And Assumptions

	ISSUE	PLANNING ASSUMPTION	CHAMPION
1	Sodium Disposition Potential use as a neutralization agent for tank waste is projected to be beyond 2015.	Interim storage in the 400 Area and Central Waste Complex (CWC) until Tank Waste treatment processes are defined. RL will include consideration of NaOH product in future privatization contracts.	Farabee Kios

A.2.0 Project Hanford Breakdown Structure (PHBS)

A.2.1 PHBS Hierarchy

RL PBS	RL WBS	Title
	1.12	Advanced Reactors Transition Project
RL-MS01	2.01.01.01.21.01	FFTF Project
	2.01.01.01.21.01.01	FFTF
	2.01.01.01.21.01.01.01	Maintain Safe & Compliant Materials in Fast Flux Test Facility
	2.01.01.01.21.01.01.02	Remove Materials from FFTF
	2.01.01.01.21.01.01.03	Maintain Safe & Compliant Fast Flux Test Facility in South 600 Areas
	2.01.01.01.21.01.01.04	Transition the Fast Flux Test Facility
RL-TP11	1.12.01	Advanced Reactors Transition
	1.12.01.01	NE Legacy Facilities
	1.12.01.01.01	Maintain Safe & Compliant NE Legacy Facilities
	1.12.01.01.02	Transition NE Legacy Facilities
	1.12.01.02	309 Facility
	1.12.01.02.01	Maintain Safe & Compliant 309 Building
	1.12.01.02.02	Transition 309 Building

A.3.0 Schedule Baseline

Schedules are provided at the PBS Level only. (See PBS Level section.)

A.4.0 Cost Baseline

A.4.1 Basis of Estimate

The Advanced Reactors Transition cost estimate has been developed using Activity Based Cost (ABC) estimating techniques. Planning rates and escalation applied to these estimates are consistent with those developed by the Fluor Daniel Hanford Company (FDH) Chief Financial Officer and approved by RL. The supporting information is maintained by the FFTF Transition Project Office in the 400 Area 4710 Building.

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¹Budgets ¹Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is NOT Included.

**SUMMARY OF BUDGET AUTHORITY (B/A) BY YEAR
BY PROJECT BASELINE SUMMARY (PBS)**

(\$000s)

MISSION WBS :		1.12			
		TARGET B/A	CARRYOVER FROM	PRESIDENT'S BUDGET	PRESIDENT'S BUDGET PLUS CARRYOVER
PBS TITLE	PBS NO	FY1998	FY1998	FY1999	FY1999
ADVANCED REACTORS TRANSITION	RL-TP11	38,380	179	1,907	2,086
	</				

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Rev. 1

FY 1999
(\$000s)

MISSION WBS :		2.0			
		TARGET B/A	CARRYOVER FROM	PRESIDENT'S BUDGET	PRESIDENT'S BUDGET PLUS CARRYOVER
PBS TITLE	PBS NO	FY1998	FY1998	FY1999	FY1999
FFTF	RL-MS01	-	-	41,200	41,200
TOTAL B/A		-	-	41,200	41,200

¹Estimated Carryover Is NOT Included In Cost Baseline; Change Request For Actual Carryover Submitted After September 30, 1998.

B.1 Advanced Reactors Transition (RL-TP11)

B.1.1.0 Advanced Reactors Transition Technical Baseline

This section describes the technical baseline for this project. It identifies the mission, the end point targets, the site major facilities, technical logic, functions, requirements, and forecasts for this project.

B.1.1.1 Advanced Reactors Transition Mission

The Advanced Reactors Transition (ART) PBS is made up of three projects: The Plutonium Recycle Test Reactor (PRTR)/309 Building, the Nuclear Energy (NE) Legacies, and prior to FY1999, the Fast Flux Test Facility (FFTF) and Fuels and Materials Examination Facility (FMEF). The purpose of the ART projects is to safely transition assigned facilities to a deactivated state. The FFTF and FMEF were placed in standby and assigned to DOE-NE (PBS RL-MS01).

The Plutonium Recycle Test Reactor (PRTR)/309 Building, originally completed in 1960, provided an operating test reactor in the Hanford Works Plutonium Fuels Utilization Program to research and develop nuclear fuel technology. In 1962, the Plutonium Recycle Critical Facility (PRCF) was added to support the PRTR operation as a location where the reactivity values of fuel assemblies could be checked. Then in 1963, the Fuel Element Rupture Test Facility (FERTF) began operation in one fringe channel of the PRTR. The FERTF was used as a pilot irradiation facility to test new fuel element designs and new operating regimes. Reactor operations ceased in 1969. Several uses of the facility continued until August of 1993, when the PRTR/309 Building facility was declared excess by DOE-NE. The transition of the building to the Environmental Restoration Contractor (ERC) will involve placing the facility in a configuration which reduces surveillance and maintenance costs to a minimum and meets acceptance criteria for turnover to the ERC.

The NE Legacies consist of non-nuclear facilities that were used in the development of the LMFBR programs and in related engineering studies. Some of the facilities contained sodium test loops that were used to study the properties of sodium heat transport systems and to investigate the behavior of mechanical components that would be operated in a sodium environment. Other facilities were used in training the FFTF operators prior to the FFTF becoming operational.

B.1.1.2 Advanced Reactors Transition End Point Targets from Hanford Strategic Plan

- Transition high cost surplus facilities to a low cost, stable, deactivated condition.
- Reuse facilities in the south 600 area for economic diversification where feasible.

B.1.1.3 Advanced Reactors Transition Major Facilities

B.1.1.3.1 309 Facility

B.1.1.3.1.1 309 Facility Description

The 309 Building is a two story, steel framed building constructed in 1960. This facility was built for use as the Plutonium Recovery Test Reactor (PRTR), but has been used by several other programs. It is currently closed.

B.1.1.3.1.2 309 Facility Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

This diagram displays the primary work activities (functions) that are performed in each life cycle phase of the facility. The diagram also reflects the technical logic (functional flow) for the facility through its remaining life cycle phases.

Project responsibility for the life cycle phases of the 309 Facility components are assigned as follows:

Table B.1-1 Responsibility Assignment Matrix for 309 Facility

Facility	Life Cycle Phase *								
	Program Planning	Pre Conceptual	Conceptual	Execute			O&M	Close Out	
				Design	Construction	Turnover		Post Ops	D&D
309 Facility	RL-TP11							RL-TP11 RL-ER05	RL-ER06

* RL PBS Identifier Index:

RL-ER05 - Surveillance and Maintenance
RL-ER06 - Decontamination & Decommissioning
RL-TP11 - Advanced Reactors Transition

Figure B.1_1 309 BUILDING

B.1.1.3.1.3 309 Facility Life Cycle Functional Descriptions and Requirements

The Life Cycle Functional Descriptions table describes the life cycle phases and the functions performed during each phase. The Life Cycle Requirements table describes the requirements that trace to the functions listed in the Life Cycle Functional Descriptions table.

Table B.1-2 309 Facility Life Cycle Functional Descriptions

hsems.4.3.4.Icam.1 309 BUILDING PROGRAM PLANNING
hsems.4.3.4.Icam.6.1 309 BUILDING POST OPERATIONS
<p>tsd.1.3.4.2.4 Maintain Safe & Compliant 309 Building S&M activities include building administration, building operations, maintenance, and safety analysis.</p> <p>Building administration consists of work management using the JCS system, lock and tag administration, property protection, emergency planning, facility access control, facility orientation and maintenance of the shutdown log.</p> <p>Building operations consists of paying utility bills, maintaining safe conduct of operations, and surveillance. Surveillance includes routine radiation protection surveys, operations checks, housekeeping and safety inspections and compliance assurance.</p> <p>Maintenance includes preventive and corrective maintenance activities to ensure the building's safety envelope is adequate during the transition activities. It also includes input into the maintenance section of the building's D&D plan.</p>
<p>tsd.2.3.4.2.4 Transition 309 Building D/C will move the facility towards turnover to the ERC for interim S&M and final D&D. Activities to be accomplished include disposition the underground emergency diesel fuel oil tank; characterize, cleanout, and stabilize the Transfer Waste Tank farm, the Rupture Loop Annex, the Fuel Storage Basin, the Fuel Examination Cell, the Fuel Transfer Basin, and the PRTR reactor cavity; replace the H&V system HEPA filters; disconnect and cap sanitary and process sewer lines; remove asbestos bearing coatings from the external surface of the dome; and upgrade the roof on other parts of the building. Completion reports will be prepared for key activities.</p> <p>The facility Safety Basis document will be formatted in the Interim Safety Basis (ISB) style but of lesser scope to be consistent with the graded approach philosophy of a radiological facility rather than a nuclear facility.</p>

Table B.1-3 309 Facility Life Cycle Requirements

Requirement	Function
The stabilizing and reconfiguring facilities for minimum S&M including deactivation of non-essential utilities, process systems, and other facility systems; modification of facility safety, ventilation, monitoring, electrical, and utility systems; removal of resources and waste; and transfer of the facility to the ERC. Remaining active systems shall be capable of operation and status from a location outside the facility so only quarterly personnel entry is required. Facility electrical systems shall be reconfigured so only minimal portions can be operated as required to support personnel entry. All facility reconfiguration shall be performed under Occupational Safety and Health Administration construction requirements.	tsd.2.3.4.2.4
Ensuring final facility configurations do not preclude D&D activities.	tsd.2.3.4.2.4
High cost surplus facilities and systems shall be transitioned to a low cost, stable, deactivated condition.	tsd.2.3.4.2.4
Facilities and systems shall be made available for other uses.	tsd.2.3.4.2.4
Facilities shall be transitioned to the surveillance and maintenance phase when no longer required to support the site mission.	tsd.2.3.4.2.4
South 600 Area gaseous effluent releases shall be monitored	tsd.1.3.4.2.4
South 600 Area facilities shall be surveilled and maintained within the approved safety envelope	tsd.1.3.4.2.4

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Table B.1-3 309 Facility Life Cycle Requirements (Continued)

Requirement	Function
The Contractor shall safely and efficiently manage the deactivation of facilities in the 300 Area whose mission was the manufacture of fuels and test assemblies for the plutonium production, space power, and advanced reactor programs. The facilities include among others, the 308, 309, 333 Buildings, and associated facilities. The program will disposition nuclear material stored in these facilities. As the material is removed, each facility will be deactivated to reduce risk and attain the lowest surveillance and maintenance cost to a condition ready for disposition.	tsd.2.3.4.2.4
The Contractor shall complete removal of the TRIGA test reactor nuclear fuel and shut down the 308 Building. The contractor shall clean-up the nuclear waste and stabilize the 309 Building and surrounding area such that the closure of the 309 Building can be accomplished.	tsd.2.3.4.2.4

B.1.1.3.1.4 309 Facility Boundary Diagram

This section identifies the other facilities (onsite and offsite) that have an interface (either input or output) with this facility.

Table B.1-4 309 Facility Boundary Diagram

Major Input Interfaces	Facility	Major Output Interfaces
External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces S600 Electrical Distribution	309 Facility	External Interfaces Hazardous Waste Disposal Contracts Offsite Landfill Hanford Site Environmental System Interfaces 300 Area Treated Effluent Disposal Facility Central Waste Complex Low-Level Waste Burial Grounds

B.1.1.3.1.5 309 Facility Interface Descriptions and Summary Level Forecasts

This section contains the material, waste, and infrastructure forecasts for this facility. It identifies the interface type, the period of time for the forecasts, the life cycle total forecast value, and the execution year forecast quantity.

OFFSITE INPUTS

Table B.1-5 Offsite Inputs for 309 Facility

Stream	Category	Period	Total	FY99	Units
X.0 Hanford Legacy					
Legacy/SS 309	(none forecasted)				

ON-SITE INPUTS

Table B.1-6 Onsite Inputs for 309 Facility

Stream	Category	Period	Total	FY99	Units
hsems.5.1.4.4 S600 Electrical Distribution					
Electricity for 309	Electricity			293.0	MW-Hr

OFFSITE OUTPUTS

Table B.1-7 Offsite Outputs for 309 Facility

Stream	Category	Period	Total	FY99	Units
X Hazardous Waste Disposal Contracts					
309 Asbestos	Asbestos	1999 - 1999	139.0	139.0	cubic meters
X Offsite Landfill					
309 Building Sanitary Solid Waste	Sanitary Solid Waste	1999 - 2003	10.0	2.0	cubic meters

ONSITE OUTPUTS

Table B.1-8 Onsite Outputs for 309 Facility

Stream	Category	Period	Total	FY99	Units
hsems.2.3.5.1 Central Waste Complex					
PRTR, CH-LLMW-I	CH LLMW I	2000 - 2003	1.28		cubic meters
PRTR, CH-TRU	(none forecasted)				
hsems.2.4.1.1 Low-Level Waste Burial Grounds					
PRTR, CH-LLW-I	CH LLW I	1999 - 2003	19.7	0.0	cubic meters
PRTR, CH-LLW-II	(none forecasted)				
hsems.A.2.1.1 300 Area Treated Effluent Disposal Facility					
309 Building Industrial Waste Water Transfer	(none forecasted)				

B.1.1.3.2 NE Legacy Facilities

B.1.1.3.2.1 NE Legacy Facilities Description

The activities associated with the sodium legacy facilities were originally performed to support the Liquid Metal Fast Breeder Reactor (LMFBR) Program for eventual commercial use. Service and auxiliary buildings, and facilities are provided as required for operational and administrative control of each facility.

B.1.1.3.2.2 NE Legacy Facilities Facility Technical Logic:

This diagram displays the primary work activities (functions) that are performed in each life cycle phase of the facility. The diagram also reflects the technical logic (functional flow) for the facility through its remaining life cycle phases.

Project responsibility for the life cycle phases of the NE Legacy Facilities components are assigned as follows:

Table B.1-9 Responsibility Assignment Matrix for NE Legacy Facilities

Facility	Life Cycle Phase *							
	Program Planning	Pre Conceptual	Conceptual	Execute			Close Out	
				Design	Construction	Turnover	O&M	Post Ops
NE Legacy Facilities	RL-TP11							RL-TP11 RL-ER05

* RL PBS Identifier Index:

RL-ER05 - Surveillance and Maintenance
RL-TP11 - Advanced Reactors Transition

Figure B.1_2 NE Legacy Facilities

B.1.1.3.2.3 NE Legacy Facilities Life Cycle Functional Descriptions and Requirements

The Life Cycle Functional Descriptions table describes the life cycle phases and the functions performed during each phase. The Life Cycle Requirements table describes the requirements that trace to the functions listed in the Life Cycle Functional Descriptions table.

Table B.1-10 NE Legacy Facilities Life Cycle Functional Descriptions

hsems.4.3.5.lcam.1 NE Legacy Facilities Program Planning
hsems.4.3.5.lcam.6.1 NE Legacy Facilities POST OPERATIONS
<p>tsd.1.3.4.7 Maintain Safe & Compliant NE Legacy Facilities Provide Landlord services for the Building 337 High Bay and buildings 335 and 3718M.</p> <p>Provide building management and operation for the 335, 337 High Bay, and 3718-M buildings and the sodium systems located in Building 337 High Bay basement and Building 3718M. Provide electrical power and electrical maintenance for buildings 335, 3718M, and 337 High Bay. Provide steam for the 337 High Bay through RL holdback if funds for "energy savings performance contract." Provide inert gas for sodium system protection. Provide building emergency organization support for buildings containing sodium.</p>
<p>tsd.2.3.4.2.5 Transition NE Legacy Facilities Provide management, technical lead and coordination for the disposition of the non-reactor NE facilities.</p> <p>The scope of this effort includes: development and implementation of the plans to eliminate NE programs legacies; implementation of the Sodium Management Plan reflecting coordination with DOE and WA-Ecology and addressing potential RCRA issues and applicability; disposition of excess material associated with these facilities, as funds permit. This includes disposition of sodium test loops in accordance with the established Cooperative Research And Development Agreement (CRADA).</p>

Table B.1-11 NE Legacy Facilities Life Cycle Requirements

Requirement	Function
Disposal of Alkali Metal Test Loops will comply with DOE/EA-0987	tsd.1.3.4.7
The stabilizing and reconfiguring facilities for minimum S&M including deactivation of non-essential utilities, process systems, and other facility systems; modification of facility safety, ventilation, monitoring, electrical, and utility systems; removal of resources and waste; and transfer of the facility to the ERC. Remaining active systems shall be capable of operation and status from a location outside the facility so only quarterly personnel entry is required. Facility electrical systems shall be reconfigured so only minimal portions can be operated as required to support personnel entry. All facility reconfiguration shall be performed under Occupational Safety and Health Administration construction requirements.	tsd.2.3.4.2.5
Ensuring final facility configurations do not preclude D&D activities.	tsd.2.3.4.2.5
High cost surplus facilities and systems shall be transitioned to a low cost, stable, deactivated condition.	tsd.2.3.4.2.5
Facilities and systems shall be made available for other uses.	tsd.2.3.4.2.5
South 600 Area facilities shall be surveilled and maintained within the approved safety envelope	tsd.1.3.4.7

B.1.1.3.2.4 NE Legacy Facilities Boundary Diagram

This section identifies the other facilities (onsite and offsite) that have an interface (either input or output) with this facility.

Table B.1-12 NE Legacy Facilities' Boundary Diagram

Major Input Interfaces	Facility	Major Output Interfaces
External Interfaces -None- Hanford Site Environmental System Interfaces Electrical Distribution System General Purpose Shops Telecommunications System	NE Legacy Facilities	External Interfaces -None- Hanford Site Environmental System Interfaces Sanitary Landfill

B.1.1.3.2.5 NE Legacy Facilities Interface Descriptions and Summary Level Forecasts

This section contains the material, waste, and infrastructure forecasts for this facility. It identifies the interface type, the period of time for the forecasts, the life cycle total forecast value, and the execution year forecast quantity.

OFFSITE INPUTS

-None-

ONSITE INPUTS**Table B.1-13 Onsite Inputs for NE Legacy Facilities**

Stream	Category	Period	Total	FY99	Units
hsems.5.1.4 Electrical Distribution System					
Electricity for NE Legacy Facilities	Electricity			1320.0	MW-Hr
hsems.5.1.5 Telecommunications System					
Telecommunications for NESF	Voice Communications Service			5.0	ea
hsems.5.2.3 General Purpose Shops					
Shops for NESF	(none forecasted)				

OFFSITE OUTPUTS

-None-

ONSITE OUTPUTS**Table B.1-14 Onsite Outputs for NE Legacy Facilities**

Stream	Category	Period	Total	FY99	Units
hsems.5.1.6 Sanitary Landfill					
Landfill for NE Legacy Facilities	Sanitary Solid Waste	1999 - 2004	42.0	7.0	cubic meters

B.1.1.4 Drivers for Advanced Reactors Transition**Table B.1-15 Source Documents for Advanced Reactors Transition**

Name	Title
DE-AC06-96RL13200	Project Hanford Management Contract, Fluor Daniel Hanford, Inc.
DOE/EA-0987	Disposition of Alkali Metal Test Loops, Hanford Site, Richland, Washington
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/RL-96-92	Hanford Strategic Plan

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Table B.1-15 Source Documents for Advanced Reactors Transition (Continued)

Name

DOE/RL-97-55

Title

Hanford Site Environmental Management Specification

B.1.2.0 Advanced Reactors Transition Work Breakdown Structure (WBS)

B.1.2.1 Advanced Reactors Transition WBS Hierarchy

RL PBS	RL WBS	Title
RL-TP11	1.12.01	Advanced Reactors Transition
	1.12.01.01	NE Legacy Facilities
	1.12.01.01.01	Maintain Safe & Compliant NE Legacy Facilities
	1.12.01.01.02	Transition NE Legacy Facilities
	1.12.01.02	309 Facility
	1.12.01.02.01	Maintain Safe & Compliant 309 Building
	1.12.01.02.02	Transition 309 Building

B.1.2.2 Advanced Reactors Transition WBS Dictionary

The following pages contain the WBS dictionary for RL-TP11

9 September 1998

1. Dictionary Title Maintain Safe & Compliant NE Legacy Facilities		2. Date 14 August 1998	3. PBS Number RL-TP11	4. Dict Rev
5. WBS No. 1.12.01.01.01	6. B & R No. EX04J102		7. Baseline CR No.	
8. Organization Name Advanced Reactors Transition				
9. Scope of Work Provide Landlord services for the Building 337 High Bay and buildings 335 and 3718M. Provide building management and operation for the 335, 337 High Bay, and 3718-M buildings and the sodium systems located in Building 337 High Bay basement and Building 3718M. Provide electrical power and electrical maintenance for buildings 335, 3718M, and 337 High Bay. Provide steam for the 337 High Bay through RL holdback if funds for "energy savings performance contract." Provide inert gas for sodium system protection. Provide building emergency organization support for buildings containing sodium. This WBS covers work necessary to support satisfying the following technical baseline requirements for the Hanford clean up mission: <ul style="list-style-type: none">- Disposal of Alkali Metal Test Loops will comply with DOE/EA-0987- South 600 Area facilities shall be surveilled and maintained within the approved safety envelope				

9 September 1998

1. Dictionary Title Transition NE Legacy Facilities		2. Date 14 August 1998	3. PBS Number RL-TP11	4. Dict Rev
5. WBS No. 1.12.01.01.02	6. B & R No. EX04J102		7. Baseline CR No.	
8. Organization Name Advanced Reactors Transition				
9. Scope of Work				
<p>Provide management, technical lead and coordination for the disposition of the non-reactor NE facilities.</p> <p>The scope of this effort includes: development and implementation of the plans to eliminate NE programs legacies; implementation of the Sodium Management Plan reflecting coordination with DOE and WA-Ecology and addressing potential RCRA issues and applicability; disposition of excess material associated with these facilities, as funds permit. This includes disposition of sodium test loops in accordance with the established Cooperative Research And Development Agreement (CRADA).</p> <p>This WBS covers work necessary to support satisfying the following technical baseline requirements for the Hanford clean up mission:</p> <ul style="list-style-type: none"> - The stabilizing and reconfiguring facilities for minimum S&M including deactivation of non-essential utilities, process systems, and other facility systems; modification of facility safety, ventilation, monitoring, electrical, and utility systems; removal of resources and waste; and transfer of the facility to the ERC. Remaining active systems shall be capable of operation and status from a location outside the facility so only quarterly personnel entry is required. Facility electrical systems shall be reconfigured so only minimal portions can be operated as required to support personnel entry. All facility reconfiguration shall be performed under Occupational Safety and Health Administration construction requirements. - Ensuring final facility configurations do not preclude D&D activities. - High cost surplus facilities and systems shall be transitioned to a low cost, stable, deactivated condition. - Facilities and systems shall be made available for other uses. 				

9 September 1998

1. Dictionary Title Maintain Safe & Compliant 309 Building		2. Date 13 August 1998	3. PBS Number RL-TP11	4. Dict Rev
5. WBS No. 1.12.01.02.01	6. B & R No. EX04J102		7. Baseline CR No.	
8. Organization Name Advanced Reactors Transition				
9. Scope of Work				
<p>S&M activities include building administration, building operations, maintenance, and safety analysis.</p> <p>Building administration consists of work management using the JCS system, lock and tag administration, property protection, emergency planning, facility access control, facility orientation and maintenance of the shutdown log.</p> <p>Building operations consists of paying utility bills, maintaining safe conduct of operations, and surveillance. Surveillance includes routine radiation protection surveys, operations checks, housekeeping and safety inspections and compliance assurance.</p> <p>Maintenance includes preventive and corrective maintenance activities to ensure the building's safety envelope is adequate during the transition activities. It also includes input into the maintenance section of the building's D&D plan.</p> <p>This WBS covers work necessary to support satisfying the following technical baseline requirements for the Hanford clean up mission:</p> <ul style="list-style-type: none">- South 600 Area gaseous effluent releases shall be monitored- South 600 Area facilities shall be surveilled and maintained within the approved safety envelope				

9 September 1998

1. Dictionary Title Transition 309 Building		2. Date 9 September 1998	3. PBS Number RL-TP11	4. Dict Rev
5. WBS No. 1.12.01.02.02	6. B & R No. EX04J102	7. Baseline CR No.		
8. Organization Name Advanced Reactors Transition				
9. Scope of Work				
<p>D/C will move the facility towards turnover to the ERC for interim S&M and final D&D. Activities to be accomplished include disposition the underground emergency diesel fuel oil tank; characterize, cleanout, and stabilize the Transfer Waste Tank farm, the Rupture Loop Annex, the Fuel Storage Basin, the Fuel Examination Cell, the Fuel Transfer Basin, and the PRTR reactor cavity; replace the H&V system HEPA filters; disconnect and cap sanitary and process sewer lines; remove asbestos bearing coatings from the external surface of the dome; and upgrade the roof on other parts of the building. Completion reports will be prepared for key activities.</p> <p>The facility Safety Basis document will be formatted in the Interim Safety Basis (ISB) style but of lesser scope to be consistent with the graded approach philosophy of a radiological facility rather than a nuclear facility.</p> <p>This WBS covers work necessary to support satisfying the following technical baseline requirements for the Hanford clean up mission:</p> <ul style="list-style-type: none"> - The stabilizing and reconfiguring facilities for minimum S&M including deactivation of non-essential utilities, process systems, and other facility systems; modification of facility safety, ventilation, monitoring, electrical, and utility systems; removal of resources and waste; and transfer of the facility to the ERC. Remaining active systems shall be capable of operation and status from a location outside the facility so only quarterly personnel entry is required. Facility electrical systems shall be reconfigured so only minimal portions can be operated as required to support personnel entry. All facility reconfiguration shall be performed under Occupational Safety and Health Administration construction requirements. - Ensuring final facility configurations do not preclude D&D activities. - High cost surplus facilities and systems shall be transitioned to a low cost, stable, deactivated condition. - Facilities and systems shall be made available for other uses. - Facilities shall be transitioned to the surveillance and maintenance phase when no longer required to support the site mission. - The Contractor shall safely and efficiently manage the deactivation of facilities in the 300 Area whose mission was the manufacture of fuels and test assemblies for the plutonium production, space power, and advanced reactor programs. The facilities include among others, the 308, 309, 333 Buildings, and associated facilities. The program will disposition nuclear material stored in these facilities. As the material is removed, each facility will be deactivated to reduce risk and attain the lowest surveillance and maintenance cost to a condition ready for disposition. - The Contractor shall complete removal of the TRIGA test reactor nuclear fuel and shut down the 308 Building. The contractor shall clean-up the nuclear waste and stabilize the 309 Building and surrounding area such that the closure of the 309 Building can be accomplished. 				

B.1.2.3 Advanced Reactors Transition Responsibility Assignment Matrix

WBS Number	Title	Responsible Manager
1.12.01	Advanced Reactors Transition	D. B. Klos, FDH E. F. Loika, BWHC
1.12.01.01	NE Legacy Facilities	W. F. Brehm
1.12.01.01.01	Maintain Safe & Compliant NE Legacy Facilities	W. F. Brehm
1.12.01.01.02	Transition NE Legacy Facilities	W. F. Brehm
1.12.01.02	309 Facility	I. L. Metcalf
1.12.01.02.01	Maintain Safe & Compliant 309 Building	I. L. Metcalf
1.12.01.02.02	Transition 309 Building	I. L. Metcalf

Activity ID	Activity Description	WBS	Orig Dur	Early Start	Early Finish	1999	2000	2001	2002	2003	2004
SITE ENVIRONMENTAL MANAGEMENT											
ADVANCED REACTORS TRANSITION											
ADVANCED REACTORS TRANSITION PBS (RL-TP-11)											
NUCLEAR ENERGY LEGACY FACILITIES											
ARA84	M-92-09, Compl facility acquisition/mod for sodi	1.12.01.01	0		30SEP04*						B19-99-402FGX
MAINTAIN SAFE COMPLIANT 300 AREA NES											
NE LEGACIES OCCUPANCY											
AR1B1C11	NE LEGACIES OCCUPANCY SUPPORT	1.12.01.01.01.01	1,505	01OCT98*	29SEP04						
TRANSITION NES											
REMOVE & SHIP 337 CONTROLS & PIPING											
AR1B1C21	NE LEGACIES REMOVE & SHIP 337 CONTROLS &	1.12.01.01.02.01	627	02OCT00*	02APR03						
CLEAN 221-T TANKS											
AR1B1C22	NE LEGACIES CLEAN 221-T TANKS	1.12.01.01.02.02	251	02OCT00*	28SEP01						
COMPLETE OPTIONS FOR NON RAD SODIUM											
AR1B1C23	NE LEGACIES COMPLETE OPTIONS FOR NON RAD	1.12.01.01.02.03	378	01APR02*	30SEP03						
ARLE0105	MX-92-11-T01 COMPL DISP OPTIONS FOR NR SODIUM	1.12.01.01.02.03	0		31MAR02*						FOX B69-02-301
CLEAN 3718-M STORAGE TANK											
AR1B1C24	NE LEGACIES CLEAN 3718-M STORAGE TANK	1.12.01.01.02.04	440	03APR02*	05JAN04						
NE LEGACY SUPPORT											
AR1B1C25	NE LEGACY SUPPORT	1.12.01.01.02.05	1,003	02OCT00*	29SEP04						
ARLE0310	M-92-10 SUBMIT HANFORD SITE Na PROJ MGT PLAN	1.12.01.01.02.05	0		31OCT98*						B69-99-302FOX

Activity ID	Activity Description	WBS	Orig Dur	Early Start	Early Finish	1999	2000	2001	2002	2003	2004
309 BUILDING FACILITY											
MAINTAIN SAFE & COMPLIANT 309 BUILDING											
309 BUILDING SURVEILLANCE AND MAINTENANCE											
AR1B1D01	309 BUILDING S & M SUPPORT	1.12.01.02.01.01	1,254	01OCT98*	30SEP03						
TRANSITION 309 BUILDING											
TW TANK FARM											
AR1B1D0A	309 BUILDING TW TANK SUPPORT	1.12.01.02.02.01	182	01OCT02*	20JUN03						
ARPP0065	STABILIZE PRTR TRANSFER WASTE HOLD B79-97-902	1.12.01.02.02.01	0		16JUN03*						
STABILIZE PRTR FUEL STORAGE BASIN											
AR1B1D0B	309 BUILDING FUEL STORAGE BASIN SUPPORT	1.12.01.02.02.02	155	15JAN01*	22AUG01						
ARPP0105	STABILIZE PRTR FUEL STORAGE BASIN B79-98-905	1.12.01.02.02.02	0		22AUG01						
STABILIZE PRTR REACTOR CAVITY											
AR1B1D0C	309 BUILDING PRTR REACTOR SUPPORT	1.12.01.02.02.03	144	02OCT00*	27APR01						
FUEL EXAM CELL											
AR1B1D0D	309 BUILDING FUEL EXAM CELL SUPPORT	1.12.01.02.02.04	90	01OCT98*	10FEB99						
STABILIZE PRTR FUEL TRANSFER PIT											
AR1B1D0E	309 BUILDING FUEL TRANSFER PIT SUPPORT	1.12.01.02.02.05	109	01DEC00*	08MAY01						
ARPP0185	STABILIZE PRTR FUEL TRANSFER PIT B79-99-900	1.12.01.02.02.05	0		08MAY01						
CLEAN OUT BALANCE PRTR CONTAINMENT											
AR1B1D0F	309 BUILDING BALANCE OF CONTAINMENT SUPPORT	1.12.01.02.02.06	190	02JAN01*	28SEP01						
ARPP0225	CLEAN OUT BALANCE PRTR CONTAINMENT B79-99-901	1.12.01.02.02.06	0		28SEP01						
STABILIZE 309 BLDG STACKS AND PITS											
AR1B1D0G	309 BUILDING HVAC STACKS SUPPORT	1.12.01.02.02.07	304	16JUL01*	30SEP02						

Activity ID		Activity Description	WBS	Orig Dur	Early Start	Early Finish	1999	2000	2001	2002	2003	2004
ARPP0275	STABILIZE 309 BLDG STACKS AND PITS	1.12.01.02.02.07	0		30SEP02	ROX ♦ B79-99-902						
FACILITY DOCUMENT UPDATES												
AR1B1DOH	309 BUILDING FACILITY DRAWING UPDATES	1.12.01.02.02.08	752	02OCT00*	30SEP03							
TRANSITION BLDG 309 TO SHUTDOWN												
AR1B1DOJ	309 BUILDING TRANSITION TO SHUTDOWN	1.12.01.02.02.09	1,109	01FEB99*	30JUN03	B79-01-901 FOX ♦						
ARPP0501	DOMED ROOF REPAIR	1.12.01.02.02.09	125	01FEB99	29JUL99	ROX ♦ B79-99-903						
ARPP0503	309 CONTAINMENT DOME REPAIR	1.12.01.02.02.09	0		29JUL99							
ARPP0510	TRANSITION BUILDING 309 TO SHUTDOWN B79-01-901	1.12.01.02.02.09	0		30JUN03*							

Activity ID	Activity Description	WBS	Orig Dur	Early Start	Early Finish
SITE ENVIRONMENTAL MANAGEMENT					
ADVANCED REACTORS TRANSITION					
ADVANCED REACTORS TRANSITION PES (RL-TP-1)					
NUCLEAR ENERGY LEGACY FACILITIES					
MAINTAIN SAFE & COMPLIANT 300 AREANES					
NE LEGACIES OCCUPANCY					
AR1B1C11	NE LEGACIES OCCUPANCY SUPPORT	1.12.01.01.01.01	1,505	01OCT98*	29SEP04
309 BUILDING FACILITY					
MAINTAIN SAFE & COMPLIANT 309 BUILDING					
309 BUILDING SURVEILLANCE AND MAINTENANCE					
AR1B1D01	309 BUILDING S & M SUPPORT	1.12.01.02.01.01	1,254	01OCT98*	30SEP03
TRANSITION 309 BUILDING					
FUEL EXAM CELL					
AR1B1D0D	309 BUILDING FUEL EXAM CELL SUPPORT	1.12.01.02.02.04	90	01OCT98*	10FEB99
TRANSITION BLDG 309 TO SHUTDOWN					
AR1B1D0J	309 BUILDING TRANSITION TO SHUTDOWN	1.12.01.02.02.09	1,109	01FEB99*	30JUN03
ARPP0501	DOME ROOF REPAIR	1.12.01.02.02.09	125	01FEB99	29JUL99
ARPP0503	309 CONTAINMENT DOME REPAIR	1.12.01.02.02.09	0		29JUL99

1998 1999

O N D J F M A M J J A S

B79-99-903ROX

Project Start: 01OCT98
Project Finish: 30SEP04
Date: 01OCT98
Run Date: 08SEP98

Early Bar
Progress Bar
Critical Activity

PH00

Sheet 1 of 1

B & W HANFORD CO.
ADVANCED REACTORS TRANSITION
EXECUTION YEAR PMBS

LOW M
B&W HANFORD COMPANY
A BETHLEHEM COMPANY

MYWP/SSPP PLANNING MILESTONE LIST
REPORTING PERIOD 10/01/97 TO 12/31/2049

MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	-----DATES-----					
					TYPE	PLANNED BASELINE	TPA/DNFSB COMMIT	DNFSB	TIP	PBS #
B69-99-302	M-92-10	I	FO	SUBMIT HANFORD SITE SODIUM MANAGEMENT PLAN TO ECOLOGY	EA	10/31/98	10/31/98	N	N	RL-TP11
B19-99-402	M-92-09	I	FO	COMPLETE ACQUISITION FACILITIES DISPOSAL OF HANFORD SITE SODIUM	EA	12/31/49	12/31/49	N	N	RL-TP11
B69-02-301	M-92-11-T01	T	FO	COMPLETE DISPOSITION OPTIONS FOR HANFORD SITE NONRADIOACTIVE NA	OTH	3/31/02		N	N	RL-TP11
B79-01-901			FO	TRANSITION BLDG 309 TO SHUTDOWN STATUS	OTH	6/30/03		N	N	RL-TP11
B79-98-905			RL	STABILIZE THE PRTR FUEL STORAGE BASIN	OTH	8/22/01		N	N	RL-TP11
B79-99-900			RL	STABILIZE THE PRTR FUEL TRANSFER PIT	OTH	5/08/01		N	N	RL-TP11
B79-99-901			RL	CLEAN OUT THE BALANCE OF THE PRTR CONTAINMENT	OTH	9/28/01		N	N	RL-TP11
B79-99-902			RL	STABILIZE THE 309 BUILDING STACK AND PITS	OTH	9/30/02		N	N	RL-TP11
B79-97-902			RL	STABILIZE THE PRTR TRANSFER WASTE HOLDING TANKS	OTH	6/16/03		N	N	RL-TP11
B79-99-903			RL	309 CONTAINMENT DOME REPAIR	OTH	7/29/99		N	N	RL-TP11

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD SITE SODIUM MANAGEMENT PLAN TO ECOLOGY			Date: 9/15/97	
Assigned To: D. A. Gantt			CIN:	
Program WBS Designator: 1.12.1.1			Due Date: 10/31/98	
PBS No: RL-TP11				
MC #: B69-99-302		TPA No: M-92-10		Rev: 0
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: X EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: X Report Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)
<p>Milestone Description: Submit Hanford Site Sodium Project Management Plan (PMP) to Ecology pursuant to Agreement Action Plan section 11.5. The Hanford Site Sodium PMP will include all plan elements required by Agreement Action Plan section 11.5. Should DOE determine (pursuant to the Hanford Site PMP and Agreement interim milestone M-50-03) that TWRS use of Hanford Site radioactive sodium (FFTF, Hallam & Sodium Reaction Experiment) is warranted, it shall specify in its TWRS, High Level Waste Vittrification Plant Request For Proposal (s) that use of Hanford site radioactive sodium is a requirement. Should the Hanford Site PMP and findings pursuant to Agreement interim milestone M-50-03 determine that TWRS use of Hanford site radioactive</p>				
<p>Description of what constitutes completion of this milestone: Delivery of the Hanford Site Sodium Project Management Plan to DOE-RL.</p>				

PHMC

MILESTONE DESCRIPTION SHEET

Continuation Page

Program WBS Designator: 1.12.1.1

MC #: B69-99-302

Milestone description: (con't)

sodium is not warranted DOE shall issue accompanying proposed Agreement change requests for alternate Hanford Site radioactive sodium disposition (e.g., necessary milestones and target dates associated with the construction of the sodium reaction facility). See also Agreement target date M-81-02-T01.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE ACQUISITION FACILITIES DISPOSAL OF HANFORD SITE SODIUM				Date: 9/15/97	
Assigned To: D. A. Gantt				CIN:	
Program WBS Designator: 1.12.1.1				Due Date: 12/31/99	
PBS No: RL-TP11					
MC #: B19-99-402			TPA No: M-92-09		Rev: 0
MILESTONE LEVEL: DOE-HQ DOE-RL ☒ DOE-FO CONTRACTOR	MILESTONE TYPE: ☒ EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: ☒ Report Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ ☒ DOE-RL Other (Specify)	
Milestone Description: Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal of Hanford site sodium.					
Description of what constitutes completion of this milestone: Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal of Hanford site sodium.					

PHMC
MILESTONE DESCRIPTION SHEET

Title: 309 CONTAINMENT DOME REPAIR			Date: 8/17/98	
Assigned To: IL Metcalf			CIN:	
Program WBS Designator: 1.12.1.2.2			Due Date: 7/29/99	
PBS No: RL-TP11				
MC #: B79-99-903		TPA No:		Rev:
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG X OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)
Milestone Description: Containment dome weather coating repairs required for the transition of the 309 to the ERC are completed. Damaged portions of the containment dome exterior weather covering and insulating materials have been removed. Removal is to the base emulsion layer covering the vessel steel above grade. The containment dome will be covered with a material which locks down the asbestos fibers in the emulsion layer and provides weather protection for the vessel steel. Gaps between the containment dome and the balance of the facility, resulting from the removal of the 7 cm insulating layer, will be repaired. The potential asbestos containing waste will be packaged and shipped to a compliant disposal site.				
Description of what constitutes completion of this milestone: FDH will submit a letter to RL-SPO documenting containment dome task completion and summarizing activity results.				

**ADVANCED REACTORS TRANSITION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)**

FY 1999

(\$000s)

PROJECT WBS:		1.12.1		(\$000s)							
PBS NO:		RL-TP11									
PBS TITLE:				ADVANCED REACTORS TRANSITION							SUBTOT
FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY1997- FY2006
OPERATING EXPENSE	14,400	43,651	1,809	1,293	3,673	3,738	2,759	540	-	-	71,863
CENRTC	-	-	-	-	-	-	-	-	-	-	-
GENERAL PLANT PROJECT	-	-	-	-	-	-	-	-	-	-	-
LINE ITEM (List Each One)											
0	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-
Escalation	-	-	-	25	149	232	232	50	-	-	688
TOTAL BCWS/PMB	14,400	43,651	1,809	1,318	3,822	3,970	2,991	590	-	-	73,551
MGMT RESERVE ²	-	-	-	-	-	-	-	-	-	-	-
LINE ITEM CONTINGENCY ²	-	-	-	-	-	-	-	-	-	-	-
TRANSFERS ³	-	-	98	98	98	98	98	98	-	-	588
Subtotal	-	-	98	98	98	98	98	98	-	-	588
Escalation	-	-	-	2	4	7	9	11	-	-	33
TOTAL	14,400	43,651	1,907	1,418	3,924	4,075	3,098	699	-	-	73,172

¹Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover is Not Included²Management Reserve and Line Item Contingency Held by RL³Funds/Workscope Transferred to Other Sites, Transferred to Hanford from Other Sites, and/or Funds/Workscope Controlled by RL.

HNF-SP-1240
Rev. 1

B14-1

**ADVANCED REACTORS TRANSITION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)**

FY 1999
(\$000s)

PROJECT WBS:		1.12.1											
PBS NO:		RL-TP11											
PBS TITLE:		ADVANCED REACTORS TRANSITION											
FUND TYPE	FY2007	FY2008	FY2009	FY2010	FY2011- FY2015	FY2016- FY2020	FY2021- FY2025	FY2026- FY2030	FY2031- FY2035	FY2036- FY2040	FY2041- FY2045	FY2046- FY2050	TOTAL FY1997- FY2050
OPERATING EXPENSE	-	-	-	-	-	-	-	-	-	-	-	-	71,863
CENRTC	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL PLANT PROJECT	-	-	-	-	-	-	-	-	-	-	-	-	-
LINE ITEM (List Each One)													
0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-	-	-
Escalation	-	-	-	-	-	-	-	-	-	-	-	-	688
TOTAL BCWS/PMB	-	-	-	-	-	-	-	-	-	-	-	-	72,551
MGMT RESERVE ²	-	-	-	-	-	-	-	-	-	-	-	-	-
LINE ITEM CONTINGENCY ³	-	-	-	-	-	-	-	-	-	-	-	-	-
TRANSFERS ³	-	-	-	-	-	-	-	-	-	-	-	-	588
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	588
Escalation	-	-	-	-	-	-	-	-	-	-	-	-	33
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	73,172

¹Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover is Not Included

²Management Reserve and Line Item Contingency Held by RL

³Funds/Workscope Transferred to Other Sites, Transferred to Hanford from Other Sites, and/or Funds/Workscope Controlled by RL

ADVANCED REACTORS TRANSITION
BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1999
(\$000s)

PROJECT WBS:	1.12.1	
PBS NO:	RL-TP11	
PBS TITLE:	ORS TRANSITION	
	TARGET B/A	PRESIDENTS BUDGET PLUS CARRYOVER FY1999
FUND TYPE	FY1998	
OPERATING EXPENSE	38,380	1,907
CENRTC	-	
GENERAL PLANT PROJECT	-	
LINE ITEM <i>(List Each One)</i>		
0	-	
0	-	
0	-	
0	-	
0	-	
0	-	
Subtotal Line Items	-	
TOTAL NEW B/A	38,380	1,907
ESTIMATED FY 1998 CARRYOVER		179
TOTAL NEW B/A+CARRYOVER	38,380	2,086

*Estimated Carryover is NOT Included In Cost Baseline; Change Request For Actual Carryover
Submitted After September 30, 1998.

HNF-SP-1240
Rev. 1

9 September 1998

B.2 FFTF Project (RL-MS01)

B.2.1.0 FFTF Project Technical Baseline

This section describes the technical baseline for this project. It identifies the mission, the end point targets, the site major facilities, technical logic, functions, requirements, and forecasts for this project.

B.2.1.1 FFTF Project Mission

The FFTF and affiliated 400 Area buildings are to be maintained in a safe and compliant standby condition. The condition of the plant hardware, software and personnel is to be preserved in a manner not to preclude a plant restart.

The Fast Flux Test Facility (FFTF) is the largest, most modern, liquid metal-cooled test reactor in the world. Originally constructed in the late 1970s, it's purpose was to support the U.S. Liquid Metal Fast Breeder Reactor (LMFBR) Program. The FFTF began power operation in 1982 and demonstrated its ability to perform fuel and materials tests in support of both national and international fast breeder reactor programs, produce medical and industrial isotopes, perform materials tests for the fusion and space programs, perform passive safety tests, and provide customized neutron environments to meet customer needs. Detailed studies were also done to show the feasibility of producing significant quantities of Plutonium-238, as well as approximately 100 megawatts of electrical power with the addition of a steam powered turbine generator.

In January 1990, after a U. S. Department of Energy (DOE) evaluation of potential long term missions for the FFTF, DOE concluded that justification to support the expense of continued operation did not exist. This led to a series of new studies and marketing efforts by the Governor of the State of Washington, in cooperation with the Congressional Delegation of the State. Eventually the Secretary of Energy informed the Washington State Congressional Delegation that DOE planned to commence a phased shutdown process on December 15, 1993, to place the FFTF in a radiologically and industrially safe shutdown condition. Accordingly, removal of the fuel from the reactor vessel began in March 1994 and was completed in April 1995. Following this major accomplishment, the washing of sodium wetted, fueled components was successfully demonstrated.

In order to remove the spent nuclear fuel from storage in the FFTF, procurement contracts were placed for the fabrication of Interim Storage Casks (ISC) and Core Component Containers (CCC) that will be used for the dry storage of washed, FFTF nuclear fueled components. The CCC, when filled with up to seven clean FFTF fueled components, is placed inside of an ISC and transported to the 400 Area Interim Storage Area (ISA), located in the northeast corner of the FFTF complex. The 400 Area ISA is large enough to also store spent nuclear fuel from other facilities in the Hanford 300 Area.

After preparations were made to support the early draining of the secondary loop sodium to in-plant storage tanks in November 1995, DOE ordered all drain activities delayed while an expedited review was conducted on the possible benefits of continued reactor operation for tritium production. Eventually, DOE suspended actions to drain the secondary loop sodium until further notice and deferred all activities that would affect the potential to restart the reactor. Then in January 1997, the Secretary of Energy, by Memorandum of Decision (MOD), directed the FFTF be maintained in a standby condition while studies are conducted to determine if the FFTF can perform a role in augmenting the current, dual-track tritium production options. By December 1998 the DOE is to determine the primary, long-term source of tritium and any potential augmentation role for the FFTF. The MOD identifies two options for producing tritium - building an accelerator or converting a commercial reactor - with the FFTF considered as either a backup or a stopgap measure. Despite these delays to the shutdown plan, significant progress has been

made in several key areas which include: packaging and storing highly-radioactive, spent, fueled components in ISCs; procedure preparation for draining plant sodium; completing the reactor vessel plenum drill development project; and completing the construction of the Sodium Storage Facility (SSF). The new SSF is located adjacent to the FFTF and is capable of storing 292,000 gallons of radioactive sodium, which will accommodate all drainable sodium from the FFTF.

The FMEF was built during the late 1970s and early 1980s as a major addition to the breeder reactor technology development program. Its design was initiated in 1978 and underwent several major changes in scope as a result of changes in the direction of the DOE's breeder reactor development programs. The initial design concept was to provide a facility with capability to destructively and nondestructively inspect irradiated fuel materials from the DOE Research and Development Breeder Reactor projects being developed at that time (the FFTF and the Clinch River Breeder Reactor Plant [CRBRP]). The first facility scope revision occurred in April 1979, when a second breeder reactor development facility was incorporated within the FMEF design. This facility, the High Performance Fuels Laboratory (HPFL), was to produce breeder reactor fuel assemblies for the FFTF and the CRBRP. It included fabrication of high-exposure and spiked fuels for proliferation resistance. During 1979, the U.S. Government's proliferation policy was changed and the need for a HPFL type of fuel fabrication was eliminated. As a result, the HPFL process was replaced by the Secure Automated Fabrication (SAF) Line in October 1980. Further changes in the DOE Breeder Reactor Program direction resulted in a facility scope reduction in October 1983, removing the irradiated fuel examination functions. During 1983, modifications to the shops and storage portion of the Entry Wing were incorporated for FFTF fuel assembly fabrication (pins to assemblies). The Fuel Assembly Area (FAA) was then established and configured to support fuel pin inspection, assembly, and storage. Low-exposure, SAF-fabricated driver fuel pins would be transferred to the FAA for final processing. With the demise of the DOE Breeder Reactor Program, the SAF Project was canceled. Several other projects have altered the original design of the facility, but none have ever come to fruition. The facility will be closed, in standby, except for limited use of shop and storage space for activities in support of the Spent Nuclear Fuels Project and the Tank Waste Remediation Project.

B.2.1.2 FFTF Project End Point Targets from Hanford Strategic Plan

- Spent fuels (TRIGA and light water reactor) and applicable FFTF fuels removed from 400 Area interim storage area to 200 Area.
- Transition high cost surplus facilities to a low cost, stable, deactivated condition.
- Transition the FFTF to low cost, stable, deactivated condition.
- Reuse facilities in the south 600 area for economic diversification where feasible.

B.2.1.3 FFTF Project Major Facilities

B.2.1.3.1 FFTF Facility

B.2.1.3.1.1 FFTF Facility Description

FFTF consists of a fast flux test reactor and numerous support facilities. The reactor uses plutonium-uranium oxide fuel and sodium coolant. It has a power rating of 400 MWt. Service and auxiliary buildings and facilities are provided for control of the plant, receiving and shipping of fuel and equipment, storage of irradiated fuel, secondary coolant system equipment, service systems, equipment decontamination and repair, and other operating and administrative services.

B.2.1.3.1.2 FFTF Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

This diagram displays the primary work activities (functions) that are performed in each life cycle phase of the facility. The diagram also reflects the technical logic (functional flow) for the facility through its remaining life cycle phases.

Project responsibility for the life cycle phases of the FFTF components are assigned as follows:

Table B.2-1 Responsibility Assignment Matrix for FFTF

Facility	Life Cycle Phase *								
	Program Planning	Pre Conceptual	Conceptual	Execute			O&M	Close Out	
				Design	Construction	Turnover		Post Ops	D&D
FFTF	RL-MS01						RL-MS01	RL-MS01 RL-ER05	RL-ER06 RL-ER07

* RL PBS Identifier Index:

- RL-MS01 - FFTF Project
- RL-ER05 - Surveillance and Maintenance
- RL-ER06 - Decontamination & Decommissioning
- RL-ER07 - Long Term Surveillance and Maintenance

Figure B.2_1 FAST FLUX TEST FACILITY

B.2.1.3.1.3 FFTF Life Cycle Functional Descriptions and Requirements

The Life Cycle Functional Descriptions table describes the life cycle phases and the functions performed during each phase. The Life Cycle Requirements table describes the requirements that trace to the functions listed in the Life Cycle Functional Descriptions table.

Table B.2-2 FFTF Life Cycle Functional Descriptions

hsems.4.3.1.1cam.1 FAST FLUX TEST FACILITY PROGRAM PLANNING
hsems.4.3.1.1cam.5 FAST FLUX TEST FACILITY OPERATIONS & MAINTENANCE
<p>tsd.1.3.1.1.1 Maintain Safe & Compliant Materials in Fast Flux Test Facility This WBS maintains the Fast Flux Test Facility and associated facilities in a standby condition while an evaluation is conducted of any future role that the facility might have in the Department's tritium and isotope production strategy.</p> <p>The surveillance and maintenance (S&M) of facilities and plant systems will be performed to comply with federal and state safety requirements. Activities will include required project planning and management, operation and monitoring of plant systems and components, monitoring of regulated effluent streams, safeguarding nuclear materials, maintaining the design of the FFTF plant systems and components, and maintaining equipment and systems operational. In the standby condition, S&M of the FFTF shall have additional objectives to ensure that there is: (a) no degradation of key plant systems; (b) retention of the authorization basis and configuration control; (c) maintenance of key staffing, qualifications, and training.</p> <p>Program planning activities include the preparation of budget documents, program plans, and schedules. Performance to these plans and schedules will be monitored and managed.</p>
<p>tsd.2.3.1.1.1 Remove Materials from FFTF This WBS provides those activities necessary for the removal of nuclear materials (unirradiated and irradiated fueled components) from the FFTF.</p> <p>Offload all unusable fueled components from within FFTF and place them in interim storage. Offload unusable nonfueled components from within FFTF and ship them for disposal. Activities in these areas include: Oversee the procurement and testing of Interim Storage Casks (ISCs) and Core Component Casks (CCCs); prepare and approve detailed refueling plans and Interim Examination and Maintenance Cell (IEMC), and Examination and Decontaminated Services (EDS) work plans; perform necessary criticality evaluations; conduct operational readiness assessments; operate and maintain the refueling equipment; provide engineering, maintenance, and operations support for component handling, washing, packaging, and shipping operations; assemble FFTF fuel assembly data packages; preserve FFTF nuclear equipment performance data and documentation.</p>
hsems.4.3.1.1cam.6.1 FAST FLUX TEST FACILITY POST OPERATIONS
<p>tsd.1.3.4.2.1 Maintain Safe & Compliant Fast Flux Test Facility in South 600 Areas During transition to shutdown, this WBS will provide surveillance and maintenance (S&M) of facilities and plant systems to comply with federal and state safety requirements. Activities will include required project planning and management, operation and monitoring of plant systems and components, monitoring of regulated effluent streams, safeguarding nuclear materials, maintaining the design of the FFTF plant systems and components, and maintaining equipment and systems operational.</p>

Table B.2-2 FFTF Life Cycle Functional Descriptions (Continued)

<p>tsd.2.3.4.2.1 Transition the Fast Flux Test Facility</p> <p>This WBS will accomplish those activities which move the FFTF to an industrially and radiologically safe shutdown condition, once DOE has determined that the FFTF is no longer required for any future mission.</p> <p>Activities will include removing unusable spent nuclear fuel components from the FFTF to dry cask storage. Irradiated, non-fueled components will also be removed from the FFTF and dispositioned for proper disposal. Any remaining, unirradiated fuel components will be removed for proper disposition. The fuel handling equipment will be maintained and upgraded, where appropriate, to ensure reliability.</p> <p>Sodium and NaK systems will be drained, to the extent practical, to the tanks in the Sodium Storage Facility. Residual sodium will be protected under a blanket of non-reactive gas.</p> <p>Reactor plant systems will be placed in a safe condition for long-term surveillance and maintenance pending final deactivation and decommissioning.</p>
--

Table B.2-3 FFTF Life Cycle Requirements

Requirement	Function
The stabilizing and reconfiguring facilities for minimum S&M including deactivation of non-essential utilities, process systems, and other facility systems; modification of facility safety, ventilation, monitoring, electrical, and utility systems; removal of resources and waste; and transfer of the facility to the ERC. Remaining active systems shall be capable of operation and status from a location outside the facility so only quarterly personnel entry is required. Facility electrical systems shall be reconfigured so only minimal portions can be operated as required to support personnel entry. All facility reconfiguration shall be performed under Occupational Safety and Health Administration construction requirements.	tsd.2.3.4.2.1
Dispositioning facility inventories of SNM/NM/NF through the stabilization, treatment, packaging, temporary storage, documentation preparation, and transportation of these materials to another locations.	tsd.2.3.4.2.1
Ensuring final facility configurations do not preclude D&D activities.	tsd.2.3.4.2.1
Managing SNM/NM/NF material as follows:	tsd.2.3.4.2.1
<ul style="list-style-type: none"> - Consolidating SNM/NM/NF materials early in the facility deactivation process to minimize the safety and compliance envelope. Where feasible, these materials shall be removed from the facility early in the deactivation process. When deactivation is complete, a facility shall no longer contain SNM/NM/NF. - Safely and compliantly storing SNM/NM/NF until a national policy on disposition is formulated. The SNM/NM/NF shall be transferred to other beneficial uses where possible. All NM held by DOE contractors shall be stored, transferred, and dispositioned in compliance with DOE guidance and federal, state, and local laws. - Continuing the current SNM/NM/NF safety and security approach, with necessary interim upgrades, until a preferred longer term approach is selected. - Continuing development and implementation of criteria for the receipt, storage, treatment, and disposition of SNM/NM/NF. - Continuing studies to determine the best alternatives for onsite material storage - Actively involving stakeholders in the development of long-term treatment, storage, and disposition plans through the NEPA process. - Delaying SNM/NM/NF treatment for ultimate disposition until final disposition for these materials is determined. 	
High cost surplus facilities and systems shall be transitioned to a low cost, stable, deactivated condition.	tsd.2.3.4.2.1
Facilities and systems shall be made available for other uses.	tsd.2.3.4.2.1
400 Area surplus facilities shall be transitioned to the surveillance and maintenance phase	tsd.2.3.4.2.1
FFTF shall be transitioned to the surveillance and maintenance phase	tsd.2.3.4.2.1
South 600 Area special nuclear materials shall be moved to the Central Plateau	tsd.2.3.1.1.1
Nuclear materials shall be moved from the 400 Area to the Central Plateau	tsd.2.3.1.1.1
South 600 Area gaseous effluent releases shall be monitored	tsd.1.3.4.2.1
FFTF shall be maintained within the approved safety envelope	tsd.1.3.4.2.1

Table B.2-3 FFTF Life Cycle Requirements (Continued)

Requirement	Function
Spent fuels (light water reactor) shall be moved from the 400 Area interim storage to the Central Plateau Interim Storage	tsd.1.3.1.1.1
400 Area Nuclear materials shall be stabilized	tsd.2.3.1.1.1
Complete transfer of irradiated fuel to dry cask storage. Due Date: 10/31/1998	tsd.2.3.4.2.1
Complete transfer of unirradiated fuel to the Plutonium Finishing Plant. Due Date: 10/31/1998	tsd.2.3.4.2.1
Complete transfer of special fuel to the Idaho National Engineering Laboratory for consolidated storage. Due Date: 10/31/1998	tsd.2.3.4.2.1
Complete auxiliary systems deactivation. Due Date: 3/31/2001	tsd.2.3.4.2.1
Complete Sodium storage facility startup. Due Date: 7/31/1998	tsd.2.3.4.2.1
Complete FFTF Sodium drain. Due Date: 3/31/2000	tsd.2.3.4.2.1
Complete PCB transformer disposal. Due Date: 9/30/2001	tsd.2.3.4.2.1
Complete commercial disposition and/or the acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal/disposition of all Hanford Site UU.	tsd.2.3.1.1.1 tsd.2.3.4.2.1 hsems.4.3.1.1 cam.6.1
This target date includes all UU located in 300 Area fuel supply facilities (Uranium dioxide powder and pellets stored in cans, pins, assemblies, and drums), Uranium trioxide (UO ₃) powder stored in T-hoppers adjacent to the U-Plant, depleted UO ₃ stored in 55 gallon drums in the 200 West Area and the 4713 Building.	
Due Date: 12/31/2000	
The Contractor shall manage the stabilization/disposition of nuclear material, fuel, and hazardous materials, and the deactivation of the FFTF and associated systems to a condition ready for final disposition, reducing the risk and attain the lowest surveillance and maintenance cost. The Contractor shall complete the sodium removal, wash the fuel elements, and place the cleaned elements in dry casks for storage. The Contractor shall complete the deactivation of FFTF.	tsd.2.3.4.2.1

B.2.1.3.1.4 FFTF Boundary Diagram

This section identifies the other facilities (onsite and offsite) that have an interface (either input or output) with this facility.

Table B.2-4 FFTF Boundary Diagram

Major Input Interfaces	Facility FFTF	Major Output Interfaces
External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces 3717B CP General Purpose Shop Misc Rad Labs S600 Electrical Distribution S600 General Purpose Office S600 General Purpose Shop S600 General Purpose Warehouse S600 Telecommunications System		External Interfaces Hazardous Waste Disposal Contracts Offsite Landfill Hanford Site Environmental System Interfaces 200 Interim Storage Area (ISA) 222-S Laboratory 242A Double Shell Tank (DST) System PFP

B.2.1.3.1.5 FFTF Interface Descriptions and Summary Level Forecasts

This section contains the material, waste, and infrastructure forecasts for this facility. It identifies the interface type, the period of time for the forecasts, the life cycle total forecast value, and the execution year forecast quantity.

OFFSITE INPUTS

Table B.2-5 Offsite Inputs for FFTF

Stream	Category	Period	Total	FY99	Units
X.0 Hanford Legacy					
Initial FFTF Highly Enriched Uranium	Highly Enriched Uranium (HEU)	1999 - 1999	42.7	42.7	kilograms
Initial FFTF LLW (Liquid)	LLW (Liquid)	1999 - 1999	39.0	39.0	cubic meters
Initial FFTF Depleted Uranium	Depleted Uranium (DU)	1999 - 1999	338.0	338.0	kilograms
Initial FFTF Natural Uranium	Natural Uranium (NU)	1999 - 1999	0.0	0.0	kilograms
Initial FFTF Plutonium	Plutonium (Pu)	1999 - 1999	285.0	285.0	kilograms
Initial FFTF Spent Nuclear Fuel	Spent Nuclear Fuel (SNF)	1999 - 1999	11.1	11.1	MTHM

ONSITE INPUTS

Table B.2-6 Onsite Inputs for FFTF

Stream	Category	Period	Total	FY99	Units
hsems.1.4.2.12 3717B					
Non-rad Standards (Calibrations) for FFTF	Non-rad Standards Lab Services			600.0	calibrations
hsems.4.5.7 Misc Rad Labs					
Radioactive Standards (Calibrations) for FFTF	Radioactive Standards Lab Services			216.0	calibrations
hsems.5.1.4.4 \$600 Electrical Distribution					
Electricity for FFTF	Electricity			31200.0	MW-hr
Electricity for 400-AC	Electricity			16900.0	MW-hr
hsems.5.1.5.4 \$600 Telecommunications System					
SS Telecommunications/FFTF	Voice Communications Service			231.0	no. of phones
hsems.5.2.2.2 \$600 General Purpose Office					
Office Space (Program Owned) for FFTF	Office Space (Program Owned)			28400.0	sq. ft.
hsems.5.2.3.1 CP General Purpose Shop					
Lifting (Cranes) for FFTF	Lifting Services			20.0	crane days
Custodial Services for FFTF	Custodial Services			100000.0	sq. ft.
hsems.5.2.3.2 \$600 General Purpose Shop					
Sedans/Light Trucks for FFTF	Sedans/Light Trucks			10.0	no. of vehicles
hsems.5.2.4.2 \$600 General Purpose Warehouse					
Storage Space (Infrastructure Owned) for FFTF	(none forecasted)				
Storage Space (Program Owned) for FFTF	Allocated Storage			78500.0	sq. ft.

OFFSITE OUTPUTS

Table B.2-7 Offsite Outputs for FFTF

Stream	Category	Period	Total	FY99	Units
X Hazardous Waste Disposal Contracts					
FFTF Asbestos	Asbestos	1999 - 2001	14.0	4.0	cubic meters
FFTF Hazardous Waste	HAZ	1999 - 2002	7.47	1.73	cubic meters
X Offsite Landfill					
FFTF Sanitary Solid Waste	Sanitary Solid Waste	1999 - 2001	11200	3730.0	cubic meters

ONSITE OUTPUTS

Table B.2-8 Onsite Outputs for FFTF

Stream	Category	Period	Total	FY99	Units
hsems.2.2.9 PFP					
FFTF Plutonium	(none forecasted)				
FFTF Spent Nuclear Fuel (to PFP)	Spent Nuclear Fuel (SNF)	2001 - 2002	0.6		MTHM
FFTF Highly Enriched Uranium	Highly Enriched Uranium (HEU)	2000 - 2000	42.7		kilograms
FFTF Natural Uranium	(none forecasted)				
FFTF Depleted Uranium (to PFP)	(none forecasted)				
hsems.2.3.1.1.44 242A					
FFTF, LLW (Liquid)	LLW (Liquid)	1999 - 2004	69.3	39.0	cubic meters

Table B.2-8 Onsite Outputs for FFTF (Continued)

Stream	Category	Period	Total	FY99	Units
hsems.2.3.1.2 Double Shell Tank (DST) System FFTF, HLW	HLW	1999 - 2015	0.0	0.0	cubic meters
hsems.2.3.4 200 Interim Storage Area (ISA) SNF Removed from FFTF	Spent Nuclear Fuel (SNF)	2000 - 2003	10.2		MTHM
hsems.2.5.1 222-S Laboratory Analytical Laboratory Services for FFTF	Analytical Laboratory Services			20.0	samples

B.2.1.4 Drivers for FFTF Project

Table B.2-9 Source Documents for FFTF Project

Name	Title
DE-AC06-96RL13200	Project Hanford Management Contract, Fluor Daniel Hanford, Inc.
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/RL-89-10	Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Rev.4
DOE/RL-96-92	Hanford Strategic Plan
DOE/RL-97-55	Hanford Site Environmental Management Specification

B.2.2.0 FFTF Project Work Breakdown Structure (WBS)

B.2.2.1 FFTF Project WBS Hierarchy

RL PBS	RL WBS	Title
RL-MS01	2.01.01.01.21.01	FFTF Project
	2.01.01.01.21.01.01	FFTF
	2.01.01.01.21.01.01.01	Maintain Safe & Compliant Materials in Fast Flux Test Facility
	2.01.01.01.21.01.01.02	Remove Materials from FFTF
	2.01.01.01.21.01.01.03	Maintain Safe & Compliant Fast Flux Test Facility in South 600 Areas
	2.01.01.01.21.01.01.04	Transition the Fast Flux Test Facility

B.2.2.2 FFTF Project WBS Dictionary

The following pages contain the WBS dictionary for RL-MS01

9 September 1998

1. Dictionary Title Maintain Safe & Compliant Materials in Fast Flux Test Facility	2. Date 11 August 1998	3. PBS Number RL-MS01	4. Dict Rev
5. WBS No. 2.01.01.01.21.01.01.01	6. B & R No.	7. Baseline CR No.	
8. Organization Name FFTF Project			
9. Scope of Work			
<p>This WBS maintains the Fast Flux Test Facility and associated facilities in a standby condition while an evaluation is conducted of any future role that the facility might have in the Department's tritium and isotope production strategy.</p>			
<p>The surveillance and maintenance (S&M) of facilities and plant systems will be performed to comply with federal and state safety requirements. Activities will include required project planning and management, operation and monitoring of plant systems and components, monitoring of regulated effluent streams, safeguarding nuclear materials, maintaining the design of the FFTF plant systems and components, and maintaining equipment and systems operational. In the standby condition, S&M of the FFTF shall have additional objectives to ensure that there is: (a) no degradation of key plant systems; (b) retention of the authorization basis and configuration control; (c) maintenance of key staffing, qualifications, and training.</p>			
<p>Program planning activities include the preparation of budget documents, program plans, and schedules. Performance to these plans and schedules will be monitored and managed.</p>			
<p>This WBS covers work necessary to support satisfying the following technical baseline requirements for the Hanford clean up mission:</p>			
<ul style="list-style-type: none"> - Spent fuels (light water reactor) shall be moved from the 400 Area interim storage to the Central Plateau Interim Storage 			

9 September 1998

1. Dictionary Title Remove Materials from FFTF		2. Date 17 August 1998	3. PBS Number RL-MS01	4. Dict Rev
5. WBS No. 2.01.01.01.21.01.01.02	6. B & R No.		7. Baseline CR No.	
8. Organization Name FFTF Project				
9. Scope of Work				
<p>This WBS provides those activities necessary for the removal of nuclear materials (unirradiated and irradiated fueled components) from the FFTF.</p> <p>Offload all unusable fueled components from within FFTF and place them in interim storage. Offload unusable nonfueled components from within FFTF and ship them for disposal. Activities in these areas include: Oversee the procurement and testing of Interim Storage Casks (ISCs) and Core Component Casks (CCCs); prepare and approve detailed refueling plans and Interim Examination and Maintenance Cell (IEMC), and Examination and Decontaminated Services (EDS) work plans; perform necessary criticality evaluations; conduct operational readiness assessments; operate and maintain the refueling equipment; provide engineering, maintenance, and operations support for component handling, washing, packaging, and shipping operations; assemble FFTF fuel assembly data packages; preserve FFTF nuclear equipment performance data and documentation.</p> <p>This WBS covers work necessary to support satisfying the following technical baseline requirements for the Hanford clean up mission:</p> <ul style="list-style-type: none"> - South 600 Area special nuclear materials shall be moved to the Central Plateau - Nuclear materials shall be moved from the 400 Area to the Central Plateau - 400 Area Nuclear materials shall be stabilized - Complete commercial disposition and/or the acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal/disposition of all Hanford Site UU. <p>This target date includes all UU located in 300 Area fuel supply facilities (Uranium dioxide powder and pellets stored in cans, pins, assemblies, and drums), Uranium trioxide (UO3) powder stored in T-hoppers adjacent to the U-Plant, depleted UO3 stored in 55 gallon drums in the 200 West Area and the 4713 Building.</p> <p>Due Date: 12/31/2000</p>				

9 September 1998

1. Dictionary Title Maintain Safe & Compliant Fast Flux Test Facility in South 600 Areas		2. Date 11 August 1998	3. PBS Number RL-MS01	4. Dict Rev
5. WBS No. 2.01.01.01.21.01.01.03	6. B & R No.		7. Baseline CR No.	
8. Organization Name FFTF Project				
9. Scope of Work <p>During transition to shutdown, this WBS will provide surveillance and maintenance (S&M) of facilities and plant systems to comply with federal and state safety requirements. Activities will include required project planning and management, operation and monitoring of plant systems and components, monitoring of regulated effluent streams, safeguarding nuclear materials, maintaining the design of the FFTF plant systems and components, and maintaining equipment and systems operational.</p> <p>This WBS covers work necessary to support satisfying the following technical baseline requirements for the Hanford clean up mission:</p> <ul style="list-style-type: none"> - South 600 Area gaseous effluent releases shall be monitored - FFTF shall be maintained within the approved safety envelope 				

9 September 1998

1. Dictionary Title Transition the Fast Flux Test Facility	2. Date 10 August 1998	3. PBS Number RL-MS01	4. Dict Rev
5. WBS No. 2.01.01.01.21.01.01.04	6. B & R No.	7. Baseline CR No.	
8. Organization Name FFTF Project			
9. Scope of Work			
<p>This WBS will accomplish those activities which move the FFTF to an industrially and radiologically safe shutdown condition, once DOE has determined that the FFTF is no longer required for any future mission.</p> <p>Activities will include removing unusable spent nuclear fuel components from the FFTF to dry cask storage. Irradiated, non-fueled components will also be removed from the FFTF and dispositioned for proper disposal. Any remaining, unirradiated fuel components will be removed for proper disposition. The fuel handling equipment will be maintained and upgraded, where appropriate, to ensure reliability.</p> <p>Sodium and NaK systems will be drained, to the extent practical, to the tanks in the Sodium Storage Facility. Residual sodium will be protected under a blanket of non-reactive gas.</p> <p>Reactor plant systems will be placed in a safe condition for long-term surveillance and maintenance pending final deactivation and decommissioning.</p> <p>This WBS covers work necessary to support satisfying the following technical baseline requirements for the Hanford clean up mission:</p> <ul style="list-style-type: none"> - The stabilizing and reconfiguring facilities for minimum S&M including deactivation of non-essential utilities, process systems, and other facility systems; modification of facility safety, ventilation, monitoring, electrical, and utility systems; removal of resources and waste; and transfer of the facility to the ERC. Remaining active systems shall be capable of operation and status from a location outside the facility so only quarterly personnel entry is required. Facility electrical systems shall be reconfigured so only minimal portions can be operated as required to support personnel entry. All facility reconfiguration shall be performed under Occupational Safety and Health Administration construction requirements. - Dispositioning facility inventories of SNM/NM/NF through the stabilization, treatment, packaging, temporary storage, documentation preparation, and transportation of these materials to another locations. - Ensuring final facility configurations do not preclude D&D activities. 			

Managing SNM/NM/NF material as follows:

- Consolidating SNM/NM/NF materials early in the facility deactivation process to minimize the safety and compliance envelope. Where feasible, these materials shall be removed from the facility early in the deactivation process. When deactivation is complete, a facility shall no longer contain SNM/NM/NF.
- Safely and compliantly storing SNM/NM/NF until a national policy on disposition is formulated. The SNM/NM/NF shall be transferred to other beneficial uses where possible. All NM held by DOE contractors shall be stored, transferred, and dispositioned in compliance with DOE guidance and federal, state, and local laws.
- Continuing the current SNM/NM/NF safety and security approach, with necessary interim upgrades, until a preferred longer term approach is selected.
- Continuing development and implementation of criteria for the receipt, storage, treatment, and disposition of SNM/NM/NF.
- Continuing studies to determine the best alternatives for onsite material storage
- Actively involving stakeholders in the development of long-term treatment, storage, and disposition plans through the NEPA process.
- Delaying SNM/NM/NF treatment for ultimate disposition until final disposition for these materials is determined.

High cost surplus facilities and systems shall be transitioned to a low cost, stable, deactivated condition. Facilities and systems shall be made available for other uses.

400 Area surplus facilities shall be transitioned to the surveillance and maintenance phase

FFTF shall be transitioned to the surveillance and maintenance phase

Complete transfer of irradiated fuel to dry cask storage. Due Date: 10/31/1998

Complete transfer of unirradiated fuel to the Plutonium Finishing Plant. Due Date: 10/31/1998

Complete transfer of special fuel to the Idaho National Engineering Laboratory for consolidated storage. Due Date: 10/31/1998

Complete auxiliary systems deactivation. Due Date: 3/31/2001

Complete Sodium storage facility startup. Due Date: 7/31/1998

Complete FFTF Sodium drain. Due Date: 3/31/2000

Complete PCB transformer disposal. Due Date: 9/30/2001

Complete commercial disposition and/or the acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal/disposition of all Hanford Site UU.

This target date includes all UU located in 300 Area fuel supply facilities (Uranium dioxide powder and pellets stored in cans, pins, assemblies, and drums), Uranium trioxide (UO₃) powder stored in T-hoppers adjacent to the U-Plant, depleted UO₃ stored in 55 gallon drums in the 200 West Area and the 4713 Building.

Due Date: 12/31/2000

The Contractor shall manage the stabilization/disposition of nuclear material, fuel, and hazardous materials, and the deactivation of the FFTF and associated systems to a condition ready for final disposition, reducing the risk and attain the lowest surveillance and maintenance cost. The Contractor shall complete the sodium removal, wash the fuel elements, and place the cleaned elements in dry casks for storage. The Contractor shall complete the deactivation of FFTF.

B.2.2.3 FFTF Project Responsibility Assignment Matrix

WBS Number	Title	Responsible Manager
2.01.01.01.21.01	FFTF Project	W. J. Apley, PNNL* D. B. Klos, FDH* E. F. Loika, BWHC
2.01.01.01.21.01.01	FFTF	E. F. Loika
2.01.01.01.21.01.01.01	Maintain Safe & Compliant Materials in Fast Flux Test Facility	E. F. Loika
2.01.01.01.21.01.01.02	Remove Materials from FFTF	E. F. Loika
2.01.01.01.21.01.02.03	Maintain Safe & Compliant Fast Flux Test Facility in South 600 Area	E. F. Loika
2.01.01.01.21.01.02.04	Transition the Fast Flux Test Facility	E. F. Loika

*In accordance with Responsibility Accountability Matrix approved by DOE September 11, 1997.
(DOE letter number 97-SPO-062)

Activity ID	Activity Description	WBS	Orig Dur	Early Start	Early Finish	1998	1999													
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
WORK FOR OTHERS																				
HQ																				
PHMC																				
BWHC																				
NON-EM																				
FFTF Project																				
FFTF																				
MAINTAIN SAFE & COMPLIANT MATERIALS IN FFTF																				
PROJECT PLANNING INTEGRATION																				
ART TPO PROGRAM MANAGEMENT																				
AR1B1030	TPO PROGRAM MANAGEMENT	2.01.01.01.21.01.01.01.01.01.	251	01OCT98*	30SEP99	▼														
ART PROJECT CONTROL/PLANNING/SCHEDULEING																				
AR1B1033	FFTF PLANNING/SCHEDULING	2.01.01.01.21.01.01.01.01.02.	251	01OCT98*	30SEP99	▼														
ART INTERGRATION MANAGEMENT																				
AR1B1035	FFTF INTERGRATION MGT.	2.01.01.01.21.01.01.01.01.03.	251	01OCT98*	30SEP99	▼														
ART SRID ADMINISTRATION																				
AR1B1018	FFTF SIRD ADMINISTRATION	2.01.01.01.21.01.01.01.01.04.	251	01OCT98*	30SEP99	▼														
ART STAND BY PROJECT SUPPORT																				
AR1B1000	FFTF EXECUTIVE DIRECTION & SUPPORT	2.01.01.01.21.01.01.01.01.05.	251	01OCT98*	30SEP99	▼														
MATERIAL & PROPERTY SECURITY (SAS)																				
ART MATERIAL & PROPERTY SECURITY (SAS)																				
AR1B1015	FFTF SAFEGUARD & SECURITY	2.01.01.01.21.01.01.01.02.01.	251	01OCT98*	30SEP99	▼														
INVENTORY CONTROL																				
ART SPARE PARTS INVENTORY																				
AR1B130K	FFTF SPARE PART INVENTORY	2.01.01.01.21.01.01.01.03.01.	251	01OCT98*	30SEP99	▼														
Project Start Project Finish Data Date Run Date	01OCT97 30SEP98 01OCT98 03SEP98	☒ Early Bar ☒ Progress Bar ☒ Critical Activity	PMBS			Sheet 1 of 5														
B & W HANFORD CO. FFTF PROJECT EXECUTION YEAR PMBS						B & W Hanford Company a Woodward company														

Activity ID	Activity Description	WBS	Orig Dur	Early Start	Early Finish	1999											
						O	N	D	J	F	M	A	M	J	J	A	I
ART SPARE PARTS WITHDRAWAL/RETURNS																	
ARTB130L	FFTE PARTS WITHDRAWAL/RETURN	2.01.01.01.21.01.01.01.03.02.	251	01OCT98*	30SEP99												
FFTE STANDBY OPERATIONS																	
ART OPERATIONS MANAGEMENT & SUPPORT																	
ARTB1010	FFTE OPES ADMIN/MGT	2.01.01.01.21.01.01.01.04.01.	251	01OCT98*	30SEP99												
ART OPES ANALYSIS & SUPPORT																	
ARTB1073	FFTE ANALYSIS AND SUPPORT	2.01.01.01.21.01.01.01.04.03.	251	01OCT98*	30SEP99												
ART OPES TRAINING SUPPORT																	
ARTB1070	FFTE TRAINING MGT/SUPPORT	2.01.01.01.21.01.01.01.04.04.	251	01OCT98*	30SEP99												
ART OPES POLICIES & PROCEDURES SUPPORT																	
ARTB1074	FFTE POLICIES AND PROCEDURES	2.01.01.01.21.01.01.01.04.05.	251	01OCT98*	30SEP99												
SELF ASSESSMENTS & SUPPORT																	
ART RADIOLOGICAL MANAGEMENT SUPPORT																	
ARTB1045	FFTE RADIOLOGICAL CONTROL SUPPORT	2.01.01.01.21.01.01.01.05.01.	251	01OCT98*	30SEP99												
ART ENVIRONMENTAL SUPPORT																	
ARTB1072	FFTE ENVIRONMENTAL WASTE	2.01.01.01.21.01.01.01.05.02.	251	01OCT98*	30SEP99												
ART SAMPLING & LAB SUPPORT																	
ARTB1172	FFTE SAMPLING & LAB SUPPORT	2.01.01.01.21.01.01.01.05.03.	251	01OCT98*	30SEP99												
ART WASTE CHARACTERIZATION SUPPORT																	
ARTB1272	FFTE WASTE CHARACTERIZATION	2.01.01.01.21.01.01.01.05.04.	251	01OCT98*	30SEP99												
ART POLLUTION PREVENTION SUPPORT																	
ARTB1372	FFTE POLLUTION PREVENTION	2.01.01.01.21.01.01.01.05.05.	251	01OCT98*	30SEP99												
ART LLW DISPOSAL																	
ARTB1472	FFTE LLW DISPOSAL	2.01.01.01.21.01.01.01.05.06.	21	01SEP99*	30SEP99												

Activity ID	Activity Description	WBS	Orig Dur	Early Start	Early Finish	1998	1999													
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
ART WASTE DISPOSAL																				
AR1B1572	FFTF QUARTERLY WASTE DISPOSAL	2.01.01.01.21.01.01.05.07.	209	02DEC98*	30SEP99															
ART SAFETY SUPPORT																				
AR1B1080	FFTF SAFETY SUPPORT	2.01.01.01.21.01.01.05.08.	251	01OCT98*	30SEP99															
ART QUALITY ASSURANCE																				
AR1B1040	FFTF QUALITY ASSURANCE SUPPORT	2.01.01.01.21.01.01.05.09.	251	01OCT98*	30SEP99															
MAINTAIN FFTF SYST DESIGN																				
ART ENGINEERING MANAGEMENT SUPPORT																				
AR1B130A	FFTF ENGINEERING MANAGEMENT	2.01.01.01.21.01.01.06.01.	251	01OCT98*	30SEP99															
ART AUX SYSTEMS ELECTRICAL ENG SUPPORT																				
AR1B1024	FFTF AUX SYSTEMS ELECTRICAL SUPPORT	2.01.01.01.21.01.01.06.02.	251	01OCT98*	30SEP99															
ART MECHANICAL EQUIP & INSPECT SUPPORT																				
AR1B1023	FFTF MECHANICAL ENGINEERING SUPPORT	2.01.01.01.21.01.01.06.03.	251	01OCT98*	30SEP99															
ART RSM ENGINEERING MANAGEMENT SUPPORT																				
AR1B1022	FFTF RSM ENGINEERING SUPPORT	2.01.01.01.21.01.01.06.04.	251	01OCT98*	30SEP99															
ART RSB ROOF RECOATING & INSPECTION																				
AR1B1123	RSB ROOF RECOATING & INSPECTION	2.01.01.01.21.01.01.06.05.	251	01OCT98*	30SEP99															
ART T196 AIR DRYER HARD PIPING																				
AR1B1223	FFTF T-196 AIR DRYER HARD PIPING	2.01.01.01.21.01.01.06.06.	251	01OCT98*	30SEP99															
ART G-3 GENERATOR REPAIR/MATERIAL PURCHASESE																				
AR1B102A	FFTF G-3 GENERATOR REPAIRS/ PURCHASE	2.01.01.01.21.01.01.06.07.	80	02NOV98*	01MAR99															
G-3 FUEL OIL LEAK DETECTOR																				
AR1B1025	G-3 FUEL OIL TANK LEAK DETECTION	2.01.01.01.21.01.01.06.08.	12	07DEC98*	22DEC98															
ARSE0078	B10-99-002 G-3 FUEL OIL TANK LEAK DETECTOR	2.01.01.01.21.01.01.06.08.	0		22DEC98	 ROX B10-99-002														

Activity ID	Activity Description	WBS	Orig Dur	Early Start	Early Finish	1998 1999														
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
FFTF MAINTENANCE																				
ART MAINTENANCE SUPPORT																				
AR1B1060	FFTF MAINTENANCE SUPPORT	2.01.01.01.21.01.01.01.07.01.	251	01OCT98*	30SEP99															
ARSN0750	FY99 CORRECTIVE MAINTENANCE 1ST PERIOD	2.01.01.01.21.01.01.01.07.01.	82	01OCT98	29JAN99															
ARSN0751	B10-99-001 COMPLETE STANDBY WORKPHASE 99-1	2.01.01.01.21.01.01.01.07.01.	0		29JAN99	ROX B10-99-001														
ARSN0752	FY99 CORRECTIVE MAINTENANCE 2ND PERIOD	2.01.01.01.21.01.01.01.07.01.	84	01FEB99	28MAY99															
ARSN0753	B10-99-103 COMPLETE STANDBY WORKPHASE 99-2	2.01.01.01.21.01.01.01.07.01.	0		28MAY99	ROX B10-99-003														
ARSN0754	FY99 CORRECTIVE MAINTENANCE 3RD PERIOD	2.01.01.01.21.01.01.01.07.01.	85	01JUN99	30SEP99															
ARSN0755	B10-99-105 COMPLETE STANDBY WORKPHASE 99-3	2.01.01.01.21.01.01.01.07.01.	0		30SEP99	B10-99-005ROX
FMEF																				
ART FMEF S & M SUPPORT																				
AR1B170A	FMEF S & M SUPPORT	2.01.01.01.21.01.01.01.08.01.	251	01OCT98*	30SEP99															
REMOVE MATERIALS FROM FFTF																				
FUEL HANDLING																				
ART FUEL HANDLING SUPPORT																				
AR1B1026	FFTF FUEL HANDLING I & C SUPPORT	2.01.01.01.21.01.01.02.01.02.	251	01OCT98*	30SEP99															
SWC																				
ART SWC SUPPORT																				
AR1B1032	FFTF SWC ENGINEERING SUPPORT	2.01.01.01.21.01.01.02.02.02.	251	01OCT98*	30SEP99															
ARSH160	B19-99-404 SWC - PEP MILESTONE	2.01.01.01.21.01.01.02.02.02.	0		30SEP99	B19-99-404
SHEAR ATP																				
ART SHEAR ATP SUPPORT																				
ARSH305	B10-98-103 OBTAIN RRB RELEASE FOR OTA SHEAR	2.01.01.01.21.01.01.02.03.01.	0		29SEP00*															

5.205.1000

Activity ID	Activity Description	WBS	Orig Dur	Early Start	Early Finish	1999	2000	2001	2002	2003	2004
WORK FOR OTHERS											
HQ											
PHMC											
BWHC											
NON-EM											
FFTF Project											
FFTF											
TRANSITION THE FFTF											
ARA08	M-81-02-T01 Submit sodium disposition eval report	2.01.01.01.21.01.01.04	0		30OCT98*	B17-98-107FOX					
ARA27	M-81-00-T02, Compl trans of irradiated fuel, dry	2.01.01.01.21.01.01.04	0		31OCT98*	B19-99-301FOX					
ARA30	M-81-00-T03, Compl trans of unirradiated fuel to	2.01.01.01.21.01.01.04	0		31OCT98*	B19-99-302FOX					
ARA33	M-81-00-T04, Compl Transfer of Spec Fuel to INEL	2.01.01.01.21.01.01.04	0		31OCT98*	B19-99-303FOX					
ARA42	M-81-04-T01, Compl reactor & heat trans sys sod	2.01.01.01.21.01.01.04	0		30OCT98*	B19-98-401FOX					
ARA51	M-81-04-T02, Compl interim decay storage/fuel so	2.01.01.01.21.01.01.04	0		31DEC98*	B19-99-401FOX					
ARA54	M-81-04, COMPLETE FFTF SODIUM DRAIN	2.01.01.01.21.01.01.04	0		31MAR00*	FOX B19-00-401					
ARA66	M-81-00-T05, Complete auxiliary systems deact	2.01.01.01.21.01.01.04	0		31MAR01*	FOX B19-01-501					
ARA69	M-81-05, Submit FFTF S&M Plan	2.01.01.01.21.01.01.04	0		30JUN01*	FOX B17-01-101					
ARA72	M-81-06, COMPLETE PCB TRANSFORMER DISPOSAL	2.01.01.01.21.01.01.04	0		30SEP01*	FOX B19-01-502					
ARA75	M-81-00, COMPL FFTF TRANS & INITIATE S&M PHSE	2.01.01.01.21.01.01.04	0		31DEC01*	FGX B17-02-101					
ARA93	M-81-03, Submit FFTF end point criteria document	2.01.01.01.21.01.01.04	0		31DEC98*	B17-99-102FGX					
Project Start: 01OCT97 Project Finish: 30SEP04 Data Date: 01OCT98 Run Date: 03SEP98						0 Early Bar 1/2 Progress Bar Critical Activity					
© Primavera Systems, Inc.						B & W HANFORD CO. FFTF TPA MILESTONES BEING RENEGOTIATED					
Sheet 1 of 2						B & W HANFORD COMPANY A BETHLEHEM COMPANY					

				Activity ID	Activity Description	WBS	Orig Dur	Early Start	Early Finish	199920002001200220032004											
				ARA96	M-20-29A, Submit sod storage/reaction fac closur	2.01.01.01.21.01.01.04	0		31DEC99*	FGX♦B17-00-101											

Sheet 2 of 2

M-020
9/09/98
10:51 am

MYWP/SSPP PLANNING MILESTONE LIST
REPORTING PERIOD 10/01/97 TO 12/31/2049

Page 1

MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	-----DATES-----		DNFSB	TIP	PBS #
						PLANNED	TPA/DNFSB			
						BASELINE	COMMIT			
B19-98-401	M-81-04-T01	T	FO	COMPLETE REACTOR AND HEAT TRANSPORT SYSTEM SODIUM DRAIN	OTH	4/30/98		N	N	RL-MS01
B17-98-107	M-81-02-T01	T	FO	SUBMIT SODIUM DISPOSITION EVALUATION REPORT/DECISION POINT	OTH	6/30/98		N	N	RL-MS01
B10-99-001		RL		COMPLETE STANDBY WORKPHASE 99-1		1/31/99		N	N	RL-MS01
B19-99-400		RL		DESIGN REVIEW FOR THE SODIUM REMOVAL SYSTEM UPGRADE		4/01/99		N	N	RL-MS01
B19-99-403		RL		CLOSED LOOP EX-VESSEL MACHINE CONTROL SYSTEM UPGRADE		9/30/99		N	N	RL-MS01
B19-99-404		RL		UPGRADE THE SOLID WASTE CASK (SWC)		9/30/99		N	N	RL-MS01
B10-99-002		RL		G-3 FUEL OIL TANK LEAK DETECTION		12/22/98		N	N	RL-MS01
B10-99-003		RL		COMPLETE STANDBY WORKPHASE 99-2		5/31/99		N	N	RL-MS01
B10-99-005		RL		COMPLETE STANDBY WORKPHASE 99-3		9/30/99		N	N	RL-MS01
B19-01-501	M-81-00-T05	T	FO	COMPLETE AUXILIARY SYSTEMS DEACTIVATION	OTH	3/31/01		N	N	RL-MS01
B17-01-101	M-81-05	I	FO	SUBMIT FFTF SURVEILLANCE AND MAINTENANCE PLAN	EA	6/30/01	6/30/01	N	N	RL-MS01
B10-98-103		RL		OBTAIN RRB RELEASE FOR OTA SHEAR OPERATION	OTH	9/30/00	10/09/98	N	N	RL-MS01
B19-99-301	M-81-00-T02	T	FO	COMPLETE TRANSFER OF IRRADIATED FUEL TO DRY CASK STORAGE	OTH	10/22/98	10/31/98	N	N	RL-MS01
B19-99-302	M-81-00-T03	T	FO	COMPLETE TRANSFER OF UNIRRADIATED FUEL TO PFP	OTH	10/22/98	10/31/98	N	N	RL-MS01
B17-00-101	M-20-29A	I	FO	SUBMIT SODIUM STORAGE FACILITY & SODIUM REACTION FACIL CLOSURE PL	EA	12/31/99	12/31/49	N	N	RL-MS01
B19-99-303	M-81-00-T04	T	FO	COMPLETE TRANSFER OF SPECIAL FUEL TO INEL FOR STORAGE	OTH	10/22/98	10/31/98	N	N	RL-MS01
B19-99-401	M-81-04-T02	T	FO	COMPLETE INTERIM DECAY STORAGE/FUEL STORAGE FACILITY SODIUM DRAIN	OTH	12/31/98	12/31/98	N	N	RL-MS01
B19-00-401	M-81-04	I	FO	COMPLETE FFTF SODIUM DRAIN	EA	3/14/00	3/31/00	N	N	RL-MS01
B19-01-502	M-81-06	I	FO	COMPLETE PCB TRANSFORMER DISPOSAL	EA	9/30/01	9/30/01	N	N	RL-MS01
B17-99-102	M-81-03	I	FO	SUBMIT FFTF END POINT CRITERIA DOCUMENT	EA	12/31/98	12/31/98	N	N	RL-MS01
B17-02-101	M-81-00	M	FO	COMPLETE FFTF TRANSITION AND INITIATE THE S&M PHASE	EA	12/31/01	12/31/01	N	N	RL-MS01

B2.38

HNF-SP-1240
Rev. 1

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE REACTOR AND HEAT TRANSPORT SYSTEM SODIUM DRAIN				Date: 9/09/98	
Assigned To: TM Burke				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 4/30/98	
PBS No: RL-MS01					
MC #: B19-98-401			TPA No: M-81-04-T01		Rev: 0
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG X OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report Letter Drawing(s) X Other (Specify) Complete Sodium Drain		ADDRESS TO: DOE-HQ DOE-RL Other (Specify)
<p>Milestone Description: THE REACTOR AND PRIMARY AND SECONDARY HEAT TRANSPORT SYSTEM SODIUM COOLANT AND SUPPORTING SODIUM SYSTEMS WILL BE MAINTAINED IN A SAFE CONFIGURATION, MOLTEN AND CIRCULATING UNTIL THE FUEL IS REMOVED FROM THE FFTF REACTOR VESSEL AND THE SODIUM STORAGE FACILITY IS OPERATIONAL. THE SODIUM WILL THEN BE DRAINED TO THE TANKS LOCATED IN THE SODIUM STORAGE FACILITY AND ALLOWED TO FREEZE.</p>					
<p>Description of what constitutes completion of this milestone: This milestone documents the completion of the reactor and heat transport system sodium drain. ATP and review by the TRRT.</p>					

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT SODIUM DISPOSITION EVALUATION REPORT/DECISION POINT				Date: 9/09/98	
Assigned To: DL Nielsen				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 6/30/98	
PBS No: RL-MS01					
MC #: B17-98-107			TPA No: M-81-02-T01		Rev: 0
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG X OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: X Report Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ DOE-RL X Other (Specify)	
<p>Milestone Description: COMPLETE AN EVALUATION OF THE ACCEPTABLE SODIUM PRODUCT FORM FOR THE TWRS TANK SLUDGE PRETREATMENT PROCESS (I.E., CAUSTIC WASHING). THIS EVALUATION WILL BE CONDUCTED IN CONCERT WITH TWRS TPA MILESTONE M-50-03 (DUE DATE MARCH 31, 1998). THE FFTF EVALUATION WILL ADDRESS OTHER CONVERSION OPTIONS FOR DISPOSAL OF THE SODIUM IF THE PRODUCT USE FOR TWRS IS NOT VIABLE. REGARDLESS OF WHICH OPTION IS SELECTED, A NEW SODIUM REACTION FACILITY WILL BE CONSTRUCTED ADJACENT TO THE SODIUM STORAGE FACILITY TO CONVERT THE BULK METALLIC SODIUM TO THE APPROPRIATE CHEMICAL FORM. THIS INCLUDES A DECISION ON THE FINAL DISPOSITION OF THE SODIUM (E.G., DISPOSAL OR REUSE). APPROPRIATE MILESTONES AND TARGET DATES WILL BE ESTABLISHED FOR CONSTRUCTION AND OPERATION OF THE SODIUM REACTION FACILITY BASED ON THE OPTION SELECTED.</p>					
<p>Description of what constitutes completion of this milestone: Submit the required report.</p>					

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE STANDBY WORKPHASE 99-1				Date: 9/09/98	
Assigned To: GJ Boehnke				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 1/31/99	
PBS No: RL-MS01					
MC #: B10-99-001			TPA No:		Rev: 0
MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:	
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER TIP	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)	
<p>Milestone Description: Complete work scope associated with 'maintaining health of facility' by accomplishing defined surveillance and maintenance work scope, e. g., required surveillances, PM/ICRS packages, designated corrective maintenance, and modification work. The work scope will be defined and managed in accordance with A-33, WORK PRIORITIZATION AND SCHEDULING. This procedure defines the process used by the Management Review Board (MRB) to approve the initial phase work scope and to approve changes during the phase. For the time period 10/1/98 through 1/31/99, the FFTF staff will: Define the initial work scope in accordance with A-33. Formally transmit a letter to FDH and RL listing the work documents comprising the initial work scope and requesting RL approval. This letter will be</p>					
<p>Description of what constitutes completion of this milestone: Completion of the milestone is demonstrated by completing a number of work documents equal to or greater than the number defined by the MRB at the beginning of the phase. This number will be clearly stated in the letter formally transmitted to FDH and RL at the beginning of the phase. Upon completion of the phase, a letter will be formally transmitted to FDH and RL documenting the work completed during that phase. Successful completion of the milestone requires that an equal or greater number of work documents were completed during the phase than those defined at its beginning. In addition, the work scope must be managed in accordance with the requirements established in A-33. This letter must be transmitted within five working days after the completion of the phase (2/8/99).</p>					

PHMC

MILESTONE DESCRIPTION SHEET

Continuation Page

Program WBS Designator: 2.1.1.1.21.1.1

MC #: B10-99-001

Milestone description: (con't)
transmitted within five working days from the beginning of the phase
(10/7).

Manage the work scope during the phase in accordance with A-33. (The
MRB will approve additions and deletions to the scope as authorized in A-
33.)

Complete the required surveillances and PM/ICRS packages at their
required frequencies.

Complete a number of work documents equal to or greater than the number
in the originally defined scope for the phase.

PHMC

MILESTONE DESCRIPTION SHEET

Title: DESIGN REVIEW FOR THE SODIUM REMOVAL SYSTEM UPGRADE				Date: 9/09/98	
Assigned To: GN Ruge				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 4/01/99	
PBS No: RL-MS01					
MC #: B19-99-400			TPA No:		Rev: 0
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)	
Milestone Description: Complete the design of upgrades to the Interim Examination and Maintenance (IEM) Cell Sodium Removal System (SRS) control system, panel C-1167. The upgrades will enhance the man-machine interface, the system reliability and maintainability, and the safety of performing maintenance. The definitive design shall be developed and a design review conducted in accordance with applicable engineering design procedures.					
Description of what constitutes completion of this milestone: The design review shall be completed and documented in a final design review report. Completion of the milestone shall be documented by letter to the RL-SPO.					

PHMC

MILESTONE DESCRIPTION SHEET

Title: CLOSED LOOP EX-VESSEL MACHINE CONTROL SYSTEM UPGRADE			Date: 9/09/98	
Assigned To: GN Ruge			CIN:	
Program WBS Designator: 2.1.1.1.21.1.1			Due Date: 9/30/99	
PBS No: RL-MS01				
MC #: B19-99-403		TPA No:		Rev: 0
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)
<p>Milestone Description: The computerized controls for the Closed Loop Ex-Vessel Machine (CLEM) are aged and require replacement to ensure reliable, maintainable operation. This upgrade will replace the computers, monitors, and related equipment required to operate the machine reliably. This task includes the completion of the definitive design, software development, and procurement and fabrication of required hardware. This equipment will be installed on the CLEM per FFTF work package 4F-97-2305/M. Testing is not included as a part of this milestone.</p>				
<p>Description of what constitutes completion of this milestone: Complete field work per FFTF work package 4F-97-2305/M. Completion of this milestone shall be documented by letter to the RL-SPO.</p>				

PHMC

MILESTONE DESCRIPTION SHEET

Title: UPGRADE THE SOLID WASTE CASK (SWC)			Date: 9/09/98	
Assigned To: SW Hiller			CIN:	
Program WBS Designator: 2.1.1.1.21.1.1			Due Date: 9/30/99	
PBS No: RL-MS01				
MC #: B19-99-404		TPA No:		Rev: 0
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)
Milestone Description: Complete the design, procurement, and shop fabrication of the SWC hoist and grapple systems.				
Description of what constitutes completion of this milestone: The status of the SWC upgrade shall be reported to the RL-SPO by letter, documenting that the above activities are complete.				

PHMC

MILESTONE DESCRIPTION SHEET

Title: G-3 FUEL OIL TANK LEAK DETECTION			Date: 9/09/98	
Assigned To: SH CROW			CIN:	
Program WBS Designator: 2.1.1.1.21.1.1			Due Date: 12/22/98	
PBS No: RL-MS01				
MC #: B10-99-002		TPA No:		Rev: 0
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)
Milestone Description: The Washington Administrative Code, section 173-360-310, Underground Storage Tank Regulations, requires that existing, underground, fuel oil storage tanks for emergency generators comply with new underground storage tank system requirements by December 22, 1998. The G-3 fuel oil tank, T-303, will be upgraded by the installation of a level sensing system equipped with a high-level alarm per modification work document 4F-97-117M. This will complete the required field modification.				
Description of what constitutes completion of this milestone: Completion of the field work per modification work document 4F-97-117M shall be reported to the RL-SPO by letter.				

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE STANDBY WORKPHASE 99-2			Date: 9/09/98	
Assigned To: GJ Boehnke			CIN:	
Program WBS Designator: 2.1.1.1.21.1.1			Due Date: 5/31/99	
PBS No: RL-MS01				
MC #: B10-99-003		TPA No:		Rev: 0
MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER TIP	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)
<p>Milestone Description:</p> <p>Complete work scope associated with 'maintaining health of facility' by accomplishing defined surveillance and maintenance work scope, e. g., required surveillances, PM/ICRS packages, designated corrective maintenance, and modification work. The work scope will be defined and managed in accordance with A-33, WORK PRIORITIZATION AND SCHEDULING. This procedure defines the process used by the Management Review Board (MRB) to approve the initial phase work scope and to approve changes during the phase.</p> <p>For the time period 2/1/99 through 5/31/99, the FFTF staff will:</p> <p>Define the initial work scope in accordance with A-33.</p> <p>Formally transmit a letter to FDH and RL listing the work documents comprising the initial work scope and requesting RL approval. This letter</p>				
<p>Description of what constitutes completion of this milestone:</p> <p>Completion of the milestone is demonstrated by completing a number of work documents equal to or greater than the number defined by the MRB at the beginning of the phase. This number will be clearly stated in the letter formally transmitted to FDH and RL at the beginning of the phase.</p> <p>Upon completion of the phase, a letter will be formally transmitted to FDH and RL documenting the work completed during that phase. Successful completion of the milestone requires that an equal or greater number of work documents were completed during the phase than those defined at its beginning. In addition, the work scope must be managed in accordance with the requirements established in A-33. This letter must be transmitted within five working days after the completion of the phase (6/7/99).</p>				

PHMC

MILESTONE DESCRIPTION SHEET

Continuation Page

Program WBS Designator: 2.1.1.1.21.1.1

MC #: B10-99-003

Milestone description: (con't)

will be transmitted within five working days from the beginning of the phase (2/8/99).

Manage the work scope during the phase in accordance with A-33. (The MRB will approve additions and deletions to the scope as authorized in A-33.)

Complete the required surveillances and PM/ICRS packages at their required frequencies.

Complete a number of work documents equal to or greater than the number in the originally defined scope for the phase.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE STANDBY WORKPHASE 99-3				Date: 9/09/98	
Assigned To: GJ Boehnke				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 9/30/99	
PBS No: RL-MS01					
MC #: B10-99-005			TPA No:		Rev: 0
MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:	
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER TIP	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)	
<p>Milestone Description: Complete work scope associated with 'maintaining health of facility' by accomplishing defined surveillance and maintenance work scope, e. g., required surveillances, PM/ICRS packages, designated corrective maintenance, and modification work. The work scope will be defined and managed in accordance with A-33, WORK PRIORITIZATION AND SCHEDULING. This procedure defines the process used by the Management Review Board (MRB) to approve the initial phase work scope and to approve changes during the phase. For the time period 6/1/99 through 9/30/99, the FFTF staff will: Define the initial work scope in accordance with A-33. Formally transmit a letter to FDH and RL listing the work documents comprising the initial work scope and requesting RL approval. This letter</p>					
<p>Description of what constitutes completion of this milestone: Completion of the milestone is demonstrated by completing a number of work documents equal to or greater than the number defined by the MRB at the beginning of the phase. This number will be clearly stated in the letter formally transmitted to FDH and RL at the beginning of the phase. Upon completion of the phase, a letter will be formally transmitted to FDH and RL documenting the work completed during that phase. Successful completion of the milestone requires that an equal or greater number of work documents were completed during the phase than those defined at its beginning. In addition, the work scope must be managed in accordance with the requirements established in A-33. This letter must be transmitted within five working days after the completion of the phase (10/7/99).</p>					

PHMC

MILESTONE DESCRIPTION SHEET

Continuation Page

Program WBS Designator: 2.1.1.1.21.1.1

MC #: B10-99-005

Milestone description: (con't)

will be transmitted within five working days from the beginning of the phase (6/7/99).

Manage the work scope during the phase in accordance with A-33. (The MRB will approve additions and deletions to the scope as authorized in A-33.)

Complete the required surveillances and PM/ICRS packages at their required frequencies.

Complete a number of work documents equal to or greater than the number in the originally defined scope for the phase.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE TRANSFER OF IRRADIATED FUEL TO DRY CASK STORAGE			Date: 9/24/96	
Assigned To: S. V. Doebler			CIN:	
Program WBS Designator: 2.1.1.1.21.1.1			Due Date: 10/22/98	
PBS No: RL-MS01				
MC #: B19-99-301		TPA No: M-81-00-T02		Rev:
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG X OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report Letter Drawing(s) X Other (Specify) Project Status Report	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)
Milestone Description: THE IRRADIATED FUEL ASSEMBLIES AND PIN CONTAINERS WILL BE TRANSFERRED FROM THE INTERIM DECAY STORAGE VESSEL AND THE FUEL STORAGE FACILITY TO THE IEM CELL FOR RESIDUAL SODIUM REMOVAL, LOADED INTO A CORE COMPONENT CONTAINER, TRANSFERRED TO THE REACTOR SERVICE BUILDING CASK LOADING STATION FOR PLACEMENT INTO AN INTERIM STORAGE CASK FOR DRY STORAGE, AND TRANSFERRED TO THE INTERIM STORAGE AREA LOCATED IN THE NORTHEAST CORNER OF THE FFTF COMPLEX.				
Description of what constitutes completion of this milestone: This milestone documents the completion of the irradiated FFTF fuel transfer to dry cask storage in the 400 Area Interim Storage Area.				

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE TRANSFER OF UNIRRADIATED FUEL TO PFP				Date: 9/24/96	
Assigned To: S. V. Doeblor				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 10/22/98	
PBS No: RL-MS01					
MC #: B19-99-302			TPA No: M-81-00-T03		Rev:
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG X OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report Letter Drawing(s) X Other (Specify) Project Status Report	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)	
Milestone Description: THIRTY TWO UNIRRADIATED FUEL ASSEMBLIES PRESENTLY STORED IN THE INTERIM DECAY STORAGE VESSEL WILL BE TRANSFERRED TO THE IEM CELL FOR WASHING AND DRYING, LOADED INTO EXISTING APPROVED SHIPPING CONTAINERS, AND TRANSFERRED TO AN APPROPRIATE STORAGE AREA IN THE PLUTONIUM FINISHING PLANT.					
Description of what constitutes completion of this milestone: This milestone documents the completion of the transfer of unirradiated fuel to the Plutonium Finishing Plant.					

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT SODIUM STORAGE FACILITY & SODIUM REACTION FACIL CLOSURE PL				Date: 9/24/96	
Assigned To: R. K. Hulvey				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 12/31/99	
PBS No: RL-MS01					
MC #: B17-00-101			TPA No: M-20-29A		Rev:
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: X EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)	
Milestone Description: Submit Sodium Storage Facility and Sodium Reaction Facility closure plan or request for procedural closure as defined in Section 6.3.3 of this Tri-Party Agreement to EPA and Ecology.					
Description of what constitutes completion of this milestone: If the sodium use for TWRS is confirmed, a request for procedural closure as defined in Section 6.3.3 of the Tri-Party Agreement will be submitted for the Sodium Storage Facility and the Sodium Reaction Facility units. If the sodium is determined to be a waste, a closure plan will be submitted for the two units.					

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE TRANSFER OF SPECIAL FUEL TO INEL FOR STORAGE				Date: 9/24/96	
Assigned To: S. V. Doeblner				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 10/22/98	
PBS No: RL-MS01					
MC #: B19-99-303			TPA No: M-81-00-T04		Rev:
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG X OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report Letter Drawing(s) X Other (Specify) Project Status Report	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)	
<p>Milestone Description: SODIUM-BONDED IRRADIATED METAL AND CARBIDE FUEL PINS FROM ASSEMBLIES CLEANED AND DISASSEMBLED IN THE IEM CELL WILL BE LOADED INTO EXISTING, APPROVED SHIPPING CASKS, AND TRANSPORTED TO THE IDAHO NATIONAL ENGINEERING LABORATORY IN IDAHO FALLS, IDAHO, FOR CONSOLIDATED STORAGE. ONE UNIRRADIATED METAL FUEL ASSEMBLY WILL ALSO BE DISPOSITIONED IN A SIMILAR MANNER.</p>					
<p>Description of what constitutes completion of this milestone: This milestone documents the completion of the transfer of the special fuel to Idaho Nuclear Engineering Laboratory (INEL). Note: There is currently a Consent Order which delays shipping this special fuel to INEL until after December 31, 2000.</p>					

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE INTERIM DECAY STORAGE/FUEL STORAGE FACILITY SODIUM DRAIN				Date: 9/24/96	
Assigned To: T. M. Burke				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 12/31/98	
PBS No: RL-MS01					
MC #: B19-99-401			TPA No: M-81-04-T02		Rev:
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: EA PEG X OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)	
<p>Milestone Description: THE INTERIM DECAY STORAGE VESSEL AND FUEL STORAGE FACILITY SODIUM WILL BE MAINTAINED IN A MOLTEN STATE UNTIL THE FUEL IS REMOVED FROM THESE STORAGE LOCATIONS. THE SODIUM WILL THEN BE DRAINED TO THE TANKS LOCATED IN THE SODIUM STORAGE FACILITY AND ALLOWED TO FREEZE.</p>					
<p>Description of what constitutes completion of this milestone: The Interim Decay Storage Vessel and the Fuel Storage Facility Vessel have had all fueled components removed and the sodium drained to the extent practical in accordance with the End Point Criteria Checklist.</p>					

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE FFTF SODIUM DRAIN			Date: 9/24/96	
Assigned To: T. M. Burke			CIN:	
Program WBS Designator: 2.1.1.1.21.1.1			Due Date: 3/14/00	
PBS No: RL-MS01				
MC #: B19-00-401		TPA No: M-81-04		Rev:
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: X EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)
Milestone Description: THIS MILESTONE WILL BE COMPLETE WHEN ALL OF THE SODIUM COOLANT HAS BEEN DRAINED FROM THE PLANT TO THE NEW SODIUM STORAGE FACILITY TO THE MAXIMUM PRACTICAL EXTENT. THE SODIUM RESIDUALS THAT REMAIN ARE INTEGRAL TO THE SYSTEM, ARE SOLID IN FORM, AND ADHERE TO THE SURFACES OF THE SYSTEM COMPONENTS. THE RESIDUALS WILL BE MAINTAINED UNDER AN INERT GAS BLANKET TO MINIMIZE POTENTIAL REACTIONS DURING THE LONG-TERM SURVEILLANCE AND MAINTENANCE PHASE. DURING FINAL DISPOSITION OF THE FACILITY, ANY REGULATED WASTES GENERATED FROM THE CLEANING OR DISMANTLEMENT OF THESE SYSTEMS, WILL BE APPROPRIATELY MANAGED.				
Description of what constitutes completion of this milestone: The Heat Transport Systems, the reactor vessel, the IDS vessel, and the Fuel Storage Facility, as well as supporting sodium systems, have been drained to the extent practical, in accordance with the End Point Criteria Checklist.				

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE PCB TRANSFORMER DISPOSAL				Date: 9/24/96	
Assigned To: S. H. Crow				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 9/30/01	
PBS No: RL-MS01					
MC #: B19-01-502			TPA No: M-81-06		Rev:
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: X EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)	
<p>Milestone Description: THE NINETEEN POLYCHLORINATED BIPHENYL (PCB) ELECTRICAL TRANSFORMERS AT THE FFTF WILL BE DISPOSED OF AFTER THE TRANSFORMERS ARE REMOVED FROM SERVICE. TWELVE OF THE NINETEEN TRANSFORMERS, WILL BE DRAINED, FLUSHED AND REMOVED FROM FFTF WITHIN THIRTY DAYS AFTER BEING REMOVED FROM SERVICE AS SPECIFIED IN 40 CFR 761. SEVEN OF THE TRANSFORMERS, WHICH ARE IN AREAS THAT ARE DIFFICULT TO OBTAIN ACCESS, WILL BE DRAINED, FLUSHED AND REMOVED FROM FFTF WITHIN NINE MONTHS OF CESSATION OF SERVICE TO ENSURE THEIR DISPOSAL WITHIN ONE YEAR FROM THE START OF STORAGE. CESSATION OF SERVICE CONSTITUTES THE START OF THE STORAGE, AND 40 CFR 761 LIMITS THIS STORAGE AND SUBSEQUENT DISPOSAL TO A ONE-YEAR PERIOD.</p>					
<p>Description of what constitutes completion of this milestone: Nineteen PCB cooled/insulated transformers are removed from the FFTF for disposal.</p>					

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT FFTF END POINT CRITERIA DOCUMENT				Date: 9/24/96	
Assigned To: D. A. Gantt				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 12/31/98	
PBS No: RL-MS01					
MC #: B17-99-102			TPA No: M-81-03		Rev:
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: X EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: X Report Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)	
Milestone Description: A DOCUMENT IDENTIFYING THE END POINT CRITERIA NECESSARY TO PLACE THE FFTF IN A SAFE AND STABLE CONFIGURATION WILL BE DEVELOPED. THIS DOCUMENT WILL BE PROVIDED TO EPA AND ECOLOGY FOR REVIEW, AND APPROVAL FOR THE HAZARDOUS SUBSTANCES PROPOSED TO REMAIN AT THE FACILITY.					
Description of what constitutes completion of this milestone: Submit End Point Criteria Document to Ecology.					

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE FFTF TRANSITION AND INITIATE THE S&M PHASE				Date: 9/24/96	
Assigned To: R. K. Hulvey				CIN:	
Program WBS Designator: 2.1.1.1.21.1.1				Due Date: 12/31/01	
PBS No: RL-MS01					
MC #: B17-02-101			TPA No: M-81-00		Rev:
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	MILESTONE TYPE: X EA PEG OTHER TIP	DNFSB STATUS: DNFSB (Y/N): N COMMIT #: RECOMM #:	DELIVERABLE: Report X Letter Drawing(s) Other (Specify)	ADDRESS TO: DOE-HQ X DOE-RL Other (Specify)	
Milestone Description: This major milestone will be achieved by completion of all activities necessary to achieve the end point criteria for placing the facility in a safe and stable surveillance and maintenance mode.					
Description of what constitutes completion of this milestone: The End Point Criteria Checklist has been completed and the Surveillance and Maintenance Plan has been implemented.					

FAST FLUX TEST FACILITY
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)

FY 1999
(\$000s)

PROJECT WBS:		2.0.1									
PBS NO:		RL-MS01									
PBS TITLE:		FFTF									
FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997- FY2006
OPERATING EXPENSE	31,100	-	41,005	-	-	-	-	-	-	-	72,105
CENRTC	-	-	-	-	-	-	-	-	-	-	-
GENERAL PLANT PROJECT	-	-	-	-	-	-	-	-	-	-	-
LINE ITEM (List Each One)											
0	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-
Escalation	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB ¹	31,100	-	41,005	-	-	-	-	-	-	-	72,105
MGMT RESERVE ²	-	-	-	-	-	-	-	-	-	-	-
LINE ITEM CONTINGENCY ³	-	-	-	-	-	-	-	-	-	-	-
TRANSFERS ³	-	-	162	-	-	-	-	-	-	-	162
Subtotal	-	-	162	-	-	-	-	-	-	-	162
Escalation	-	-	-	-	-	-	-	-	-	-	-
TOTAL	31,100	-	41,167	-	-	-	-	-	-	-	72,267

¹Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover is Not Included

²Management Reserve and Line Item Contingency Held by RL

³Funds/Workscope Transferred to Other Sites, Transferred to Hanford from Other Sites, and/or Funds/Workscope Controlled by RL.

FAST FLUX TEST FACILITY
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1999
(\$000s)

PROJECT WBS:	2.0.1												
PBS NO:	RL-MS01												
PBS TITLE: FFTF													
FUND TYPE	FY2007	FY2008	FY2009	FY2010	FY2011- FY2015	FY2016- FY2020	FY2021- FY2025	FY2026- FY2030	FY2031- FY2035	FY2036- FY2040	FY2041- FY2045	FY2046- FY2050	TOTAL FY1997- FY2050
OPERATING EXPENSE	-	-	-	-	-	-	-	-	-	-	-	-	72,105
CENRTC	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL PLANT PROJECT	-	-	-	-	-	-	-	-	-	-	-	-	-
LINE ITEM (List Each One)													
0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-	-	-
Escalation	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB ¹	-	-	-	-	-	-	-	-	-	-	-	-	72,105
MGMT RESERVE ²	-	-	-	-	-	-	-	-	-	-	-	-	-
LINE ITEM CONTINGENCY ²	-	-	-	-	-	-	-	-	-	-	-	-	-
TRANSFERS ³	-	-	-	-	-	-	-	-	-	-	-	-	162
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	162
Escalation	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	72,267

¹Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover is Not Included

²Management Reserve and Line Item Contingency Held by RL

³Funds/Workscope Transferred to Other Sites, Transferred to Hanford from Other Sites, and/or Funds/Workscope Controlled by RL.

FAST FLUX TEST FACILITY

BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)FY 1999
(\$000s)

PROJECT WBS:	2.0.1	
PBS NO:	RL-MS01	
PBS TITLE:	FFTF	
	TARGET	PRESIDENT'S
	B/A	BUDGET PLUS
		CARRYOVER
FUND TYPE	FY1998	FY1999
OPERATING EXPENSE	-	41,200
CENRTC	-	
GENERAL PLANT PROJECT	-	
LINE ITEM (List Each One)		
0	-	
0	-	
0	-	
0	-	
0	-	
0	-	
0	-	
Subtotal Line Items	-	
TOTAL NEW B/A	-	41,200
ESTIMATED FY 1998 CARRYOVER		
TOTAL NEW B/A+CARRYOVER	-	41,200

*Estimated Carryover is NOT Included In Cost Baseline; Change Request For Actual Carryover
Submitted After September 30, 1998.

C. Supplemental Information

FY 1999-2000 Project Priority Lists

UAS ID	EM Office	PBS #	UAS Name	1999	1999LI	2000	2000LI	PS	WS	EP
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Advanced Reactors

476	EM60	TP11	ESPC -- 337 Highbay Steam	\$98		\$98				
2	EM60	TP11	Advanced Reactors Transition [ART] Min Safe (Nuclear Energy [NE] Legacies, 309 Bldg)	\$1,132		\$1,210		L	H	L
Subtotal: Min Safe				\$1,230	\$0	\$1,308	\$0			
405	EM60	TP11	Advanced Reactor Fee	\$110		\$110		NA	NA	NA
Subtotal: Essential Services				\$1,340	\$0	\$1,418	\$0			
3	EM60	TP11	309/PRTR Deactivation	\$567		\$1,362		L	L	L
4	EM60	TP11	Nuclear Energy [NE] Legacy Deactivation			\$1,438		L	M	L
Subtotal: Additional Roms				\$1,907	\$0	\$2,280	\$0			

C-1-1

HNF-SF-1240
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PERFORMANCE ENHANCEMENT WORKSHEET

ITEM 1

Part I

PROJ: ADVANCED REACTORS TRANSITION		Ranges				FUNDING REQUIRED TO INVESTIGATE OPPORTUNITY (\$Thous)	WBS#(s) WHERE FUNDING IS REQUIRED
PBS: RL-TP-11		ROM- PROBABILITY OF SUCCESS(%)		ROM ESTIMATED LIFE CYCLE SAVINGS (\$Millions)			
		90	100	\$1	\$2		
DESCRIPTION OF ENHANCEMENT OPPORTUNITY							
Full funding for 309 Building/PRTR deactivation scope would allow this work to be completed within one year instead of stretching over three years, as currently budgeted. This would save two years of surveillance and maintenance costs.							
Total						\$0	

Part II

STEPS/SCHEDULE TO ACCOMPLISH PART I ENHANCEMENTS

Activity Description		Dates		BCR Required?	
		Start	Complete	Yes	No
1	Budget full deactivation funding (\$2.4M) into the site baseline & IPL for FY 2001.	10/1/98	6/30/99		X
2	Revise out-year baseline to include full funded deactivation and turnover to BHI in FY 2001.	6/30/99	8/31/99	X	
3	Perform remaining PRTR Deactivation	10/1/00	9/30/01		
4					
5					
6					
7					
8					
9					
10					

ITEM 2

Part I

PROJ: ADVANCED REACTORS TRANSITION		Ranges		FUNDING REQUIRED TO INVESTIGATE OPPORTUNITY (\$Thous)	WBS#(s) WHERE FUNDING IS REQUIRED
PBS:		ROM - PROBABILITY OF SUCCESS(%)	ROM ESTIMATED LIFE CYCLE SAVINGS (Millions)		
DESCRIPTION OF ENHANCEMENT OPPORTUNITY					
Total			\$0 \$0	\$0	

Part II

STEPS/SCHEDULE TO ACCOMPLISH PART I ENHANCEMENTS

Activity Description		Dates		BCR Required?	
		Start	Complete	Yes	No
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

PERFORMANCE ENHANCEMENT WORKSHEET

ITEM 3

Part I

PROJ:				Ranges		FUNDING REQUIRED TO INVESTIGATE OPPORTUNITY (\$Thous)	WBS#(s) WHERE FUNDING IS REQUIRED
PBS:				ROM- PROBABILITY OF SUCCESS(%)	ROM ESTIMATED LIFE CYCLE SAVINGS (\$Millions)		
DESCRIPTION OF ENHANCEMENT OPPORTUNITY							
Total					\$0	\$0	\$0

Part II

STEPS/SCHEDULE TO ACCOMPLISH PART I ENHANCEMENTS

	Activity Description	Dates		BCR Required?	
		Start	Complete	Yes	No
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

ITEM 4

Part I

PROJ:	0	Ranges		FUNDING REQUIRED TO INVESTIGATE OPPORTUNITY (\$Thous)	WBS#(s) WHERE FUNDING IS REQUIRED
PBS:		ROM- PROBABILITY OF SUCCESS(%)	ROM ESTIMATED LIFE CYCLE SAVINGS (Millions)		
DESCRIPTION OF ENHANCEMENT OPPORTUNITY					
Total			\$0	\$0	\$0

Part II

STEPS/SCHEDULE TO ACCOMPLISH PART I ENHANCEMENTS

	Activity Description	Dates		BCR Required?	
		Start	Complete	Yes	No
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Performance Objectives and Measures

Advanced Reactors Transition Mission

HSP Success Indicator/ Critical Success Factor	Strategic Outcome/Goal	Performance Objective	Output/Metric	EM Management Commitment	FY 1999	FY 2000	FY 2001	FY 97-06	End Point Target
TP11 Reduced risk; reduced inventory; reduced mortgages; increased land available	Facilities Transition goal	Maintain the FFTF in a safe and compliant standby condition. The condition of the plant hardware, software and personnel will be preserved in a manner not to preclude a plant restart.	SNF fuel stabilized during the period m3	No				2.4	2.4
			SNF fuel stabilized during the period MTHM	No				1.81	1.81
		Transition 300 Area contaminated facilities to low risk, low cost surveillance & maintenance state	Clean out the balance of the PRTR containment	No 9/28/01					
			Clean sodium residuals from two drained storage tanks previously removed from 221-T	No 9/28/01					
			Facilities, final completion of decommissioning	No				2	2
			Facilities/buildings deactivated during the period	Yes				3	3
			Facilities/buildings deactivated during the period/Complete disposition of Hanford Site non-radioactive sodium	No 7/30/04				3	3

TP11-SF-12-10
Rev. 1

Performance Objectives and Measures

Advanced Reactors Transition Mission

HSP Success Indicator/ Critical Success Factor	Strategic Outcome/Goal	Performance Objective	Output/Metric	EM Management Commitment	FY 1999	FY 2000	FY 2001	FY 97-06	End Point Target
TP11 Reduced risk; reduced inventory; reduced mortgages; increased land available	Facilities Transition goal	Transition 300 Area contaminated facilities to low risk, low cost surveillance & maintenance state	Facilities/buildings not yet deactivated	No		4	4	4	
			Facilities/buildings deactivated during the period/Deactive 309 Building	Yes 9/30/03				1	1
			Hazardous waste disposal, on- site commercial m3	No		2		2	2
			Remove insulation from 309 Building dome	No 9/30/99					

Performance Objectives and Measures

Fast Flux Test Facility Mission

HSP Success Indicator/ Critical Success Factor	Strategic Outcome/Goal	Performance Objective	Output/Metric	EM Management Commitment	FY 1999	FY 2000	FY 2001	FY 97-06	End Point Target
MS01 Reduced risk; reduced inventory; reduced mortgages; increased land available	Facilities Transition goal	Maintain the FFTF in a safe and compliant standby condition. The condition of the plant hardware, software and personnel will be preserved in a manner not to preclude a plant restart.	Complete maintenance activities associated with "maintaining health of the facility." Specific activities will be defined at the start of each of the three consecutive four- month periods.	No 9/30/99					

1.0 PBS RL-TP11, ADVANCED REACTORS TRANSITION

Changes from the FY 1998 MYWP (as revised by BCRs):

Deactivation activities for 309 Building and for NE Legacies sodium test loops are suspended for FY 2000 due to priorities being below the funded level in the IPL. Activities are assumed to be funded again in FY 2001. This results in an additional one-year delay in project completion.

2.0 Outcomes Based on Proposed Updates

- EM Management Commitments:

There are no existing EM Management Commitments associated with this PBS.

- PBS Performance Metrics

Deactivation dates for the 309 Building and the NE Legacy sodium test loops will slip by an additional year.

309 Building is: Oct01

Proposed: Oct02 (1 facility)

NE Legacies is: Jul03

Proposed: Jul04 (3 facilities)

- FY 1999 Interim End Points

\$0.5M will be available for deactivation work (D&C) at the 309 Bldg. The proposed priority is to remove the asbestos containing insulation from the outside of the dome during this fiscal year. Based on preliminary cost estimates, there will be little funding available for contingency.

3.0 Technical Changes – Based on Proposed Updates

- Technical Requirements

There are NO CHANGES to the technical requirements.

- Technical Workscope

There are NO CHANGES to the technical workscope.

4.0 Schedule Changes – Based on Proposed Updates

- Regulatory, DNFSB, and/or HQ Milestones

TPA Target milestone M-92-11-T01, due March 2002 will be completed no sooner than July 2004. As a "Target" milestone, there is no enforcement action associated with this delay.

- Affected Project Interfaces

RL-TP14, 300 Area Revitalization, will not receive the 337 Highbay, 335, and 3718M Buildings until October 2004. (Was scheduled October 2003.)

RL-ER05, Surveillance and Maintenance, will not receive the 309 Building until October 2002. (Was scheduled October 2001.)

- Potential Slippages of Scheduled Activities as a Result of the BUG

Schedule changes are due to the low priority for requested D&C funding in FY 2000. The minimal D&C funding for FY 1999, as provided for in the BUG, was previously identified in the FY 1998 MYWP.

5.0 Cost – Based on Proposed Updates

- Costs as a Result of Items 2 through 4

The lack of D&C funding in FY 2000 will result in an added, total project cost of approximately \$1.4M, primarily for an additional year of surveillance and maintenance.

6.0 Funding

- As a result of updates to expected available funds, what strategy/path forward do you recommend for any updates to the current life-cycle baseline?

FY 1999 funding and BCWS are consistent with that projected in the FY 1998 MYWP.

FY 2000 funding is anticipated to be limited to S&M and essential services , \$1,418K, vs. the \$4,152K budgeted in the FY 1998 MYWP.

Path forward:

- Reassess site priorities to determine how many years these facilities may be held in the current status, prior to completing deactivation.
- Attempt to gain increased D&C funding for the 309 Building in the FY 2001 budget process.
- Although relatively low cost projects, the low risks and low mortgage reduction (<\$750k/yr) associated with these projects mitigate against near-term funding to completion.

7.0 Key Areas of Focused Emphasis

- Performance Objectives and Performance Metrics

See listing in section C.3.1 of this MYWP.

- Performance Enhancements

It is probable that the 309 Building deactivation could be completed in a single year, saving lifecycle S&M costs. Further assessment of this possibility will be pursued.

- Technical Issues Management List (TIML) Issues

There are no TIML Issues associated with this PBS.

- Technology Insertion Points

There are no identified technology issues related to these activities.

1.0 PBS RL-MS01 FFTF

Changes from the FY 1998 MYWP (as revised by BCRs):

The FFTF will remain in Standby throughout FY 1999, rather than beginning an EIS, as was assumed in the FY 1998 MYWP. Pseudo-PBS number RL-MS01 is assigned to allow tracking of this NE funded work within the site integration systems.

2.0 Outcomes Based on Proposed Updates

- EM Management Commitments:

Not applicable; this project is funded from DOE-NE

- PBS Performance Metrics

Not Applicable.

- FY 1999 Interim End Points

Complete work scope associated with "maintaining the health of the facility." An initial list of specific work to be accomplished in this area will be defined for each four month period and approved by RL-SPO.

Complete repairs/upgrades to the Solid Waste Cask (SWC) hoist through the completion of fabrication and complete the grapple system design.

Complete field installation of control system upgrades for the Closed Loop Ex-Vessel Machine.

Complete design of control system upgrades for the Sodium Removal System.

3.0 Technical Changes – Based on Proposed Updates

- Technical Requirements

There are NO CHANGES to the technical requirements.

- Technical Workslope

The SVC repair is new detail in the effort to preserve equipment operable for a potential restart, and, as necessary, for resumption of transition to shutdown.

4.0 Schedule Changes – Based on Proposed Updates

- Regulatory, DNFSB, and/or HQ Milestones

Deferral of the M-81 series of milestones is still pending final approval of TPA Change M-81-97-01A.

- Affected Project Interfaces

None. FFTF Standby was initiated in FY 1997.

- Potential Slippages of Scheduled Activities as a Result of the BUG

As described above. The BUG, section C.10 directs that the "FTTF is to remain in 'standby'..."

5.0 Cost – Based on Proposed Updates

- Costs as a Result of Items 2 through 4

FY 1999 costs will be \$41.0M. Lifecycle costs are indeterminate due to the lack of a clear mission direction.

6.0 Funding

- As a result of updates to expected available funds, what strategy/path forward do you recommend for any updates to the current life-cycle baseline?

Life-cycle baseline cannot be determined until a mission decision has been made by DOE-HQ.

7.0 Key Areas of Focused Emphasis

- Performance Objectives and Performance Metrics
Maintain the FFTF in a safe and compliant standby condition. The condition of the plant hardware, software, and personnel shall be maintained in a manner not to preclude a plant restart.
- Performance Enhancements
None identified.
- Technical Issues Management List (TIML) Issues
TWRS milestone M-50-03 confirmed advanced pretreatment will not be required. If FFTF is shutdown, the baseline will be developed considering the use of FFTF sodium to produce sodium hydroxide for tank waste pretreatment.
- Technology Insertion Points
There are no identified technology issues related to these activities.

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