Special Initiatives FY 1996 Multi-Year Program Plan (MYPP) WBS 5.0

S. C. Howald

Date Published
September 1995

Prepared for the U.S. Department of Energy
Assistant Secretary for Nuclear Energy

**Westinghouse
Hanford Company**

P.O. Box 1970
Richland, Washington

Hanford Operations and Engineering Contractor for the
U.S. Department of Energy under Contract DE-AC06-87RL10930

Approved for Public Release

MASTER

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APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

T.L. Ontiveros

September 22, 1995

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
MANAGEMENT & OPERATING (M&O) CONTRACT WORK AUTHORIZATION

1. Work Authorization No.

2. Initiator: R. A. Almquist TPD/FFTF Team 376-2171
Name and Signature Organization Phone No.

3. Program Title: Special Initiatives/Space Power Program

4. Program WBS No.: 5.1

5. M&O Contractor: Westinghouse Hanford Company

6. Performance Period From: 10-01-95 To: 9-30-96

7. Start Date: N/A Expected Completion Date: N/A

8. Description: Authorization is given to initiate work consistent with the Special Initiatives FY 1996 Multi-Year Program Plan (MYPP). Changes to funding and workscope will require a formal Baseline Change Control Action.

Concurrence

	NAME	SIGNATURE	DATE
9. RL Program Manager:	<u>O. A. Farabee</u>	<u>O. A. Farabee</u>	<u>9/21/95</u>
10. M&O Contractor:	<u>R. E. Traister</u>	<u>R. E. Traister</u>	<u>9/25/95</u>

Approval

11. RL AM-COR: L. L. Piper L. L. Piper 9/26/95

Funds will be authorized via the FINPLAN.

c.c. PID
CFO
M&O Contractor

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
MANAGEMENT & OPERATING (M&O) CONTRACT WORK AUTHORIZATION

1. Work Authorization No.

2. Initiator: R. A. Almquist TPD/FFTF Team 376-2171
Name and Signature Organization Phone No.

3. Program Title: Special Initiatives/Advanced Programs,
Other Advanced Programs and International
Programs

4. Program WBS No.: 5.2.1 & 5.2.2

5. M&O Contractor: Westinghouse Hanford Company

6. Performance Period From: 10-01-95 To: 9-30-96

7. Start Date: N/A Expected Completion Date: N/A

8. Description: Authorization is given to initiate work consistent with the Special Initiatives FY 1996 Multi-Year Program Plan (MYPP) for Other Advanced Programs, WBS 5.2.1, and International Programs, WBS 5.2.2. Changes to funding and workscope will require a formal Baseline Change Control Action.

Concurrence

	NAME	SIGNATURE	DATE
9. RL Program Manager:	<u>O. A. Farabee</u>	<u>R. A. Almquist</u>	<u>9/22/95</u>
10. M&O Contractor:	<u>R. E. Traister</u>	<u>R. E. Traister</u>	<u>9/25/95</u>

Approval

11. RL AM-COR: L. L. Piper L. L. Piper 9/26/95

Funds will be authorized via the FINPLAN.

c.c. PID
CFO
M&O Contractor

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
MANAGEMENT & OPERATING (M&O) CONTRACT WORK AUTHORIZATION

1. Work Authorization No.

2. Initiator: ^{for} W. A. Ruhlman *W. A. Ruhlman* TPD 376-2171
Name Signature Org. Telephone

3. Program Title: Special Initiatives/Advanced Programs/Isotopes Program

4. Program WBS No.: 5.2.3

5. Contractor: WHC

6. Performance Period From: 10/01/95 To: 09/30/96

7. Start Date: N/A Expected Completion Date: N/A

8. Description: Authorization is given to initiate work consistent with the Special Initiatives FY 1996 Multi-Year Program Plan (MYPP). Changes to funding and workscope will require a formal Change Control Action.

Concurrence

	NAME	SIGNATURE	DATE
9. RL Program Manager:	<u>C. R. Richins</u>	<u><i>C. R. Richins</i></u>	<u>9/24/95</u>
10. Contractor:	<u>R. E. Traister</u>	<u><i>R. E. Traister</i></u>	<u>9/25/95</u>

Approval

11. RL AM-COR:	<u>R. M. Rosselli</u>	<u><i>R. M. Rosselli</i></u>	<u>9/25/95</u>
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Funds will be authorized via the FINPLAN in accordance with the authorized funding table.

c.c. OPI
CFO
M&O Contractor

MYPP APPROVAL SHEET

5.0 Special Initiatives Program Office U. S. Department of Energy Richland Operations Office

Assistant Manager-Contracting Officer's Representative

L. L. Piper

9/26/95
(Date)

R. M. Rosselli

9/25/95
(Date)

RL Program Manager

for O. A. Farabee

9/25/95
(Date)

C. R. Richins

9/25/95
(Date)

Westinghouse Hanford Company Program Manager

R. E. Traister

9/25/95
(Date)

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SPECIAL INITIATIVES

1996 MULTI-YEAR PROGRAM PLAN

WBS #5.0

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1.0 PROGRAM OVERVIEW

A. Program Mission

The Special Initiatives mission supports programmatic requests for service to DOE offices, other organizations and agencies. These requests can include the following:

- Supporting priority DOE initiatives
- Researching special programs
- Studying locating new activities at the Hanford Site
- Producing specialty materials
- Providing consulting support to other sites
- Managing a broad spectrum of U.S. and international test programs

The Special Initiatives Program consists of the following elements:

WBS 5.1 - Space Power Programs

Provide a transportation system for safe and reliable transport of Radioisotope Thermoelectric Generators in accordance with the provisions of Title 10, Code of Federal Regulations, Part 71 (10 CFR 71). Section 5.1 of this document further defines this program area.

WBS 5.2 - Advanced Programs

The Hanford Site has developed key personnel and facilities which support Advanced Programs in several technical areas. These capabilities are unique to Hanford and support programs directed by either Hanford or other DOE sites. In addition, the isotope program manages the marketing, sales, processing, production and distribution of radioisotopes from the Hanford Site to government and commercial customers. The isotope program utilizes, in part, existing by-product materials from previous defense production operations plus other nuclear facilities and expertise to produce, process, package and ship these radioisotope products. Section 5.2 of this document further defines this program area.

WBS 5.9 - Special Programs

Support the many and varied activities that are not identified in the Multi-Year Program Plans. This support is to DOE Headquarters, and other DOE sites, Department of Defense, other Government agencies, Westinghouse Electric and other commercial customers.

B. Program Strategy

This mission area accomplishes national objectives by supporting space, energy, isotope, defense and other programs in addition to supporting environmental restoration and waste management. The program areas 5.1 Space Power Program, and 5.2 Advanced Programs, further define specific objectives. For all programs within Special Initiatives, the following general objectives also apply.

- Ensure safety and operation.

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- Plan to meet enforceable Tri-Party Agreement, DOE-HQ and RL milestones.
- Comply with laws and regulations including:
 - The Atomic Energy Act, as amended
 - The National Environmental Policy Act (NEPA)
 - The Resource Conservation and Recovery Act ((RCRA) and amendments
 - The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and amendments (SARA)
 - The Clean Water Act (CWA)
 - The Clean Air Act (CAA)
 - The Toxic Substances Control Act (TSCA)
 - The Safe Drinking Water Act (SDWA)
 - DOE Orders
 - Other applicable environmental laws and regulations
- Manage all radioactive, hazardous, mixed and sanitary waste so that they will not pose an unacceptable threat to human health and safety or to the environment. Compliance must be confirmed by monitoring and surveillance.
- Develop and implement programs and projects which minimize the generation of waste by material and product substitutions, by recycling, by administrative controls, and by stimulating the development of more modern materials processing methods.
- Support the Defense Program, Nuclear Energy, Energy Research, Waste Operations, and other DOE missions.
- Execute a strong quality assurance program to improve the efficiency and effectiveness of Special Initiatives programs and document achievement of these requirements.
- Execute program management in compliance with the Westinghouse Management Control System. The System Description is contained in WHC-EP-0388, Management Control System Description (WHC 1990). Specific procedures implementing these principals and requirements are confirmed in manual WHC-CM-2-5, Management Control System (WHC 1990).
- Reduce overhead and infrastructure costs.
- Establish productivity improvement targets.
- Consider placing work in the private sector wherever possible.
- Support ongoing commitments to the State, the Tribes and the overall Hanford integrated planning effort.

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2.0 PROGRAM BASELINES

A. Responsibility Assignment Matrix

Work Breakdown Structure Index and Programmatic Responsibility Assignment Matrix					
MISSION	PROGRAM	PROGRAM ELEMENT	TITLE	RESPONSIBLE MANAGER	RESPONSIBLE ORGANIZATION
5.0			SPECIAL INITIATIVES	RE TRAISTER	PSS
	5.1		SPACE POWER PROGRAMS	WF IRVINE	PSS/T&P
		5.1.3	RTG TRANSPORTATION SYSTEM	WF IRVINE	PSS/T&P
	5.2		ADVANCED PROGRAMS	RJ PUIGH	PSS/SAE
		5.2.1	OTHER ADVANCED PROGRAMS	RJ PUIGH	PSS/SAE
		5.2.2	INTERNATIONAL PROGRAMS	RJ PUIGH	PSS/SAE
		5.2.3	ISOTOPEs	RJ PUIGH	PSS/SAE

**SPECIAL INITIATIVES
WBS 5.0**

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B. Schedule Baseline

1. Program Master Baseline Schedule

Activity Name	RL WBS	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Special Initiatives	5.0							
Submit Fiscal Year (FY) Multi-Year Program Plan / Fiscal Year Work Plan (MYPP/FYWP) to RL...		△	△	△				
RL Approve FY MYPP/FYWP...		△	△	△				
Space Power Programs	5.1							
SP 100	5.1.1							
(No Activity Currently Planned in this WBS Element)								
Thermionics	5.1.2							
(No Activity Currently Planned in this WBS Element)								
RTG Transportation System	5.1.3							
Deliver RTG Transportation System to Custodian	5.1.3							
Ship RTGs For CASSINI Launch								
CASSINI Launch								
Advanced Programs	5.2							
Nuclear Criticality Database	5.2.1.2							
Nuclear Criticality Parameter Database Final Report and Database Listing	5.2.1.2.1							
International Programs								
Fuels & Materials SMA	5.2.2.2							
RBCB Work For PNC (ORT)...	5.2.2.4							
Isotopes Program Office	5.2.3							
Y-90 Production	5.2.3.1							

**FY 1996 Special Initiatives Multi-Year Program Plan
2.B.1 Program Summary Schedule**

2. Milestone List

MILESTONE LIST				
Milestone Type	Control Number	WBS/ADS	Milestone Description	Milestone Completion Date
RL	SI-96-003	5.0	Submit the Special Initiatives Fiscal Year 1997 Multi-Year Program Plan	08-31-96
RL	SI-96-004	5.0	DOE-RL approve the Special Initiatives Fiscal Year 1997 Multi-Year Program Plan	09-30-96
RL	SI-96-005	5.0	Submit the Special Initiatives Fiscal Year 1997 Multi-Year Program Plan	08-31-97
RL	SI-97-006	5.0	DOE-RL approve the Special Initiatives Fiscal Year 1997 Multi-Year Program Plan	09-30-97

* TPA, HQ, RL, and selected contractor milestones

* On Tri-Party Agreement Milestones, also designate if they are HQ, RL

SPECIAL INITIATES
WBS 5.0

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3. Milestone Description Sheets

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #1			
Title: Submit Fiscal Year 1997 Multi-Year Program Plan.			Date: 06-30-95
Assigned To: S. C. Howald			CIN:
Program WBS Designator: 5.0			Due Date: 08-31-96
Control Number: SI-96-003			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Submit to DOE-RL the Fiscal Year 1997 Multi-Year Program Plan (MYPP). The Document will detail the work scope, schedule, milestones, and funding requirements for the Special Initiatives Program.			
Description of what constitutes completion of this milestone: Delivery to the RL Assistant Manager-Contracting Officers Representative the FY 1997 MYPP for comments and approval.			
Cost Account Manager:		Program/Project Manager
L. L. Powers		R. E. Traister	
Program Element Manager R. E. Traister		Date: 9/21/95	

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #2			
Title: RL Approval of Special Initiatives Fiscal Year 1997 Multi-Year Program Plan.			Date: 06-30-95
Assigned To: S. C. Howald			CIN:
Program WBS Designator: 5.0			Due Date: 09-30-96
Control Number: SI-96-004			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: DOE-RL approval of the Special Initiatives Fiscal Year 1997 Multi-Year Program Plan (MYPP).			
Description of what constitutes completion of this milestone: Approval sheet signed by the RL Assistant Manager-Contracting Officer and Program Manager.			
Cost Account Manager: L. L. Powers		Program/Project Manager R. E. Traister
Date: 9/21/95		Date: 9/21/95	
Program Element Manager R. E. Traister			

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #3			
Title: Submit Fiscal Year 1998 Multi-Year Program Plan.			Date: 06-30-95
Assigned To: S. C. Howald			CIN:
Program WBS Designator: 5.0			Due Date: 08-31-97
Control Number: SI-96-005			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Submit to DOE-RL the Fiscal Year 1998 Multi-Year Program Plan (MYPP). The Document will detail the work scope, schedule, milestones, and funding requirements for the Special Initiatives Program.			
Description of what constitutes completion of this milestone: Delivery to the RL Assistant Manager-Contracting Officers Representative the FY 1998 MYPP for comments and approval.			
Cost Account Manager: L. L. Powers <i>[Signature]</i>		Program/Project Manager R. E. Traister <i>[Signature]</i>	
Program Element Manager R. E. Traister		Date 9/2/95	

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #4			
Title: RL Approval of Special Initiatives Fiscal Year 1998 Multi-Year Program Plan.			Date: 06-30-95
Assigned To: S. C. Howald			CIN:
Program WBS Designator: 5.0			Due Date: 09-30-97
Control Number: SI-97-006			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: DOE-RL approval of the Special Initiatives Fiscal Year 1998 Multi-Year Program Plan (MYPP).			
Description of what constitutes completion of this milestone: Approval sheet signed by the RL Assistant Manager-Contracting Officer and Program Manager.			
Cost Account Manager: L. L. Powers		Program/Project Manager R. E. Traister
Date 9/21/95		Date 9/21/95	
Program Element Manager R. E. Traister			

SPACE POWER PROGRAM

1996 MULTI-YEAR PROGRAM PLAN

WBS #5.1

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RTG TRANSPORTATION SYSTEM PROGRAM ELEMENT - WBS 5.1.3

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1.0 PROGRAM OVERVIEW

A. Program Mission

This work breakdown structure element encompasses the activities conducted at Hanford in support of NE-50 (Space and Defense Power Systems). The only program currently active in this element is:

Radioisotope Thermoelectric Generator (RTG) Transportation System - WHC will support DOE, on a continuing basis, in the overall program management, design, fabrication, safety analysis, and testing of the RTG Transportation System (RTGTS). The RTGTS Program will develop a transportation system for transporting Radioisotope Thermoelectric Generator (RTGs) in full compliance with 10 CFR 71 and DOE guidance. The RTGTS program deliverables will include three RTG Packagings, two custom semitrailer systems, and all necessary operations and ancillary equipment.

B. Program Strategy

In addition to the overall objectives as identified in Section 5.0, Special Initiatives, the following specific objectives apply to the Space and Power Programs.

RTG Transportation System - Provide support to DOE on a continuing basis through Fiscal Year 1997 in the overall program management of the RTG Transportation System development effort. This effort will develop a system to transport RTGs in a safe and reliable manner in accordance with the provisions of 10 CFR 71, DOE guidance, approved RTG User Community Guidance, and all applicable laws and regulations.

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2. PROGRAM BASELINES

A. Responsibility Assignment Matrix

Work Breakdown Structure Index and Programmatic Responsibility Assignment Matrix					
PROGRAM ELEMENT	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESPONSIBLE ORGANIZATION
5.1.3			RTG TRANSPORTATION SYSTEM	WF IRVINE	PSS/T&P
	5.1.3.1		PROGRAM MANAGEMENT	DL MCCALL	PSS/T&P
		5.1.3.1.1 1XJ101	PROGRAM MANAGEMENT	DL MCCALL	PSS/T&P
	5.1.3.2		WHC DESIGN & FABRICATION	JG FIELD	PSS/T&P
		5.1.3.2.1 6XJ200	RTG DESIGN & FABRICATION	JG FIELD	PSS/T&P
		5.1.3.2.1 1XJ200	RTG EXPENSE FUNDED EQUIPMENT	JG FIELD	PSS/T&P
	5.1.3.3		RTG PROGRAM SUPPORT	DL MCCALL	PSS/T&P
		5.1.3.3.1 6XJ5A3	TELEDYNE BROWN ENGINEERING	DL MCCALL	PSS/T&P

RTG TRANSPORTATION SYSTEM
5.1.3

1.0 PROGRAM OVERVIEW

A. Program Mission

Radioisotope Thermoelectric Generator (RTG) Transportation System - WHC will support DOE on a continuing basis in the overall program management and execution of design, fabrication, testing, and certification activities associated with the RTGTS. This effort will develop a transportation system capable of transporting RTGs in full compliance with 10 CFR 71, DOE, and approved RTG User Community functions requirements and guidance. The program deliverables will include three RTG Packages, two custom semitrailer systems, all necessary operations and ancillary equipment and documentation. WHC will also provide coordination and liaison with the organizations that will use the RTGTS as well as the ultimate system custodian, EG&G Mound, Miamisburg, Ohio.

The complete RTGTS will be delivered to the custodian on or before December 15, 1996. The completion date is required in order that the RTGTS can support the National Aeronautics and Space Administration Cassini mission to Saturn. The Cassini mission will use three RTGs plus one spare. The RTGTS is an essential mission support element.

B. Program Strategy

WHC will provide direct technical and financial management and oversight of design, fabrication, procurement, testing, and certification activities associated with the RTGTS. WHC management and oversight applies to WHC and subcontractor activities. Specifically, WHC will:

- Direct technical and financial oversight of all program activities and performing subcontractor's efforts. This includes maintaining schedule and applicable budget activities as required by WHC and DOE guidance.
- Ensure that the RTGTS meets the requirements of 10 CFR 71, other applicable regulatory requirements, approved RTG User Community requirements, and conforms to DOE directives.
- Design, analyze, fabricate, and test all required system hardware.
- Develop the Safety Analysis Report for Packaging (SARP) for the RTG Package design. This activity includes coordination and liaison with the DOE Office of Facility Safety Analysis to obtain approval of the SARP leading to issuance of a Certificate of Compliance for the package design.

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- Provide coordination and liaison with the RTG User Community. The objective of this liaison will be to appraise the users of the RTGTS program status and to ensure that the RTGTS conforms to user requirements. Activities that require review and approval are defined in the *Radioisotope Thermoelectric Generator Transportation System Program Management Plan*, WHC-SD-PMP-001.
- Provide coordination and liaison with the ultimate system custodian, EG&G Mound. The objective of this liaison will be to ensure that the custodian is prepared to receive and support the RTGTS.
- Submission of monthly technical and financial reports to RL.
- Support of periodic program update meetings as directed by DOE.

2.0 PROGRAM BASELINES

A. Work Breakdown Structure (WBS) Dictionary

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Space Power Programs	2 DATE August 12, 1993	3 IDENTIFICATION NO. DE-AC06-87RL10930
4 WBS ELEMENT CODE 5.1.3	5 WBS ELEMENT TITLE RTG Transportation System	
6 INDEX LINE NO.	7 REVISION NO. AND AUTHORIZATION	8 DATE
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION	11 BUDGET AND REPORTING NUMBER AF-70-10-20 & AF-70-30	

12. ELEMENT TASK DESCRIPTION

This program element is for the design, fabrication, testing, certification, and procurement of three shipping packages, two custom semitrailers, and necessary operations and ancillary equipment for the transport of RTGs. It includes the engineering activities needed to meet the technical requirements (thermal, mechanical, shielding, interface, etc.) for shipping RTGs, and the preparation of the Safety Analysis Report for Packaging (SARP) needed to meet regulatory requirements defined in 10 CFR 71.

The RTG Transportation System Program is divided into three elements: (1) Program Management, (2) WHC Design/Fabrication, and (3) RTG Contractors. The WHC Design/Fabrication effort is further divided into five elements. These elements are identified as follows:

- System 100 - Systems Engineering
- System 120 - Packaging System
- System 140 - Trailer System
- System 160 - Operations and Ancillary Equipment
- System 180 - Facility Transport System

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WBS 5.1

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A. Actions/Deliverables

1. Assess and ensure transportation system progresses on technical, cost and schedule bases.
2. Prepare monthly technical and financial reports to DOE and coordinate program reviews with DOE.
3. Interface with RTG manufacturers and users to coordinate package handling and operating requirements.
4. Attend program status updates as directed.
5. Attend monthly RL Special Initiatives meeting and present program status and issues.
6. Design, analyze, test, obtain Certification of Compliance from EH-32 and fabricate three RTG shipping packages, two custom semitrailers, and operations and ancillary equipment.
7. Provide detailed schedules to RL on a monthly basis or upon request.

B. Resources

This WBS element includes labor, overhead, G&A, procurement, transportation, and testing costs.

B. Schedule Baseline

1. Program Master Baseline Schedule

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FY 1996 Special Initiatives Multi-Year Program Plan
2.B.1 Space Power Program

Activity Name	Milestone Control #	RL WBS	TYPE	Fiscal Year 1996					Fiscal Year 1997				Fiscal Year 1998				
				4	1	2	3	4	1	2	3	4	1	2	3	4	1
Space Power Systems		5.1															
SP 100		5.1.1					(No Activity Currently Planned in This Element)										
Thermionics		5.1.2					(No Activity Currently Planned in This Element)										
RTG Transportation System		5.1.3															
Deliver RTG Transportation System to Custodian	SIP-97-063	5.1.3.4	HQ							▽							
Ship RTGs For CASSINI Launch											▽						
CASSINI Launch												▽					
Systems Engineering (100)		5.1.3.2															
Complete Final System Acceptance Test (FSAT)	SIP-96-054	5.1.3.2.1	RL														
Complete System 100 Functional Assessment	SIP-96-066	5.1.3.2.1	RL														
Complete System 100 Functional Demonstration	SIP-96-067	5.1.3.2.1	RL														
Packaging System (120)		5.1.3.2															
Start Fabrication of Packaging(s)	SIP-95-029	5.1.3.2.2	RL														
				4	1	2	3	4	1	2	3	4	1	2	3	4	1
				Fiscal Year 1996					Fiscal Year 1997				Fiscal Year 1998				

Aug 31, 1995

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Aug 31, 1995 -

2. Milestone List

MILESTONE LIST				
Milestone Type	Control Number	WBS/ADS	Milestone Description	Milestone Completion Date
HQ	SIP-97-063	5.1.3.4	Deliver RTG Transportation System to Custodian	12-15-96
RL	SIP-96-054	5.1.3.2.1	Complete Final Acceptance Test (FSAT)	8-30-96
RL	SIP-96-066	5.1.3.2.1	Complete System 100 Functional Assessment	5-6-96
RL	SIP-96-067	5.1.3.2.1	Complete System 100 Functional Demonstration	9-13-96
RL	SIP-95-028	5.1.3.2.2	Receive Certificate of Compliance	3-18-96
RL	SIP-95-029	5.1.3.2.2	Start Fabrication of Packaging(s) (Completed 8-28-95)	10-2-95
RL	SIP-96-030	5.1.3.2.2	Complete Fabrication of Two Packages	7-29-96
RL	SIP-95-070	5.1.3.2.2	Complete Fabrication of Third Package	12-1-96
RL	SIP-96-068	5.1.3.2.3	Complete Fabrication of the First Subsystem 141 Custom Semitrailer	11-30-95
RL	SIP-96-069	5.1.3.2.3	Complete Fabrication of the Second Subsystem 141 Custom Semitrailer	1-15-96
RL	SIP-95-058	5.1.3.2.4	Issue Operating and Maintenance Manual(s) for Review	4-1-96

* TPA, HQ, RL, and selected contractor milestones

* On Tri-Party Agreement Milestones, also designate if they are HQ, RL

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3. Milestone Description Sheets

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #1			
Title: Deliver RTG Transportation System to Custodian			Date: 08-05-94
Assigned To: J. G. Field			CIN:
Program WBS Designator: 5.1.3.4			Due Date: 12-15-96
Control Number: SIP-97-063			Rev: 0
MILESTONE TYPE: ☒ DOE-HQ ☐ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Turn the RTG Transportation System, over to the custodian.			
Description of what constitutes completion of this milestone: - Release System 100 to the custodian via letter. NOTE: This milestone is dependent upon the issuance of the Certificate of Compliance. The Certificate of Compliance is not completely in the control of Westinghouse Hanford Company as it is issued by the DOE licensing agent.			
Cost Account Manager: J. C. McCoy		Date	Program/Project Manager W. F. Irvine
Program Element Manager D. L. McCall		Date	

2. Milestone List

MILESTONE LIST				
Milestone Type*	Control Number	WBS/ADS	Milestone Description	Milestone Completion Date
HQ	SIP-97-063	5.1.3.4	Deliver RTG Transportation System to Custodian	12-15-96
RL	SIP-96-054	5.1.3.2.1	Complete Final Acceptance Test (FSAT)	8-30-96
RL	SIP-96-066	5.1.3.2.1	Complete System 100 Functional Assessment	5-6-96
RL	SIP-96-067	5.1.3.2.1	Complete System 100 Functional Demonstration	9-13-96
RL	SIP-95-028	5.1.3.2.2	Receive Certificate of Compliance	3-18-96
RL	SIP-95-029	5.1.3.2.2	Start Fabrication of Packaging(s) (Completed 8-28-95)	10-2-95
RL	SIP-96-030	5.1.3.2.2	Complete Fabrication of Two Packages	7-29-96
RL	SIP-95-070	5.1.3.2.2	Complete Fabrication of Third Package	12-1-96
RL	SIP-96-068	5.1.3.2.3	Complete Fabrication of the First Subsystem 141 Custom Semitrailer	11-30-95
RL	SIP-96-069	5.1.3.2.3	Complete Fabrication of the Second Subsystem 141 Custom Semitrailer	1-15-96
RL	SIP-95-058	5.1.3.2.4	Issue Operating and Maintenance Manual(s) for Review	4-1-96

* TPA, HQ, RL, and selected contractor milestones

* On Tri-Party Agreement Milestones, also designate if they are HQ, RL

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3. Milestone Description Sheets

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #1			
Title: Deliver RTG Transportation System to Custodian			Date: 08-05-94
Assigned To: J. G. Field			CIN:
Program WBS Designator: 5.1.3.4			Due Date: 12-15-96
Control Number: SIP-97-063			Rev: 0
MILESTONE TYPE: ☒ DOE-HQ ☐ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Turn the RTG Transportation System, over to the custodian.			
Description of what constitutes completion of this milestone: - Release System 100 to the custodian via letter. NOTE: This milestone is dependent upon the issuance of the Certificate of Compliance. The Certificate of Compliance is not completely in the control of Westinghouse Hanford Company as it is issued by the DOE licensing agent.			
Cost Account Manager: J. C. McCoy		Program/Project Manager W. F. Irvine	
Program Element Manager D. L. McCall		Date 9/22/95	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #2			
Title: Complete Final System Acceptance Test (FSAT)			Date: 08-05-94
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.1			Due Date: 08-30-96
Control Number: SIP-96-054			Rev: 2
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Complete the final system acceptance test. This test will verify the performance of all systems except System 180. The System 180 design will be completed, but the system will not be built.			
Description of what constitutes completion of this milestone: - Complete final system acceptance test procedure. - Conduct the test. NOTE: This milestone does not include activities associated with the final system acceptance test report.			
Cost Account Manager: J. C. McCoy		Date: 9/22/95	Program/Project Manager: W. F. Irvine
Program Element Manager: D. L. McCall		Date: 4/22/95	

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #3			
Title: Complete System 100 Functional Assessment			Date: 05-01-95
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.1			Due Date: 05-06-96
Control Number: SIP-96-066			Rev: 0
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
<p>Milestone Description:</p> <p>Complete the functional assessment of System 100. This assessment will not include the Package, System 120, or the Facility Transporter, System 180.</p>			
<p>Description of what constitutes completion of this milestone:</p> <p>- Conduct a series of evaluations on all systems making up System 100, except for System 120 and System 180 as noted above.</p> <p>This functional assessment replaces the individual system integration tests and will determine if each system meets the basic functional design and interface requirements. These evaluations will be preparatory to the Full System Acceptance Test to be conducted following this assessment.</p> <p>NOTE: This milestone does not include activities associated with final documentation/reporting of the functional assessment.</p>			
Cost Account Manager:		Program/Project Manager	
J. C. McCoy	Date: 9/22/95	W. F. Irvine	Date: 9/22/95
Program Element Manager			
D. L. McCall	Date: 9/22/95		

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #4			
Title: Complete System 100 Functional Demonstration			Date: 05-01-95
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.1			Due Date: 09-13-96
Control Number: SIP-96-067			Rev: 0
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Complete a demonstration of the functioning of System 100 before the RTG community. This demonstration will not include System 180.			
Description of what constitutes completion of this milestone: - Completion of demonstration NOTE: This milestone does not include activities associated with final documentation/reporting of the demonstration.			
Cost Account Manager: J. C. McCoy		Date 9/22/95	Program/Project Manager W. F. Irvine
Program Element Manager D. L. McCall		Date 9/22/95	

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #5			
Title: Receive Certificate of Compliance			Date: 08-05-94
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.2			Due Date: 03-18-96
Control Number: SIP-95-028			Rev: 2
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Receive the Certificate of Compliance from the DOE certification authority.			
Description of what constitutes completion of this milestone: - Submit SARP to DOE certification authority. - Resolve review questions from DOE certification authority. - Receive Certificate of Compliance. NOTE: This milestone is not considered under the control of the Westinghouse Hanford Company, but it is important to the success of the RTG Transportation System Program.			
Cost Account Manager: J. C. McCoy		Date 9/22/95	Program/Project Manager W. F. Irvine
Program Element Manager D. L. McCall		Date 9/24/95	Date 9/22/95

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #6			
Title: Start Fabrication of Packaging(s)			Date: 08-05-94
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.2			Due Date: 10-02-95 Completed 8-28-95
Control Number: SIP-95-029			Rev: 1
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Start fabrication of the packages.			
Description of what constitutes completion of this milestone: <ul style="list-style-type: none"> - Complete the final design review for regulatory hardware. - Fabrication shop under contract. - Partial receipt of materials at fabrication site. - Start of fabrication <p>NOTE: This date is the latest start date possible to meet program delivery dates. However, starting fabrication prior to receipt of a Certificate of Compliance from the DOE's Office of Facility Safety Analysis (EH-32) assumes some risk to the program.</p>			
Cost Account Manager: J. C. McCoy <i>[Signature]</i>		Program/Project Manager W. F. Irvine <i>[Signature]</i>	
Program Element Manager D. L. McCall <i>[Signature]</i>		Date 9/22/95	

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #7			
Title: Complete Fabrication of Two Packages			Date: 08-05-94
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.2			Due Date: 07-29-96
Control Number: SIP-96-030			Rev: 1
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Complete fabrication of two packages, System 120.			
Description of what constitutes completion of this milestone: - Complete fabrication of two packages in accordance with specification WHC-S-0397.			
Cost Account Manager: J. C. McCoy <i>[Signature]</i> 9/22/95		Program/Project Manager W. F. Irvine <i>[Signature]</i> 9/22/95	
Program Element Manager D. L. McCall <i>[Signature]</i> 9/22/95			

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #8			
Title: Complete Fabrication of Third Package			Date: 08-05-94
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.2			Due Date: 12-01-96
Control Number: SIP-95-070			Rev: 0
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Complete fabrication of third package, System 120.			
Description of what constitutes completion of this milestone: - Complete fabrication of third package in accordance with specification WHC-S-0397.			
Cost Account Manager: J. C. McCoy <i>[Signature]</i> 9/22/95		Program/Project Manager W. F. Irvine <i>[Signature]</i> 9/22/95	
Program Element Manager D. L. McCall <i>[Signature]</i> 9/22/95			

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #9			
Title: Complete Fabrication of First Subsystem 141 Custom Semitrailer			Date: 05-01-95
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.3			Due Date: 11-30-95
Control Number: SIP-96-068			Rev: 0
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Complete fabrication, but not testing, of the first Subsystem 141 Custom Semitrailer by the supplier.			
Description of what constitutes completion of this milestone: - Completion of the Custom Semitrailer fabrication.			
Cost Account Manager: J. C. McCoy <i>[Signature]</i> 9/22/95		Program/Project Manager W. F. Irvine <i>[Signature]</i> 9/22/95	
Program Element Manager D. L. McCall <i>[Signature]</i> 9/22/95			

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #10			
Title: Complete Fabrication of Second Subsystem 141 Custom Semitrailer			Date: 05-01-95
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.3			Due Date: 01-15-96
Control Number: SIP-96-069			Rev: 0
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Complete fabrication, but not testing, of the second Subsystem 141 Custom Semitrailer by the supplier.			
Description of what constitutes completion of this milestone: - Completion of the Custom Semitrailer fabrication.			
Cost Account Manager: J. C. McCoy <i>[Signature]</i>		Program/Project Manager W. F. Irvine <i>[Signature]</i>	
Program Element Manager D. L. McCall <i>[Signature]</i>		Date 9/22/95	

SPACE POWER PROGRAM
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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #11			
Title: Issue Operating and Maintenance Manual(s) for Review			Date: 08-05-94
Assigned To: J. G. Field			CIN: SI5-195-008
Program WBS Designator: 5.1.3.2.4			Due Date: 04-01-96
Control Number: SIP-95-058			Rev: 1
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Provide Draft Operating and Maintenance manual(s) for System 120 and System 140.			
Description of what constitutes completion of this milestone: - Issue Draft Operating and Maintenance manual(s) for System 120 and System 140 for review. NOTE: This milestone does not include the Integrated Operating Procedure(s) or O&M manual delivery, which are the responsibility of the custodian, as defined in WHC-SD-RTG-PMP-003. The final O&M manuals will be delivered as part of milestone SIP-97-063.			
Cost Account Manager: J. C. McCoy		Date: 9/22/95	Program/Project Manager: W. F. Irvine
Program Element Manager: D. L. McCall		Date: 9/22/95	

C. Cost Baseline

1. Cost Baseline Summary by Year

Cost Baseline Summary (\$ in Thousands)								
Program Element/ADS #	Fund Type (OPI, LI, CE, GPP)	FY 1996 SMS Guidance	FY 1996 Plan	FY 1997 Plan	FY 1998 Plan	FY 1999 Plan	FY 2000 Plan	FY 2001 Plan
5.1.3.1 Program Management	OPI	289	289	99	0	0	0	0
5.1.3.2 WHC Design & Fabrication	OPI	2,796	2,796	0	0	0	0	0
5.1.3.3 RTG Program Support	OPI	90	90	30	0	0	0	0
5.1.3.4 Preparation for Delivery	OPI	0	0	232	0	0	0	0
Total Program Cost Summary	OPI CE GPP LI	3,175	3,175	361	0	0	0	0
	Total	3,175	3,175	361	0	0	0	0

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2. Program Carryover

FY 1996 PROGRAM CARRYOVER (\$ in '000'S)

- \$1,174.1 • This carryover is committed to three program areas. The first is workscope carryover for October 1995 for the WHC, ICF Kaiser, and BSCR support personnel at Hanford. Second, the custom semi-trailer manufacturer, Mobilized Systems, Inc., will be submitting bills for work performed in October 1995. Third, a contract to Packaging Technologies was established in fiscal year 1995 for the fabrication of the three RTG package production units. Note that the bulk of the carryover was created by schedule delays earlier in FY 1995 which pushed workscope on the custom semi-trailers and production unit packages into fiscal year 1996. Additionally, these carryover funds plus the \$3.175 million is the minimum funding requirement to complete the entire scope of work. Funding levels less than this will necessitate a reduction in workscope.

3. Planned Staffing Profiles

Planned Staffing (Full Time Equivalent)				Note: Job Family Only After 1997				
Job Family	Number							
Job Category		1996	1997	1998	1999	2000	2001	2002
MANAGERS								
First line								
General/executive		0.6	0.3					
Projec/Program		0.1	0.1					
Other								
Subtotal		0.7	0.4	0.0	0.0	0.0	0.0	0.0
ENGINEERS								
Chemical								
Civil								
Computer								
Electrical		1.2	0.0					
Environmental								
Industrial								
Mechanical		5.4	1.2					
Nuclear		0.1	0.0					
Petroleum/Mining								
Plant		0.1	0.1					
Quality Control		0.3	0.1					
Safety		0.1	0.0					
Other								

Planned Staffing (Full Time Equivalent)				Note: Job Family Only After 1997				
Job Family	Number							
Job Category		1996	1997	1998	1999	2000	2001	2002
Subtotal		7.2	1.4	0.0	0.0	0.0	0.0	0.0
SCIENTISTS								
Chemists								
Environmental								
Geologists								
Life								
Material								
Mathematicians								
Physicists								
Social								
Other								
Subtotal		0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADMINISTRATIVE/OTHER PROFESSIONALS								
Accountant/auditor		0.5	0.5					
Architect								
Buyers/Procurement		0.2	0.0					
Communications								
Compliance Inspectors								

Planned Staffing (Full Time Equivalent)				Note: Job Family Only After 1997				
Job Family	Number							
Job Category		1996	1997	1998	1999	2000	2001	2002
Computer Sys Analyst								
Cost Est/planner/sch		0.5	0.0					
Health Physics								
Industrial Hygiene								
Lawyers								
Personnel/labor Relations								
Physicians								
Physician Assistant/Nurse								
Safeguard & Security								
Tech Writers & Editors		1.0	0.0					
Trainers								
Other								
Subtotal		2.7	0.5	0.0	0.0	0.0	0.0	0.0
GENERAL ADMIN/SECRETARY/CLERK								
Admin Assistant								
Office Clerk (Gen)								

Planned Staffing (Full Time Equivalent)				Note: Job Family Only After 1997				
Job Family	Number							
Job Category		1996	1997	1998	1999	2000	2001	2002
Office Clerk (Special)		0.2						
Secretaries		0.3	0.3					
Typist/Word Processor		0.1	0.0					
Other								
Subtotal		0.4	0.3	0.0	0.0	0.0	0.0	0.0
TECHNICIANS								
Computer Operator/Coder								
Drafters								
Engineers/Technicians		1.3	0.0					
Environmental Science Technicians								
Health Physics Technicians								
Industrial Saf/health Technicians								
Instru/Control Technicians		0.3	0.0					
Lab. Technicians								
Media Technicians								

Planned Staffing (Full Time Equivalent)				Note: Job Family Only After 1997				
Job Family	Number							
Job Category		1996	1997	1998	1999	2000	2001	2002
Survey/Map Technicians								
Other								
<u>Subtotal</u>		1.6	0.0	0.0	0.0	0.0	0.0	0.0
CRAFTS								
Carpenters								
Electricians								
HVAC								
Machinists								
Masons								
Millwrights								
Painters								
Plmbrs/Pipefitters								
Struct/Metal Workers								
Vehicle/Mobile Equip. Mechanics								
Welders								
Other								
<u>Subtotal</u>		0.0	0.0	0.0	0.0	0.0	0.0	0.0
OPERATORS								

Planned Staffing (Full Time Equivalent)				Note: Job Family Only After 1997				
Job Family	Number							
Job Category		1996	1997	1998	1999	2000	2001	2002
Lt. Vehicle Drivers								
Material Moving Equip.								
Nuclear Plant								
Utilities Waste Proces								
Other								
<u>Subtotal</u>		0.0	0.0	0.0	0.0	0.0	0.0	0.0
LABOR & GENERAL WORKERS								
Firefighters								
Food Service								
Hand/Help Lab Gen								
Hand/Help Lab Special								
Janitors/Cleaners								
Laundry Workers								
Security Guards								
Other								
<u>Subtotal</u>		0.0	0.0	0.0	0.0	0.0	0.0	0.0
<u>TOTAL FTEs</u>		12.6	2.6	0.0	0.0	0.0	0.0	0.0

3. EXECUTION YEAR

1. Cost Baseline by Month

Cost Baseline By Month														
Activity/Cost Account		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
5.1.3.1 Program Management	Labor \$	28	25	31	26	18	24	19	18	22	16	18	23	275
	Other \$		3		3		3		4		4		4	22
Monthly \$ Totals		29	29	31	30	19	28	19	23	23	20	18	28	297
FTEs		3.2	3.2	3.2	3.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.5
Comments:														

Cost Baseline By Month														
Activity/Cost Account		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
5.1.3.2 WHC Design & Fabrication	Labor \$	89	68	83	73	73	96	76	68	82	59	66	77	910
	Other \$	184	131	221	139	137	138	136	139	137	144	137	243	1,886
Monthly \$ Totals		273	199	304	212	210	234	212	207	219	203	203	320	2,796
FTEs		12.4	10.4	10.4	10.4	10.4	10.4	10.4	9.4	9.4	9.4	9.4	8.4	10.1
Comments:														

Cost Baseline By Month														
Activity/Cost Account		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
5.1.3.3 RTG Program Support	Labor \$													
	Other \$	7	8	7	8	7	8	7	8	7	8	7	8	90
Monthly \$ Totals		7	8	7	8	7	8	7	8	7	8	7	8	90
FTEs														
Comments:														

ADVANCED PROGRAMS

1996 MULTI-YEAR PROGRAM PLAN

WBS #5.2

1.0 PROGRAM OVERVIEW

- A. Program Mission
- B. Program Strategy

2.0 PROGRAM BASELINES

- A. Work Breakdown Structure (WBS) Dictionary
- B. Responsibility Assignment Matrix
- C. Schedule Baseline
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3.0 EXECUTION YEAR

- 1. Cost Baseline by Month

1.0 PROGRAM OVERVIEW

A. Program Mission

The Hanford Site has developed key personnel and facilities which support Advanced Programs in several technical areas. These capabilities are unique to Hanford and support programs directed by either Hanford or other DOE sites. Advanced Programs consists of three WBS elements.:

Other Advanced Programs WBS 5.2.1

Nuclear Criticality Database - Develop a knowledge-screened and value indexed nuclear criticality parameter study database. The database would be available on a personal computer and be connected to Office of Scientific and Technical Information (OSTI) technical literature information retrieval systems. Eventually the database will be turned over to OSTI. The database would cover technical publications including contractor-generated reports. The database should be an invaluable tool to the criticality engineers and reviewers. It pinpoints technical activity that have been performed in the past and thereby reduces the need for new analyses, provides a source to check answers of studies, and introduces new people in the field to valuable background information.

International Programs WBS 5.2.2

Fuels and Materials SMA - The contract modification to the Specific Memorandum of Agreement (SMA) for Development of Fuels and Materials for Liquid Metal Reactors between the U.S. Department of Energy (DOE) and the Japanese Power Reactor and Nuclear Fuel Development Corporation (PNC) identifies the following tasks: the preparation of MOTA material specimens for shipment to Japan, the non-destructive examination of selected MFA-1, MFA-2, and ACO-3 fuel pins, dimensional measurements on wire wrap from selected MFA-1, MFA-2, and ACO-3 fuel pins and their preparation for shipment to Japan, the preparation of tensile specimens and duct material strips from selected MFA-1, MFA-2, and ACO-3 ducts for shipment to Japan, the destructive examination of selected MFA-1, MFA-2, and ACO-3 fuel pins, the preparation of defueled cladding specimens from selected MFA-1, MFA-2, and ACO-3 fuel pins for emersion density measurements and shipment to Japan, preparation and examination of ceramography specimens from selected MFA-1, MFA-2 and ACO-3 fuel pins, and the receipt and storage of C-1 fuel pin remnants from Japan. The total available contract funds for the completion of the SMA work scope are fixed. Work on the ACO-3 fuel pins and materials will be completed as funding permits.

RBCB Work for PNC (ORT) - The over all Operational Reliability Testing (ORT) contract between PNC and DOE consists of Operational Transient Testing (OT) and Run Beyond Cladding Breach (RBCB) testing on MOX fuels in the EBR-II. WHC is responsible for developing, evaluating, and reporting on the approaches and equipment to retrieve and characterize fuel and fission products released from defected MOX fuel pins. The remaining WHC work involves assisting in planning the capsule examinations and reporting the results.

Isotopes - WBS 5.2.3

The Hanford Isotope Program manages the marketing, sales, processing, production, and distribution of radioisotopes from the Hanford Site to government and commercial customers. The program also includes technology development associated with targetry and irradiation vehicles, physics predictions, processing, purification, encapsulation, and packaging activities required for isotope production and sales. Finally, the program provides direct support to the DOE-HQ in areas relating to medical and research isotopes.

The Hanford Site is one of six DOE sites involved with the production and sale of isotopes to both government and commercial customers around the world. Isotopes are used extensively in medical and industrial applications, including cancer detection and treatment, heart and other organ imaging, sterilization of medical supplies, radiography, and nondestructive inspection of components.

The Hanford Site is currently the lead site for yttrium-90 (Y-90) with further growth into new product areas expected over the next several years. The isotope program utilizes, in part, existing by-product materials from previous defense production operations plus other nuclear facilities and expertise to produce, process, package, and ship radioisotope products. The current radioisotope product for the site is Y-90, which is linked with monoclonal antibodies as a new treatment for lymphoma, ovarian and other cancers. The development and supply of alpha-emitting isotopes for medical research is a growth area for the Hanford Isotope Program in Fiscal Year 1996.

B. Program Strategy

In addition to the overall mission strategy as identified in Section 5.0, Special Initiatives; the following specific apply to Other Advanced Programs.

Nuclear Criticality Database - The generation of the database consists of reviewing the past published nuclear criticality documentation and identifying parameter studies important to the U.S. Department of Energy contractor criticality safety community. The parameter studies are screened as to the type of studies and their impact on criticality indicators. The reviewed reports will be value-indexed. The data are entered into a Paradox database. The database, upon completion, will be merged with the OSTI database to provide the user not only with titles but also abstracts.

International Program WBS 5.2.2

Fuels and Materials SMA - The overall program mission strategy for the completion of the Fuels and Materials SMA will be to conduct the non-destructive examinations of the selected MFA-1, MFA-2, and ACO-3 fuel pins, the duct strip preparations, and the wire wrap dimensional measurements at the Hot Fuel Examination Facility (HFEF) at the Idaho National Engineering Laboratory (INEL). Funds for these activities will be under separate funding and will not be reported under this Site Management System. HFEF accomplishments and schedule status will be reported for program completeness.

The Special Initiative Program will control funds and commitments for work scope activities assigned to Hanford. These activities include: the overall management of the program, the preparations for shipment of all non-fuel specimens to Japan, the destructive examination of selected MFA-1, MFA-2, and ACO-3 fuel pins, the preparation of defueled cladding specimens from selected MFA-1, MFA-2, and ACO-3 fuel pins for emersion density measurements, and the receipt and transfer to storage of C-1 fuel pin remnants from Japan.

Program funds at Hanford will be managed by WHC to conduct the planned work scope based upon the priorities provided by the PNC for the MFA-1 and MFA-2 fuel pins and ducts. Work on ACO-3 fuel pins and duct will be deferred until either PNC directs a higher priority for this work or sufficient funds are secure to do the incremental work and complete the planned work on the MOTA specimen preparations and the MFA-1 and MFA-2 test materials.

RBCB Work for PNC (ORT) - Assist in the examination of the remaining five test capsules exposed during RBCB testing at EBR-II, and provide support to ANL in the interpretation and reporting of the test results. This work will conclude PNC RBCB program.

Isotopes Program WBS 5.2.3

The Isotope Program objectives include the development and improvement of the DOE/WHC business infrastructure, continued growth in weekly production of Y-90, leadership support to the DOE-HQ in medical isotopes, growth in the production of alpha-emitting isotopes for medical research, and the development of Hanford's role in meeting the growing radioisotope needs of the medical community.

ADVANCED PROGRAMS
WBS 5.2

FY 1996 Program Plan

WHC-SP-1125

2. PROGRAM BASELINES

A. Work Breakdown Structure (WBS) Dictionary

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Advanced Programs	2 DATE August 19, 1993	3 IDENTIFICATION NO. DE-AC06-87RL10930
4 WBS ELEMENT CODE 5.2.1.2	5 WBS ELEMENT TITLE Nuclear Criticality Database	
6 INDEX LINE NO.	7 REVISION NO. AND AUTHORIZATION	8 DATE
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION	11 BUDGET AND REPORTING NUMBER KK-05-02-20-6	

12. ELEMENT TASK DESCRIPTION

Assemble for DOE/NE a nuclear criticality parameter database as part of the Nuclear Criticality Safety and Technology Program.

A. Actions/Deliverables

The database entries consist of files, dates, document identification, authors and technical screening of the contents of the documentation into special categories pertinent to nuclear criticality safety. Furthermore all entries have assigned value indices as a measure of the review the document has received. The information from the database can be obtained in listings or graphic display. The database will be connected to OSTI for abstract extraction.

B. Resources

This WBS element includes labor, overhead, and G&A/CSP costs.

ADVANCED PROGRAMS
WBS 5.2

FY 1996 Program Plan

WHC-SP-XXXX

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Advanced Programs	2 DATE February 3, 1995	3 IDENTIFICATION NO. DE-AC06-87RS10930
4 WBS ELEMENT CODE 5.2.2.2	5 WBS ELEMENT TITLE Fuels and Materials SMA	
6 INDEX LINE NO.	7 REVISION NO. AND AUTHORIZATION	8 DATE
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION	11 BUDGET AND REPORTING NUMBER AF-20-70-10-0	

12. ELEMENT TASK DESCRIPTION

The following work scope activities are to be conducted under the Fuels and Materials SMA and includes significant activities within PNL facilities and the FFTF facility:

A. Actions/Deliverables

Shipping/receiving activities to include: location, visual examination, and preparation of the NAM-1/CCR-2 material specimens for shipment to Japan; fuel pin and duct shipments between FFTF, HFEF, and the PNL hot cell facilities; preparations for shipment of specimens to Japan, and receipt of C-1 fuel remnants from Japan and their transfer to storage.

Destructive examinations on selected fuel pins to include: equipment set-up, gas analyses, ceramography, defueling, immersion density, tensile specimen machining from duct material, and waste disposal.

Management activities to include: coordination of shipping/receiving, non-destructive examinations, and destructive examinations, reporting, and PNC assignee support.

B. Resources

This WBS element includes labor, overhead, procurements, travel, and G&A/CSP costs.

ADVANCED PROGRAMS
WBS 5.2

FY 1996 Program Plan

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WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Advanced Programs	2 DATE August 14, 1993	3 IDENTIFICATION NO. DE-AC06-87RL10930
4 WBS ELEMENT CODE 5.2.2.4	5 WBS ELEMENT TITLE (ORT) RBCB Work from PNC	
6 INDEX LINE NO.	7 REVISION NO. AND AUTHORIZATION	8 DATE
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION	11 BUDGET AND REPORTING NUMBER AF-20-70-20	

12. ELEMENT TASK DESCRIPTION

This work provides support to ANL for the PNC-RBCB Program at EBR-II. This is the final stage in the multi-year program started in 1984 and will complete in December 1995.

A. Actions/Deliverables

Operational Reliability Testing (ORT) contract between PNC and DOE consists of Operational Transient Testing (OTT) and Run Beyond Cladding Breach (RBCB) testing on MOX fuels in the EBR-II. WHC contribution to the RBCB program is to support the best planning and the interpretation and reporting of the test results. WHC is responsible for developing, evaluating, and reporting on the approaches and equipment to retrieve and characterize fuel and fission products released from intentionally defected MOX fuel pins.

B. Resources

This WBS element includes labor, overhead, and G&A/CSP costs.

ADVANCED PROGRAMS
WBS 5.2

FY 1996 Program Plan

WHC-SP-XXXX

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Advanced Programs	2 DATE August 12, 1993	3 IDENTIFICATION NO. DE-AC06-87RL10930
4 WBS ELEMENT CODE 5.2.3.1	5 WBS ELEMENT TITLE Isotope Development/Production	
6 INDEX LINE NO.	7 REVISION NO. AND AUTHORIZATION	8 DATE
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION	11 BUDGET AND REPORTING NUMBER ST	

12. ELEMENT TASK DESCRIPTION

This WBS activity addresses the specific operations required to produce or prepare and ship isotope products, including certification and documentation. Isotope products include high purity Y-90 radiochemical, alpha-emitter isotopes for medical research, MOTA-2B isotopes, and various other isotopes as requested by customers.

A. Actions/Deliverables

1. Produce and deliver Y-90 to offsite customers, as required, on a weekly basis.
2. Provide limited quantities of alpha emitter isotopes for medical research and develop capabilities to produce if needed.
3. Provide direct support to DOE-HQ in management of medical and research isotopes.
4. Develop technology for production of selected isotopes and provide information required to support production decisions to DOE as requested.
5. Complete monthly financial projections and documents as requested by DOE-HQ.

5.2.3.1 (continued)

B. Resources

This task will require funding to support WHC management, engineering, and technicians within isotope production operations and the purchase of Capital Equipment Not Related to Construction (CENRTC) associated with the Y-90 facility. The funding also fully supports PNL hot-cell operations, including technical/engineering, management, and support staff (e.g., HPTs, shipping, maintenance).

ADVANCED PROGRAMS
WBS 5.2

FY 1996 Program Plan

WHC-SP-1125

B. Responsibility Assignment Matrix

Work Breakdown Structure Index and Programmatic Responsibility Assignment Matrix					
PROGRAM ELEMENT	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESPONSIBLE ORGANIZATION
5.2.1			OTHER ADVANCED PROGRAMS	RJ PUIGH	PSS/SAE
	5.2.1.2		NUCLEAR CRITICALITY DATABASE	RJ PUIGH	PSS/SAE
		5.2.1.2.1 1XA210	NUCLEAR CRITICALITY DATABASE	RJ PUIGH	PSS/SAE
5.2.2			INTERNATIONAL PROGRAMS	RJ PUIGH	PSS/SAE
	5.2.2.2		PNC FUELS & MATERIALS SPECIFIC MEMORANDUM OF AGREEMENT	RJ PUIGH	PSS/SAE
		5.2.2.2.2 1XA305	PNC F&M SMA	RJ PUIGH	PSS/SAE
	5.2.2.4		RBCB WORK FOR PNC (ORT)	RJ PUIGH	PSS/SAE
		5.2.2.4.1 1XA301	(ORT) RBCB WORK FOR PNC	RP COLBURN	TWR/ENG
5.2.3			ISOTOPES	RJ PUIGH	PSS/SAE
	5.2.3.1		ISOTOPE DEVELOPMENT/PRODUCTION	RJ PUIGH	PSS/SAE
		5.2.3.1.1 1XD120	YITITIMUM-90 PRODUCTION	SL GOLLADAY	PSS/SAE
		5.2.3.1.2 1XD410	NEW ISOTOPE PROJECTS DEVELOPMENT	RE SCHENTER	PSS/SAE
		5.2.3.1.3 1XD710	TECHNICAL SUPPORT TO DOE-HQ	RE SCHENTER	PSS/SAE
		5.2.3.1.4 1XD810	MARKETING & PROGRAM OFFICE SUPPORT	RE SCHENTER	PSS/SAE
		5.2.3.1.4 1XD820	Y-90 SALES & CUSTOMER SERVICES	SL GOLLADAY	PSS/SAE

C. Schedule Baseline

1. Program Master Baseline Schedule

FY 1996 Special Initiatives Multi-Year Program Plan
2.C.1 Advanced Programs Schedule

Activity Name	Milestone Control #	RL WBS	TYPE	Fiscal Year 1996					Fiscal Year 1997				Fiscal Year 1998				Fiscal Year 1999					
				4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	
Advanced Programs		5.2																				
Nuclear Criticality Database		5.2.1.2																				
Nuclear Criticality Parameter Database Final Report and Database Listing	SIA-96-D10	5.2.1.2.1	HQ					▽														
PNC Fuels & Materials Specific Memorandum of Agreement		5.2.2																				
NAM-1/CCR-2 Specimens are Encapsulated and Ready for Shipment to Japan	SII-95-008	5.2.2.2	RL	▬	▽																	
Complete Preparation of MFA-1 and MFA-2 Material Specimens for the First Shipment to Japan	SII-95-009	5.2.2.2	RL	▬	▽																	
Issue Report on The Non-Destructive Examination of The MFA-1 Fuel Pins	SII-96-011	5.2.2.2	RL			▽																
Complete Preparation of MFA-1 and MFA-2 Material Specimens For The Second Shipment to Japan	SII-96-013	5.2.2.2	RL			▬	▽															
Issue Report on The Non-Destructive Examination of the MFA-2 Fuel Pins	SII-96-016	5.2.2.2	RL			▽																
Issue Report on The Destructive Examination of The MFA-1 Fuel Pins	SII-96-017	5.2.2.2	RL					▽														
Issue Report on The Destructive Examination of The MFA-2 Fuel Pins	SII-96-018	5.2.2.2	RL					▽														
Complete Disposal of Waste From SMA Program	SII-97-019	5.2.2.2	RL						▽													
				4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	
				Fiscal Year 1996					Fiscal Year 1997				Fiscal Year 1998				Fiscal Year 1999					

Aug 30, 1995

2. Milestone List

MILESTONE LIST			
Milestone Type*	Control Number	Milestone Description	Milestone Completion Date
HQ	SIA-96-D10	Nuclear Criticality Parameter Database Final Report and Database Listing	9-30-96
RL	SII-95-008	NAM-1/CCR-2 Specimens are Encapsulated and Ready to Ship to Japan	10-27-95
RL	SII-95-009	Complete Preparation of MFA-1 and MFA-2 Specimens for First Shipment to Japan	11-21-95
RL	SII-96-011	Issue Report on Non-Destructive Examination of the MFA-1 Fuel Pins	02-01-96
RL	SII-96-013	Complete Preparation of MFA-1 and MFA-2 Specimens for Second Shipment to Japan	04-30-96
RL	SII-96-016	Issue Report on the Non-Destructive Examination of MFA-2 Fuel Pins	03-01-96
RL	SII-96-017	Issue Report of the Destructive Examination of the MFA-1 Fuel Pins	07-01-96
RL	SII-96-018	Issue Report of the Destructive Examination of the MFA-2 Fuel Pins	08-01-96

* TPA, HQ, RL, and selected contractor milestones

* On Tri-Party Agreement Milestones, also designate if they are HQ, RL

3. Milestone Description Sheets

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #1			
Title: Nuclear Criticality Parameter DBase Final Report & DBase Listing			Date: 08-18-94
Assigned To: R. J. Puigh			CIN:
Program WBS Designator: 5.2.1.2			Due Date: 09-30-96
Control Number: SIA-96-D10			Rev: 0
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
☒ DOE-HQ ☐ DOE-RL ☐ CONTRACTOR	☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	☒ DOE-HQ ☐ DOE-RL ☐ Other (specify)
<p>Milestone Description:</p> <p>Provide a description of the Nuclear Criticality Parameter database, its features, user instructions, examples, and a listing of its contents.</p>			
<p>Description of what constitutes completion of this milestone:</p> <p>Submission of the final report describing the successful implementation of the Nuclear Criticality Parameter database into the OSTI System.</p>			
Cost Account Manager:		Program/Project Manager	
R. J. Puigh	Date 9/21/95	R. J. Puigh	Date 9/21/95
Program Element Manager			
R. J. Puigh	Date 9/21/95		

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #2			
Title: NAM-1/CCR-2 Specimens are Encapsulated and Ready to Ship to Japan			Date: 02-10-95
Assigned To: R. J. Puigh			CIN:
Program WBS Designator: 5.2.2.2			Due Date: 10-27-95
Control Number: SII-95-008			Rev: 1
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: The materials specimens irradiated as part of either the NAM-1 experiment or the CCR-2 experiment and identified by PNC for return to Japan will be visually examined, the pressurized tubes will have their gas vented, and the specimens will be encapsulated into shipping tubes for shipment to Japan.			
Description of what constitutes completion of this milestone: All specimens identified for return to Japan will be located and visually examined. Pressurized tube specimens will have their gas vented. All material specimens will be prepared for shipment to Japan by encapsulation into shipping tubes per PNC's specifications. The data package to support shipment of the specimens to Japan will be completed. A memo documenting the readiness to load these shipping tubes into the cask will be sent to RL.			
Cost Account Manager: R. J. Puigh <i>[Signature]</i>		Date 9/21/95	Program/Project Manager R. J. Puigh <i>[Signature]</i>
Program Element Manager R. J. Puigh <i>[Signature]</i>		Date 9/21/95	

ADVANCED PROGRAMS
WBS 5.2

FY 1996 Program Plan

WHC-SP-1125

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #3			
Title: Complete Preparation of MFA-1 & MFA-2 Specimens for First Shipment to Japan			Date: 02-10-95
Assigned To: R. J. Puigh			CIN:
Program WBS Designator: 5.2.2.2			Due Date: 11-21-95
Control Number: SII-95-009			Rev: 1
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: The following MFA-1 and MFA-2 material specimens shall be prepared for the first shipment to Japan: 60 defueled cladding sections from MFA-1 pins, MFA-1 wire wrap from two fuel pins, one MFA-1 duct strip and 45 defueled cladding sections from MFA-2 fuel pins. The preparation for shipping includes the encapsulation of these specimens.			
Description of what constitutes completion of this milestone: All MFA-1 and MFA-2 material specimens shall be encapsulated per the specifications provided by PNC. A letter documenting the readiness to load these specimens into the PNC cask shall be written to RL.			
Cost Account Manager: R. J. Puigh <i>RJP</i>		Program/Project Manager R. J. Puigh <i>RJP</i>	
Date 9/21/95		Date 9/21/95	
Program Element Manager R. J. Puigh <i>RJP</i>			
Date 9/21/95			

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #4				
Title: Issue Report on Non-Destructive Examination of the MFA-1 Fuel Pin			Date: 02-10-95	
Assigned To: R. J. Puigh			CIN:	
Program WBS Designator: 5.2.2.2			Due Date: 02-01-96	
Control Number: SII-96-011			Rev: 1	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☒ DOE-HQ ☒ DOE-RL ☒ Other (specify) PNC	
Milestone Description: A report documenting the results from the non-destructive examinations on the nine MFA-1 fuel pins shipped to HFEF shall be completed and sent to PNC.				
Description of what constitutes completion of this milestone: The report shall document the results from the non-destructive examination of the nine MFA-1 fuel pins sent to HFEF which include: dimensional measurements on the fuel pins, selected wire wrap, density measurements, visual examinations, gamma scans, and neutron radiography. Information on the cutting of the MFA-1 duct will also be included in this report.				
Cost Account Manager: R. J. Puigh <i>RJP</i>		Date 9/21/95	Program/Project Manager R. J. Puigh <i>RJP</i>	
Program Element Manager R. J. Puigh <i>RJ</i>		Date 9/21/95		

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #5			
Title: Complete Preparation of MFA-1 and MFA-2 Specimens for Second Shipment to Japan			Date: 02-10-95
Assigned To: R. J. Puigh			CIN:
Program WBS Designator: 5.2.2.2			Due Date: 04-30-96
Control Number: SII-96-013			Rev: 1
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
<p>Milestone Description:</p> <p>The following MFA-1 and MFA-2 material specimens identified for the second shipment to Japan: MFA-1 tensile specimens, MFA-2 wire wrap, and fifteen MFA-2 defueled cladding sections.</p>			
<p>Description of what constitutes completion of this milestone:</p> <p>All MFA-1 and MFA-2 material specimens identified for the second shipment shall be encapsulated per the specifications provided by PNC. A letter documenting the readiness to load these specimens into the PNC cask shall be written to RL.</p>			
Cost Account Manager:		Program/Project Manager	
R. J. Puigh	Date 9/21/95	R. J. Puigh	Date 9/21/95
Program Element Manager			
R. J. Puigh	Date 9/21/95		

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #6			
Title: Issue Report on the Non-Destructive Examination of MFA-2 Fuel Pins			Date: 02-10-95
Assigned To: R. J. Puigh			CIN:
Program WBS Designator: 5.2.2.2			Due Date: 03-01-96
Control Number: SII-96-016			Rev: 0
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☒ DOE-HQ ☒ DOE-RL ☒ Other (specify) PNC
Milestone Description: A report documenting the results from the non-destructive examinations on the fifteen MFA-2 fuel pins shipped to HFEF shall be completed and sent to PNC.			
Description of what constitutes completion of this milestone: The report shall document the results from the non-destructive examinations on the fifteen MFA-2 fuel pins, which include: visual examinations, dimensional measurements on the fuel pins, gamma scans, neutron radiography, and selected wire wrap density measurements.			
Cost Account Manager: R. J. Puigh <i>RJP</i>		Program/Project Manager R. J. Puigh <i>RJP</i>	
Date 9/21/95		Date 9/21/95	
Program Element Manager R. J. Puigh <i>RJP</i>			
Date 9/21/95			

ADVANCED PROGRAMS
WBS 5.2

FY 1996 Program Plan

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #7			
Title: Issue Report on the Destructive Examination of the MFA-1 Fuel Pins			Date: 02-10-95
Assigned To: R. J. Puigh			CIN:
Program WBS Designator: 5.2.2.2			Due Date: 07-01-96
Control Number: SII-96-017			Rev: 1
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☒ DOE-HQ ☒ DOE-RL ☒ Other (specify) PNC
Milestone Description: Issue report documenting the results from the destructive examinations associated with the MFA-1 fuel pins.			
Description of what constitutes completion of this milestone: The destructive examination report for the MFA-1 fuel pins shall include the following information: description of the defueling activities, gas analyses, ceramography results, emersion density measurements on defueled cladding, and a description of the tensile specimen machining activities on the MFA-1 duct.			
Cost Account Manager: R. J. Puigh <i>RJP</i> 9/21/95		Program/Project Manager R. J. Puigh <i>RJP</i> 9/21/95	
Program Element Manager R. J. Puigh <i>RJP</i> 9/21/95			

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #8			
Title: Issue Report on the Destructive Examination of the MFA-2 Fuel Pins			Date: 02-10-95
Assigned To: R. J. Puigh			CIN:
Program WBS Designator: 5.2.2.2			Due Date: 08-01-98
Control Number: SII-96-018			Rev: 1
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	☒ DOE-HQ ☒ DOE-RL ☒ Other (specify) PNC
Milestone Description: Issue report documenting the results from the destructive examinations associated with the MFA-2 fuel pins.			
Description of what constitutes completion of this milestone: The destructive examination report for the MFA-2 fuel pins shall include the following information: description of the defueling activities, gas analyses, ceramography results, and emersion density measurements on defueled cladding.			
Cost Account Manager:		Program/Project Manager	
R. J. Puigh	Date: 9/21/95	R. J. Puigh	Date: 9/21/95
Program Element Manager			
R. J. Puigh	Date: 9/21/95		

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET #9			
Title: Complete Disposal of Waste from SMA Program			Date: 08-31-95
Assigned To: R. J. Puigh			CIN:
Program WBS Designator: 5.2.2.2			Due Date: 12-31-96
Control Number: SII-97-019			Rev: 0
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify) PNC
Milestone Description: All radioactive waste associated with the SMA work scope has been sent to either Solid Waste Disposal or FFTF for storage.			
Description of what constitutes completion of this milestone: Waste associated with the SMA work scope will include both fuel and mental scrap. These materials will be appropriately packaged and sent to either Solid Waste Disposal or FFTF for storage. A letter documenting completion of this milestone will be sent to the DOE-RL.			
Cost Account Manager: R. J. Puigh <i>[Signature]</i> 9/2/95		Program/Project Manager: R. J. Puigh <i>[Signature]</i> 9/2/95	
Program Element Manager: R. J. Puigh <i>[Signature]</i> 9/2/95			