

# Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Idaho**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

Project **ID-SNF-104 / Constructed New Facilities**

Report Number: **GEN-01b**

Print Date: **3/10/2000**

HQ ID: **0178**

---

## General Project Information

### Project Description Narratives

#### Purpose, Scope, and Technical Approach:

Definition of Scope: Specific work to be accomplished by ID-SNF-104 includes:

1. Provide equipment for dewatering and drying the TMI-2 core debris canisters at TAN.
2. Provide an NRC licensed Interim Spent Fuel Storage Installation (ISFSI) at Idaho Nuclear Technology and Engineering Center (INTEC) formerly the ICPP, capable of receiving and providing interim dry storage of TMI-2 fuel-bearing and LOFT and Commercial fuel materials. The ISFSI will consist of the standard NUHOMS dry spent fuel storage system adapted for TMI-2 fuel. The ISFSI will consist of the following major items:
  - \* Basemat
  - \* Concrete horizontal storage module (HSM) (30 required for TMI-2 fuel)
  - \* Dry shielded canisters (DSC) (29 required for TMI-2 fuel)
3. Provide interim dry storage capabilities and fuel handling equipment for the non-TMI-2 fuel-bearing materials in the TAN Pool.

These activities are in direct support of the Idaho State Settlement Agreement.

Technical Approach: The ID-SNF-104 Project technical approach is to resolve vulnerabilities by:

- Transferring TMI SNF in the TAN Pool to new dry Nuclear Regulatory Commission (NRC) licensed storage at Idaho Nuclear Technology and Engineering Center (INTEC) formerly the ICPP.
- Transferring non-TMI "intact" SNF in the TAN pool to new dry storage at INTEC.
- Transferring non-TMI "degraded" SNF in the TAN pool to an existing dry storage location (TAN Hot Shop Silo).

#### Project Status in FY 2006:

- Project completes in FY-2001
- All facilities and equipment complete and ready for Spent Nuclear Fuel Operations to move all the fuel-bearing materials (TMI-2, LOFT, and DOE owned commercial fuel) from wet storage in the TAN Pool to interim dry storage.

#### Post-2006 Project Scope:

Not applicable. This project completes in FY-2001.

#### Project End State

- All facilities and equipment complete and ready for Spent Nuclear Fuel Operations to move all the fuel-bearing materials (TMI-2, LOFT, and DOE owned commercial fuel) from wet storage in the TAN Pool to interim dry storage.

#### Cost Baseline Comments:

The budget for this project is as approved in HQ BCP 1.3.4.3.7-99-01. It will be necessary to rebaseline the project to cover the LOFT and DOE-

---

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

Page 1 of 6

# Project Baseline Summary Report

Data Source: EM CDB

Operations/Field Office: Idaho

Site Summary Level: Idaho National Engineering and Environmental Laboratory

Project ID-SNF-104 / Constructed New Facilities

Report Number: GEN-01b

Print Date: 3/10/2000

HQ ID: 0178

---

## Project Description Narratives

owned commercial fuel scope planned for FY-2000 and FY-2001.

### Safety & Health Hazards:

Continued wet storage of the TMI-2 fuel was identified as an SNF storage vulnerability because the TAN-607 facility has inadequate corrosion monitoring, lack of leak detection and leak trending of the pool water inventory, and a potential deficiency in the seismic design of the basin. This poses a potential for release of contaminants which could potentially reach the environment, workers or public. This project provides the new storage facility to remove the TMI-2 SNF from wet storage to dry storage.

Work is done: (1) by LMITCO for excavation for the ISFSI pad and erection of a fence isolating the construction area from the remainder of INTEC, (2) under a turnkey subcontract with Newport News Shipbuilding (NNS), where they contractually provide their own S&H oversight and controls during construction of the ISFSI following commercial standards in order to avoid dual regulation by DOE and the NRC, and (3) by LMITCO at Test Area North (TAN), where nearly all of the work of dewatering, drying, and the hot demonstration is performed in remote handling facilities.

### Safety & Health Work Performance:

Safety personnel will be needed in the radiological safety, industrial safety, and nuclear safety categories. The cost per FTE is assumed to be \$23/hour for RCTs, \$44/hour for Industrial Safety personnel, and \$61/hour for Nuclear Safety analysts. RCTs will perform radiological survey and monitoring. Industrial Safety personnel will perform industrial safety reviews and will support the operational readiness review. Nuclear Safety Analysts will do unreviewed safety question (USQ) analysis as needed. Available resources to perform these duties have been identified as being available.

### PBS Comments:

Failure to complete ISFSI construction by 12/31/98 and initiate the removal of fuel by 3/31/99 results in direct violation of the Settlement Agreement.

### Baseline Validation Narrative:

The initial "independent" validation of the project scope of work, schedule, cost estimate, and technical approach was performed in 1991 for FY-93 by DOE-HQ. Validation authority was subsequently delegated to the field offices. DOE-ID, with DOE-HQ participation, has performed three revalidations (4/12/93 for FY95, 4/15/94 for FY-96, and 4/11/95 for FY-97). The most recent validation was dated 12/30/98, and DOE-HQ approval was obtained.

## General PBS Information

Project Validated? Yes Date Validated: 4/1/1991

Has Headquarters reviewed and approved project? Yes

Date Project was Added: 12/1/1997

Baseline Submission Date:

---

Dataset Name: FY 1999 Planning Data

Date of Dataset: 9/20/1999

Page 2 of 6

# Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Idaho**

Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

HQ ID: **0178**

Project **ID-SNF-104 / Constructed New Facilities**

## General PBS Information

FEDPLAN Project?	Yes							
<b>Drivers:</b>	<b>CERCLA</b>	<b>RCRA</b>	<b>DNFSB</b>	<b>AEA</b>	<b>UMTRCA</b>	<b>State</b>	<b>DOE Orders</b>	<b>Other</b>
	N	N	N	N	N	Y	Y	Y

## Project Identification Information

DOE Project Manager:	B. A. Beller
DOE Project Manager Phone Number:	208-526-0235
DOE Project Manager Fax Number:	208-526-9150
DOE Project Manager e-mail address:	bellerba@inel.gov
Is this a High Visibility Project (Y/N):	Y

## Planning Section

### Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006	
PBS Baseline (current year dollars)	0	0	0						0	0	0	0	0	0	0	
PBS Baseline (constant 1999 dollars)	0	0	0						0	0	0	0	0	0	0	
PBS EM Baseline (current year dollars)	0	0	0						0	0	0	0	0	0	0	
PBS EM Baseline (constant 1999 dollars)	0	0	0						0	0	0	0	0	0	0	
	2007	2008	2009	2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (current	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Dataset Name: **FY 1999 Planning Data**

Page 3 of 6

Date of Dataset: **9/20/1999**

# Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Idaho**

Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

HQ ID: **0178**

Project **ID-SNF-104 / Constructed New Facilities**

	2007	2008	2009	2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
year dollars)																
PBS Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Baseline Escalation Rates

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
			2.70%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%

## Project Reconciliation

### Project Completion Date Changes:

Previously Projected End Date of Project: 9/1/2001

Current Projected End Date of Project:

Explanation of Project Completion Date Difference (if applicable):

Project is Non Defense funded and moved to PBS SNF -104-N

### Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars): 30,235    Actual 1997 Cost:                      Actual 1998 Cost:

Dataset Name: **FY 1999 Planning Data**

Page 4 of 6

Date of Dataset: **9/20/1999**

# Project Baseline Summary Report

Data Source: **EM CDB**  
 Operations/Field Office: **Idaho**  
 Site Summary Level: **Idaho National Engineering and Environmental Laboratory**  
 Project **ID-SNF-104 / Constructed New Facilities**

Report Number: **GEN-01b**  
 Print Date: **3/10/2000**  
 HQ ID: **0178**

## Project Reconciliation

Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	30,235	Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):	816
Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	31,051		

## Project Cost Changes

	Cost Adjustments	Reconciliation Narratives
Cost Change Due to Scope Deletions (-):	31,051	Project is Non Defense funded and moved to PBS SNF -104-N
Cost Reductions Due to Efficiencies (-):		N/A
Cost Associated with New Scope (+):		
Cost Growth Associated with Scope Previously Reported (+):		
Cost Reductions Due to Science & Technology Efficiencies (-):		
<b>Subtotal:</b>	<b>0</b>	
<b>Additional Amount to Reconcile (+):</b>	<b>0</b>	
<b>Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):</b>	<b>0</b>	

## Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Complete TMI-2 Independent Spent Fuel Storage (ISFS) Installation construction.			12/1/1998						Y		
TMI-2 ISFS installation turnover for operation.			3/1/1999						Y		
Project Start			10/1/1996								

## Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critical Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Complete TMI-2 Independent Spent Fuel Storage (ISFS) Installation construction.										Y	

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Idaho**

Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

HQ ID: **0178**

Project **ID-SNF-104 / Constructed New Facilities**

## Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critical Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
TMI-2 ISFS installation turnover for operation.										Y	
Project Start				Y						Y	PBS BAseline Start