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Plan

INEEL Spent Nuclear Fuel Integrated Transfer Schedule

Idaho National Engineering and Environmental Laboratory

Form 412.14
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CONTENTS

Figures

TABLES

ACRONYMS

ANL-E	Argonne National Laboratory-East
ANL-W	Argonne National Laboratory-West
ANP	Advanced Nuclear Programs
APPR	Army Package Power Reactor
ARMF	Advanced Reactivity Measurement Facility
ATR	Advanced Test Reactor
BBWI	Bechtel BWXT Idaho, LLC
BMI	Battelle Memorial Institute
BORAX	Boiling Water Reactor Experiment
BWR	boiling water reactor
CFRMF	Coupled Fast Reactivity Measurement Facility
CPP	Chemical Processing Plant
CRWMS	Civilian Radioactive Waste Management System
DOE	U.S. Department of Energy
DOE-EM	Department of Energy, Office of Environmental Management
NE-ID	U.S. Department of Energy, Idaho Operations Office
DRCT	Dry Rod Consolidation Technology
DR&S	domestic receipt and shipment
DRR	domestic research reactor
EBR	Experimental Breeder Reactor
EM	Environmental Management
FFTF	Fast Flux Text Facility
FRR	foreign research reactor
FSV	Fort St. Vrain

FSVR	For St. Vrain Reactor
FY	fiscal year
GCRE	Gas-Cooled Reactor Experiment
GETR	General Electric Test Reactor
HEU	highly enriched uranium
HIC	high integrity can
HFBR	High Flux Beam Reactor
HLW	high level waste
IFSF	Irradiated Fuel Storage Facility
INEEL	Idaho National Engineering and Environmental Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
ISFSI	Independent Spent Fuel Storage Installation
LCC	Large Cell Casks
LFRSB	Loose Fuel Rod Storage Basket
LOFT	Loss of Fluid Test
LWBR	light water breeder reactor
LWT	legal weight truck
MGR	monitored geologic repository
MTHM	metric tons of heavy metal
MTR	Materials Test Reactor
MURR	Missouri University Research Reactor
NRC	Nuclear Regulatory Commission
NRF	Naval Reactor Facility
NSNFP	National Spent Nuclear Fuel Program
ORR	Oak Ridge Reservation

PBF	Power Burst Facility
PTE	proof test element
PWR	Pressurized water reactor
ROD	record of decision
RW	radioactive waste
SNF	Spent Nuclear Fuel
SNFDSP	Spent Nuclear Fuel Dry Storage Project
SNM	special nuclear material
SPEC	Specimens
SPSS	SPERT-I & SPERT-III Post Examination Specimens
SRS	Savannah River Site
TAN	Test Area North
TBD	to be determined
TMI-2	Three Mile Island Unit 2
TORY IIA	Experimental Propulsion Test Reactor
TRA	Test Reactor Area
TRIGA	training, research, and isotope reactors
UBM	uranium bearing material
UT	ultrasonic
VBWR	Vallecitos Boiling Water Reactor
VEPCO	Virginia Electric and Power Company
WAPD	Westinghouse Atomic Power Division
WASRD	Waste Acceptance System Requirements Document
WVDP	West Valley Demonstration Project
Y-12	Specialized Production Area (Oak Ridge, TN)

1. PURPOSE AND SCOPE

1.1 Purpose

This document provides a representation of the current technical baseline for spent nuclear fuel (SNF) at the Idaho Completion Project (ICP) Idaho Nuclear Technology and Engineering Center (INTEC) Completion subproject. The transfers shown on the charts and tables provided are based on a detailed understanding of performance expectations with respect to fuel transfers. As new expectations or policies are developed, this plan will be revised. Figure 1 illustrates overall project activity by facility. In this revision, all special nuclear material (SNM) information has been removed and is addressed in PLN-1249, "Disposition Strategies for EM-Owned Unirradiated Special Nuclear Material at the Idaho National Engineering and Environmental Laboratory."

This document is intended as a companion to the *Idaho Completion Project Idaho Nuclear Technology and Engineering Center Completion Life-Cycle Baseline,* INEEL/EXT-03-00120R1, published May 2003.

1.2 Priority of Information

If there is a difference between information in this document and earlier documents published by the INTEC Completion subproject, the information in this document takes precedence. Figure 2 contains a graphical presentation of the current technical baseline for the removal of SNF from the Idaho National Engineering and Environmental Laboratory (INEEL).

1.3 Planning Variable

The receipts and transfers shown in this document will depend on a number of variables including:

- Adequate availability of intersite resources for shipper and receiver
- Adequate funding
- Timely approval of regulatory authorities
- Agreements with receiving site

DOE directs fuel movements to occur and approves funding on a year-by-year basis. High level estimates have been prepared through Fiscal Year (FY) 2005. Beyond FY 2005, the funding profile becomes less defined. For this reason, the out-year projections of fuel movements are provided in this document for planning purposes, and their execution will become more certain as the variables involved are resolved. The impacts of reduced funding in early years may impact the ability of this project to meet out-year milestones because of facility capacity limits.

Figure 1. INEEL Spent Nuclear Fuel receipts and transfers by facility, Revision 3.

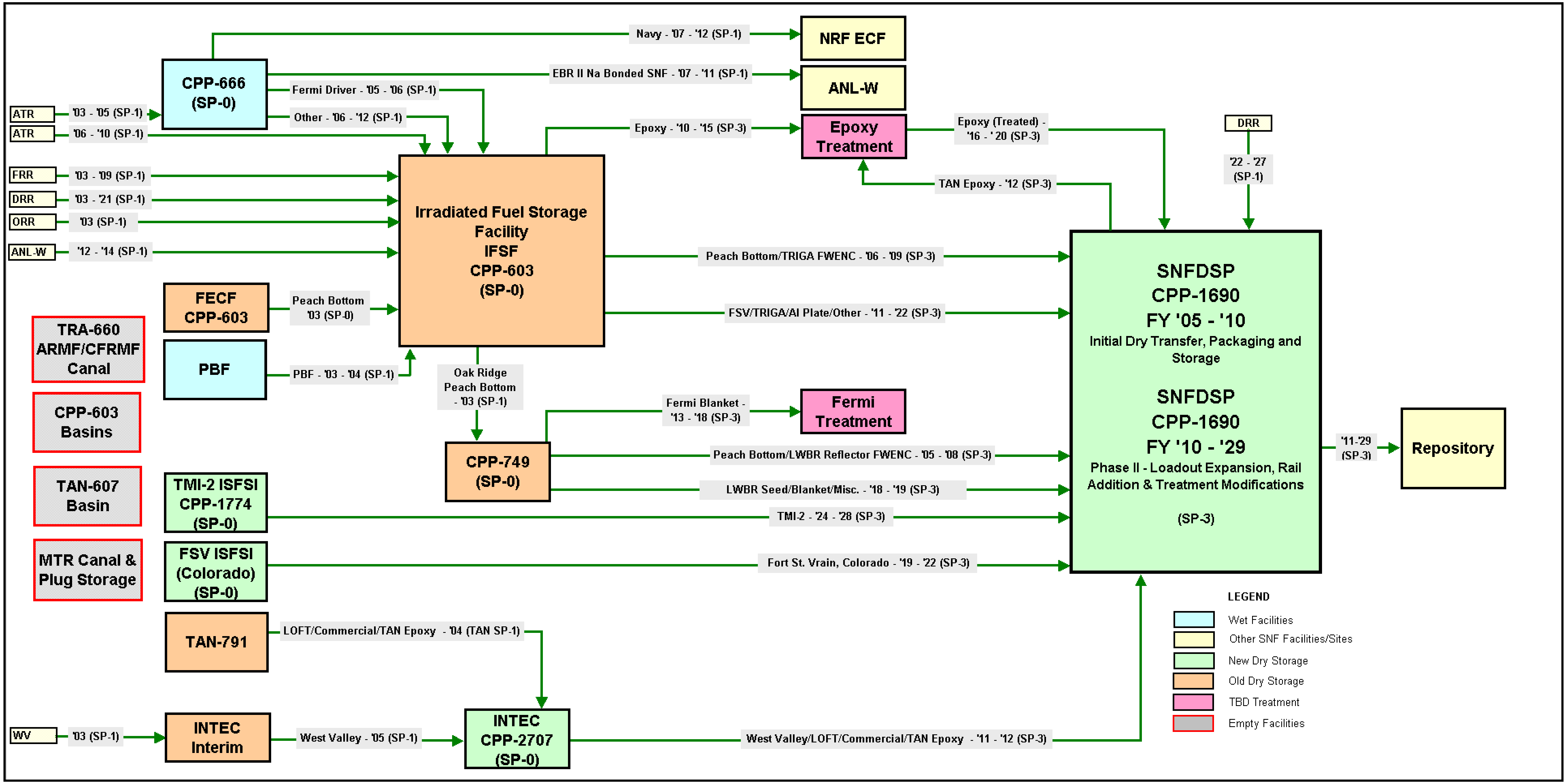

Figure 2. INEEL Spent Nuclear Fuel facility process flow, Revision 8.

1.4 Major Changes Between Revision 1 and Revision 2 of the Integrated Transfer Schedule

The list of major changes between Revision 1 and Revision 2 of the Integrated Transfer Schedule are provided below.

1. SNM included in Revision 1 has been removed in Revision 2. PLN-1249 (Disposition Strategies for EM-owned Unirradiated SNM at the INEEL) when issued will contain the SNM information.

2. The issuance of the "Environmental Management Performance Management Plan for Accelerating Cleanup of the INEEL," report DOE/ID-11006 and supporting direction from DOE has accelerated the consolidation of SNF to INTEC and disposal of the SNF at the repository. Receiving and transfer dates for the SNF storage facilities have been changed to reflect the acceleration.

3. The intersite transfer of SNF between SRS and the INEEL has been eliminated according to directions received by DOE.

2. MAJOR MILESTONES AND OBJECTIVES

The major milestones listed in the following paragraphs provide an overview of the primary drivers for the INTEC Completion subproject. Refer to the life cycle baseline for lists of milestones by project and detailed project schedules.

- Continue to receive two cask loads per year of foreign research reactor (FRR) SNF and place into storage at the Irradiated Fuel Storage Facility (IFSF). FRR receipts will be completed by September 30, 2009.

- Accept receipts at the INEEL of domestic research reactor (DRR) SNF from 16 universities, eight research reactors and four DOE sites. DRR receipts will end September 30, 2027.

- Complete removal of all SNF from Power Burst Facility (PBF) Canal by December 24, 2003.

- Complete removal of all SNF from Test Area North (TAN)-791 by September 30, 2004.

- Complete removal of all DOE-owned SNF from CPP-666 by September 30, 2012.

- Complete removal of all SNF from CPP-749 by September 30, 2019.

- Complete construction of CPP-2707 (INTEC cask storage pad) in FY 2003. Transfer all West Valley Demonstration Project (WVDP) SNF to CPP-2707 by September 30, 2005. Transfer all TAN-791 SNF to CPP-2707 by September 30, 2004. Complete removal of all SNF from CPP-2707 by September 30, 2012.

- Complete transfer of Fort St. Vrain (FSV) SNF (1,464 elements) from Colorado to INTEC for repackaging by September 30, 2022.

- Complete removal of all SNF from Three Mile Island Unit 2 (TMI-2) Independent Spent Fuel Storage Installation (ISFSI) by September 30, 2028.

- Complete removal of all SNF from IFSF by September 30, 2022.

- All INEEL legacy SNF will be received, packaged, and sent to the repository from the Spent Nuclear Fuel Dry Storage Project (SNFDSP). The SNFDSP will begin receiving SNF as early as June 1, 2005, and complete shipment of all DOE-owned INEEL SNF to the repository by September 30, 2029.

3. STRATEGY

Integration with the DOE repository program is an important strategy to ensure acceptance of INEEL SNF at the earliest possible time; achieved through support by the National SNF Program (NSNFP). The NSNFP has developed standard disposal containers (Standardized SNF Canisters) and is implementing a repository quality assurance program at all sites; implementing DOE-RW requirements through development of performance-based acceptance criteria and performance of assessments to the acceptance criteria; and ensuring that repository facilities and schedules are integrated with SNF shipping sites.

Technology development plays a vital role in ensuring safe, new interim storage and technologies required to condition, characterize, and package SNF for meeting repository acceptance criteria. Technologies required may include SNF conditioning, epoxy removal, packaging and characterization technologies, and others as the spent fuel conditions may dictate.

Construction and operation of the SNFDSP facility is another key factor in meeting the Settlement Agreement Milestones for transition to new dry storage facilities and preparation of the fuel for repository disposition. A contract has been awarded to Foster Wheeler Environmental Corporation (FWENC) to design, construct, and operate this facility just outside the boundaries of INTEC. The INEEL SNF Project will be ready to ship SNF to the SNFDSP by June 1, 2005. The current schedule provides for hot functional test beginning in 2005. This facility will perform functions to ensure acceptance of the INEEL SNF at the repository, including conditioning (if required), characterization (if required), and packaging.

Figure 2 illustrates the INTEC SNF Project fuel and facility process flow, identifying facilities, facility interfaces, fuel flows, quantities (in terms of repository standard canisters), and planned movement dates of SNF. This process flow represents the strategic fuel movement plan for the Clean/Close INTEC Completion subproject and is used as the basis for the INEEL SNF detailed work plans and the life-cycle baseline. The process flow has also been used as the basis to identify the amount of INEEL repository-ready lag storage and shipment quantities/timeframes for repository receipts based on movement schedules and repository-ready canisters of SNF. Figure 3 shows detailed, year-by-year transfers and shipments. Figure 4 provides a graphical representation of the annual INEEL SNF inventory by facility.

3.1 Project Drivers

The following drivers guide operations of all projects within the INEEL SNF Project. The shipping schedules shown here have been developed to comply with these drivers.

- Bechtel BWXT Idaho, LLC (BBWI) Contract with DOE-ID No. DE-AC07-99ID13727, including Part III - List of Documents, Exhibits, and Other Attachments; Attachment G - List of Applicable Directives (List B); and Attachment K-List of Applicable Laws and Regulations (List A). These are the lists of applicable directives, laws, and regulations for the INEEL that were developed in accordance with DEAR 970.5204.78, Laws, Regulations, and DOE Directives (June 1997). These directives, laws, and regulations are interpreted and implemented via BBWI implementing documents. This includes the direction that the DOE RW/0333P, *Quality Assurance Requirements and Description*, will be followed for the INEEL SNF Project.

- State of Idaho Settlement Agreement, dated October 16, 1995, between the State, Navy, and DOE.

Figure 3. INEEL Spent Nuclear Fuel detailed work plans receipts/transfers/shipments schedule, Revision 3.

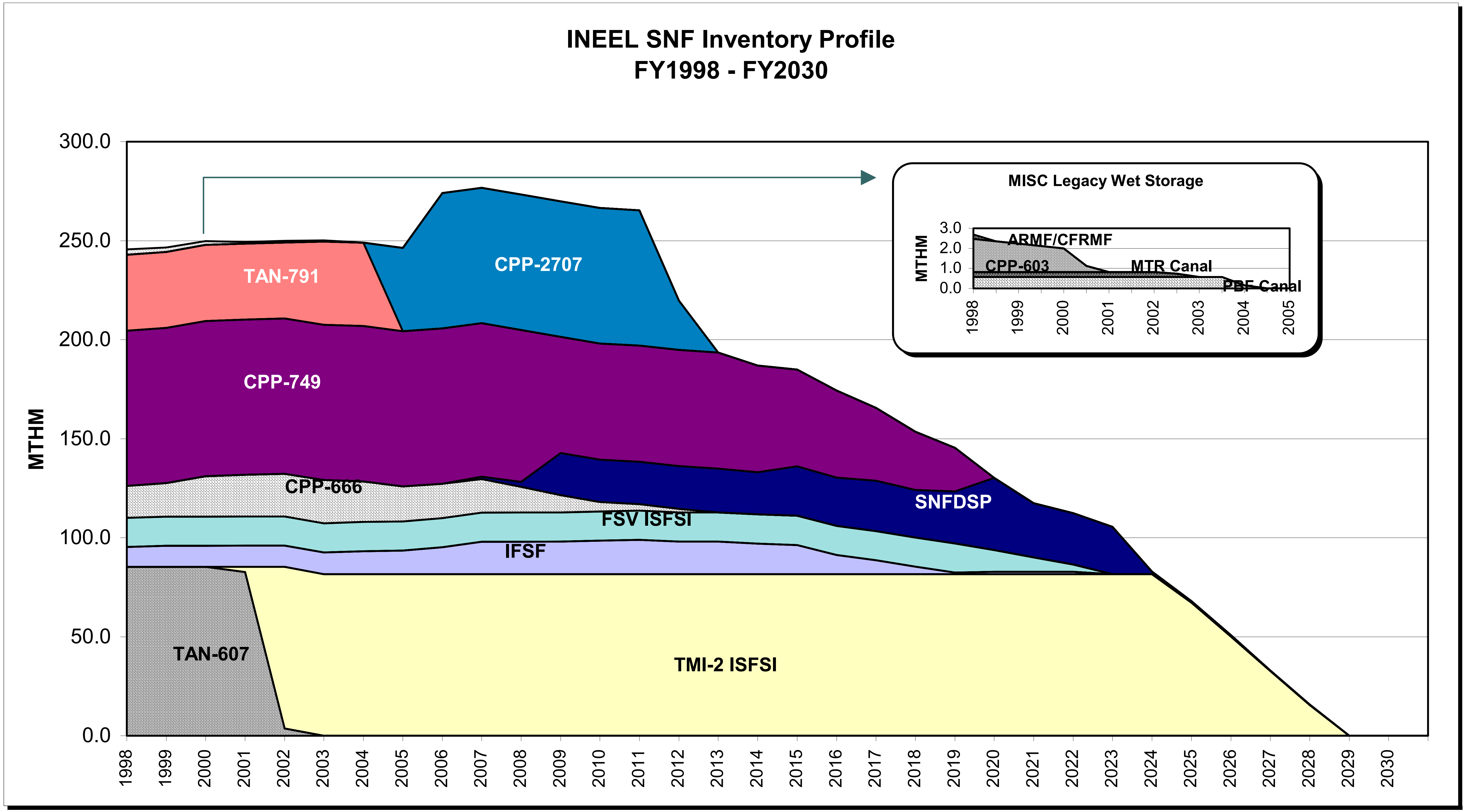

Figure 4. INEEL Spent Nuclear Fuel inventory profile, Revision 3.

- Agreement between DOE and the State of Colorado regarding shipping spent fuel out of Colorado, dated February 13, 1996. Section A, Spent Fuel Shipments Leaving Colorado, Paragraph 2—*"By this agreement, the Department (of Energy) is committed to shipping the spent nuclear fuel located at the installation (FSV ISFSI) out of Colorado as soon as it can be placed in a geologic repository or interim storage facility, but in any case, by no later than January 1, 2035."*

- The Record of Decision (ROD) for the DOE Programmatic Spent Nuclear Fuel Management, and INEEL Environmental Restoration and Waste Management Programs established the INEEL SNF Project mission, provided direction concerning transfer of SNF between the three DOE sites chosen to manage the DOE-owned SNF, and addressed receipt of SNF from various government-owned or supported facilities and universities. However, the ROD will be modified to eliminate the transfer of aluminum clad SNF from the INEEL to the Savannah River Site (SRS), and the transfer of nonaluminum clad SNF from the SRS to the INEEL. These SNF types will be dispositioned to the monitored geologic repository (MGR) directly from the sites where they are presently stored.

- The ROD for a Multi-Purpose Canister or Comparable System for Idaho National Engineering and Environmental Laboratory Spent Nuclear Fuel provides direction that a multi-purpose canister or comparable system will be used for the loading and storage of DOE-owned SNF at the INEEL, and transportation of this SNF for ultimate disposition outside the State of Idaho. Through its contract with FWENC for the construction and operation of the SNFDSP, NE-ID has indicated that the Standard Canister developed by the NSNFP is the selected multi-purpose canister design.

- The ROD on a Nuclear Weapons Nonproliferation Policy Concerning Foreign Research Reactor Spent Nuclear Fuel provides direction concerning receipt of SNF into the INEEL SNF Project from FRRs.

- The Memorandum of Agreement for Acceptance of Department of Energy Spent Nuclear Fuel and High-Level Radioactive Waste Office of Civilian Radioactive Waste Management (RW), Rev. 1, dated January 1999, establishes the terms and conditions under which RW will make available services to Environmental Management (EM) for all DOE SNF and high-level waste. The memorandum of agreement was written under the authority of the Nuclear Waste Policy Act and the Atomic Energy Act of 1954.

- In the ROD for the Treatment and Management of Sodium-Bonded Spent Nuclear Fuel, Final, DOE has decided to electrometallurgically treat the Experimental Breeder Reactor II (EBR-II) SNF and miscellaneous small lots of sodium-bonded SNF. Fermi-1 sodium-bonded blanket SNF will be stored while alternative treatment is evaluated.

3.2 Project Level Assumptions

The following assumptions have been applied to this project in order to guide the development of the life cycle baseline and the shipping plans presented in this document.

- The ROD for the treatment and management of sodium-bonded SNF directs that EBR-II SNF at INTEC be treated at Argonne National Laboratory-West (ANL-W). The EBR-II SNF shipments from CPP-666 to ANL-W will start in FY 2007 and be completed by the end of FY 2012.

- Disposition of the Fermi blanket SNF was not decided in the ROD. Until DOE makes a decision, the disposition path is to be determined (TBD). For the budgeting estimate, it is assumed that the electrometallurgical treatment process will be used for treatment.

- The Advanced Test Reactor (ATR) Program will continue to ship SNF to INTEC through FY 2010. It will be received at the CPP-666 facility through FY 2005, and then at the IFSF through FY 2010. After FY 2010, the ATR Program will be responsible for shipment of the SNF directly to the repository.

- The INEEL SNF Project will cease to receive any SNF after FY 2027. Other programs will be responsible for managing any remaining SNF that was to be shipped to the INEEL in accordance with the ROD.

- The federal repository will begin receiving SNF from the INEEL in FY 2011. Shipment schedule to the repository when approved, will give formal direction to the INEEL as to when transfers will begin and the amount transferred each year.

- The SNFDSP will begin startup in June 2005, under FWENC. The INTEC Infrastructure Project and the Electrical Utilities Systems Upgrade Project will provide installation of utilities for the SNFDSP. The INTEC SNF Project will be ready to ship SNF to FWENC by June 1, 2005.

- The SNFDSP will be expanded using a Line Item Construction Project to add the necessary capabilities to receive and load rail casks with appropriate capacity to meet the September 30, 2029, completion date, and any additional modification to treat INEEL SNF to meet repository requirements.

- The FSV SNF inventory in Colorado will be shipped to the INEEL for placement into repository acceptable standard canisters prior to shipment to the repository.

- The Idaho Settlement Agreement milestones will be met.

- Conditioning and nondestructive assay of INEEL SNF may be needed prior to packaging and shipment to the repository to meet repository acceptance criteria.

- A rail transportation cask capable of holding nine 18-in. × 15-ft standard canisters will be available for shipment to the repository starting in 2011.

- SNF will be packaged to meet transportation and repository safeguards and security requirements.

- The swap of SNF between SRS and INEEL will not take place.

These assumptions (and others as they are identified) will be confirmed or revised as the project matures. Annual replanning is anticipated to adjust for unknowns such as funding changes, carryover scope from previous years, responsibilities for SNF not currently within the scope of the project (e.g., enhanced safeguard requirements for existing SNF), repository availability, and mechanical and facility reliability. Some schedules are quite aggressive despite the fact that the feasibility of schedules have not been verified.

4. CLEAN/CLOSE INTEC PROJECT SPENT NUCLEAR FUEL RECEIPTS

Table 4-1 shows the yearly schedule of receipts that the INTEC Completion subproject will receive. The table does not include intrastate shipments that are discussed in Section 5 and assumes that all related resources and funding would be provided in a timely manner.

Table 4-1. INEEL SNF receipts and shipments.

	Shipping Site	Fuel Type	Number of Truck Shipments	Total MTHM (Approx)	Year of Shipment	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	DRR & FRR SNF RECEIPTS																																			
	FRR: South Korea	TRIGA	3	0.053	1998	3																														
	FRR: Germany, Italy, Romania, Slovania (2)	TRIGA	5	0.085	1999		5																													
	FRR: England	TRIGA	1	0.017	2000			1																												
	FRR: Germany	TRIGA	3	0.023	2001				3																											
	FRR Japan	TRIGA	1	0.014	2003						1																									
	General Atomics	HTGR/RERTR	1	0.005	2003						1																									
★	Oak Ridge	Misc. ORR SNF	5	0.219	2003						5																									
★	West Valley	BRP (BWR)/R.E. Ginna (PWR)	83	26.315	2003						83																									
Note 1	FRR Indonesia	TRIGA	2	0.046	2004							2																								
★	Cornell University	TRIGA	1	0.023	2004							1																								
	Sandia National Laboratory	SNL Na Bonded (to ANL-W)	4	0.045	2004							4																								
	University of Illinois	TRIGA	2	0.038	2004							2																								
Note 1	FRR Countries	TRIGA	2	0.034	2005								2																							
	ANL-E	ANL-E Misc. (to ANL-W)	4	0.113	2005								4																							
	ANL-E	CP-5 Converters (to INTEC)	1	0.001	2005								1																							
	Hanford	SS/Na Bonded (to ANL-W)	4	0.209	2005								4																							
	Sandia National Laboratory	SNL Misc. (to INTEC)	4	0.001	2005								4																							
★	State University of New York	PULSTAR	2	0.350	2005								2																							
	University of Texas at Austin	TRIGA	1	0.008	2005								1																							
Note 1	FRR Countries	TRIGA	2	0.034	2006									2																						
	Hanford	SS/Na Bonded (to ANL-W)	4	0.192	2006									4																						
	Sandia National Laboratory	SNL Misc. (to INTEC)	4	0.003	2006									4																						
★	University of California - Davis	TRIGA	2	0.028	2006									2																						
Note 1	FRR Countries	TRIGA	2	0.034	2007										2																					
	Sandia National Laboratory	SNL Misc. (to INTEC)	5	0.070	2007										5																					
Note 1	FRR Countries	TRIGA	2	0.034	2008											2																				
	North Carolina State University	PULSTAR	1	0.114	2008											1																				
	Oregon State University	TRIGA FLIP	2	0.018	2008											2																				
	Reed College	TRIGA	1	0.013	2008											1																				
Note 1	FRR Countries	TRIGA	2	0.034	2009												2																			
	University Texas A&M	TRIGA	2	0.013	2009												2																			
	University Texas A&M	TRIGA FLIP	2	0.015	2010													2																		
	University of Utah	TRIGA	1	0.010	2010													1																		
	University of Arizona	TRIGA	2	0.018	2011														2																	
	University of Wisconsin	TRIGA FLIP	2	0.017	2011														2																	
	General Atomics	TRIGA	4	0.053	2012															4																
	Kansas State University	TRIGA	1	0.010	2012															1																
	Washington State University	TRIGA FLIP	2	0.013	2014																	2														
	Penn State University	TRIGA	1	0.017	2016																			1												

Table 4-1. (continued).

Shipping Site	**Fuel Type**	**Number of Truck Shipments**	**Total MTHM (Approx)**	**Year of Shipment**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Sandia National Laboratory	TRIGA & ACPR (to INTEC)	4	0.169	2018																					4										
North Carolina State University	PULSTAR	2	0.352	2019																						2									
University of California-Irvine	TRIGA	1	0.022	2020																							1								
B&W, NESI, Lynchburg, VA	Misc. B&W SNF	1	0.044	2021																								1							
Kansas State University	TRIGA	2	0.021	2021																								2							
AFRRI, Bethesda, MD	TRIGA	1	0.018	2022																									1						
University of Wisconsin	TRIGA	3	0.033	2022																									3						
Washington State University	TRIGA	3	0.034	2023																										3					
University of Utah	TRIGA	2	0.015	2025																												2			
Aerotest, ARRR	TRIGA	2	0.018	2027																														2	
DOW Corp., Midland, MI	TRIGA	1	0.015	2027																														1	
Oregon State University	TRIGA	2	0.019	2027																														2	
Penn State University	TRIGA	2	0.034	2027																														2	
Reed College	TRIGA	1	0.014	2027																														1	
USGS, Denver, CO	TRIGA	2	0.041	2027																														2	
University of California - Davis	TRIGA	2	0.044	2027																														2	
University of Maryland (UM)	TRIGA	3	0.017	2027																														3	
University Texas A&M	TRIGA	2	0.013	2027																														2	
University of Texas at Austin	TRIGA	2	0.023	2027																														2	
TOTAL MTHM & ANNUAL INEEL RECEIPTS		211	29.284		3	5	1	3	0	90	9	18	12	7	6	4	3	4	5	0	2	0	1	0	4	2	1	3	4	3	0	2	0	19	0

	Shipping Site	**Fuel Type**	**Number of Truck Shipments**	**Total MTHM (Approx)**	**Year of Shipment**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
	FSV SNF RECEIPTS																																			
Note 2	FSV ISFSI in Colorado	Fort St. Vrain	61	3.682	2019																						**61**									
	FSV ISFSI in Colorado	Fort St. Vrain	61	3.682	2020																							**61**								
	FSV ISFSI in Colorado	Fort St. Vrain	61	3.682	2021																								**61**							
	FSV ISFSI in Colorado	Fort St. Vrain	61	3.682	2022																									**61**						
	TOTAL MTHM & ANNUAL INEEL RECEIPTS		244	14.730		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**61**	**61**	**61**	**61**	**0**	**0**	**0**	**0**	**0**	**0**

* DOE has sent letters to these sites indicating approximate receipt timeframes.

Note 1 The MTHM for forecasted Foreign Research Reactor (FRR) SNF is based on an average shipment weight of 0.0172 MTHM per cask. This is used because the actual shipping schedule, actual cask that will be used, etc. for the various FRR shipments have not been finalized.

Note 2 Fort St. Vrain (FSV) fuel currently stored in the DOE-Owned Independent Spent Fuel Storage Installation (ISFSI) near Platteville, Colorado, may go directly to the repository (applies to all projected FSV receipts). The Settlement Agreement allows for the shipment of this SNF into the State of Idaho after the repository has opened and only for a period of time sufficient to treat the SNF for disposal or storage in the repository.

FRR (yellow)

Domestic (cyan)

5. INDIVIDUAL FACILITY SCHEDULES

Each section below addresses the fuel transfers to and from one facility. The fuel types to be handled at each facility are indicated.

5.1 Power Burst Facility Canal

The tables at the end of this section provide information for the removal of DOE-owned SNF from the Power Burst Facility (PBF) Canal to dry storage in the fuel storage area of the IFSF at INTEC. The SNF inventory consists of 2,425 PBF Driver Core rods. The rods will be removed from their canisters and placed into 28 buckets. Each bucket will contain a maximum of 87 rods. The HFEF-6 cask will be used to transport the SNF to INTEC. The HFEF-6 cask can transport only one bucket at a time. Therefore, 28 transfers will be required to relocate the SNF to INTEC. The transfers were to begin in FY 2003 and be completed by December 24, 2003. Figure 5 depicts the PBF Canal inventory by MTHM.

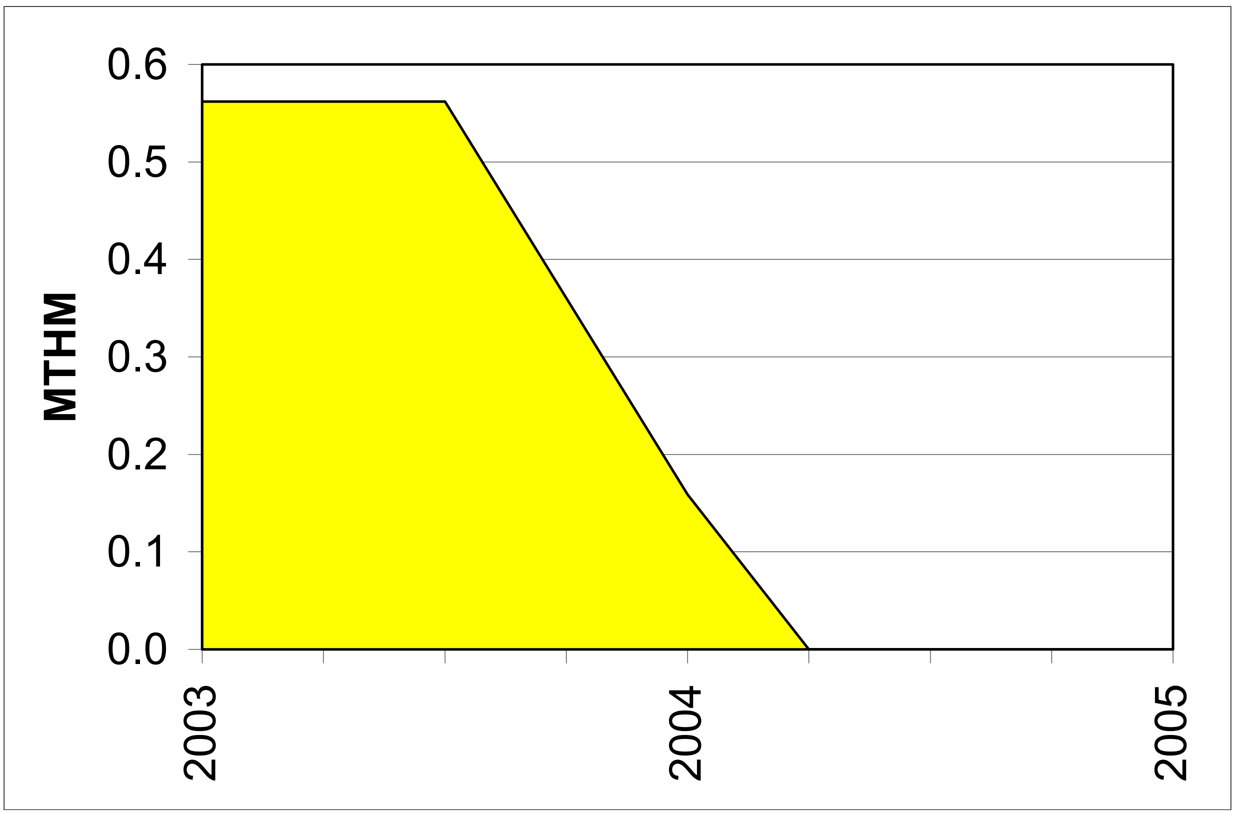

Figure 5. PBF Canal inventory.

Table 5-1. PBF Canal current inventory (as of October 1, 2002).

Fuel Name	Fuel Units	MTHM	Interim Storage Facility	Shipping Cask	Units per Load	Number of Transfers
PBF Driver Core	2425	0.5616	IFSF	HFEF-6	87	28

Table 5-2. PBF Canal inventory per year (MTHM, cask loads, and fuel units).

	2003	2004	2005
Inventory by MTHM	0.562	0.159	0
Inventory by Cask Loads	28	8	0
Inventory by Fuel Units	2425	685	0

Table 5-3. PBF Canal transfers (MTHM, cask loads, and fuel units).

	To	Total	2003	2004	2005
PBF Driver Core (MTHM)	IFSF	0.562	0.403	0.159	0
PBF Driver Core (Cask Loads)	IFSF	28	20	8	0
PBF Driver Core (Fuel Units)	IFSF	2425	1740	685	0

5.2 CPP-666 Facility

The tables at the end of this section provide information for the removal of DOE-owned SNF from the CPP-666 underwater storage basins by September 30, 2012. (Removal of DOE-owned SNF is scheduled to coincide with the removal of Naval SNF). Removal of all SNF from underwater storage is required by December 31, 2023, based on the Idaho Settlement Agreement. Receipts will be complete by the end of FY 2005, and transfers will be complete by the end of FY 2012.

The DOE-owned SNF will be transferred to the IFSF at INTEC for interim dry storage or, in the case of the sodium-bearing -II fuels, to ANL-W for treatment. Naval SNF will be removed from the CPP-666 underwater storage basins by September 30, 2012, based on Naval Reactor Facility (NRF) receipt projections. The Naval SNF will be transferred to the NRF.

The following sections provide an assumption and basis for each SNF type.

5.2.1 ATR SNF Receipts

The ATR plans on completing 28 shipments with eight elements per shipment in FY 2003. As of April 8, 2003, 21 of the 28 shipments have been completed. Completion of the remaining seven shipments is planned for August and September 2003. No ATR shipments are planned in FY 2004, because ATR will be performing a Core Internals Changeout for most of the year. In FY 2005, 14 shipments with eight elements per shipment are planned.

5.2.2 Aluminum Plate SNF Transfers

The maximum ATR inventory scheduled for transfer to IFSF is estimated at 1,928 elements. The remaining aluminum plate fuel inventory consists of 220 HFBR elements, 32 MURR elements, and 26 UWNR elements for a total of 2,206 elements to be transferred. This is estimated to require 277 High-Load Charger shipments (eight elements per shipment). Aluminum plate fuels will be dried in the fuel conditioning station at IFSF and will be placed in an interim storage configuration similar to other aluminum plate fuels already in IFSF. Plans include transfer of this SNF beginning in FY 2006 and ending in FY 2010.

5.2.3 Fermi SNF Transfers

The Fermi driver inventory consists of 214 cans. Fermi will be transferred using the High-Load Chargers and is estimated to require 54 shipments (four cans per shipment). Fermi fuel cans are assumed to be dry inside. Dryness will be verified by ultrasonic (UT) inspection. If a can is determined to be wet, it will be dried in the IFSF fuel conditioning station (FCS). Plans include transfer of this SNF to the IFSF in FY 2005 and FY 2006.

5.2.4 EBR-II SNF Transfers

The EBR-II inventory consists of 3,624 cans of sodium-bonded SNF. It has been assumed that 10% of the cans contain water. Transfers of “dry” cans will occur using the legal weight truck (LWT) cask as “in-commerce” shipments with 40 cans per shipment. Transfers of “leaker” cans will occur using the HFEF-6 cask as “out-of-commerce” shipments with 16 cans per shipment. The “leaker” cans will be identified using UT inspection. This is estimated to require 82 LWT cask shipments and 23 HFEF-6 cask shipments. EBR-II fuel will be transferred to ANL-W for treatment in the electrometallurgical process. ANL-W will provide for receipt and treatment of the fuel and ultimate disposition of the resulting products. Plans include transfer of this SNF to ANL-W beginning in FY 2007 and ending in FY 2011.

5.2.5 Intact SNF Transfers

Intact fuels inventory consists of 280 TRIGA stainless steel elements, 36 BORAX V elements, 40 Shippingport pressurized water reactors (PWR) elements, and 417 Pathfinder rods. The TRIGA and BORAX V elements will be transferred using the High-Load Chargers and will require 28 shipments (19 TRIGA and nine BORAX V). The Shippingport PWR elements will be transferred in the Peach Bottom cask and will require 20 shipments. The Pathfinder rods will be transferred in the HFEF-6 cask and will require seven shipments. Plans are for the TRIGA to be transferred in FY 2007, the BORAX and Pathfinder SNF to be transferred in FY 2010, and the Shippingport PWR SNF to be transferred in FY 2012.

5.2.6 Miscellaneous Canned SNF Transfers

Miscellaneous canned fuels consist of the following fuel types: SNAP (31 cans), TORY IIA (146 cans), ANP (two cans), APPR & SPSS (two cans), BMI (three cans), GCRE (two cans), VBWR (four cans), GETR (70 filters), SM-1A (93 cans) and Buffalo PULSTAR (24 cans). These cans will be transferred using the High-Load Chargers and will require approximately 99 shipments. The cans are assumed to contain water and will require venting and drying in the FCS at IFSF. Plans include transfer of this SNF in FY 2011 and FY 2012.

5.2.7 Navy SNF Receipts and Transfers

Currently the Navy has no plans to ship additional SNF to INTEC for storage. If delays continue in their dry storage efforts, shipment to INTEC for interim storage may resume.

Two Large Cell Casks (LCC) will be used for shipments of naval fuel back to NRF. The resultant number of shipments using these casks is approximately 143. Transfers are scheduled to begin in FY 2007 and be completed by the end of FY 2012. Figure 6 depicts CPP-666 SNF inventory by MTHM.

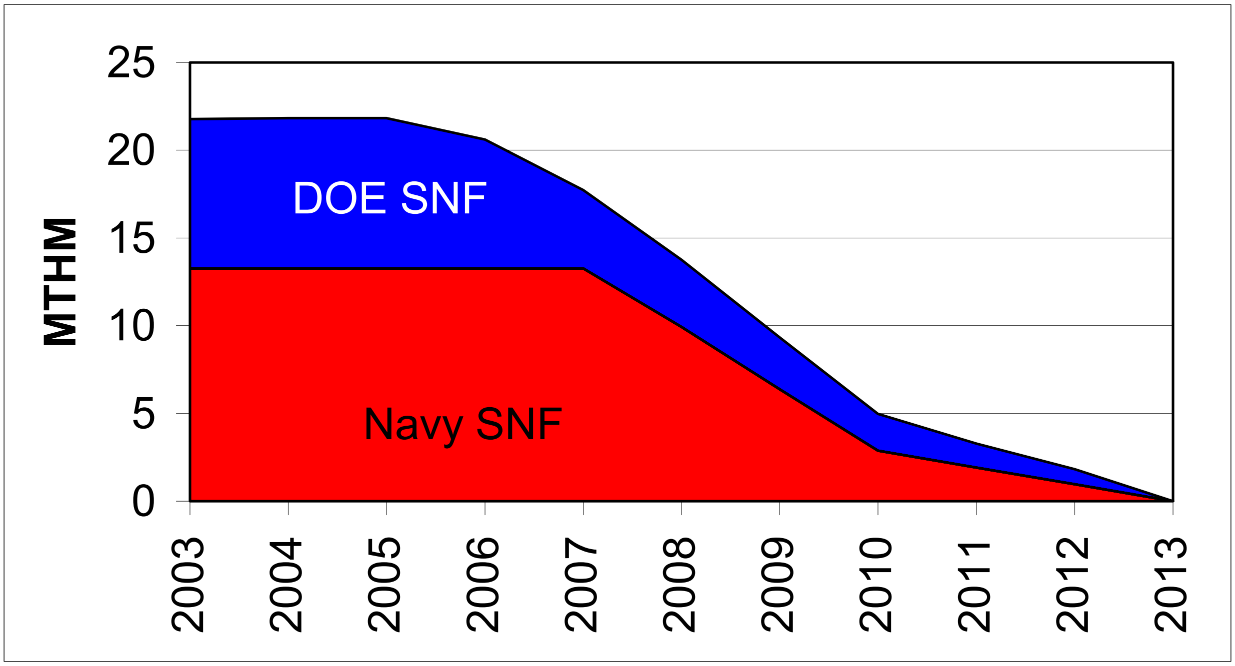

Figure 6. CPP-666 inventory.

Table 5-4. CPP-666 current inventory (as of May 31, 2003).

Fuel Name	Fuel Units	MTHM	Interim Storage Facility	ShippingCask	Units per Load	Number of Transfers
ATR	1760	1.4780	IFSF	High-Load Charger	8	220
Univ. of Washington	26	0.0039	IFSF	High-Load Charger	8	4
HFBR	220	0.0585	IFSF	High-Load Charger	8	28
MURR	32	0.0219	IFSF	High-Load Charger	8	4
FERMI	214	3.9321	IFSF	High-Load Chargers	4	54
TRIGA	280	0.0519	IFSF	High-Load Chargers	15	19
BORAX V	36	0.0208	IFSF	High-Load Chargers	4	9
Shippingport PWR	40	0.5217	IFSF	PB	2	20
Pathfinder	417	0.0534	IFSF	HFEF-6	62	7
SNAP	31	0.0291	IFSF	High-Load Charger	2	16
TORY-IIA	146	0.0486	IFSF	High-Load Charger	4	37
ANP	2	0.0011	IFSF	High-Load Charger	2	1
APPR & SPSS	2	0.0008	IFSF	High-Load Charger	2	1
BMI	3	0.0018	IFSF	High-Load Charger	2	2
GCRE	2	0.0010	IFSF	High-Load Charger	2	1
VBWR	4	0.0124	IFSF	High-Load Charger	4	1
GETR filters	70	0.0044	IFSF	High-Load Charger	7	10
SM-1A	93	0.0658	IFSF	High-Load Charger	4	24
Pulstar—Buffalo	24	0.2522	IFSF	High-Load Charger	4	6
EBR-II Dry	3256	1.7670	ANL-W	LWT	40	82
EBR-II Wet	368	0.1997	ANL-W	HFEF-6	16	23
Navy	4233	13.2568	NRF	LCC	24 or 38	143
Total	11259	21.7829				712

Table 5-5. CPP-666 receipts.

Fuel Name	Fuel Units	MTHM	From	Shipping Cask	Units per Load	Number of Transfers	Units per Position	Number of Storage Positions	Interim Storage Facility	Shipping Cask	Units per Load	Number of Transfers
ATR (2003–2005) receipts	168	0.1402	TRA	ATR	8	21	4	42	IFSF	High-Load Charger	8	21

Table 5-6. CPP-666 inventory per year (MTHM, and fuel units).

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Inventory by MTHM	21.783	21.830	21.830	20.600	17.736	13.754	9.326	4.978	3.278	1.820	0.000
Inventory by Fuel Units	11259	11315	11315	11355	10909	8815	6601	4585	2311	799	0

Table 5-7. CPP-666 receipts and transfers per year (MTHM).

Receipts	From		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ATR (2001–2005)	TRA	0.140	0.047	0	0.093	0	0	0	0	0	0	0	0
Transfers	To		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ATR	IFSF	1.478	0	0	0	0.255	0.390	0.423	0.410	0	0	0	0
ATR (2003–2005) receipts	IFSF	0.140	0	0	0	0	0	0	0	0.140	0	0	0
Univ. of Washington	IFSF	0.004	0	0	0	0	0	0	0	0.004	0	0	0
HFBR	IFSF	0.058	0	0	0	0	0	0	0	0.058	0	0	0
MURR	IFSF	0.022	0	0	0	0	0	0	0	0.022	0	0	0
FERMI	IFSF	3.932	0	0	1.323	2.609	0	0	0	0	0	0	0
TRIGA	IFSF	0.052	0	0	0	0	0.052	0	0	0	0	0	0
BORAX V	IFSF	0.021	0	0	0	0	0	0	0	0.021	0	0	0
Shippingport PWR	IFSF	0.522	0	0	0	0	0	0	0	0	0	0.522	0
Pathfinder	IFSF	0.053	0	0	0	0	0	0	0	0.053	0	0	0
SNAP	IFSF	0.029	0	0	0	0	0	0	0	0	0.029	0	0
TORY-IIA	IFSF	0.049	0	0	0	0	0	0	0	0	0.049	0	0
ANP	IFSF	0.001	0	0	0	0	0	0	0	0	0	0.001	0
APPR & SPSS	IFSF	0.001	0	0	0	0	0	0	0	0	0	0.001	0
BMI	IFSF	0.002	0	0	0	0	0	0	0	0	0	0.002	0
GCRE	IFSF	0.001	0	0	0	0	0	0	0	0	0	0.001	0
VBWR	IFSF	0.012	0	0	0	0	0	0	0	0	0	0.012	0
GETR Filters	IFSF	0.004	0	0	0	0	0	0	0	0	0	0.004	0
SM-1A	IFSF	0.066	0	0	0	0	0	0	0	0	0	0.066	0
Pulstar—Buffalo	IFSF	0.252	0	0	0	0	0	0	0	0	0	0.252	0
EBR-II Dry	ANL-W	1.767	0	0	0	0	0.217	0.391	0.391	0.391	0.377	0	0
EBR-II Wet	ANL-W	0.200	0	0	0	0	0	0.052	0.052	0.052	0.044	0	0
Navy	NRF	13.257	0	0	0	0	3.323	3.562	3.495	0.959	0.959	0.959	0
Total		21.923	0	0	1.323	2.864	3.982	4.428	4.428	1.700	1.458	1.820	0

Table 5-8. CPP-666 receipts and transfers per year (cask loads).

Receipts	From		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ATR (2001–2005)	TRA	21	7	0	14	0	0	0	0	0	0	0	0
Transfers	To		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ATR	IFSF	220	0	0	0	38	58	63	61	0	0	0	0
ATR (2002–2005) receipts	IFSF	21	0	0	0	0	0	0	0	21	0	0	0
Univ. of Washington	IFSF	4	0	0	0	0	0	0	0	4	0	0	0
HFBR	IFSF	28	0	0	0	0	0	0	0	28	0	0	0
MURR	IFSF	4	0	0	0	0	0	0	0	4	0	0	0
FERMI	IFSF	54	0	0	18	36	0	0	0	0	0	0	0
TRIGA	IFSF	19	0	0	0	0	19	0	0	0	0	0	0
BORAX V	IFSF	9	0	0	0	0	0	0	0	9	0	0	0
Shippingport PWR	IFSF	20	0	0	0	0	0	0	0	0	0	20	0
Pathfinder	IFSF	7	0	0	0	0	0	0	0	7	0	0	0
SNAP	IFSF	16	0	0	0	0	0	0	0	0	16	0	0
TORY-IIA	IFSF	37	0	0	0	0	0	0	0	0	37	0	0
ANP	IFSF	1	0	0	0	0	0	0	0	0	0	1	0
APPR & SPSS	IFSF	1	0	0	0	0	0	0	0	0	0	1	0
BMI	IFSF	2	0	0	0	0	0	0	0	0	0	2	0
GCRE	IFSF	1	0	0	0	0	0	0	0	0	0	1	0
VBWR	IFSF	1	0	0	0	0	0	0	0	0	0	1	0
GETR Filters	IFSF	10	0	0	0	0	0	0	0	0	0	10	0
SM-1A	IFSF	24	0	0	0	0	0	0	0	0	0	24	0
Pulstar—Buffalo	IFSF	6	0	0	0	0	0	0	0	0	0	6	0
EBR-II Dry	ANL-W	82	0	0	0	0	10	18	18	18	18	0	0
EBR-II Wet	ANL-W	23	0	0	0	0	0	6	6	6	5	0	0
Navy	NRF	143	0	0	0	0	25	25	27	22	22	22	0
Total		733	0	0	18	74	112	112	112	119	98	88	0

Table 5-9. CPP-666 receipts and transfers per year (fuel units).

Receipts	From		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ATR (2003-2005)	TRA	168	56	0	112	0	0	0	0	0	0	0	0
Transfers	To		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ATR	IFSF	1760	0	0	0	304	464	504	488	0	0	0	0
ATR (2003-2005) receipts	IFSF	168	0	0	0	0	0	0	0	168	0	0	0
Univ of Washington	IFSF	26	0	0	0	0	0	0	0	26	0	0	0
HFBR	IFSF	220	0	0	0	0	0	0	0	220	0	0	0
MURR	IFSF	32	0	0	0	0	0	0	0	32	0	0	0
Fermi Driver	IFSF	214	0	0	72	142	0	0	0	0	0	0	0
TRIGA	IFSF	280	0	0	0	0	280	0	0	0	0	0	0
BORAX V	IFSF	36	0	0	0	0	0	0	0	36	0	0	0
Shippingport PWR	IFSF	40	0	0	0	0	0	0	0	0	0	40	0
Pathfinder	IFSF	417	0	0	0	0	0	0	0	417	0	0	0
SNAP	IFSF	31	0	0	0	0	0	0	0	0	31	0	0
TORY-IIA	IFSF	146	0	0	0	0	0	0	0	0	146	0	0
ANP	IFSF	2	0	0	0	0	0	0	0	0	0	2	0
APPR & SPSS	IFSF	2	0	0	0	0	0	0	0	0	0	2	0
BMI	IFSF	3	0	0	0	0	0	0	0	0	0	3	0
GCRE	IFSF	2	0	0	0	0	0	0	0	0	0	2	0
VBWR	IFSF	4	0	0	0	0	0	0	0	0	0	4	0
GETR Filters	IFSF	70	0	0	0	0	0	0	0	0	0	70	0
SM-1A	IFSF	93	0	0	0	0	0	0	0	0	0	93	0
Pulstar - Buffalo	IFSF	24	0	0	0	0	0	0	0	0	0	24	0
EBR-II Dry	ANL-W	3256	0	0	0	0	400	720	720	720	696	0	0
EBR-II Wet	ANL-W	368	0	0	0	0	0	96	96	96	80	0	0
Navy	NRF	4233	0	0	0	0	950	894	712	559	559	559	0
Total		11427	0	0	72	446	2094	2214	2016	2274	1512	799	Total

5.3 CPP-603 Irradiated Fuel Storage Facility (IFSF)

The tables at the end of this section provide information for the receipt and removal of DOE-owned SNF from the IFSF. The IFSF is the center point of the SNF consolidation efforts at the INEEL. IFSF will receive SNF from INTEC, PBF, and Test Reactor Area (TRA) for interim storage. In addition, it is expected to receive SNF from 16 domestic universities, three domestic reactor facilities, up to 18 foreign countries, and four DOE facilities. The IFSF will ship epoxy SNF to a yet-to-be-determined facility for treatment and remaining SNF to the SNFDSP for shipment to the repository. The IFSF will receive SNF until the end of FY 2021 and store SNF until the end of FY 2022.

The removal of SNM stored in the facility is described in PLN-1249, “Disposition Strategies for EM-Owned Unirradiated SNM at the INEEL.”

The following sections provide an assumption and basis for each SNF type.

5.3.1 Peach Bottom Transfers

The Peach Bottom SNF inventory consists of 786 Peach Bottom Core 2 elements, two partial Peach Bottom Core 1 elements stored in the Fuel Element Cutting Facility (FECF), and one proof test element (PTE) irradiated in Peach Bottom Core 1. Peach Bottom SNF will be transferred to the SNFDSP using the Peach Bottom cask in two stages. The Peach Bottom SNF is part of the SNF to be sent to the SNFDSP under the contract between DOE and FWENC. Seven hundred eighty-two Peach Bottom elements in 68 storage canisters and the Peach Bottom stored in the FECF (one storage canister) will be sent to the SNFDSP; 69 shipments will be made, 1 shipment for each storage canister. Plans include transfer of this SNF in FY 2006 through FY 2008.

The remaining Peach Bottom SNF, four broken Core 2 elements, and the PTE are not part of the existing FWENC contract and will be sent at a later date. These elements are stored in two storage canisters. One shipment using the Peach Bottom will be made, one shipment for each storage canister. Plans include transfer of this SNF to the SNFDSP in FY 2011.

5.3.2 Fort St. Vrain Reactor Transfers

The FSV Reactor (FSVR) SNF inventory consists of 744 elements stored in 188 storage canisters. FSVR SNF will be transferred to the SNFDSP using the Peach Bottom cask. One hundred eighty-eight shipments will be made, one shipment for each storage canister. Plans include transfer of this SNF in FY 2016 through FY 2018. This timeframe was chosen to allow FSVR SNF stored at the INEEL to be processed through the SNFDSP before FSVR SNF stored in Colorado, thus ensuring the handling operation is defined and proven, and minimizing the SNF stay in Idaho.

5.3.3 TORY-IIC Transfers

The TORY-IIC inventory consists of 655 aluminum cans of crushed SNF stored in 23 canisters. TORY-IIC SNF will be transferred to the SNFDSP using the Peach Bottom cask. Twenty-three shipments will be made, one shipment for each storage canister. Plans include transfer of this SNF in FY 2015 with other canned SNF.

5.3.4 BER-II (TRIGA) Transfers

The BER-II TRIGA inventory consists of 21 assemblies in two storage canisters. This fuel is similar to other stainless steel TRIGA SNF. However, the fuel was not fabricated by General Atomics and is not a true TRIGA fuel. Standard fuel assemblies have 16 fuel elements. BER-II TRIGA will be transferred to SNFDSP using the Peach Bottom cask. Two shipments will be made, one shipment for each storage canister. Plans include transfer of this SNF in FY 2011 with other TRIGA SNF.

5.3.5 TRIGA Transfers

The TRIGA inventory (as of October 1, 2003) consists of TRIGA aluminum from CPP-603 (558 elements), FRR TRIGA currently stored (951 elements), and TRIGA High Power (267 elements) in a total of 23 storage canisters. Part of this inventory was included in the schedule for SNFDSP. The schedule included 1,600 TRIGA elements that are stored in the facility or will be received from FFRs and DRRs by the end of FY 2007. TRIGA will be transferred to the SNFDSP using the Peach Bottom cask. Twenty shipments will be made, one shipment for each storage canister, except for the TRIGA SNF in the contract between DOE and FWENC that will be repackaged before shipping. Plans are for part of this SNF to be transferred in FY 2008, and the remaining SNF to be transferred in FY 2011.

5.3.6 Core Filter Transfer

The core filter consists of a depleted uranium block that contains a highly enriched uranium (HEU) annulus. The core filter was an experimental item used to provide neutron shielding of experimental items in the Coupled Fast Reactivity Measurement Facility (CFRMF) reactor. The core filter is stored in one storage canister and will be transferred to the SNFDSP using the Peach Bottom cask. One shipment will be made. Plans include transfer of this SNF in FY 2011.

5.3.7 Westinghouse Atomic Power Division and SPEC (ORME) SNF Transfers

The Westinghouse Atomic Power Division (WAPD) and SPEC SNF are currently stored together in one storage canister. The WAPD SNF consists of 25 experiment capsules that contain metallic sodium. One shipment of this SNF to ANL-W is planned in FY 2010. SPEC SNF consists of SNF specimens examined by BMI. This SNF has deteriorated in wet storage. Plans are for one shipment of this SNF to ANL-W in FY 2010 for treatment. These shipments may be combined with other shipments to ANL-W.

5.3.8 Rover UBM Transfer

Rover uranium bearing material (UBM) consists of 65 cans in six storage canisters of debris from the decontamination and decommissioning of Rover Fuels Reprocessing Facility. The Rover Fuel Reprocessing Facility used two hot, fluidized beds of alumina particles to convert the graphite fuel elements into gaseous combustion products and uranium and niobium-bearing ash. The ash was then to be collected and dissolved so the uranium could be separated. The Rover UBM is the enriched uranium and niobium ash and alumina particles that remained after the facility was shut down. This SNF will be transferred to the SNFDSP using the Peach Bottom cask. Six shipments will be made, one shipment for each storage canister. Plans include transfer of this SNF in FY 2015.

5.3.9 Materials Test Reactor Canal Transfer

This SNF contains material shipped to the IFSF in FY 2002 from the Materials Test Reactor (MTR) Canal. Most of the material from the MTR Canal was obtained after testing in the PBF. Forty-seven experiments were performed in the PBF using this test fuel, and six different types of light water reactor accidents were simulated. In addition, fuel is stored from several tests on the PBF Driver Core and fuel tested in the Halden Reactor in Norway. This material is stored in 105 cans that have been placed into 10 storage canisters. There are four types of cans with varying lengths and diameters.

This SNF contains epoxy that is planned for treatment at a TBD location. Plans include 10 shipments of this SNF to the TBD location for treatment in FY 2010 through FY 2015.

5.3.10 Aluminum Plate SNF Receipts and Transfer

The aluminum plate SNF inventory currently in IFSF consists of 260 elements; 71 Advanced Reactivity Measurement Facility (ARMF)/CFRMF elements and 189 aluminum plate elements received from CPP-603 wet storage (ATR 128 elements, MURR 24 elements, HFBR 20 elements, and ORR 17 elements). The 260 elements are stored in 16 storage canisters. Plans are for the IFSF to receive 277 High-Load Charger shipments (eight elements per shipment) from CPP-666 containing 2,206 aluminum plate elements (1,928 ATR elements, 220 HFBR elements, 32 MURR elements, and 26 UWNR elements) beginning in FY 2006 and finishing by the end of FY 2010. The 2,206 aluminum plate elements will require 139 storage positions (16 elements per storage position). In addition to the aluminum plate elements from CPP-666, plans are for the IFSF to receive 14 shipments per year (eight elements per shipment per year) in the ATR Cask of ATR elements from TRA beginning in FY 2006 and ending in FY 2010, for a total of 560 elements that will require 35 storage positions (16 elements per storage position). When received the aluminum plate fuels will be dried in the fuel conditioning station at IFSF and placed into storage canisters in a storage configuration similar to other aluminum plate fuels already in IFSF.

All aluminum plate elements will be transferred to the SNFDSP using the Peach Bottom cask. One hundred and ninety shipments will be made, one shipment for each storage canister. Plans include transfer of this SNF in FY 2011 through FY 2013.

5.3.11 Fermi SNF Receipts and Transfers

The IFSF will receive High-Load Chargers shipments of Fermi SNF (214 cans) from CPP-666 in FY 2005 and FY 2007 and place it into 14 storage canisters. Fermi fuel cans are assumed to be dry inside. Dryness will be verified by UT inspection. If a can is determined to be wet, it will be dried in the IFSF FCS. Fermi SNF will be transferred to the SNFDSP using the Peach Bottom cask. Fourteen shipments will be made, one shipment for each storage canister. Plans include transfer of this SNF in FY 2014.

5.3.12 Miscellaneous Intact SNF Receipts and Transfers

The IFSF will receive from CPP-666 19 shipments of TRIGA (280 elements) and 9 shipments of BORAX (36 elements) in the High-Load Chargers, 20 shipments of Shippingport PWR (40 elements) in the Peach Bottom cask, and 7 shipments of Pathfinder (417 rods) SNF in the HFEF-6 cask in FY 2007 through FY 2011. This SNF will be placed into 53 storage canisters. The miscellaneous intact SNF will be transferred to the SNFDSP using the Peach Bottom cask. Fifty-two shipments will be made, one shipment for each storage canister. The only exception is the TRIGA SNF in the contract between DOE and FWENC that will be repackaged before shipping. Plans are for TRIGA SNF to be transferred in FY 2008 and FY 2011; BORAX, Pathfinder, and Shippingport PWR will be transferred in FY 2014 and FY 2015.

5.3.13 Miscellaneous Canned SNF Receipts and Transfers

The IFSF will receive 99 shipments from CPP-666 in the STR or High-Load Chargers consisting of the following miscellaneous canned SNF types: SNAP (31 cans), TORY IIA (146 cans), GETR (70 filters), SM-1A (93 cans), Buffalo PULSTAR (24 cans), ANP (2 cans), APPR (2 cans), BMI (3 cans), GCRE (2 cans), and VBWR (4 cans). Plans are for the miscellaneous canned SNF to be shipped to the IFSF in FY 2011 and FY 2012 and placed into 24 storage canisters. One storage canister will contain the 13 cans of ANP, APPR, BMI, GCRE, and VBWR SNF. The miscellaneous canned SNF will be transferred to the SNFDSP using the Peach Bottom cask. Twenty-four shipments will be made, one shipment for each storage canister. Plans are for the SNF to be transferred in FY 2014 through FY 2016.

5.3.14 PBF Canal Receipts and Transfers

The IFSF will receive 28 shipments in the HFEF-6 cask of PBF Driver Core SNF (2,425 rods) in FY 2003 and FY 2004. The SNF will be placed into 14 storage canisters. The PBF SNF will be transferred to the SNFDSP using the Peach Bottom cask. Fourteen shipments will be made, one shipment for each storage canister. Plans are for the SNF to be transferred in FY 2014.

5.3.15 Domestic Receipts & Shipments and Foreign Research Reactor

The domestic receipt and shipment (DR&S) and FRR projects expect receipt of up to 110 shipments of SNF into the IFSF. These shipments will come from 16 domestic universities, eight domestic reactor facilities, four DOE sites, and 18 foreign countries. Letter CCN 42069 contains a summary of the shipping sites. The SNF will be received between FY 2003 and FY 2021. FRR shipments will be complete by the end of FY 2009. The DR&S and FRR receipt will be placed in approximately 125 storage canisters. The DR&S and FRR SNF will be transferred to the SNFDSP using the Peach Bottom cask. One hundred twenty-one shipments will be made, one shipment for each storage canister except for the TRIGA SNF in the contract between DOE and FWENC that will be repackaged before shipping. Plans are for the SNF to be transferred in FY 2008, and in FY 2011 through FY 2022. Figure 7 depicts IFSF inventory by MTHM.

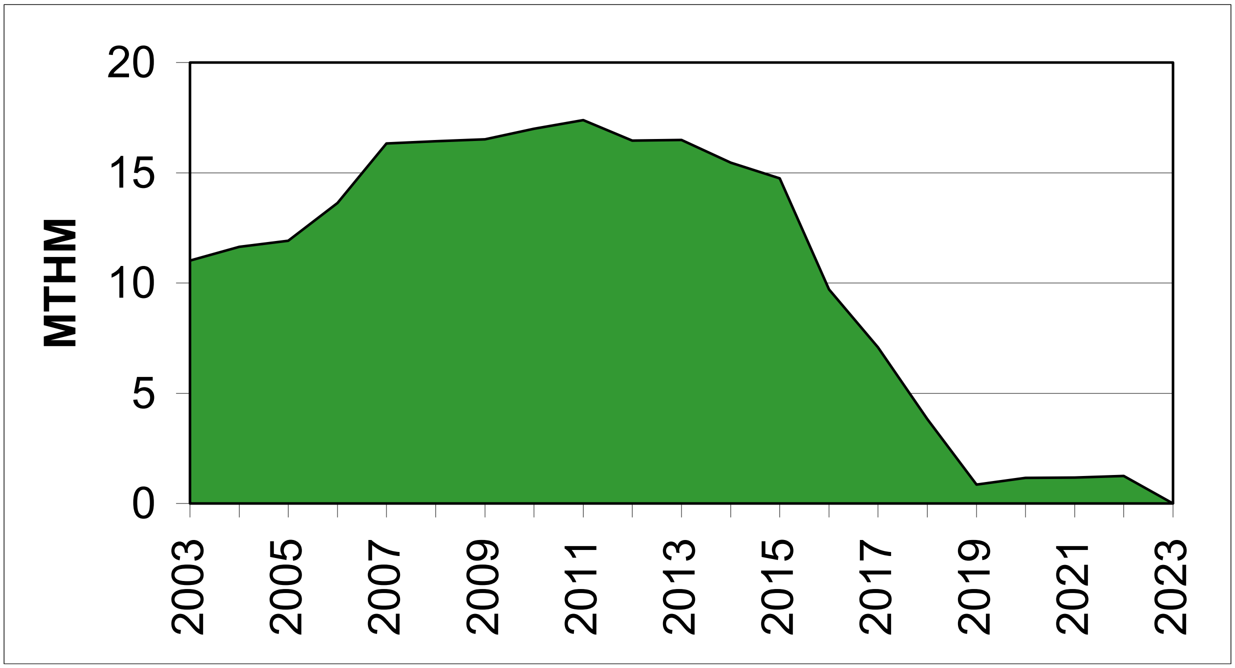

Figure 7. IFSF inventory.

Table 5-10. IFSF (CPP-603) current inventory (as of October 1, 2002).

Fuel Name	Fuel Units	MTHM	Storage Positions	Interim Storage Facility	Shipping Cask	Units per Load	Number of Transfers
TORY-IIC	655	0.0591	23	SNFDSP	PB	28	23
Peach Bottom (within FWENC)	786	1.2821	69	SNFDSP	PB	12	69
Peach Bottom (outside FWNC)	5	0.0105	2	SNFDSP	PB	5	1
FSVR	744	8.6273	188	SNFDSP	PB	4	188
Rover UBM FY-98	65	0.1198	6	SNFDSP	PB	11	6
TRIGA BER-II	21	0.0092	2	SNFDSP	PB	11	2
TRIGA AL (CPP603)	558	0.1025	7	SNFDSP	PB	72	7
TRIGA FRR	951	0.1723	15	SNFDSP	PB	72 or 90	12
TRIGA High Power	267	0.0056	1	SNFDSP	PB	267	1
ARMF/CFRMF	71	0.0129	5	SNFDSP	LWT	16	5
Aluminum Plate	189	0.1235	11	SNFDSP	LWT	16	11
Core Filter	1	0.2185	1	SNFDSP	PB	1	1
WAPD (Na bonded) & SPEC (ORME)	25	0.0090	1	ANL-W	HFEF-6	23	1
MTR Canal Test Fuel	105	0.2613	10	TBD	TBD	11	10
Total	4443	11.0136	341				337

Table 5-11. CPP-603 IFSF receipts.

Fuel Name	Fuel Units	MTHM	From	Shipping Cask	Units per Load	Number of Transfers	Units per Position	Storage Positions	Storage Facility	Shipping Cask	Units per Load	Number of Transfers
PBF Driver Core	2425	0.5616	PBF Canal	HFEF-6	87	28	174	14	SNFDSP	PB	174	14
ATR from TRA to IFSF (2006–2010)	560	0.4650	TRA	ATR Cask	8	70	16	35	SNFDSP	PB	16	35
ATR from TRA to CPP-666 (2003–2005)	168	0.1402	CPP-666	High-Load Charger	8	21	16	11	SNFDSP	PB	16	11
ATR	1760	1.4778	CPP-666	High-Load Charger	8	220	16	110	SNFDSP	PB	16	110
Univ of Washington	26	0.0039	CPP-666	High-Load Charger	8	4	16	2	SNFDSP	PB	16	2
HFBR	220	0.0585	CPP-666	High-Load Charger	8	28	16	14	SNFDSP	PB	16	14
MURR	32	0.0219	CPP-666	High-Load Charger	8	4	16	2	SNFDSP	PB	16	2
Fermi Driver	214	3.9321	CPP-666	High-Load Charger	4	54	16	14	SNFDSP	PB	16	14
TRIGA	280	0.0519	CPP-666	High-Load Charger	15	19	72	4	SNFDSP	PB	72 or 90	3
BORAX V	36	0.0208	CPP-666	High-Load Charger	4	9	18	2	SNFDSP	PB	18	2
Shippingport PWR	40	0.5217	CPP-666	PB	2	20	1	40	SNFDSP	PB	1	40
Pathfinder	417	0.0534	CPP-666	HFEF-6	62	7	62	7	SNFDSP	PB	62	7
SNAP	31	0.0291	CPP-666	High-Load Charger	2	16	16	2	SNFDSP	PB	16	2
TORY-IIA	146	0.0486	CPP-666	High-Load Charger	4	37	14	11	SNFDSP	PB	14	11
ANP, APPR, SPSS, BMI, GCRE, & VBWR	13	0.0171	CPP-666	High-Load Charger	2	6	13	1	SNFDSP	PB	13	1
GETR Filters	70	0.0044	CPP-666	High-Load Charger	7	10	35	2	SNFDSP	PB	35	2

Table 5-11. (continued).

Fuel Name	Fuel Units	MTHM	From	Shipping Cask	Units per Load	Number of Transfers	Units per Position	Storage Positions	Storage Facility	Shipping Cask	Units per Load	Number of Transfers
SM-1A	93	0.0658	CPP-666	High-Load Charger	4	24	16	6	SNFDSP	PB	16	6
Pulstar – Buffalo	24	0.2522	CPP-666	High-Load Charger	4	6	16	2	SNFDSP	PB	16	2
ORR Receipts	62	0.2080	ORR	TN-FSV	15	5	12	6	SNFDSP	PB	12	6
GA (RERTR & HTGR)	2	0.0052	GA	NAC-LWT	2	1	2	1	SNFDSP	PB	2	1
CP-5 Converter	2	0.0012	ANL-E	TBD	2	1	2	1	SNFDSP	PB	2	1
SNL receipts	493	0.2430	SNL	TBD	5 or 120	17	5 or 72	19	SNFDSP	PB	5 or 72	19
ANL-W (TRIGA, TREAT, Exper, Misc)	2302	4.7451	ANL-W	TBD	N/A	38	61	38	SNFDSP	PB	61	38
B&W (Arkansas, Oconee, TMI-2)	18	0.0439	B&W	TN-FSV	18	1	9	2	SNFDSP	PB	9	2
TRIGA FRR & DRR	2962	0.5679	FRR/DRR	NAC-LWT	120	42	56	53	SNFDSP	PB	52 or 90	51
Pulstar DRR	65	0.8159	DRR	NAC-LWT	14	5	16	5	SNFDSP	PB	16	5
Total	12461	14.3562				693		404				401

Table 5-12. CPP-603 IFSF Inventory (MTHM, fuel units, and storage positions).

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Inventory by MTHM	11.014	11.644	11.909	13.626	16.335	16.426	16.517	17.002	17.385	16.461	16.484	15.458	14.479	9.715	7.085	3.838	0.853	1.155	1.177	1.242	0.000
Inventory by Fuel Units	4443	6318	7575	7901	8558	9283	8735	9255	10392	7859	7536	7386	5420	1860	1479	1199	1360	1388	1501	1519	0
Inventory by Storage Positions	341	359	372	387	416	436	440	479	525	467	458	389	322	241	166	96	32	34	36	40	0

Table 5-13. CPP-603 IFSF receipts (MTHM).

CPP-603 IFSF Receipts	From	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
PBF Driver Core	PBF	0.562	0.403	0.159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	TRA	0.465	0	0	0	0.093	0.093	0.093	0.093	0.093	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	CPP-666	0.140	0	0	0	0	0	0	0	0.140	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	CPP-666	1.478	0	0	0	0.255	0.390	0.423	0.410	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	CPP-666	0.004	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	CPP-666	0.058	0	0	0	0	0	0	0	0.058	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	CPP-666	0.022	0	0	0	0	0	0	0	0.022	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	CPP-666	3.932	0	0	1.323	2.609	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (CPP-666)	CPP-666	0.052	0	0	0	0	0.052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	CPP-666	0.021	0	0	0	0	0	0	0	0.021	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	CPP-666	0.522	0	0	0	0	0	0	0	0	0	0.522	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	CPP-666	0.053	0	0	0	0	0	0	0	0.053	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	CPP-666	0.029	0	0	0	0	0	0	0	0	0.029	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	CPP-666	0.049	0	0	0	0	0	0	0	0	0.049	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	CPP-666	0.017	0	0	0	0	0	0	0	0	0.017	0	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	CPP-666	0.004	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0
SM-1A	CPP-666	0.066	0	0	0	0	0	0	0	0	0	0.066	0	0	0	0	0	0	0	0	0	0	0
Pulstar - Buffalo	CPP-666	0.252	0	0	0	0	0	0	0	0	0	0.252	0	0	0	0	0	0	0	0	0	0	0
ORR Receipts	ORR	0.208	0.208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	GA	0.005	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	GA	0.005	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CP-5 Converter	ANL-E	0.001	0	0	0.001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNL receipts	SNL	0.243	0	0	0.001	0.003	0.070	0	0	0	0	0	0	0	0	0	0	0.169	0	0	0	0	0

Table 5-13. (continued).

CPP-603 IFSF Receipts	From	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ANL-W (TRIGA, TREAT, Exper, Misc)	ANL	4.745	0	0	0	0	0	0	0	0	0	0.028	0.099	4.618	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	B&W	0.044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.044	0	0
TRIGA FRR & DRR	FRR/DRR	0.568	0.014	0.106	0.042	0.062	0.034	0.064	0.048	0.026	0.035	0.064	0	0.013	0	0.017	0	0	0	0.022	0.021	0	0
Pulstar DRR	DRR	0.816	0	0.000	0.350	0	0	0.164	0	0	0	0	0	0	0	0	0	0	0.302	0	0	0	0
Total		14.356	0.630	0.265	1.717	3.022	0.639	0.744	0.551	0.417	0.130	0.936	0.099	4.631	0	0.017	0	0.169	0.302	0.022	0.065	0	0

Table 5-14. CPP-603 IFSF transfers (MTHM).

CPP-603 IFSF Transfers	To	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
TORY-IIC	SNFDSP	0.059	0	0	0	0	0	0	0	0	0	0	0	0	0.059	0	0	0	0	0	0	0	0
Peach Bottom (FWC C-II & FECF C-I))	SNFDSP	1.282	0	0	0	0.313	0.548	0.421	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom (C-II & PTE-1)	SNFDSP	0.011	0	0	0	0	0	0	0	0	0.011	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	SNFDSP	8.627	0	0	0	0	0	0	0	0	0	0	0	0	0	2.226	3.247	3.154	0	0	0	0	0
Rover UBM FY-98	SNFDSP	0.120	0	0	0	0	0	0	0	0	0	0	0	0	0.120	0	0	0	0	0	0	0	0
TRIGA BER-II	SNFDSP	0.009	0	0	0	0	0	0	0	0	0.009	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA AL (CPP603)	SNFDSP	0.103	0	0	0	0	0	0	0	0	0.103	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA FRR	SNFDSP	0.172	0	0	0	0	0	0.128	0	0	0.044	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA High Power	SNFDSP	0.006	0	0	0	0	0	0	0	0	0.006	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	SNFDSP	0.013	0	0	0	0	0	0	0	0	0.013	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	SNFDSP	0.124	0	0	0	0	0	0	0	0	0.124	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	SNFDSP	0.218	0	0	0	0	0	0	0	0	0.218	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	SNFDSP	0.562	0	0	0	0	0	0	0	0	0	0	0	0.562	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	SNFDSP	0.465	0	0	0	0	0	0	0	0	0	0	0.465	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	SNFDSP	0.140	0	0	0	0	0	0	0	0	0.140	0	0	0	0	0	0	0	0	0	0	0	0
ATR	SNFDSP	1.478	0	0	0	0	0	0	0	0	0.107	0.766	0.605	0	0	0	0	0	0	0	0	0	0
Univ of Washington	SNFDSP	0.004	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0
HFBR	SNFDSP	0.058	0	0	0	0	0	0	0	0	0	0.058	0	0	0	0	0	0	0	0	0	0	0

Table 5-14. (continued).

CPP-603 IFSF Transfers	To	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MURR	SNFDSP	0.022	0	0	0	0	0	0	0	0	0	0.022	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	SNFDSP	3.932	0	0	0	0	0	0	0	0	0	0	0	3.932	0	0	0	0	0	0	0	0	0
TRIGA (CPP-666)	SNFDSP	0.052	0	0	0	0	0	0.039	0	0	0	0.013	0	0	0	0	0	0	0	0	0	0	0
BORAX V	SNFDSP	0.021	0	0	0	0	0	0	0	0	0	0	0	0	0.021	0	0	0	0	0	0	0	0
Shippingport PWR	SNFDSP	0.522	0	0	0	0	0	0	0	0	0	0	0	0.522	0	0	0	0	0	0	0	0	0
Pathfinder	SNFDSP	0.053	0	0	0	0	0	0	0	0	0	0	0	0	0.053	0	0	0	0	0	0	0	0
SNAP	SNFDSP	0.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0.029	0	0	0	0	0	0	0
TORY-IIA	SNFDSP	0.049	0	0	0	0	0	0	0	0	0	0	0	0	0	0.049	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	SNFDSP	0.017	0	0	0	0	0	0	0	0	0	0	0	0	0	0.017	0	0	0	0	0	0	0
GETR Filters	SNFDSP	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0
SM-1A	SNFDSP	0.066	0	0	0	0	0	0	0	0	0	0	0	0.066	0	0	0	0	0	0	0	0	0
Pulstar – Buffalo	SNFDSP	0.252	0	0	0	0	0	0	0	0	0	0	0	0	0	0.252	0	0	0	0	0	0	0
ORR Receipts	SNFDSP	0.208	0	0	0	0	0	0	0	0	0	0	0	0.208	0	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	SNFDSP	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0.005	0	0	0	0	0	0	0	0
CP-5 Converter	SNFDSP	0.001	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0	0	0	0	0	0	0	0
SNL receipts	SNFDSP	0.243	0	0	0	0	0	0	0	0	0	0	0	0	0	0.074	0	0	0	0	0	0.169	0
ANL-W (TRIGA, TREAT, Exper, Misc)	SNFDSP	4.745	0	0	0	0	0	0	0	0	0	0	0	0	4.745	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	SNFDSP	0.044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.044	0
TRIGA FRR & DRR	SNFDSP	0.557	0	0	0	0	0	0.065	0.066	0	0.224	0	0	0	0	0	0	0	0	0	0	0.202	0
Pulstar DRR	SNFDSP	0.816	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.816	0
WAPD (Na bonded) & SPEC (ORME)	ANL-W	0.009	0	0	0	0	0	0	0	0.009	0	0	0	0	0	0	0	0	0	0	0	0	0
MTR Canal Test Fuel	ANL-W	0.261	0	0	0	0	0	0	0	0.025	0.055	0.050	0.055	0.050	0.026	0	0	0	0	0	0	0	0
Total		25.359	0	0	0	0.313	0.548	0.653	0.066	0.034	1.054	0.913	1.125	5.340	5.034	2.647	3.247	3.154	0	0	0	1.231	0

Table 5-15. CPP-603 IFSF receipts (cask loads).

CPP-603 IFSF Receipts	From	Cask	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
PBF Driver Core	PBF	28	20	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	TRA	70	0	0	0	14	14	14	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	CPP-666	21	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	CPP-666	220	0	0	0	38	58	63	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	CPP-666	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	CPP-666	28	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	CPP-666	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	CPP-666	54	0	0	18	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (CPP-666)	CPP-666	19	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	CPP-666	9	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	CPP-666	20	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	CPP-666	7	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	CPP-666	16	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	CPP-666	37	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	CPP-666	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	CPP-666	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
SM-1A	CPP-666	24	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0
Pulstar - Buffalo	CPP-666	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
ORR Receipts	ORR	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	GA	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CP-5 Converter	ANL-E	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNL receipts	SNL	17	0	0	4	4	5	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	ANL	38	0	0	0	0	0	0	0	0	0	12	13	13	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	B&W	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
TRIGA FRR & DRR	FRR/DRR	42	1	5	3	4	2	5	4	3	4	5	0	2	0	1	0	0	0	1	2	0	0
Pulstar DRR	DRR	5	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
Total		693	27	13	28	96	98	83	79	90	57	83	13	15	0	1	0	4	2	1	3	0	0

Table 5-16. CPP-603 IFSF transfers (cask loads).

CPP-603 IFSF Transfers	To	Casks	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
TORY-IIC	SNFDSP	23	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0
Peach Bottom (FWC C-II & FECF C-I)	SNFDSP	69	0	0	0	16	28	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom (C-II & PTE-1)	SNFDSP	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	SNFDSP	188	0	0	0	0	0	0	0	0	0	0	0	0	0	48	70	70	0	0	0	0	0
Rover UBM FY-98	SNFDSP	6	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
TRIGA BER-II	SNFDSP	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA AL (CPP603)	SNFDSP	7	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA FRR	SNFDSP	12	0	0	0	0	0	8	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA High Power	SNFDSP	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	SNFDSP	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	SNFDSP	11	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	SNFDSP	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	SNFDSP	14	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	SNFDSP	35	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	SNFDSP	11	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
ATR	SNFDSP	110	0	0	0	0	0	0	0	0	8	57	45	0	0	0	0	0	0	0	0	0	0
Univ of Washington	SNFDSP	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
HFBR	SNFDSP	14	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0
MURR	SNFDSP	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	SNFDSP	14	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
TRIGA (CPP-666)	SNFDSP	3	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
Shippingport PWR	SNFDSP	40	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0
Pathfinder	SNFDSP	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
SNAP	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
TORY-IIA	SNFDSP	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	SNFDSP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
GETR Filters	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
SM-1A	SNFDSP	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0

Table 5-16. (continued).

CPP-603 IFSF Transfers	To	Casks	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pulstar - Buffalo	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
ORR Receipts	SNFDSP	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	SNFDSP	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
CP-5 Converter	SNFDSP	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
SNL receipts	SNFDSP	19	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	6	0
ANL-W (TRIGA, TREAT, Exper, Misc)	SNFDSP	38	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
TRIGA FRR & DRR	SNFDSP	51	0	0	0	0	0	4	4	0	17	0	0	0	0	0	0	0	0	0	0	26	0
Pulstar DRR	SNFDSP	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
WAPD (Na bonded) & SPEC (ORME)	ANL-W	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
MTR Canal Test Fuel	ANL-W	10	0	0	0	0	0	0	0	1	2	2	2	2	1	0	0	0	0	0	0	0	0
Total		738	0	0	0	16	28	39	4	2	71	77	82	82	81	77	70	70	0	0	0	39	0

Table 5-17. CPP-603 IFSF receipts (fuel units).

CPP-603 IFSF Receipts	From	Fuel Units	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
PBF Driver Core	PBF	2425	1740	685	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	TRA	560	0	0	0	112	112	112	112	112	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	CPP-666	168	0	0	0	0	0	0	0	168	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	CPP-666	1760	0	0	0	304	464	504	488	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	CPP-666	26	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	CPP-666	220	0	0	0	0	0	0	0	220	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	CPP-666	32	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	CPP-666	214	0	0	72	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (CPP-666)	CPP-666	280	0	0	0	0	280	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	CPP-666	36	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	CPP-666	40	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	CPP-666	417	0	0	0	0	0	0	0	417	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	CPP-666	31	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	CPP-666	146	0	0	0	0	0	0	0	0	146	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	CPP-666	13	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	CPP-666	70	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	0	0	0	0
SM-1A	CPP-666	93	0	0	0	0	0	0	0	0	0	93	0	0	0	0	0	0	0	0	0	0	0
Pulstar - Buffalo	CPP-666	24	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0
ORR Receipts	ORR	62	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	GA	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CP-5 Converter	ANL-E	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNL receipts	SNL	493	0	0	4	31	25	0	0	0	0	0	0	0	0	0	0	433	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	ANL	2302	0	0	0	0	0	0	0	0	0	340	1152	810	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	B&W	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0
TRIGA FRR & DRR	FRR/DRR	2962	71	572	220	260	180	345	260	161	199	307	0	78	0	85	0	0	0	113	0	111	0
Pulstar DRR	DRR	65	0	0	28	0	0	9	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0
Total		12461	1875	1257	326	849	1061	970	860	1172	376	887	1152	888	0	85	0	433	28	113	18	111	0

Table 5-18. CPP-603 IFSF transfers (fuel units).

CPP-603 IFSF Transfers	To	Fuel Units	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
TORY-IIC	SNFDSP	655	0	0	0	0	0	0	0	0	0	0	0	0	655	0	0	0	0	0	0	0	0
Peach Bottom (FWC C-II & FECF C-I)	SNFDSP	786	0	0	0	192	336	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom (C-II & PTE-1)	SNFDSP	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	SNFDSP	744	0	0	0	0	0	0	0	0	0	0	0	0	0	192	280	272	0	0	0	0	0
Rover UBM FY-98	SNFDSP	65	0	0	0	0	0	0	0	0	0	0	0	0	65	0	0	0	0	0	0	0	0
TRIGA BER-II	SNFDSP	21	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIC	SNFDSP	558	0	0	0	0	0	0	0	0	558	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA AL (CPP603)	SNFDSP	951	0	0	0	0	0	708	0	0	243	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA FRR	SNFDSP	267	0	0	0	0	0	0	0	0	267	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA High Power	SNFDSP	71	0	0	0	0	0	0	0	0	71	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	SNFDSP	189	0	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	SNFDSP	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	SNFDSP	2425	0	0	0	0	0	0	0	0	0	0	0	2425	0	0	0	0	0	0	0	0	0
PBF Driver Core	SNFDSP	560	0	0	0	0	0	0	0	0	0	0	560	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	SNFDSP	655	0	0	0	0	0	0	0	0	168	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	SNFDSP	168	0	0	0	0	0	0	0	0	128	912	720	0	0	0	0	0	0	0	0	0	0
ATR	SNFDSP	1760	0	0	0	0	0	0	0	0	0	0	0	0	655	0	0	0	0	0	0	0	0
Univ of Washington	SNFDSP	26	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0
HFBR	SNFDSP	220	0	0	0	0	0	0	0	0	0	220	0	0	0	0	0	0	0	0	0	0	0
MURR	SNFDSP	32	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	SNFDSP	214	0	0	0	0	0	0	0	0	0	0	0	214	0	0	0	0	0	0	0	0	0
TRIGA (CPP-666)	SNFDSP	280	0	0	0	0	0	212	0	0	68	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	SNFDSP	36	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0
Shippingport PWR	SNFDSP	40	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0
Pathfinder	SNFDSP	417	0	0	0	0	0	0	0	0	0	0	0	0	417	0	0	0	0	0	0	0	0
SNAP	SNFDSP	31	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0
TORY-IIA	SNFDSP	146	0	0	0	0	0	0	0	0	0	0	0	0	0	146	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	SNFDSP	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0
GETR Filters	SNFDSP	70	0	0	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	0

Table 5-18. (continued).

CPP-603 IFSF Transfers	To	Fuel Units	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
SM-1A	SNFDSP	93	0	0	0	0	0	0	0	0	0	0	0	93	0	0	0	0	0	0	0	0	0
Pulstar - Buffalo	SNFDSP	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0
ORR Receipts	SNFDSP	62	0	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
CP-5 Converter	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
SNL receipts	SNFDSP	493	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	433	0
ANL-W (TRIGA, TREAT, Exper, Misc)	SNFDSP	2302	0	0	0	0	0	0	0	0	0	0	0	0	2302	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	SNFDSP	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0
TRIGA FRR & DRR	SNFDSP	2962	0	0	0	0	0	340	340	0	1168	0	0	0	0	0	0	0	0	0	0	1114	0
Pulstar DRR	SNFDSP	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	0
WAPD (Na bonded) & SPEC (ORME)	ANL-W	25	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0
MTR Canal Test Fuel	ANL-W	105	0	0	0	0	0	0	0	10	22	20	22	20	11	0	0	0	0	0	0	0	0
Total		16904	0	0	0	192	336	1518	340	35	2909	1210	1302	2854	3560	466	280	272	0	0	0	1630	0

Table 5-19. CPP-603 IFSF receipts (storage positions).

CPP-603 IFSF Receipts	From	Storage Positions	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
PBF Driver Core	PBF	14	10	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	TRA	35	0	0	0	7	7	7	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	CPP-666	11	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	CPP-666	110	0	0	0	19	29	31	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	CPP-666	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	CPP-666	14	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	CPP-666	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	CPP-666	14	0	0	4	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (CPP-666)	CPP-666	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	CPP-666	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	CPP-666	40	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	CPP-666	7	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	CPP-666	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	CPP-666	11	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	CPP-666	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	CPP-666	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
SM-1A	CPP-666	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
Pulstar – Buffalo	CPP-666	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
ORR Receipts	ORR	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	GA	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CP-5 Converter	ANL-E	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNL receipts	SNL	19	0	0	4	4	5	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	ANL	38	0	0	0	0	0	0	0	0	0	12	13	13	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	B&W	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
TRIGA FRR & DRR	FRR/DRR	53	1	9	4	5	3	6	5	3	4	5	0	2	0	2	0	0	0	2	2	0	0
Pulstar DRR	DRR	5	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
Total		404	18	13	15	45	48	45	43	48	17	68	13	15	0	2	0	6	2	2	4	0	0

Table 5-20. CPP-603 IFSF transfers (storage positions).

CPP-603 IFSF Transfers	To	Storage Positions	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
TORY-IIC	SNFDSP	23	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0
Peach Bottom (FWC C-II & FECF C-I))	SNFDSP	69	0	0	0	16	28	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom (C-II & PTE-1)	SNFDSP	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	SNFDSP	188	0	0	0	0	0	0	0	0	0	0	0	0	0	48	70	70	0	0	0	0	0
Rover UBM FY-98	SNFDSP	6	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
TRIGA BER-II	SNFDSP	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA AL (CPP603)	SNFDSP	7	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA FRR	SNFDSP	15	0	0	0	0	0	9	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA High Power	SNFDSP	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	SNFDSP	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	SNFDSP	11	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	SNFDSP	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	SNFDSP	14	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	SNFDSP	35	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	SNFDSP	11	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
ATR	SNFDSP	110	0	0	0	0	0	0	0	0	8	57	45	0	0	0	0	0	0	0	0	0	0
Univ of Washington	SNFDSP	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
HFBR	SNFDSP	14	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0
MURR	SNFDSP	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	SNFDSP	14	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
TRIGA (CPP-666)	SNFDSP	4	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
Shippingport PWR	SNFDSP	40	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0
Pathfinder	SNFDSP	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
SNAP	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
TORY-IIA	SNFDSP	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0

Table 5-20. (continued).

CPP-603 IFSF Transfers	To	Storage Positions	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ANP, APPR, SPSS, BMI, GCRE, & VBWR	SNFDSP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
GETR Filters	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
SM-1A	SNFDSP	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
Pulstar - Buffalo	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
ORR Receipts	SNFDSP	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	SNFDSP	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
CP-5 Converter	SNFDSP	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
SNL receipts	SNFDSP	19	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	6	0
ANL-W (TRIGA, TREAT, Exper, Misc)	SNFDSP	38	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	SNFDSP	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
TRIGA FRR & DRR	SNFDSP	53	0	0	0	0	0	4	4	0	18	0	0	0	0	0	0	0	0	0	0	27	0
Pulstar DRR	SNFDSP	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
WAPD (Na bonded) & SPEC (ORME)	ANL-W	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
MTR Canal Test Fuel	ANL-W	10	0	0	0	0	0	0	0	1	2	2	2	2	1	0	0	0	0	0	0	0	0
Total		745	0	0	0	16	28	41	4	2	75	77	82	82	81	77	70	70	0	0	0	40	0

5.4 CPP-749 (Irradiated)

The tables at the end of this section provide information for the receipt and removal of DOE-owned SNF from the CPP-749 underground storage. SNF that is going to the repository will be transferred to the SNFDSP. The sodium-bonded SNF stored in the facility will be treated. Although, the exact treatment process is to be determined, it is assumed that all SNF will be treated offsite. The facility is to be emptied of SNF and fuel by the end of FY 2019.

The removal of SNM stored in the facility is described in PLN-1249, Disposition Strategies for EM-owned Unirradiated SNM at the INEEL.

The following sections provide an assumption and basis for each SNF type.

5.4.1 Peach Bottom Receipts

Oak Ridge is storing nine intact uncut Peach Bottom Core 2 elements. The elements consist of driver and test SNF. In FY 2003, these nine elements will arrive at INTEC and be placed into dry storage at CPP-749 in an underground vault. This SNF will be transferred (one shipment) to the SNFDSP. Plans include transfer of this SNF to the SNFDSP in the Peach Bottom cask in FY 2018.

5.4.2 Peach Bottom Transfers

The Peach Bottom Core 1 inventory consists of 814 elements in 814 cans stored in 46 underground storage vaults. The Peach Bottom SNF is part of the SNF to be sent to the SNFDSP under the contract between DOE and FWENC. Peach Bottom SNF will be transferred to SNFDSP using the Peach Bottom cask. Forty-six shipments will be made, one shipment for each storage vault. Plans include transfer of this SNF in FY 2006 through FY 2007. While supporting DOE commitments under the contract with FWENC, the INEEL must be prepared to deliver SNF to the SNFDSP as early as June 1, 2005. If the SNFDSP is ready to receive SNF before FY 2006, the Peach Bottom Core 1 SNF will be sent.

5.4.3 Fermi Blanket SNF Transfers

The Fermi Blanket inventory consists of 14 cans of sodium-bonded subassemblies. Fermi Blanket SNF will be transferred using the Peach Bottom cask to a TBD facility for treatment. The Fermi Blanket rods contain sodium metal, which is not allowed in the repository. Although the exact treatment process to remove the sodium has not been identified, it is assumed that all the SNF will be treated offsite by September 30, 2018. Plans include transfer of this SNF (14 shipments) between FY 2013 and FY 2018.

5.4.4 Shippingport LWBR (Irradiated) SNF Transfers

The light water breeder reactor (LWBR) SNF consists of 47 liners containing SNF from the 39 LWBR core modules and experimental rods used in the LWBR program. The 15 LWBR Reflector liners and one scrap liner are part of the SNF to be sent to the SNFDSP under the contract between DOE and FWENC. LWBR liners will be transferred to the SNFDSP using a Peach Bottom cask. The Peach Bottom cask can transfer one liner per shipment. Sixteen LWBR liners (Reflector and scrap) will be transferred in FY 2008. Plans are for the remaining 31 LWBR liners (seed, blanket, and scrap) to be transferred to the SNFDSP in FY 2018 and FY 2019. Because these liners have a high decay heat value, they will be a just–in-time shipment. These liners will be shipped to the SNFDSP, repackaged, and shipped immediately out of the facility to the repository. Figure 8 depicts CPP-749 inventory by MTHM.

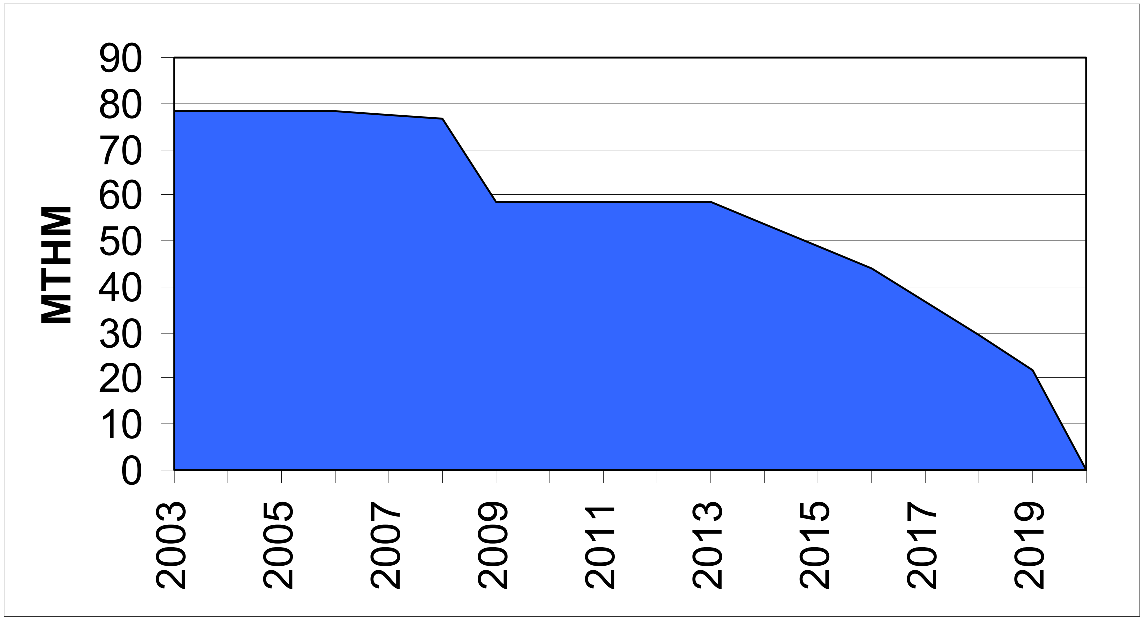

Figure 8. CPP-749 inventory.

Table 5-21. CPP-749 current inventory (as of April 8, 2003).

Fuel Name	Fuel Units	MTHM	Transfer To	Shipping Cask	Units per Load	Number of Transfers
Peach Bottom Core 1	814	1.6465	SNFDSP	PB	18	46
LWBR Reflector	15	17.3314	SNFDSP	PB	1	15
LWBR Blanket	12	16.7857	SNFDSP	PB	1	12
LWBR Seed	12	5.1105	SNFDSP	PB	1	12
LWBR Scrap	7	3.1224	SNFDSP	PB	1	7
LWBR Scrap module	1	0.2451	SNFDSP	PB	1	1
Fermi Blanket	14	34.1715	TBD	PB	1	14
Total	875	78.4131				107

Table 5-22. CPP-749 receipts.

Fuel Name	Fuel Units	MTHM	From	Shipping Cask	Units per Position	Number of Storage Positions	Transfer To	Shipping Cask	Units per Load	Number of Transfers
Peach Bottom Unit 1 Core II	9	0.0106	ORR	PB	18	1	SNFDSP	PB	18	1

Table 5-23. CPP-749 inventory per year (MTHM, cask loads, and fuel units).

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Inventory by MTHM	78.413	78.424	78.424	78.424	77.514	76.777	58.672	58.672	58.672	58.672	58.672	53.790	48.908	44.026	36.704	29.382	21.897	0.000
Inventory by Cask Loads	107	108	108	108	83	62	46	46	46	46	46	44	42	40	37	34	24	0
Inventory by Fuel Units	875	884	884	884	434	70	54	54	54	54	54	52	50	48	45	42	24	0

Table 5-24. CPP-749 Receipts and transfers per year (MTHM).

Receipts	From		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Peach Bottom Core 2	ORR	0.011	0.011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers	To		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Peach Bottom Core 1	SNFDSP	1.647	0	0	0	0.910	0.737	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	SNFDSP	17.331	0	0	0	0	0	17.331	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Blanket	SNFDSP	16.786	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.786	0
LWBR Seed	SNFDSP	5.111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.111	0
LWBR Scrap	SNFDSP	3.122	0	0	0	0	0	0.774	0	0	0	0	0	0	0	0	0	2.348	0	0
LWBR Scrap module	SNFDSP	0.245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.245	0	0
Peach Bottom Core 2	SNFDSP	0.011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.011	0	0
Fermi Blanket	TBD	34.171	0	0	0	0	0	0	0	0	0	0	4.882	4.882	4.882	7.322	7.322	4.881	0	0
Total		78.424	0	0	0	0.910	0.737	18.105	0	0	0	0	4.882	4.882	4.882	7.322	7.322	7.485	21.897	0

Table 5-25. CPP-749 Receipts and transfers per year (cask loads).

Receipts	From		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Peach Bottom Core 2	ORR	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers	**To**		**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Peach Bottom Core 1	SNFDSP	46	0	0	0	25	21	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	SNFDSP	15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Blanket	SNFDSP	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
LWBR Seed	SNFDSP	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
LWBR Scrap	SNFDSP	7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6	0	0
LWBR Scrap module	SNFDSP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Peach Bottom Core 2	SNFDSP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Fermi Blanket	TBD	14	0	0	0	0	0	0	0	0	0	0	2	2	2	3	3	2	0	0
Total		108	0	0	0	25	21	16	0	0	0	0	2	2	2	3	3	10	24	0

Table 5-26. CPP-749 Receipts and transfers per year (fuel units)

Receipts	From		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Peach Bottom Core 2	ORR	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers	**To**		**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Peach Bottom Core 1	SNFDSP	814	0	0	0	450	364	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	SNFDSP	15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Blanket	SNFDSP	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
LWBR Seed	SNFDSP	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
LWBR Scrap	SNFDSP	7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6	0	0
LWBR Scrap module	SNFDSP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Peach Bottom Core 2	SNFDSP	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0
Fermi Blanket	TBD	14	0	0	0	0	0	0	0	0	0	0	2	2	2	3	3	2	0	0
Total		884	0	0	0	450	364	16	0	0	0	0	2	2	2	3	3	18	24	0

5.5 TMI-2 ISFSI

The tables at the end of this section provide information for the receipt and removal of DOE-owned SNF from TMI-2 ISFSI, CPP-1774, to the SNFDSP where the materials will be packaged in preparation for offsite storage in the repository. TMI-2 ISFSI inventory consists of 341 canisters of TMI-2 Core Debris. The TMI-2 canisters have been placed into 29 storage positions. All but two of these positions contain 12 TMI-2 canisters. The TMI-2 ISFSI will store SNF until the facility is emptied at the end of FY 2028.

Current plans are for the TMI-2 SNF to be transferred to the SNFDSP where the materials will be packaged in preparation for offsite storage in the repository from FY 2024 through FY 2028. This time was chosen for two main reasons: first, the TMI-2 ISFSI is a new facility and will be able to store the SNF safely for this period of time; second, the SNF has been disrupted and is in a nonstandard form, and it may be more difficult to document the characterization of the SNF. The TMI-2 SNF was placed at the end of the INEEL shipping campaign to ensure the repository has been operating for an extended period of time and would be able to handle the storage operation of this SNF. Figure 9 depicts TMI-2 ISFSI inventory by MTHM.

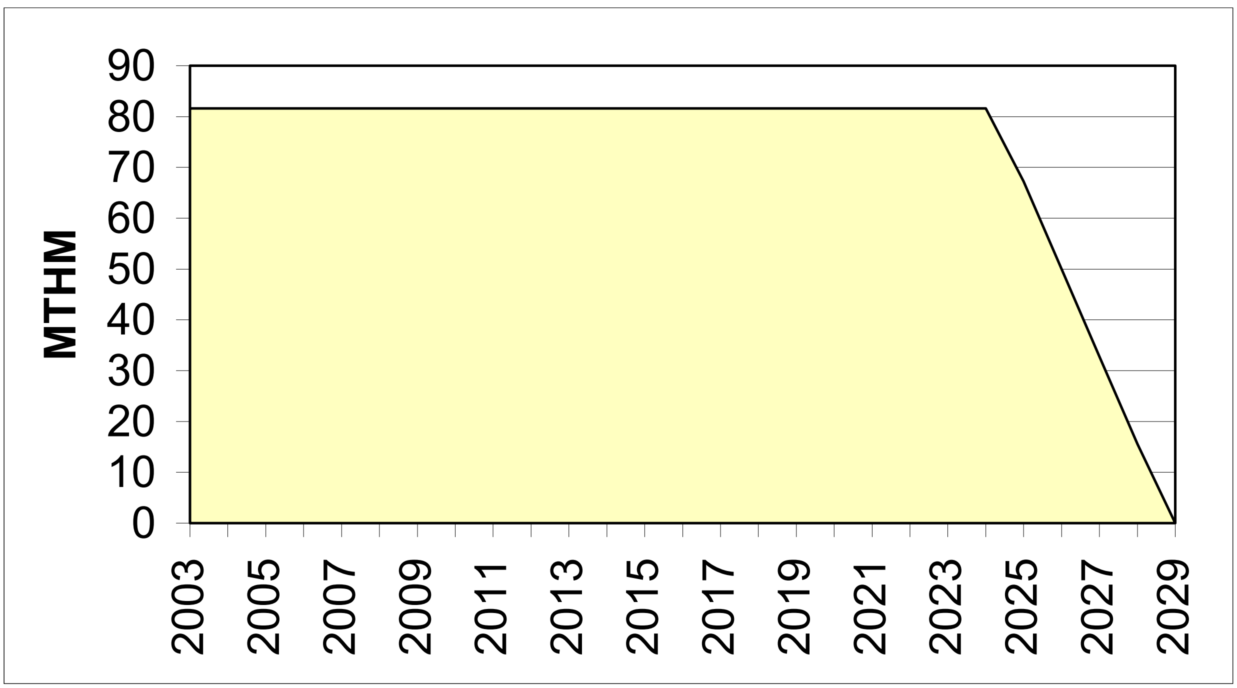

Figure 9. TMI-2 ISFSI inventory.

Table 5-27. TMI-2 ISFSI current inventory (as of October 1, 2002).

Fuel Name	Fuel Units	MTHM	Interim Storage Facility	Shipping Cask	Units per Load	Number of Transfers
TMI-2	341	81.5880	SNFDSP	OS-197	12	29

Table 5-28. TMI-2 ISFSI inventory (MTHM, cask loads, and fuel units).

	2003	2004–2023	2024	2025	2026	2027	2028	2029
Inventory by MTHM	81.588	81.588	81.588	67.232	50.005	32.778	15.551	0.000
Inventory by Cask Loads	29	29	29	24	18	12	6	0
Inventory by Fuel Units	341	341	341	281	209	137	65	0

Table 5-29. TMI-2 ISFSI transfers (MTHM cask loads, and fuel units).

	To	Total	2003	2004–2023	2024	2025	2026	2027	2028	2029
TMI-2 (MTHM)	SNFDSP	81.588	0.000	0.000	14.356	17.227	17.227	17.227	15.551	0.000
TMI-2 (Cask Loads)	SNFDSP	29	0	0	5	6	6	6	6	0
TMI-2 (Fuel Units)	SNFDSP	341	0	0	60	72	72	72	65	0

5.6 Fort St. Vrain ISFSI

The tables at the end of this section provide information for the receipt and removal of DOE-owned SNF from the FSV ISFSI to the SNFDSP where the materials will be packaged in preparation for offsite storage in the repository. The FSV ISFSI is storing 1,464 graphite blocks of FSVR fuel. The fuel is stored in 244 cans that hold six graphite blocks per can.

The TN-FSV casks owned by DOE were manufactured to transport FSVR fuel to the INEEL. These casks will be used to transport the 244 cans of fuel to the SNFDSP. Each cask will hold one can of FSV fuel, and 244 transfers will be required to relocate all the FSVR fuel to the INEEL.

Plans are for the FSVR SNF to be shipped to the INEEL in 4 years beginning in FY 2019 and continuing through FY 2022. When the FSVR SNF arrives at the INEEL, it will be repackaged in the SNFDSP and immediately transferred to the repository. The DOE does have an agreement with the State of Colorado to remove all FSV SNF from Colorado by January 1, 2035. Figure 10 depicts FSV ISFSI inventory by MTHM.

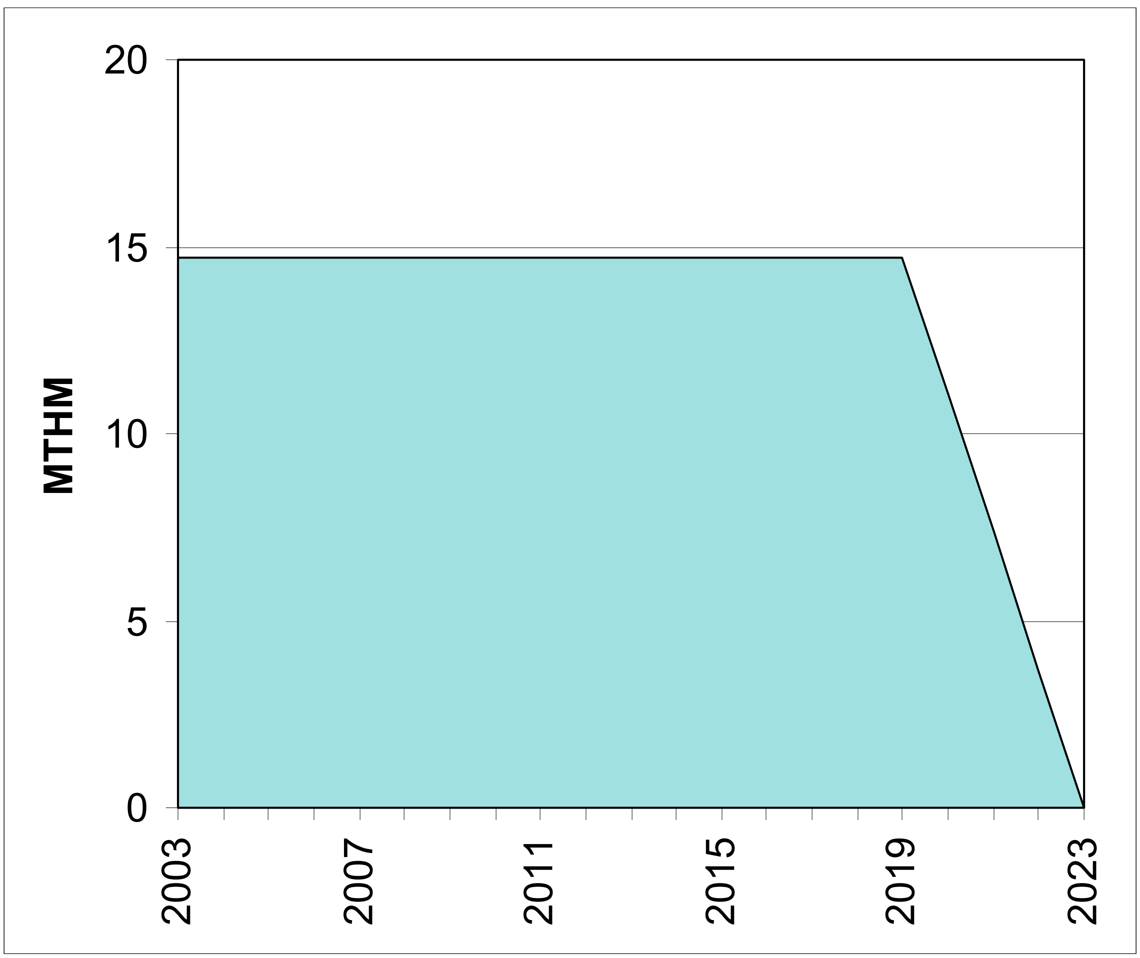

Figure 10. FSV ISFSI inventory.

Table 5-30. FSV ISFSI current inventory (as of October 1, 2002).

Fuel Name	Fuel Units	MTHM	Interim Storage Facility	Shipping Cask	Units per Load	Number of Transfers
FSVR	1464	14.7295	SNFDSP	TN-FSV	6	244

Table 5-31. FSV ISFSI inventory (MTHM, cask loads, and fuel units).

	2003	2004–2018	2019	2020	2021	2022	2023
Inventory by MTHM	14.730	14.730	14.730	11.048	7.366	3.683	0.000
Inventory by Cask Loads	244	244	244	183	122	61	0
Inventory by Fuel Units	1464	1464	1464	1098	732	366	0

Table 5-32. FSV ISFSI transfers (MTHM cask loads, and fuel units).

	To	Total	2003	2004–2019	2019	2020	2021	2022	2023
FSVR (MTHM)	SNFDSP	14.730	0	0	3.682	3.682	3.683	3.683	0
FSVR (Cask Loads)	SNFDSP	244	0	0	61	61	61	61	0
FSVR (Fuel Units)	SNFDSP	1464	0	0	366	366	366	366	0

5.7 TAN-791 Pad

The tables at the end of this section provide information for the removal of SNF from the TAN-791 Storage Pad. The current inventory consists of commercial nuclear fuel acquired from the utility industry and SNF removed from the TAN-607 basin in FY 2002. This SNF is stored in six dry storage casks. Plans are to consolidate the casks at INTEC on a new storage pad in FY 2004.

The following sections provide an assumption and basis for each SNF cask.

5.7.1 GNS Castor V/21 Cask

The GNS Castor V/21 cask contains 20 intact VEPCO PWR assemblies and one VEPCO PWR assembly with 12 rods removed (T-11). Plans are to consolidate the cask at INTEC on a new storage pad in FY 2004.

5.7.2 Westinghouse MC-10 Cask

The Westinghouse MC-10 cask contains 5 intact Turkey Point PWR assemblies, 12 VEPCO PWR assemblies, and 1 BCD B-17 PWR assembly. The BCD B-17 PWR assembly contains only 183 fuel rods. Twenty-one fuel rods were removed from the assembly and replaced with solid stainless steel rods. Plans are to consolidate the cask at INTEC on a new storage pad in FY 2004.

5.7.3 Pacific Sierra Nuclear VSC-17 Cask

The Pacific Sierra Nuclear VSC-17 cask contains 17 Dry Rod Consolidation Technology (DRCT) canisters. The DRCT canisters are filled with rods extracted from Westinghouse 15 × 15 standard zircaloy clad fuel assemblies. Forty-eight assemblies (36 VEPCO and 12 Turkey Point) were used in the DRCT project to demonstrate that rods can be successfully extracted from commercial SNF assemblies and consolidated into canisters for storage in dry casks. In some cases, fuel from VEPCO is mixed with fuel from Turkey Point. The fuel from two fuel assemblies was consolidated into one DRCT canister. Plans are to consolidate the cask at INTEC on a new storage pad in FY 2004.

5.7.4 Transnuclear TN-24P Cask

The Transnuclear TN-24P cask contains seven DRCT canisters. The DRCT canisters are filled with rods extracted from Westinghouse 15 × 15 standard fuel assemblies. Forty-eight assemblies (36 VEPCO and 12 Turkey Point) were used in the DRCT project to demonstrate that rods can be successfully extracted from commercial SNF assemblies and consolidated into canisters for storage in dry casks. In some cases, fuel from VEPCO is mixed with fuel from Turkey Point. The fuel from two fuel assemblies was consolidated into one DRCT canister. In FY 2002, 12 intact Loss of Fluid Test (LOFT) modules (four corner, four center, and four standard) were added to the cask. Plans are to consolidate the cask at INTEC on a new storage pad in FY 2004.

5.7.5 REA 2023 Cask

The REA 2023 cask was loaded with commercial SNF, LOFT SNF, and loose spent fuel rods and placed on the storage pad in FY 2002.

The commercial SNF consists of loose rods and intact assemblies. The intact assemblies are Connecticut Yankee (S004), H. B. Robinson (B05), Peach Bottom (PH0006 and PH0462), and Dresden I (E0016 and UN0064). The Dresden and Peach Bottom assemblies are from a boiling-water reactor (BWR) and the H. B. Robinson and Connecticut Yankee assemblies are from PWR. There is also a can of unclad and clad fuel pellets from Battelle Columbus. This can is called the Loose Fuel Rod Storage Basket (LFRSB) and has the dimensions of a standard 15 × 15 Westinghouse PWR fuel assembly. The LFRSB contains fuel rod sections from 15 reactors (Turkey Point, Peach Bottom, Connecticut Yankee, Oyster Creek, Monticello, Surry, Zion, Brunswick, Quad Cities, Calvert Cliffs, H. B. Robinson, Oconee, Maine Yankee, Ginna, and VEPCO).

The LOFT consists of LOFT Center Module FP-1 with two rods removed, the remains of LOFT Center Module FP-2 in ten storage cans, which also contain epoxy, and two loose FP-1 rods.

Four containers of loose rods are stored in the cask. Three stainless steel overpack storage baskets containing 35 encapsulation tubes from the 10 × 10 rack are stored in the cask. Each aluminum encapsulation tube has an outside diameter of 1 inch and is 165.41 inches in length. The fuel in the encapsulation tubes consists of intact fuel rods and pieces of fuel rods. There are 2 tubes of rods from the LOFT assembly FP-1, 12 tubes with fuel rods from H. B. Robinson assembly B05, 7 tubes with fuel rods from Peach Bottom assembly PH0006 and 14 tubes with fuel rods fuel Peach Bottom assembly PH0462. The remaining container of loose fuel rods stored in the cask contains nine VEPCO Surry rods from assembly T-11.

Plans are to consolidate the cask at INTEC on a new storage pad in FY 2004.

5.7.6 NuPac 125-B Cask

The NuPac 125-B cask stores TMI-2 Debris Canisters D153 and D388 (both contain epoxy SNF). Plans are to consolidate the cask at INTEC on a new storage pad in FY 2004. Figure 11 depicts TAN-791 inventory by MTHM.

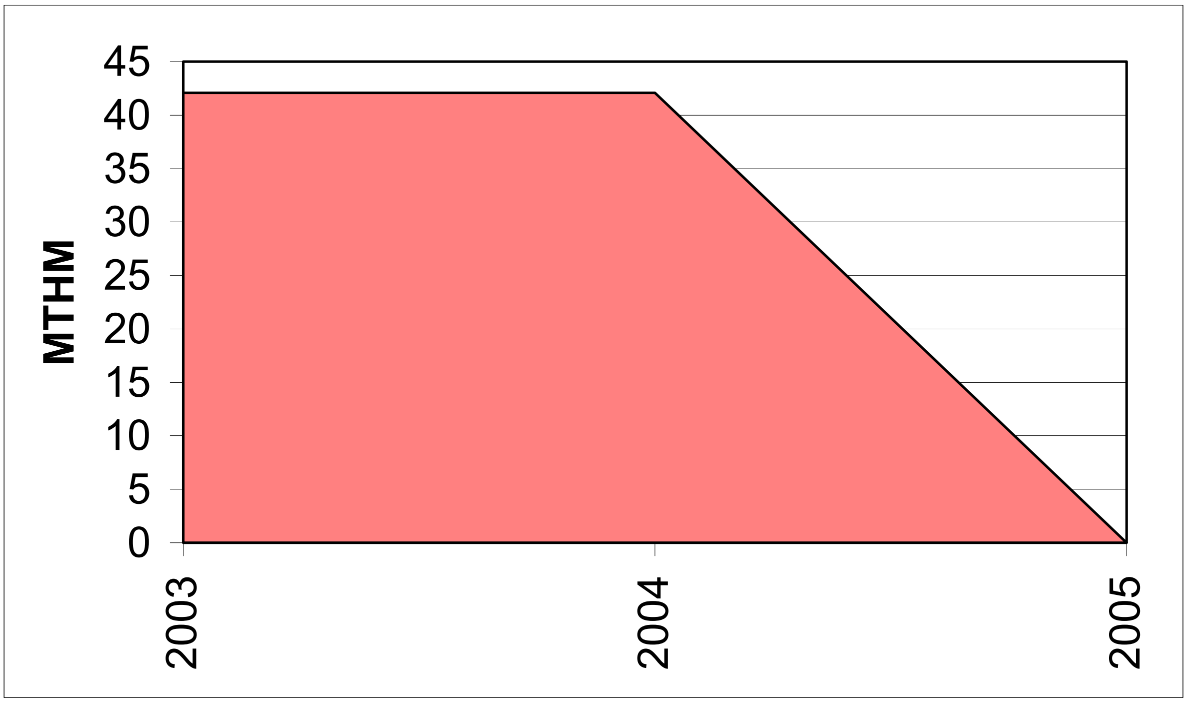

Figure 11. TAN-791 inventory.

Table 5-33. TAN-791 current inventory (as of October 1, 2002).

Fuel Name	Fuel Units	MTHM	Interim Storage Facility	Shipping Cask	Units per Load	Number of Transfers
GNS V/21 Cask (VEPCO)	21	9.2722	CPP-2707	GNS V/21	21	1.0
MC-10 Cask (Turkey Point B-17)	1	0.4118	CPP-2707	MC-10	18	0.1
MC-10 Cask (Turkey Point)	5	2.2216	CPP-2707	MC-10	18	0.3
MC-10 Cask(VEPCO)	12	5.3135	CPP-2707	MC-10	18	0.6
VSC-17 Cask (DRCT)	17	15.0060	CPP-2707	VSC-17	17	1.0
TN-24P Cask (DRCT)	7	6.1450	CPP-2707	TN-24P	19	0.4
TN-24P Cask (LOFT Center)	4	0.8149	CPP-2707	TN-24P	19	0.2
TN-24P Cask (LOFT Corner)	4	0.2791	CPP-2707	TN-24P	19	0.2
TN-24P Cask (LOFT Std)	4	0.8130	CPP-2707	TN-24P	19	0.2
REA-2023 Cask (LOFT FP-1 rods)	1	0.2017	CPP-2707	REA 2023	14	0.1
REA-2023 Cask (LOFT FP-2)	2	0.0999	CPP-2707	REA 2023	14	0.1
REA-2023 Cask (CT Yankee)	1	0.3938	CPP-2707	REA 2023	14	0.1
REA-2023 Cask (Dresden I)	1	0.1099	CPP-2707	REA 2023	14	0.1
REA-2023 Cask (Dresden I)	1	0.0573	CPP-2707	REA 2023	14	0.1
REA-2023 Cask (H.B. Robinson)	1	0.2292	CPP-2707	REA 2023	14	0.1
REA-2023 Cask (Peach Bottom)	2	0.2853	CPP-2707	REA 2023	14	0.1
REA-2023 Cask (LFRSB)	1	0.3111	CPP-2707	REA 2023	14	0.1
REA-2023 Cask (35 encapsulation tubes)	3	0.0939	CPP-2707	REA 2023	14	0.1
REA-2023 Cask (9 Surry rods)	1	0.0197	CPP-2707	REA 2023	14	0.1
NuPac 125-B Cask (TMI Epoxy)	2	0.0188	CPP-2707	NuPac 125-B	7	1.0
Total	91	42.0977				6.0

Table 5-34. TAN-791 inventory (MTHM and fuel units).

	2003	2004	2005
Inventory by MTHM	42.098	42.098	0
Inventory by Cask Loads	6	6	0
Inventory by Fuel Units	91	91	0

Table 5-35. TAN-791 transfers (MTHM).

TAN-791 Transfers	To	MTHM	2003	2004	2005
GNS V/21 Cask (VEPCO)	CPP-2707	9.272	0	9.272	0
MC-10 Cask (Turkey Point B-17)	CPP-2707	0.412	0	0.412	0
MC-10 Cask (Turkey Point)	CPP-2707	2.221	0	2.221	0
MC-10 Cask(VEPCO)	CPP-2707	5.314	0	5.314	0
VSC-17 Cask (DRCT)	CPP-2707	15.006	0	15.006	0
TN-24P Cask (DRCT)	CPP-2707	6.145	0	6.145	0
TN-24P (LOFT Center)	CPP-2707	0.815	0	0.815	0
TN-24P (LOFT Corner)	CPP-2707	0.279	0	0.279	0
TN-24P (LOFT Square)	CPP-2707	0.813	0	0.813	0
REA-2023 (LOFT FP-1 rods)	CPP-2707	0.202	0	0.202	0
REA -2023 (LOFT FP-2)	CPP-2707	0.100	0	0.100	0
REA-2023 (CT Yankee)	CPP-2707	0.394	0	0.394	0
REA-2023 (Dresden I)	CPP-2707	0.110	0	0.110	0
REA-2023 (Dresden I)	CPP-2707	0.057	0	0.057	0
REA-2023 (H.B. Robinson)	CPP-2707	0.229	0	0.229	0
REA-2023 (Peach Bottom)	CPP-2707	0.285	0	0.285	0
REA-2023 (LFRSB)	CPP-2707	0.311	0	0.311	0
REA-2023 Cask (35 encapsulation tubes)	CPP-2707	0.094	0	0.094	0
REA-2023 Cask (9 Surry rods)	CPP-2707	0.020	0	0.020	0
NuPac 125-B (TMI Epoxy)	CPP-2707	0.019	0	0.019	0
Total		42.098	0	42.098	0

Table 5-36. TAN-791 transfers (cask loads).

TAN-791 Transfers	To	Cask Loads	2003	2004	2005
GNS V/21 Cask (VEPCO)	CPP-2707	1.0	0	1.0	0
MC-10 Cask (Turkey Point B-17)	CPP-2707	0.1	0	0.1	0
MC-10 Cask (Turkey Point)	CPP-2707	0.3	0	0.3	0
MC-10 Cask(VEPCO)	CPP-2707	0.6	0	0.6	0
VSC-17 Cask (DRCT)	CPP-2707	1.0	0	1.0	0
TN-24P Cask (DRCT)	CPP-2707	0.4	0	0.4	0
TN-24P (LOFT Center)	CPP-2707	0.2	0	0.2	0
TN-24P (LOFT Corner)	CPP-2707	0.2	0	0.2	0
TN-24P (LOFT Square)	CPP-2707	0.2	0	0.2	0
REA-2023 (LOFT FP-1 rods)	CPP-2707	0.1	0	0.1	0
REA -2023 (LOFT FP-2)	CPP-2707	0.1	0	0.1	0
REA-2023 (CT Yankee)	CPP-2707	0.1	0	0.1	0
REA-2023 (Dresden I)	CPP-2707	0.1	0	0.1	0
REA-2023 (Dresden I)	CPP-2707	0.1	0	0.1	0
REA-2023 (H.B. Robinson)	CPP-2707	0.1	0	0.1	0
REA-2023 (Peach Bottom)	CPP-2707	0.1	0	0.1	0
REA-2023 (LFRSB)	CPP-2707	0.1	0	0.1	0
REA-2023 Cask (35 encapsulation tubes)	CPP-2707	0.1	0	0.1	0
REA-2023 Cask (9 Surry rods)	CPP-2707	0.1	0	0.1	0
NuPac 125-B (TMI Epoxy)	CPP-2707	1.0	0	1.0	0
Total		6.0	0	6.0	0.0

Table 5-37. TAN-791 transfers (fuel units).

TAN-791 Transfers	To	Fuel Units	2003	2004	2005
GNS V/21 Cask (VEPCO)	CPP-2707	21	0	21	0
MC-10 Cask (Turkey Point B-17)	CPP-2707	1	0	1	0
MC-10 Cask (Turkey Point)	CPP-2707	5	0	5	0
MC-10 Cask(VEPCO)	CPP-2707	12	0	12	0
VSC-17 Cask (DRCT)	CPP-2707	17	0	17	0
TN-24P Cask (DRCT)	CPP-2707	7	0	7	0
TN-24P (LOFT Center)	CPP-2707	4	0	4	0
TN-24P (LOFT Corner)	CPP-2707	4	0	4	0
TN-24P (LOFT Square)	CPP-2707	4	0	4	0
REA-2023 (LOFT FP-1 rods)	CPP-2707	1	0	1	0
REA -2023 (LOFT FP-2)	CPP-2707	2	0	2	0
REA-2023 (CT Yankee)	CPP-2707	1	0	1	0
REA-2023 (Dresden I)	CPP-2707	1	0	1	0
REA-2023 (Dresden I)	CPP-2707	1	0	1	0
REA-2023 (H.B. Robinson)	CPP-2707	1	0	1	0
REA-2023 (Peach Bottom)	CPP-2707	2	0	2	0
REA-2023 (LFRSB)	CPP-2707	1	0	1	0
REA-2023 Cask (35 encapsulation tubes)	CPP-2707	3	0	3	0
REA-2023 Cask (9 Surry rods)	CPP-2707	1	0	1	0
NuPac 125-B (TMI Epoxy)	CPP-2707	2	0	2	0
Total		91	0	91	0

5.8 CPP-2707

The tables in this section provide information for the receipt of SNF to a new cask storage pad at INTEC (CPP-2707). To further consolidate and to decrease the footprint of the INEEL, plans are for a new storage pad to be constructed in FY 2003. This pad will provide interim storage for casks stored at TAN and for WVDP SNF. Plans are for the SNF to be sent to the SNFDSP for shipment to the repository in FY 2011 and FY 2012.

The following sections provide an assumption and basis for each SNF cask.

5.8.1 TN-REG and TN-BRP Casks

The WVDP was a demonstration facility for reprocessing commercial spent fuel to recover uranium and plutonium, and was built and operated between 1966 and 1972. The SNF consists of approximately 26 MTHM of commercial nuclear fuel acquired from the R. E. Ginna and Big Rock Point reactors. SNF has been placed in two dry storage/transport casks. The casks will arrive at INTEC in 2003 and is stored on railroad trailers until an interim storage pad is available. Plans are for the casks to be transferred to the SNFDSP for shipment to the repository in FY 2011 and FY 2012.

The TN-REG cask has been constructed to transport R. E. Ginna SNF from WVDP to the INEEL for storage. The cask has a 40-compartment fuel basket. Each compartment can accommodate a single R. E. Ginna PWR fuel assembly (40 total assemblies). The cask is scheduled to arrive at the INEEL in FY 2003 and to be placed on the CPP-2707 pad in FY 2005.

The TN-BRP cask has been constructed to transport Big Rock Point SNF from WVDP to the INEEL and store it. The cask has a 44-compartment fuel basket. Each compartment can accommodate two Big Rock Point BWR fuel assemblies (85 total assemblies). The cask is scheduled to arrive at the INEEL in FY 2003 and to be placed on the CPP-2707 pad in FY 2005.

5.8.2 TAN Casks

The TAN casks (GNS Castor V/21, Westinghouse MC-10, Pacific Sierra Nuclear VSC-17, Transnuclear TN-24P, NuPac-125B and REA 2023 casks) that store commercial and LOFT SNF are to be consolidated at INTEC on a new storage pad in FY 2004. Plans are for the casks to be consolidated at INTEC on a new storage pad in FY 2004 and transferred to the SNFDSP for shipment to the repository in FY 2011 and FY 2012. The only exception is the epoxy SNF in the NuPac-125 B and REA-2023 cask that will be transferred to a TBD facility to be treated in FY 2012 before going to the repository.
Figure 12 depicts CPP-2707 inventory by MTHM.

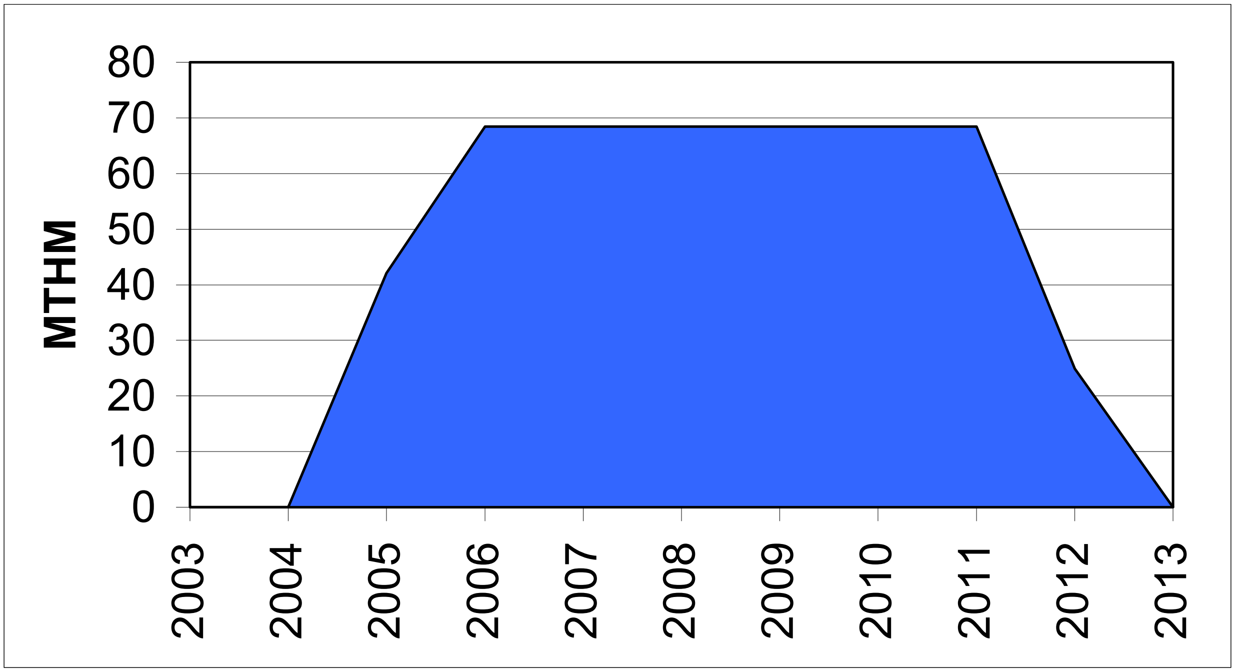

Figure 12. CPP-2707 inventory.

Table 5.38. CPP-2707 receipts.

Fuel Name	Fuel Units	MTHM	From	Shipping Cask	Units per Load	Number of Transfers	Interim Storage Facility	Shipping Cask	Units per Load	Number of Transfers
WV BRP-B	2	0.2500	WV	TN-BRP	85	0	SNFDSP	TN-BRP	85	0
WV BRP-C	4	0.4600	WV	TN-BRP	85	0.05	SNFDSP	TN-BRP	85	0.05
WV BRP-D1	4	0.5080	WV	TN-BRP	85	0.05	SNFDSP	TN-BRP	85	0.05
WV BRP-D2	2	0.2170	WV	TN-BRP	85	0	SNFDSP	TN-BRP	85	0
WV BRP-E	51	6.8660	WV	TN-BRP	85	0.6	SNFDSP	TN-BRP	85	0.6
WV BRP-EG	4	0.5100	WV	TN-BRP	85	0.05	SNFDSP	TN-BRP	85	0.05
WV BRP-EP	3	0.3560	WV	TN-BRP	85	0.05	SNFDSP	TN-BRP	85	0.05
WV BRP-F	15	2.0210	WV	TN-BRP	85	0.2	SNFDSP	TN-BRP	85	0.2
WV Robert E. Ginna (REG)	40	15.1270	WV	TN-REG	40	1	SNFDSP	TN-REG	40	1
GNS V/21 Cask (VEPCO)	21	9.2722	TAN-791	GNS V/21	21	1.0	SNFDSP	GNS V/21	21	1.0
MC-10 Cask (Turkey Point B-17)	1	0.4118	TAN-791	MC-10	18	0.1	SNFDSP	MC-10	18	0.1
MC-10 Cask (Turkey Point)	5	2.2216	TAN-791	MC-10	18	0.3	SNFDSP	MC-10	18	0.3
MC-10 Cask (VEPCO)	12	5.3135	TAN-791	MC-10	18	0.6	SNFDSP	MC-10	18	0.6
VSC-17 Cask (DRCT)	17	15.0060	TAN-791	VSC-17	17	1.0	SNFDSP	VSC-17	17	1.0
TN-24P Cask (DRCT)	7	6.1450	TAN-791	TN-24P	19	0.4	SNFDSP	TN-24P	19	0.4
TN-24P (LOFT Center)	4	0.8149	TAN-791	TN-24P	19	0.2	SNFDSP	TN-24P	19	0.2
TN-24P (LOFT Corner)	4	0.2791	TAN-791	TN-24P	19	0.2	SNFDSP	TN-24P	19	0.2
TN-24P (LOFT Square)	4	0.8130	TAN-791	TN-24P	19	0.2	SNFDSP	TN-24P	19	0.2
REA-2023 (FP-2 Epoxy)	1	0.2017	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1
REA-2023 (FP-1 rods)	2	0.0999	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1
REA-2023 Cask (CT Yankee)	1	0.3938	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1
REA-2023 Cask (Dresden I)	1	0.1099	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1
REA-2023 Cask (Dresden I)	1	0.0573	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1
REA-2023 Cask (H.B. Robinson)	1	0.2292	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1

Table 5-38. (continued).

Fuel Name	Fuel Units	MTHM	From	Shipping Cask	Units per Load	Number of Transfers	Interim Storage Facility	Shipping Cask	Units per Load	Number of Transfers
REA-2023 Cask (Peach Bottom)	2	0.2853	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1
REA-2023 Cask (LFRSB)	1	0.3111	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1
REA-2023 Cask (35 encapsul. tubes)	3	0.0939	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1
REA-2023 Cask (9 Surry rods)	1	0.0197	TAN-791	REA-2023	14	0.1	SNFDSP	REA 2023	14	0.1
NuPac 125-B Cask (TMI Epoxy)	2	0.0188	TAN-791	NuPac 125-B	7	1.0	SNFDSP	NuPac 125-B	7	1.0
Total	216	68.4127				8				8

Table 5-39. CPP-2707 inventory (MTHM, casks loads, and fuel units).

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Inventory by MTHM	0	0	42.098	68.413	68.413	68.413	68.413	68.413	68.413	24.879	0
Inventory by cask loads	0	0	6	8	8	8	8	8	8	4	0
Inventory by fuel units	0	0	91	216	216	216	216	216	216	52	0

Table 5-40. CPP-2707 receipts (MTHM).

CPP-2707 Receipts	From	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
WV BRP-B	WV	0.250	0	0	0.250	0	0	0	0	0	0	0	0
WV BRP-C	WV	0.460	0	0	0.460	0	0	0	0	0	0	0	0
WV BRP-D1	WV	0.508	0	0	0.508	0	0	0	0	0	0	0	0
WV BRP-D2	WV	0.217	0	0	0.217	0	0	0	0	0	0	0	0
WV BRP-E	WV	6.866	0	0	6.866	0	0	0	0	0	0	0	0
WV BRP-EG	WV	0.510	0	0	0.510	0	0	0	0	0	0	0	0
WV BRP-EP	WV	0.356	0	0	0.356	0	0	0	0	0	0	0	0
WV BRP-F	WV	2.021	0	0	2.021	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	WV	15.127	0	0	15.127	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	TAN-791	9.272	0	9.272	0	0	0	0	0	0	0	0	0
MC-10 Cask (Turkey Point B-17)	TAN-791	0.412	0	0.412	0	0	0	0	0	0	0	0	0
MC-10 Cask (Turkey Point)	TAN-791	2.221	0	2.221	0	0	0	0	0	0	0	0	0
MC-10 Cask(VEPCO)	TAN-791	5.314	0	5.314	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	TAN-791	15.006	0	15.006	0	0	0	0	0	0	0	0	0
TN-24P Cask (DRCT)	TAN-791	6.145	0	6.145	0	0	0	0	0	0	0	0	0
TN-24P (LOFT Center)	TAN-791	0.815	0	0.815	0	0	0	0	0	0	0	0	0
TN-24P (LOFT Corner)	TAN-791	0.279	0	0.279	0	0	0	0	0	0	0	0	0
TN-24P (LOFT Square)	TAN-791	0.813	0	0.813	0	0	0	0	0	0	0	0	0
REA-2023 (LOFT FP-1 rods)	TAN-791	0.202	0	0.202	0	0	0	0	0	0	0	0	0
REA -2023 (LOFT FP-2)	TAN-791	0.100	0	0.100	0	0	0	0	0	0	0	0	0
REA-2023 (CT Yankee)	TAN-791	0.394	0	0.394	0	0	0	0	0	0	0	0	0
REA-2023 (Dresden I)	TAN-791	0.110	0	0.110	0	0	0	0	0	0	0	0	0
REA-2023 (Dresden I)	TAN-791	0.057	0	0.057	0	0	0	0	0	0	0	0	0
REA-2023 (H.B. Robinson)	TAN-791	0.229	0	0.229	0	0	0	0	0	0	0	0	0
REA-2023 (Peach Bottom)	TAN-791	0.285	0	0.285	0	0	0	0	0	0	0	0	0
REA-2023 (LFRSB)	TAN-791	0.311	0	0.311	0	0	0	0	0	0	0	0	0
REA-2023 Cask (35 encapsul. tubes)	TAN-791	0.094	0	0.094	0	0	0	0	0	0	0	0	0
REA-2023 Cask (9 Surry rods)	TAN-791	0.020	0	0.020	0	0	0	0	0	0	0	0	0
NuPac 125-B (TMI Epoxy)	TAN-791	0.019	0	0.019	0	0	0	0	0	0	0	0	0
Total		68.413	0	42.098	26.315	0	0	0	0	0	0	0	0

Table 5-41. CPP-2707 transfers (MTHM).

CPP-2707 Transfers	To	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
WV BRP-B	SNFDSP	0.250	0	0	0	0	0	0	0	0	0.250	0	0
WV BRP-C	SNFDSP	0.460	0	0	0	0	0	0	0	0	0.460	0	0
WV BRP-D1	SNFDSP	0.508	0	0	0	0	0	0	0	0	0.508	0	0
WV BRP-D2	SNFDSP	0.217	0	0	0	0	0	0	0	0	0.217	0	0
WV BRP-E	SNFDSP	6.866	0	0	0	0	0	0	0	0	6.866	0	0
WV BRP-EG	SNFDSP	0.510	0	0	0	0	0	0	0	0	0.510	0	0
WV BRP-EP	SNFDSP	0.356	0	0	0	0	0	0	0	0	0.356	0	0
WV BRP-F	SNFDSP	2.021	0	0	0	0	0	0	0	0	2.021	0	0
WV Robert E. Ginna (REG)	SNFDSP	15.127	0	0	0	0	0	0	0	0	15.127	0	0
GNS V/21 Cask (VEPCO)	SNFDSP	9.272	0	0	0	0	0	0	0	0	9.272	0	0
MC-10 Cask (Turkey Point B-17)	SNFDSP	0.412	0	0	0	0	0	0	0	0	0.412	0	0
MC-10 Cask (Turkey Point)	SNFDSP	2.221	0	0	0	0	0	0	0	0	2.221	0	0
MC-10 Cask(VEPCO)	SNFDSP	5.314	0	0	0	0	0	0	0	0	5.314	0	0
VSC-17 Cask (DRCT)	SNFDSP	15.006	0	0	0	0	0	0	0	0	0	15.006	0
TN-24P Cask (DRCT)	SNFDSP	6.145	0	0	0	0	0	0	0	0	0	6.145	0
TN-24P (LOFT Center)	SNFDSP	0.815	0	0	0	0	0	0	0	0	0	0.815	0
TN-24P (LOFT Corner)	SNFDSP	0.279	0	0	0	0	0	0	0	0	0	0.279	0
TN-24P (LOFT Square)	SNFDSP	0.813	0	0	0	0	0	0	0	0	0	0.813	0
REA-2023 (LOFT FP-1 rods)	SNFDSP	0.202	0	0	0	0	0	0	0	0	0	0.202	0
REA -2023 (LOFT FP-2)	SNFDSP	0.100	0	0	0	0	0	0	0	0	0	0.100	0
REA-2023 (CT Yankee)	SNFDSP	0.394	0	0	0	0	0	0	0	0	0	0.394	0
REA-2023 (Dresden I)	SNFDSP	0.110	0	0	0	0	0	0	0	0	0	0.110	0
REA-2023 (Dresden I)	SNFDSP	0.057	0	0	0	0	0	0	0	0	0	0.057	0
REA-2023 (H.B. Robinson)	SNFDSP	0.229	0	0	0	0	0	0	0	0	0	0.229	0
REA-2023 (Peach Bottom)	SNFDSP	0.285	0	0	0	0	0	0	0	0	0	0.285	0
REA-2023 (LFRSB)	SNFDSP	0.311	0	0	0	0	0	0	0	0	0	0.311	0
REA-2023 Cask (35 encapsul. tubes)	SNFDSP	0.094	0	0	0	0	0	0	0	0	0	0.094	0
REA-2023 Cask (9 Surry rods)	SNFDSP	0.020	0	0	0	0	0	0	0	0	0	0.020	0
NuPac 125-B (TMI Epoxy)	SNFDSP	0.019	0	0	0	0	0	0	0	0	0	0.019	0
Total		68.413	0	0	0	0	0	0	0	0	43.534	24.879	0

Table 5-42. CPP-2707 receipts (cask loads).

CPP-2707 Receipts	From	Cask Loads	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
WV BRP-B	WV	0.0	0	0	0	0	0	0	0	0	0	0	0
WV BRP-C	WV	0.05	0	0	0.05	0	0	0	0	0	0	0	0
WV BRP-D1	WV	0.05	0	0	0.05	0	0	0	0	0	0	0	0
WV BRP-D2	WV	0.0	0	0	0	0	0	0	0	0	0	0	0
WV BRP-E	WV	0.6	0	0	0.6	0	0	0	0	0	0	0	0
WV BRP-EG	WV	0.05	0	0	0.05	0	0	0	0	0	0	0	0
WV BRP-EP	WV	0.05	0	0	0.05	0	0	0	0	0	0	0	0
WV BRP-F	WV	0.2	0	0	0.2	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	WV	1.0	0	0	1	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	TAN-791	1.0	0	1.0	0	0	0	0	0	0	0	0	0
MC-10 Cask (Turkey Point B-17)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
MC-10 Cask (Turkey Point)	TAN-791	0.3	0	0.3	0	0	0	0	0	0	0	0	0
MC-10 Cask(VEPCO)	TAN-791	0.6	0	0.6	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	TAN-791	1.0	0	1.0	0	0	0	0	0	0	0	0	0
TN-24P Cask (DRCT)	TAN-791	0.4	0	0.4	0	0	0	0	0	0	0	0	0
TN-24P (LOFT Center)	TAN-791	0.2	0	0.2	0	0	0	0	0	0	0	0	0
TN-24P (LOFT Corner)	TAN-791	0.2	0	0.2	0	0	0	0	0	0	0	0	0
TN-24P (LOFT Square)	TAN-791	0.2	0	0.2	0	0	0	0	0	0	0	0	0
REA-2023 (LOFT FP-1 rods)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
REA -2023 (LOFT FP-2)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
REA-2023 (CT Yankee)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
REA-2023 (Dresden I)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
REA-2023 (Dresden I)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
REA-2023 (H.B. Robinson)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
REA-2023 (Peach Bottom)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
REA-2023 (LFRSB)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
REA-2023 Cask (35 encapsul. tubes)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
REA-2023 Cask (9 Surry rods)	TAN-791	0.1	0	0.1	0	0	0	0	0	0	0	0	0
NuPac 125-B (TMI Epoxy)	TAN-791	1.0	0	1.0	0	0	0	0	0	0	0	0	0
Total		8	0	6	2	0	0	0	0	0	0	0	0

Table 5-43. CPP-2707 transfers (cask loads).

CPP-2707 Transfers	To	Cask Loads	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
WV BRP-B	SNFDSP	0.0	0	0	0	0	0	0	0	0	0.0	0	0
WV BRP-C	SNFDSP	0.05	0	0	0	0	0	0	0	0	0.05	0	0
WV BRP-D1	SNFDSP	0.05	0	0	0	0	0	0	0	0	0.05	0	0
WV BRP-D2	SNFDSP	0.0	0	0	0	0	0	0	0	0	0.0	0	0
WV BRP-E	SNFDSP	0.6	0	0	0	0	0	0	0	0	0.6	0	0
WV BRP-EG	SNFDSP	0.05	0	0	0	0	0	0	0	0	0.05	0	0
WV BRP-EP	SNFDSP	0.05	0	0	0	0	0	0	0	0	0.05	0	0
WV BRP-F	SNFDSP	0.2	0	0	0	0	0	0	0	0	0.2	0	0
WV Robert E. Ginna (REG)	SNFDSP	1.0	0	0	0	0	0	0	0	0	1.0	0	0
GNS V/21 Cask (VEPCO)	SNFDSP	1.0	0	0	0	0	0	0	0	0	1.0	0	0
MC-10 Cask (Turkey Point B-17)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0.1	0	0
MC-10 Cask (Turkey Point)	SNFDSP	0.3	0	0	0	0	0	0	0	0	0.3	0	0
MC-10 Cask(VEPCO)	SNFDSP	0.6	0	0	0	0	0	0	0	0	0.6	0	0
VSC-17 Cask (DRCT)	SNFDSP	1.0	0	0	0	0	0	0	0	0	0	1.0	0
TN-24P Cask (DRCT)	SNFDSP	0.4	0	0	0	0	0	0	0	0	0	0.4	0
TN-24P (LOFT Center)	SNFDSP	0.2	0	0	0	0	0	0	0	0	0	0.2	0
TN-24P (LOFT Corner)	SNFDSP	0.2	0	0	0	0	0	0	0	0	0	0.2	0
TN-24P (LOFT Square)	SNFDSP	0.2	0	0	0	0	0	0	0	0	0	0.2	0
REA-2023 (LOFT FP-1 rods)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
REA -2023 (LOFT FP-2)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
REA-2023 (CT Yankee)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
REA-2023 (Dresden I)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
REA-2023 (Dresden I)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
REA-2023 (H.B. Robinson)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
REA-2023 (Peach Bottom)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
REA-2023 (LFRSB)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
REA-2023 Cask (35 encapsul. tubes)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
REA-2023 Cask (9 Surry rods)	SNFDSP	0.1	0	0	0	0	0	0	0	0	0	0.1	0
NuPac 125-B (TMI Epoxy)	SNFDSP	1.0	0	0	0	0	0	0	0	0	0	1.0	0
Total		8	0	0	0	0	0	0	0	0	4	4	0

Table 5-44. CPP-2707 receipts (fuel units).

CPP-2707 Receipts	From	Fuel Units	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
WV BRP-B	WV	2	0	0	2	0	0	0	0	0	0	0	0
WV BRP-C	WV	4	0	0	4	0	0	0	0	0	0	0	0
WV BRP-D1	WV	4	0	0	4	0	0	0	0	0	0	0	0
WV BRP-D2	WV	2	0	0	2	0	0	0	0	0	0	0	0
WV BRP-E	WV	51	0	0	51	0	0	0	0	0	0	0	0
WV BRP-EG	WV	4	0	0	4	0	0	0	0	0	0	0	0
WV BRP-EP	WV	3	0	0	3	0	0	0	0	0	0	0	0
WV BRP-F	WV	15	0	0	15	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	WV	40	0	0	40	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	TAN-791	21	0	21	0	0	0	0	0	0	0	0	0
MC-10 Cask (Turkey Point B-17)	TAN-791	1	0	1	0	0	0	0	0	0	0	0	0
MC-10 Cask (Turkey Point)	TAN-791	5	0	5	0	0	0	0	0	0	0	0	0
MC-10 Cask(VEPCO)	TAN-791	12	0	12	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	TAN-791	17	0	17	0	0	0	0	0	0	0	0	0
TN-24P Cask (DRCT)	TAN-791	7	0	7	0	0	0	0	0	0	0	0	0
TN-24P (LOFT Center)	TAN-791	4	0	4	0	0	0	0	0	0	0	0	0
TN-24P (LOFT Corner)	TAN-791	4	0	4	0	0	0	0	0	0	0	0	0
TN-24P (LOFT Square)	TAN-791	4	0	4	0	0	0	0	0	0	0	0	0
REA-2023 (LOFT FP-1 rods)	TAN-791	1	0	1	0	0	0	0	0	0	0	0	0
REA -2023 (LOFT FP-2)	TAN-791	2	0	2	0	0	0	0	0	0	0	0	0
REA-2023 (CT Yankee)	TAN-791	1	0	1	0	0	0	0	0	0	0	0	0
REA-2023 (Dresden I)	TAN-791	1	0	1	0	0	0	0	0	0	0	0	0
REA-2023 (Dresden I)	TAN-791	1	0	1	0	0	0	0	0	0	0	0	0
REA-2023 (H.B. Robinson)	TAN-791	1	0	1	0	0	0	0	0	0	0	0	0
REA-2023 (Peach Bottom)	TAN-791	2	0	2	0	0	0	0	0	0	0	0	0
REA-2023 (LFRSB)	TAN-791	1	0	1	0	0	0	0	0	0	0	0	0
REA-2023 Cask (35 encapsul. tubes)	TAN-791	3	0	3	0	0	0	0	0	0	0	0	0
REA-2023 Cask (9 Surry rods)	TAN-791	1	0	1	0	0	0	0	0	0	0	0	0
NuPac 125-B (TMI Epoxy)	TAN-791	2	0	2	0	0	0	0	0	0	0	0	0
Total		216	0	91	125	0	0	0	0	0	0	0	0

Table 5-45. CPP-2707 transfers (fuel units).

CPP-2707 Transfers	To	Fuel Units	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
WV BRP-B	SNFDSP	2	0	0	0	0	0	0	0	0	2	0	0
WV BRP-C	SNFDSP	4	0	0	0	0	0	0	0	0	4	0	0
WV BRP-D1	SNFDSP	4	0	0	0	0	0	0	0	0	4	0	0
WV BRP-D2	SNFDSP	2	0	0	0	0	0	0	0	0	2	0	0
WV BRP-E	SNFDSP	51	0	0	0	0	0	0	0	0	51	0	0
WV BRP-EG	SNFDSP	4	0	0	0	0	0	0	0	0	4	0	0
WV BRP-EP	SNFDSP	3	0	0	0	0	0	0	0	0	3	0	0
WV BRP-F	SNFDSP	15	0	0	0	0	0	0	0	0	15	0	0
WV Robert E. Ginna (REG)	SNFDSP	40	0	0	0	0	0	0	0	0	40	0	0
GNS V/21 Cask (VEPCO)	SNFDSP	21	0	0	0	0	0	0	0	0	21	0	0
MC-10 Cask (Turkey Point B-17)	SNFDSP	1	0	0	0	0	0	0	0	0	1	0	0
MC-10 Cask (Turkey Point)	SNFDSP	5	0	0	0	0	0	0	0	0	5	0	0
MC-10 Cask(VEPCO)	SNFDSP	12	0	0	0	0	0	0	0	0	12	0	0
VSC-17 Cask (DRCT)	SNFDSP	17	0	0	0	0	0	0	0	0	0	17	0
TN-24P Cask (DRCT)	SNFDSP	7	0	0	0	0	0	0	0	0	0	7	0
TN-24P (LOFT Center)	SNFDSP	4	0	0	0	0	0	0	0	0	0	4	0
TN-24P (LOFT Corner)	SNFDSP	4	0	0	0	0	0	0	0	0	0	4	0
TN-24P (LOFT Square)	SNFDSP	4	0	0	0	0	0	0	0	0	0	4	0
REA-2023 (LOFT FP-1 rods)	SNFDSP	1	0	0	0	0	0	0	0	0	0	1	0
REA -2023 (LOFT FP-2)	SNFDSP	2	0	0	0	0	0	0	0	0	0	2	0
REA-2023 (CT Yankee)	SNFDSP	1	0	0	0	0	0	0	0	0	0	1	0
REA-2023 (Dresden I)	SNFDSP	1	0	0	0	0	0	0	0	0	0	1	0
REA-2023 (Dresden I)	SNFDSP	1	0	0	0	0	0	0	0	0	0	1	0
REA-2023 (H.B. Robinson)	SNFDSP	1	0	0	0	0	0	0	0	0	0	1	0
REA-2023 (Peach Bottom)	SNFDSP	2	0	0	0	0	0	0	0	0	0	2	0
REA-2023 (LFRSB)	SNFDSP	1	0	0	0	0	0	0	0	0	0	1	0
REA-2023 Cask (35 encapsul. tubes)	SNFDSP	3	0	0	0	0	0	0	0	0	0	3	0
REA-2023 Cask (9 Surry rods)	SNFDSP	1	0	0	0	0	0	0	0	0	0	1	0
NuPac 125-B (TMI Epoxy)	SNFDSP	2	0	0	0	0	0	0	0	0	0	2	0
Total		216	0	0	0	0	0	0	0	0	164	52	0

5.9 SNFDSP

The tables in this section provide information for the receipt and removal of DOE-owned SNF from the SNFDSP. The SNFDSP is a line item construction project scheduled to be operational in FY 2005. The SNFDSP will receive, offload, treat and/or condition as necessary, characterize as required, and repackage the INEEL noncommercial SNF into repository-acceptable canisters. The SNFDSP will then either place the road-ready canisters into the interim dry storage area or directly load them into transportation casks for shipment to the MGR. This project includes all SNF that the INEEL plans to send to the MGR. It includes stainless steel/zircaloy clad and graphite SNF in CPP-603 IFSF and CPP-749, graphite SNF at the FSV ISFSI in Colorado, and DR&S SNF.

The SNFDSP will transfer noncommercial SNF stored in standard canisters into DOE-RW provided transportation casks; nine canisters (18 inch diameter) per transportation cask. The casks will then be placed onto either railcars or trailers, depending on the mode of transportation being used to transfer the SNF to the MGR. Approximately 1,436 standard canisters (162 cask shipments) of SNF will be required to contain the noncommercial SNF in interim storage at the INEEL. These transfers will occur from FY 2011 to September 30, 2029.

Beside the INEEL SNF packaged into canisters, INEEL standard and nonstandard commercial SNF will also be repackaged in the SNFDSP for disposal in the MGR. Nonstandard commercial SNF may be disposed of differently than standard commercial SNF. If the nonstandard commercial SNF needs to be conditioned or reoackaged before being sent to the MGR, it will occur in the SNFDSP. Transfers of the INEEL commercial SNF will occur in FY 2011 and FY 2012. Eight cask shipments will be required to ship the INEEL commercial SNF to the MGR. Figure 13 depicts SNFDSP inventory by MTHM.

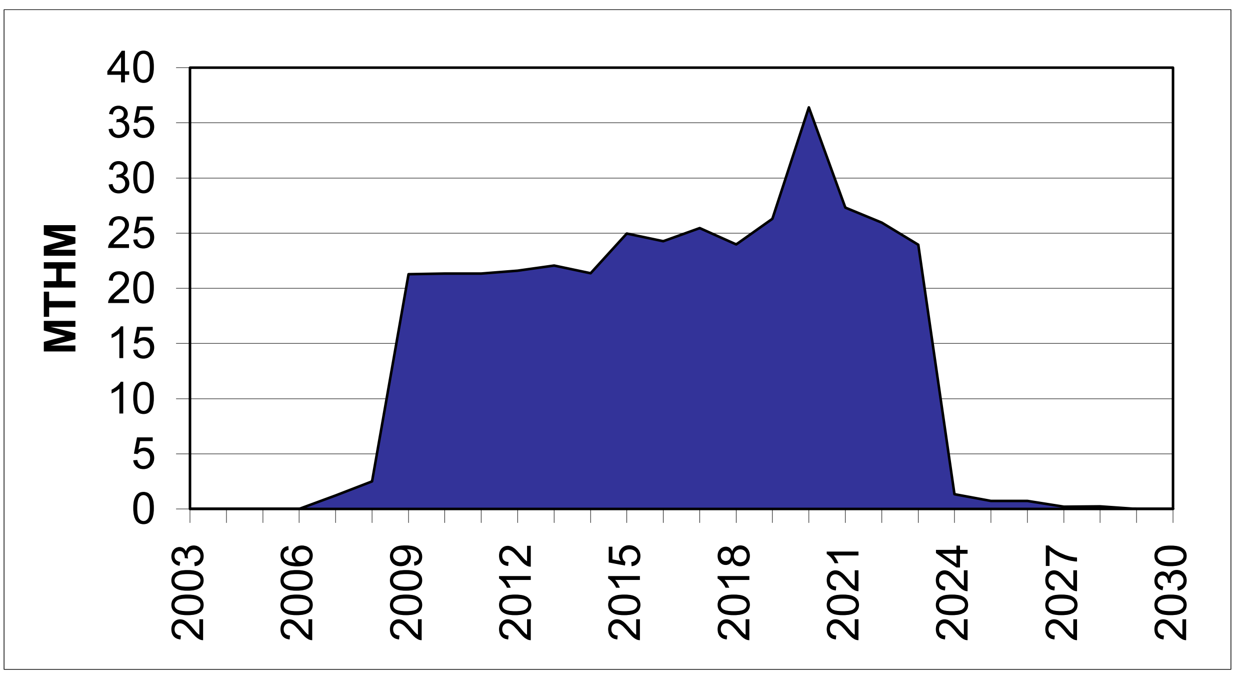

Figure 13. Spent Nuclear Fuel Dry Storage Project inventory.

Table 5-46. SNFDSP receipts.

Fuel Name	Fuel Units	MTHM	From	Shipping Cask	Units per Load	Number of Transfers	Units per Position	Number of 10' × 18" Positions	Number of 15' × 18" Positions	Number of 15' × 24" Position	Final Storage Facility	Shipping Cask	Units per Load	Number of Transfers
Peach Bottom Core 2	782	1.2787	IFSF	PB	12	68	10	0	79	0	MGR	TBD	9	8.8
Peach Bottom Core 1 FECF	4	0.0034	IFSF	PB	4	1	7	0	1	0	MGR	TBD	9	0.1
Peach Bottom Core 1 CPP-749	814	1.6465	CPP-749	PB	18	46	7 or 10	0	86	0	MGR	TBD	9	9.5
LWBR Reflector	15	17.3314	CPP-749	PB	1	15	1	0	0	15	MGR	TBD	5	3.0
LWBR Liner 15681-C	1	0.7735	CPP-749	PB	1	1	1	0	0	1	MGR	TBD	5	0.2
TRIGA	1,600	0.2980	IFSF	PB	90	18	108	15	0	0	MGR	TBD	9	1.7
SNAP	31	0.0291	IFSF	PB	16	2	7	5	0	0	MGR	TBD	9	0.6
TORY-IIA	146	0.0486	IFSF	PB	14	11	7	21	0	0	MGR	TBD	9	2.4
ANP, APPR, SPSS, BMI, GCRE, & VBWR	13	0.0171	IFSF	PB	13	1	7	2	0	0	MGR	TBD	9	0.2
GETR Filters	70	0.0044	IFSF	PB	35	2	35	2	0	0	MGR	TBD	9	0.2
SM-1A	93	0.0658	IFSF	PB	16	6	16	6	0	0	MGR	TBD	9	0.7
Pulstar – Buffalo	24	0.2522	IFSF	PB	16	2	16	2	0	0	MGR	TBD	9	0.2
ATR from TRA to IFSF (2006-2010)	560	0.4650	IFSF	PB	16	35	24	0	24	0	MGR	TBD	9	2.7
ATR from TRA to CPP-666 (2003-2005)	168	0.1402	IFSF	PB	16	11	24	0	7	0	MGR	TBD	9	0.8
ATR	1760	1.4778	IFSF	PB	16	110	24	0	74	0	MGR	TBD	9	8.2
Univ of Washington	26	0.0039	IFSF	PB	16	2	32	0	1	0	MGR	TBD	9	0.1
HFBR	220	0.0585	IFSF	PB	16	14	32	0	7	0	MGR	TBD	9	0.8
MURR	32	0.0219	IFSF	PB	16	2	32	0	1	0	MGR	TBD	9	0.1
ARMF/CFRMF	71	0.0129	IFSF	PB	16	5	32	0	3	0	MGR	TBD	9	0.2
Aluminum Plate	189	0.1235	IFSF	PB	16	11	24 & 32	0	8	0	MGR	TBD	9	0.9
Core Filter	1	0.2185	IFSF	PB	1	1	1	1	0	0	MGR	TBD	9	0.1
PBF Driver Core	2425	0.5616	IFSF	PB	174	14	174	14	0	0	MGR	TBD	9	1.6
Fermi Driver	214	3.9321	IFSF	PB	16	14	16	14	0	0	MGR	TBD	9	1.6
BORAX V	36	0.0208	IFSF	PB	18	2	18	2	0	0	MGR	TBD	9	0.2
Shippingport PWR	40	0.5217	IFSF	PB	1	40	1	0	40	0	MGR	TBD	9	4.4
Pathfinder	417	0.0534	IFSF	PB	62	7	62	7	0	0	MGR	TBD	9	0.8
TRIGA (STD, Al, & Flip)	869	0.1591	IFSF	PB	72	12	111	8	0	0	MGR	TBD	9	0.9
TRIGA (DRR/FRR)	2282	0.4375	IFSF	PB	54	43	111	21	0	0	MGR	TBD	9	2.2
TRIGA (DRR/FRR offsite)	1716	0.3370	Offsite	PB	62	28	111	16	0	0	MGR	TBD	9	1.8
TRIGA BER-II	21	0.0092	IFSF	PB	11	2	12	2	0	0	MGR	TBD	9	0.2
TRIGA High Power	267	0.0056	IFSF	PB	267	1	288	1	0	0	MGR	TBD	9	0.1
Peach Bottom (C-2 & PTE-1)	5	0.0105	IFSF	PB	5	1	5	0	1	0	MGR	TBD	9	0.1
TORY-IIC	655	0.0591	IFSF	PB	28	23	30	0	22	0	MGR	TBD	9	2.5
FSVR	744	8.6273	IFSF	PB	4	188	5	0	149	0	MGR	TBD	9	16.6
Rover UBM FY-98	65	0.1198	IFSF	PB	11	6	10	0	7	0	MGR	TBD	9	0.8
LWBR Scrap	6	2.3489	CPP-749	PB	1	6	1	0	6	0	MGR	TBD	9	0.8
LWBR Blanket	12	16.7857	CPP-749	PB	1	12	0.5	0	24	0	MGR	TBD	9	2.7

Table 5-46. (continued).

Fuel Name	Fuel Units	MTHM	From	Shipping Cask	Units per Load	Number of Transfers	Units per Position	Number of 10' × 18" Positions	Number of 15' × 18" Positions	Number of 15' × 24" Position	Final Storage Facility	Shipping Cask	Units per Load	Number of Transfers
LWBR Seed	12	5.1105	CPP-749	PB	1	12	1	0	12	0	MGR	TBD	9	1.3
LWBR Scrap D Liner 15718	1	0.2451	CPP-749	PB	1	1	1	0	1	0	MGR	TBD	9	0.1
FSVR Colorado	1464	14.7295	Colorado	TN-FSV	6	244	5	0	293	0	MGR	TBD	9	32.5
TMI-2	341	81.5880	CPP-1774	OS-197	12	29	1	0	341	0	MGR	TBD	9	37.9
TN-24P Cask (LOFT Center)	4	0.8149	CPP-2707	TN-24P	19	0.2	1	4	0	0	MGR	TBD	9	0.4
TN-24P Cask (LOFT Corner)	4	0.2791	CPP-2707	TN-24P	19	0.2	2	2	0	0	MGR	TBD	9	0.3
TN-24P Cask (LOFT Square)	4	0.8130	CPP-2707	TN-24P	19	0.2	1	4	0	0	MGR	TBD	9	0.4
REA-2023 Cask (LOFT FP-1 rods)	1	0.2017	CPP-2707	REA-2023	14	0.1	1	1	0	0	MGR	TBD	9	0.1
Miscellaneous Scrap (Expoy, MTR, TMI, LOFT)	14	0.3800	TBD	TBD	1	14	1	0	14	0	MGR	TBD	9	1.6
Pulstar DRR	65	0.8159	IFSF	PB	16	5	16	5	0	0	MGR	TBD	9	0.5
GA (RERTR & HTGR)	2	0.0052	IFSF	PB	2	1	16	1	0	0	MGR	TBD	9	0.1
CP-5 Converter	2	0.0012	IFSF	PB	2	1	16	1	0	0	MGR	TBD	9	0.1
B&W (Arkansas, Oconee, TMI-2)	18	0.0439	IFSF	PB	9	2	18	1	0	0	MGR	TBD	9	0.1
ORR (Fast Reactor, HTGR, LWR, Scrap)	62	0.2080	IFSF	PB	12	6	12	6	0	0	MGR	TBD	9	0.7
ORR Intact Peach Bottom	9	0.0106	CPP-749	PB	18	1	10	0	1	0	MGR	TBD	9	0.1
ANL-W (TRIGA, TREAT, Exper, Misc)	2302	4.7451	IFSF	PB	61	38	61	11	27	0	MGR	TBD	9	4.2
SNL receipts	493	0.2430	IFSF	PB	5 or 72	19	111 or 5	5	12	0	MGR	TBD	9	1.9
TN-24P Cask (DRCT)	7	6.1450	CPP-2707	TN-24P	19	0.4	N/A	0	0	0	MGR	TBD	12	0.6
VSC-17 Cask (DRCT)	17	15.0060	CPP-2707	VSC-17	17	1	N/A	0	0	0	MGR	TBD	12	1.4
GNS V/21 Cask (VEPCO)	21	9.2722	CPP-2707	GNS V/21	21	1	N/A	0	0	0	MGR	TBD	24	0.9
MC-10 Cask (commercial assemblies)	18	7.9469	CPP-2707	MC-10	18	1	N/A	0	0	0	MGR	TBD	24	0.8
WV Robert E. Ginna (REG)	40	15.1270	CPP-2707	TN-REG	40	1	N/A	0	0	0	MGR	TBD	24	1.7
WV BRP	85	11.1880	CPP-2707	TN-BRP	85	1	N/A	0	0	0	MGR	TBD	60	1.4
REA-2023 Cask (commercial)	11	1.5002	CPP-2707	REA-2023	14	0.8	N/A	0	0	0	MGR	TBD	24	0.5
REA-2023 Cask (LOFT FP-2)	2	0.0999	CPP-2707	REA-2023	14	0.1	N/A	0	0	0	TBD	TBD	2	1.0
NuPac 125-B Cask (TMI Epoxy)	2	0.0188	CPP-2707	NuPac 125-B	7	1.0	N/A	0	0	0	TBD	TBD	2	1.0
Total	21395	234.7989				1144		180	1241	16				170.5

Table 5-47. SNFDSP inventory (MTHM, fuel units, and repository containers).

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Inventory by year (MTHM)	0	0	0	0	1.223	2.508	21.266	21.332	21.332	21.607	22.048	21.368	24.955	24.261	25.447	23.967	26.291	36.389	27.326	25.942	23.945	1.330	0.732	0.738	0.193	0.233	0	0
Inventory by year (fuel units)	0	0	0	0	642	1342	2876	3216	3216	5653	6593	5537	6567	6010	5674	5250	4654	4674	4664	4537	5688	1566	1239	1327	628	768	0	0
Inventory by year (R containers)	0	0	0	0	67	139	194	197	197	200	222	186	176	166	159	128	103	125	111	94	104	28	16	17	8	9	0	0

Table 5-48. SNFDSP receipts (MTHM).

SNFDSP Receipts	From	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peach Bottom Core 2	IFSF	1.279	0	0	0	0.313	0.548	0.418	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 FECF	IFSF	0.003	0	0	0	0	0	0.003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 CPP-749	CPP-749	1.647	0	0	0	0.910	0.737	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	CPP-749	17.331	0	0	0	0	0	17.331	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Liner 15681-C	CPP-749	0.774	0	0	0	0	0	0.774	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA	IFSF	0.298	0	0	0	0	0	0.232	0.066	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	IFSF	0.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	IFSF	0.049	0	0	0	0	0	0	0	0	0	0	0	0	0	0.049	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	IFSF	0.017	0	0	0	0	0	0	0	0	0	0	0	0	0	0.017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	IFSF	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SM-1A	IFSF	0.066	0	0	0	0	0	0	0	0	0	0	0	0.066	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulstar - Buffalo	IFSF	0.252	0	0	0	0	0	0	0	0	0	0	0	0	0	0.252	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006–2010)	IFSF	0.465	0	0	0	0	0	0	0	0	0	0	0.465	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003–2005)	IFSF	0.140	0	0	0	0	0	0	0	0	0.140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	IFSF	1.478	0	0	0	0	0	0	0	0	0.107	0.766	0.605	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	IFSF	0.004	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	IFSF	0.058	0	0	0	0	0	0	0	0	0	0.058	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	IFSF	0.022	0	0	0	0	0	0	0	0	0	0.022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	IFSF	0.013	0	0	0	0	0	0	0	0	0.013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	IFSF	0.124	0	0	0	0	0	0	0	0	0.124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	IFSF	0.218	0	0	0	0	0	0	0	0	0.218	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	IFSF	0.562	0	0	0	0	0	0	0	0	0	0	0	0.562	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	IFSF	3.932	0	0	0	0	0	0	0	0	0	0	0	3.932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	IFSF	0.021	0	0	0	0	0	0	0	0	0	0	0	0	0.021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	IFSF	0.522	0	0	0	0	0	0	0	0	0	0	0	0.522	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	IFSF	0.053	0	0	0	0	0	0	0	0	0	0	0	0	0.053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (STD, Al, & Flip)	IFSF	0.159	0	0	0	0	0	0	0	0	0.159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR)	IFSF	0.437	0	0	0	0	0	0	0	0	0.224	0	0	0	0	0	0	0	0	0	0	0.213	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR offsite)	Offsite	0.337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.052	0.034	0	0.015	0	0.236	0	0	0
TRIGA BER-II	IFSF	0.009	0	0	0	0	0	0	0	0	0.009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA High Power	IFSF	0.006	0	0	0	0	0	0	0	0	0.006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom (C-2 & PTE-1)	IFSF	0.011	0	0	0	0	0	0	0	0	0.011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIC	IFSF	0.059	0	0	0	0	0	0	0	0	0	0	0	0	0.059	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5-48. (continued).

SNFDSP Receipts	From	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
FSVR	IFSF	8.627	0	0	0	0	0	0	0	0	0	0	0	0	0	2.226	3.247	3.154	0	0	0	0	0	0	0	0	0	0	0	0
Rover UBM FY-98	IFSF	0.120	0	0	0	0	0	0	0	0	0	0	0	0	0.120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Scrap	CPP-749	2.348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.348	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Blanket	CPP-749	16.786	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.786	0	0	0	0	0	0	0	0	0	0	0
LWBR Seed	CPP-749	5.110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.110	0	0	0	0	0	0	0	0	0	0	0
LWBR Scrap D Liner 15718	CPP-749	0.245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.245	0	0	0	0	0	0	0	0	0	0	0	0
FSVR Colorado	Colorado	14.730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.682	3.682	3.683	3.683	0	0	0	0	0	0	0	0
TMI-2	CPP-1774	81.588	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.356	17.227	17.227	17.227	15.551	0	0
TN-24P Cask (LOFT Center)	CPP-2707	0.815	0	0	0	0	0	0	0	0	0	0.815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Corner)	CPP-2707	0.279	0	0	0	0	0	0	0	0	0	0.279	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Standard)	CPP-2707	0.813	0	0	0	0	0	0	0	0	0	0.813	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-1 rods)	CPP-2707	0.202	0	0	0	0	0	0	0	0	0	0.202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Scrap (Expoy)	TBD	0.380	0	0	0	0	0	0	0	0	0	0	0	0	0	0.054	0.082	0.081	0.082	0.081	0	0	0	0	0	0	0	0	0	0
Pulstar DRR	IFSF	0.816	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.816	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	IFSF	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CP-5 Converter	IFSF	0.001	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	IFSF	0.044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.044	0	0	0	0	0	0	0	0
ORR (Fast Reactor, HTGR, LWR, Scrap)	IFSF	0.208	0	0	0	0	0	0	0	0	0	0	0	0.208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORR Intact Peach Bottom	CPP-749	0.011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.011	0	0	0	0	0	0	0	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	IFSF	4.745	0	0	0	0	0	0	0	0	0	0	0	0	4.745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNL receipts	IFSF	0.243	0	0	0	0	0	0	0	0	0	0	0	0	0	0.074	0	0	0	0	0	0.169	0	0	0	0	0	0	0	0
TN-24P Cask (DRCT)	CPP-2707	6.145	0	0	0	0	0	0	0	0	0	6.145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	CPP-2707	15.006	0	0	0	0	0	0	0	0	0	15.006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	CPP-2707	9.272	0	0	0	0	0	0	0	0	9.272	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC-10 Cask (commercial assemblies)	CPP-2707	7.947	0	0	0	0	0	0	0	0	7.947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	CPP-2707	15.127	0	0	0	0	0	0	0	0	15.127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV BRP	CPP-2707	11.188	0	0	0	0	0	0	0	0	11.188	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (commercial)	CPP-2707	1.500	0	0	0	0	0	0	0	0	0	1.500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-2)	CPP-2707	0.100	0	0	0	0	0	0	0	0	0	0.100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NuPac 125-B Cask (TMI Epoxy)	CPP-2707	0.019	0	0	0	0	0	0	0	0	0	0.019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		234.799	0	0	0	1.223	1.285	18.758	0.066	0	44.545	25.729	1.070	5.290	5.008	2.701	3.329	5.839	25.660	3.763	3.683	4.977	0.034	14.356	17.242	17.227	17.463	15.551	0	0

Table 5-49. SNFDSP transfers (MTHM).

SNFDSP Transfers	To	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peach Bottom Core 2	MGR	1.279	0	0	0	0	0	0	0	0	0.736	0.409	0.134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 FECF	MGR	0.003	0	0	0	0	0	0	0	0	0	0	0.003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 CPP-749	MGR	1.647	0	0	0	0	0	0	0	0	0	0	1.315	0.332	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	MGR	17.331	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.331	0	0	0	0	0	0	0
LWBR Liner 15681-C	MGR	0.774	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.774	0	0	0	0	0	0	0	0
TRIGA	MGR	0.298	0	0	0	0	0	0	0	0	0	0	0.298	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	MGR	0.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	MGR	0.049	0	0	0	0	0	0	0	0	0	0	0	0	0	0.049	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	MGR	0.017	0	0	0	0	0	0	0	0	0	0	0	0	0	0.017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	MGR	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SM-1A	MGR	0.066	0	0	0	0	0	0	0	0	0	0	0	0	0.057	0.009	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulstar - Buffalo	MGR	0.252	0	0	0	0	0	0	0	0	0	0	0	0	0	0.252	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	MGR	0.465	0	0	0	0	0	0	0	0	0	0	0	0.465	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	MGR	0.140	0	0	0	0	0	0	0	0	0	0	0	0.140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	MGR	1.478	0	0	0	0	0	0	0	0	0	0	0	0.766	0.712	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	MGR	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	MGR	0.058	0	0	0	0	0	0	0	0	0	0	0	0	0.058	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	MGR	0.022	0	0	0	0	0	0	0	0	0	0	0	0	0.022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	MGR	0.013	0	0	0	0	0	0	0	0	0	0	0	0	0.013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	MGR	0.124	0	0	0	0	0	0	0	0	0	0	0	0	0.124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	MGR	0.218	0	0	0	0	0	0	0	0	0	0	0	0	0.218	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	MGR	0.562	0	0	0	0	0	0	0	0	0	0	0	0	0.562	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	MGR	3.932	0	0	0	0	0	0	0	0	0	0	0	0	3.932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	MGR	0.021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.021	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	MGR	0.522	0	0	0	0	0	0	0	0	0	0	0	0	0	0.522	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	MGR	0.053	0	0	0	0	0	0	0	0	0	0	0	0	0	0.053	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (STD, Al, & Flip)	MGR	0.159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.020	0	0	0	0	0.139	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR)	MGR	0.437	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.383	0	0	0	0	0.054	0	0
TRIGA (DRR/FRR offsite)	MGR	0.337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.131	0.196	0.010	0	0
TRIGA BER-II	MGR	0.009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.009	0	0	0	0	0	0
TRIGA High Power	MGR	0.006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.006	0	0	0	0	0	0
Peach Bottom (C-2 & PTE-1)	MGR	0.011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.011	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIC	MGR	0.059	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.014	0.045	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	MGR	8.627	0	0	0	0	0	0	0	0	0	0	0	0	0	0.580	4.754	3.293	0	0	0	0	0	0	0	0	0	0	0	0

Table 5-49. (continued).

SNFDSP Transfers	To	MTHM	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rover UBM FY-98	MGR	0.120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.120	0	0	0	0	0	0	0	0	0
LWBR Scrap	MGR	2.348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.348	0	0	0	0	0	0	0	0
LWBR Blanket	MGR	16.786	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.890	4.896	0	0	0	0	0	0	0	0	0	0
LWBR Seed	MGR	5.110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.258	0.852	0	0	0	0	0	0	0	0	0
LWBR Scrap D Liner 15718	MGR	0.245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.245	0	0	0	0	0	0	0	0	0
FSVR Colorado	MGR	14.730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.672	3.672	3.673	3.713	0	0	0	0	0	0	0	0
TMI-2	MGR	81.588	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.356	17.227	17.227	17.227	15.551	0	0
TN-24P Cask (LOFT Center)	MGR	0.815	0	0	0	0	0	0	0	0	0	0.815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Corner)	MGR	0.279	0	0	0	0	0	0	0	0	0	0.279	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Standard)	MGR	0.813	0	0	0	0	0	0	0	0	0	0.813	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-1 rods)	MGR	0.202	0	0	0	0	0	0	0	0	0	0.202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Scrap (Expoy, MTR, TMI, LOFT)	MGR	0.380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.190	0.190	0	0	0	0	0	0
Pulstar DRR	MGR	0.816	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.402	0	0.414	0	0	0	0
GA (RERTR & HTGR)	MGR	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.005	0	0	0	0	0	0	0	0	0
CP-5 Converter	MGR	0.001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	MGR	0.044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.044	0	0	0	0	0	0	0	0	0
ORR (Fast Reactor, HTGR, LWR, Scrap)	MGR	0.208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.081	0	0	0.127	0	0	0	0	0	0	0	0	0
ORR Intact Peach Bottom	MGR	0.011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.011	0	0	0	0	0	0	0	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	MGR	4.745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.745	0	0	0	0	0	0	0
SNL receipts	MGR	0.243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.074	0	0	0	0	0	0	0	0	0	0.169	0	0
TN-24P Cask (DRCT)	MGR	6.145	0	0	0	0	0	0	0	0	0	6.145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	MGR	15.006	0	0	0	0	0	0	0	0	0	15.006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	MGR	9.272	0	0	0	0	0	0	0	0	9.272	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC-10 Cask (commercial assemblies)	MGR	7.947	0	0	0	0	0	0	0	0	7.947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	MGR	15.127	0	0	0	0	0	0	0	0	15.127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV BRP	MGR	11.188	0	0	0	0	0	0	0	0	11.188	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (commercial)	MGR	1.500	0	0	0	0	0	0	0	0	0	1.500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-2)	TBD	0.100	0	0	0	0	0	0	0	0	0	0.100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NuPac 125-B Cask (TMI Epoxy)	TBD	0.019	0	0	0	0	0	0	0	0	0	0.019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		234.799	0	0	0	0	0	0	0	0	44.270	25.288	1.750	1.703	5.702	1.515	4.809	3.515	15.562	12.826	5.067	6.974	22.649	14.963	17.227	17.772	17.423	15.784	0	0

Table 5-50. SNFDSP receipts (cask loads).

SNFDSP Receipts	From	Cask Loads	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peach Bottom Core 2	IFSF	68	0	0	0	16	28	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 FECF	IFSF	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 CPP-749	CPP-749	46	0	0	0	25	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	CPP-749	15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Liner 15681-C	CPP-749	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA	IFSF	18	0	0	0	0	0	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	IFSF	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	IFSF	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SM-1A	IFSF	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulstar – Buffalo	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	IFSF	35	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	IFSF	11	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	IFSF	110	0	0	0	0	0	0	0	0	8	57	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	IFSF	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	IFSF	14	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	IFSF	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	IFSF	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	IFSF	11	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	IFSF	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	IFSF	14	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	IFSF	14	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	IFSF	40	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	IFSF	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (STD, Al, & Flip)	IFSF	12	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR)	IFSF	44	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR offsite)	Offsite	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	2	0	19	0	0	0
TRIGA BER-II	IFSF	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA High Power	IFSF	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom (C-2 & PTE-1)	IFSF	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIC	IFSF	23	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	IFSF	188	0	0	0	0	0	0	0	0	0	0	0	0	0	48	70	70	0	0	0	0	0	0	0	0	0	0	0	0
Rover UBM FY-98	IFSF	6	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Scrap	CPP-749	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Blanket	CPP-749	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0

Table 5-50. (continued).

SNFDSP Receipts	From	Cask Loads	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
LWBR Seed	CPP-749	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0
LWBR Scrap D Liner 15718	CPP-749	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
FSVR Colorado	Colorado	244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	61	61	61	0	0	0	0	0	0	0	0
TMI-2	CPP-1774	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	6	6	6	0	0
TN-24P Cask (LOFT Center)	CPP-2707	0.2	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Corner)	CPP-2707	0.2	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Standard)	CPP-2707	0.2	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-1 rods)	CPP-2707	0.1	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Scrap (Expoy, MTR, TMI, LOFT)	TBD	14	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	3	3	3	0	0	0	0	0	0	0	0	0	0
Pulstar DRR	IFSF	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	IFSF	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CP-5 Converter	IFSF	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
ORR (Fast Reactor, HTGR, LWR, Scrap)	IFSF	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORR Intact Peach Bottom	CPP-749	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	IFSF	38	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNL receipts	IFSF	19	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	6	0	0	0	0	0	0	0	0
TN-24P Cask (DRCT)	CPP-2707	0.4	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	CPP-2707	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	CPP-2707	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC-10 Cask (commercial assemblies)	CPP-2707	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	CPP-2707	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV BRP	CPP-2707	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (commercial)	CPP-2707	0.8	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-2)	CPP-2707	0.1	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NuPac 125-B Cask (TMI Epoxy)	CPP-2707	1.0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		1144.0	0	0	0	41	49	55	4	0	73	79	80	80	80	79	73	81	88	64	61	104	3	5	8	6	25	6	0	0

Table 5-51. SNFDSP transfers (cask loads).

SNFDSP Transfers	To	Cask Loads	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peach Bottom Core 2	MGR	8.8	0	0	0	0	0	0	0	0	5.0	2.8	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 FECF	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 CPP-749	MGR	9.5	0	0	0	0	0	0	0	0	0	0	7.2	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	MGR	3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.0	0	0	0	0	0	0	0
LWBR Liner 15681-C	MGR	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0
TRIGA	MGR	1.7	0	0	0	0	0	0	0	0	0	0	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	MGR	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	MGR	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	MGR	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	MGR	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SM-1A	MGR	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulstar – Buffalo	MGR	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	MGR	2.7	0	0	0	0	0	0	0	0	0	0	0	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	MGR	0.8	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	MGR	8.2	0	0	0	0	0	0	0	0	0	0	0	4.2	4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	MGR	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	MGR	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	MGR	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	MGR	1.6	0	0	0	0	0	0	0	0	0	0	0	0	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	MGR	1.6	0	0	0	0	0	0	0	0	0	0	0	0	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	MGR	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	MGR	4.4	0	0	0	0	0	0	0	0	0	0	0	0	0	4.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	MGR	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (STD, Al, & Flip)	MGR	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0.8	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR)	MGR	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0	0	0	0	0	0.3	0	0
TRIGA (DRR/FRR offsite)	MGR	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	1.0	0.1	0	0
TRIGA BER-II	MGR	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0
TRIGA High Power	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
Peach Bottom (C-2 & PTE-1)	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIC	MGR	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	1.9	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	MGR	16.6	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	9.1	6.4	0	0	0	0	0	0	0	0	0	0	0	0
Rover UBM FY-98	MGR	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0
LWBR Scrap	MGR	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0
LWBR Blanket	MGR	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	0.8	0	0	0	0	0	0	0	0	0	0

Table 5-51. (continued).

SNFDSP Transfers	To	Cask Loads	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
LWBR Seed	MGR	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0.2	0	0	0	0	0	0	0	0	0
LWBR Scrap D Liner 15718	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
FSVR Colorado	MGR	32.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.1	8.1	8.1	8.2	0	0	0	0	0	0	0	0
TMI-2	MGR	37.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.7	8.0	8.0	8.0	7.2	0	0
TN-24P Cask (LOFT Center)	MGR	0.4	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Corner)	MGR	0.3	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Standard)	MGR	0.4	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-1 rods)	MGR	0.1	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Scrap (Expoy, MTR, TMI, LOFT)	MGR	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0.8	0	0	0	0	0	0
Pulstar DRR	MGR	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0.3	0	0	0	0
GA (RERTR & HTGR)	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
CP-5 Converter	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
ORR (Fast Reactor, HTGR, LWR, Scrap)	MGR	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0.5	0	0	0	0	0	0	0	0	0
ORR Intact Peach Bottom	MGR	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	MGR	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.2	0	0	0	0	0	0	0
SNL receipts	MGR	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	0	0	0	0	0	0	0	0	0	0.6	0	0
TN-24P Cask (DRCT)	MGR	0.6	0	0	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	MGR	1.4	0	0	0	0	0	0	0	0	0	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	MGR	0.9	0	0	0	0	0	0	0	0	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC-10 Cask (commercial assemblies)	MGR	0.8	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	MGR	1.7	0	0	0	0	0	0	0	0	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV BRP	MGR	1.4	0	0	0	0	0	0	0	0	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (commercial)	MGR	0.5	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-2)	TBD	1.0	0	0	0	0	0	0	0	0	0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NuPac 125-B Cask (TMI Epoxy)	TBD	1.0	0	0	0	0	0	0	0	0	0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		170.5	0	0	0	0	0	0	0	0	9.8	8.5	10	10	10	10	10	10	10	10	10	10	10	8.0	8.0	9.0	9.0	8.2	0	0

Table 5-52. SNFDSP receipts (fuel units).

SNFDSP Receipts	From	Fuel Units	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peach Bottom Core 2	IFSF	782	0	0	0	192	336	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 FECF	IFSF	4	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 CPP-749	CPP-749	814	0	0	0	450	364	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	CPP-749	15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Liner 15681-C	CPP-749	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA	IFSF	1,600	0	0	0	0	0	1260	340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	IFSF	31	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	IFSF	146	0	0	0	0	0	0	0	0	0	0	0	0	0	146	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	IFSF	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	IFSF	70	0	0	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SM-1A	IFSF	93	0	0	0	0	0	0	0	0	0	0	0	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulstar – Buffalo	IFSF	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006-2010)	IFSF	560	0	0	0	0	0	0	0	0	0	0	560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003–2005)	IFSF	168	0	0	0	0	0	0	0	0	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	IFSF	1760	0	0	0	0	0	0	0	0	128	912	720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	IFSF	26	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	IFSF	220	0	0	0	0	0	0	0	0	0	220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	IFSF	32	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	IFSF	71	0	0	0	0	0	0	0	0	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	IFSF	189	0	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	IFSF	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	IFSF	2425	0	0	0	0	0	0	0	0	0	0	0	2425	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	IFSF	214	0	0	0	0	0	0	0	0	0	0	0	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	IFSF	36	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	IFSF	40	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	IFSF	417	0	0	0	0	0	0	0	0	0	0	0	0	417	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (STD, Al, & Flip)	IFSF	869	0	0	0	0	0	0	0	0	869	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR)	IFSF	2282	0	0	0	0	0	0	0	0	1168	0	0	0	0	0	0	0	0	0	0	1114	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR offsite)	Offsite	1716	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	289	200	0	88	0	1139	0	0	0
TRIGA BER-II	IFSF	21	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA High Power	IFSF	267	0	0	0	0	0	0	0	0	267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom (C-2 & PTE-1)	IFSF	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIC	IFSF	655	0	0	0	0	0	0	0	0	0	0	0	0	655	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	IFSF	744	0	0	0	0	0	0	0	0	0	0	0	0	0	192	280	272	0	0	0	0	0	0	0	0	0	0	0	0

Table 5-52. (continued).

SNFDSP Receipts	From	Fuel Units	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rover UBM FY-98	IFSF	65	0	0	0	0	0	0	0	0	0	0	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Scrap	CPP-749	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Blanket	CPP-749	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0
LWBR Seed	CPP-749	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0
LWBR Scrap D Liner 15718	CPP-749	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
FSVR Colorado	Colorado	1464	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	366	366	366	366	0	0	0	0	0	0	0	0
TMI-2	CPP-1774	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	72	72	72	65	0	0
TN-24P Cask (LOFT Center)	CPP-2707	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Corner)	CPP-2707	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Standard)	CPP-2707	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-1 rods)	CPP-2707	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Scrap (Expoy, MTR, TMI, LOFT)	TBD	14	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	3	3	3	0	0	0	0	0	0	0	0	0	0
Pulstar DRR	IFSF	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CP-5 Converter	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	IFSF	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0
ORR (Fast Reactor, HTGR, LWR, Scrap)	IFSF	62	0	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORR Intact Peach Bottom	CPP-749	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	IFSF	2302	0	0	0	0	0	0	0	0	0	0	0	0	2302	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNL receipts	IFSF	493	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	433	0	0	0	0	0	0	0	0
TN-24P Cask (DRCT)	CPP-2707	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	CPP-2707	17	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	CPP-2707	21	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC-10 Cask (commercial assemblies)	CPP-2707	18	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	CPP-2707	40	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV BRP	CPP-2707	85	0	0	0	0	0	0	0	0	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (commercial)	CPP-2707	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-2)	CPP-2707	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NuPac 125-B Cask (TMI Epoxy)	CPP-2707	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		21395	0	0	0	642	700	1534	340	0	3051	1242	1280	2834	3549	468	283	291	393	369	366	2285	200	60	160	72	1211	65	0	0

Table 5-53. SNFDSP transfers (fuel units).

SNFDSP Transfers	To	Fuel Units	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peach Bottom Core 2	MGR	782	0	0	0	0	0	0	0	0	450	250	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 FECF	MGR	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 CPP-749	MGR	814	0	0	0	0	0	0	0	0	0	0	650	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	MGR	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0
LWBR Liner 15681-C	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
TRIGA	MGR	1,600	0	0	0	0	0	0	0	0	0	0	1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	MGR	31	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	MGR	146	0	0	0	0	0	0	0	0	0	0	0	0	0	146	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	MGR	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	MGR	70	0	0	0	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SM-1A	MGR	93	0	0	0	0	0	0	0	0	0	0	0	0	80	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulstar – Buffalo	MGR	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006–2010)	MGR	560	0	0	0	0	0	0	0	0	0	0	0	560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003-2005)	MGR	168	0	0	0	0	0	0	0	0	0	0	0	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	MGR	1760	0	0	0	0	0	0	0	0	0	0	0	912	848	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	MGR	26	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	MGR	220	0	0	0	0	0	0	0	0	0	0	0	0	220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	MGR	32	0	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	MGR	71	0	0	0	0	0	0	0	0	0	0	0	0	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	MGR	189	0	0	0	0	0	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	MGR	2425	0	0	0	0	0	0	0	0	0	0	0	0	2425	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	MGR	214	0	0	0	0	0	0	0	0	0	0	0	0	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	MGR	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	MGR	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	MGR	417	0	0	0	0	0	0	0	0	0	0	0	0	0	417	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (STD, Al, & Flip)	MGR	869	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111	0	0	0	0	758	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR)	MGR	2282	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1998	0	0	0	0	284	0	0
TRIGA (DRR/FRR offsite)	MGR	1716	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	666	999	51	0	0
TRIGA BER-II	MGR	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0
TRIGA High Power	MGR	267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	267	0	0	0	0	0	0
Peach Bottom (C-2 & PTE-1)	MGR	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIC	MGR	655	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150	505	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	MGR	744	0	0	0	0	0	0	0	0	0	0	0	0	0	50	410	284	0	0	0	0	0	0	0	0	0	0	0	0
Rover UBM FY-98	MGR	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	0	0	0	0	0	0	0	0	0
LWBR Scrap	MGR	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0

Table 5-53. (continued).

SNFDSP Transfers	To	Fuel Units	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
LWBR Blanket	MGR	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.5	3.5	0	0	0	0	0	0	0	0	0	0
LWBR Seed	MGR	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	0	0	0	0
LWBR Scrap D Liner 15718	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
FSVR Colorado	MGR	1464	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	365	365	365	369	0	0	0	0	0	0	0	0
TMI-2	MGR	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	72	72	72	65	0	0
TN-24P Cask (LOFT Center)	MGR	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Corner)	MGR	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Standard)	MGR	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-1 rods)	MGR	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Scrap (Expoy, MTR, TMI, LOFT)	MGR	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0
Pulstar DRR	MGR	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0	33	0	0	0	0
GA (RERTR & HTGR)	MGR	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
CP-5 Converter	MGR	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	MGR	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0
ORR (Fast Reactor, HTGR, LWR, Scrap)	MGR	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	38	0	0	0	0	0	0	0	0	0
ORR Intact Peach Bottom	MGR	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	MGR	2302	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2302	0	0	0	0	0	0	0
SNL receipts	MGR	493	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	0	0	0	433	0	0
TN-24P Cask (DRCT)	MGR	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	MGR	17	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	MGR	21	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC-10 Cask (commercial assemblies)	MGR	18	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	MGR	40	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV BRP	MGR	85	0	0	0	0	0	0	0	0	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (commercial)	MGR	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-2)	TBD	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NuPac 125-B Cask (TMI Epoxy)	TBD	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		21395	0	0	0	0	0	0	0	0	614	302	2336	1804	4106	804	707	887	373.5	378.5	493	1134	4322	387	72	771	1071	833	0	0

Table 5-54. SNFDSP receipts (repository containers).

SNFDSP Receipts	From	Repos. Cont.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peach Bottom Core 2	IFSF	79	0	0	0	19	34	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 FECF	IFSF	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 CPP-749	CPP-749	86	0	0	0	48	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	CPP-749	15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Liner 15681-C	CPP-749	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA	IFSF	15	0	0	0	0	0	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	IFSF	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	IFSF	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SM-1A	IFSF	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulstar – Buffalo	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006–2010)	IFSF	24	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003–2005)	IFSF	7	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	IFSF	74	0	0	0	0	0	0	0	0	6	38	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	IFSF	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	IFSF	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	IFSF	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	IFSF	3	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	IFSF	8	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	IFSF	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	IFSF	14	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	IFSF	14	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	IFSF	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	IFSF	40	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	IFSF	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (STD, Al, & Flip)	IFSF	8	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR)	IFSF	21	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR offsite)	Offsite	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	1	0	10	0	0	0
TRIGA BER-II	IFSF	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA High Power	IFSF	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom (C-2 & PTE-1)	IFSF	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIC	IFSF	22	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	IFSF	149	0	0	0	0	0	0	0	0	0	0	0	0	0	39	56	54	0	0	0	0	0	0	0	0	0	0	0	0
Rover UBM FY-98	IFSF	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Scrap	CPP-749	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0

Table 5-54. (continued).

SNFDSP Receipts	From	Repos. Cont.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
LWBR Blanket	CPP-749	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0
LWBR Seed	CPP-749	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0
LWBR Scrap D Liner 15718	CPP-749	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
FSVR Colorado	Colorado	293	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	73	73	74	0	0	0	0	0	0	0	0
TMI-2	CPP-1774	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	72	72	72	65	0	0
TN-24P Cask (LOFT Center)	CPP-2707	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Corner)	CPP-2707	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Standard)	CPP-2707	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-1 rods)	CPP-2707	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Scrap (Expoy, MTR, TMI, LOFT)	TBD	14	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	3	3	3	0	0	0	0	0	0	0	0	0	0
Pulstar DRR	IFSF	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
GA (RERTR & HTGR)	IFSF	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CP-5 Converter	IFSF	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	IFSF	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
ORR (Fast Reactor, HTGR, LWR, Scrap)	IFSF	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORR Intact Peach Bottom	CPP-749	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	IFSF	38	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNL receipts	IFSF	17	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	5	0	0	0	0	0	0	0	0
TN-24P Cask (DRCT)	CPP-2707	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	CPP-2707	17	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	CPP-2707	21	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC-10 Cask (commercial assemblies)	CPP-2707	18	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	CPP-2707	40	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV BRP	CPP-2707	85	0	0	0	0	0	0	0	0	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (commercial)	CPP-2707	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-2)	CPP-2707	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NuPac 125-B Cask (TMI Epoxy)	CPP-2707	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		1640	0	0	0	67	72	55	3	0	212	97	54	80	80	83	59	65	112	76	73	98	2	60	73	72	82	65	0	0

Table 5-55. SNFDSP transfers (repository containers).

SNFDSP Transfers	To	Repos. Cont.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peach Bottom Core 2	MGR	79	0	0	0	0	0	0	0	0	45	25	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 FECF	MGR	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peach Bottom Core 1 CPP-749	MGR	86	0	0	0	0	0	0	0	0	0	0	65	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LWBR Reflector	MGR	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0
LWBR Liner 15681-C	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
TRIGA	MGR	15	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNAP	MGR	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIA	MGR	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANP, APPR, SPSS, BMI, GCRE, & VBWR	MGR	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GETR Filters	MGR	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SM-1A	MGR	6	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulstar – Buffalo	MGR	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to IFSF (2006–2010)	MGR	24	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR from TRA to CPP-666 (2003–2005)	MGR	7	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATR	MGR	74	0	0	0	0	0	0	0	0	0	0	0	38	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Univ of Washington	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HFBR	MGR	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MURR	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARMF/CFRMF	MGR	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum Plate	MGR	8	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Core Filter	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBF Driver Core	MGR	14	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fermi Driver	MGR	14	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BORAX V	MGR	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Shippingport PWR	MGR	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pathfinder	MGR	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIGA (STD, Al, & Flip)	MGR	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	7	0	0	0	0	0	0	0	0
TRIGA (DRR/FRR)	MGR	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	3	0	0
TRIGA (DRR/FRR offsite)	MGR	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	9	1	0	0
TRIGA BER-II	MGR	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
TRIGA High Power	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Peach Bottom (C-2 & PTE-1)	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
TORY-IIC	MGR	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	17	0	0	0	0	0	0	0	0	0	0	0	0
FSVR	MGR	149	0	0	0	0	0	0	0	0	0	0	0	0	0	10	82	57	0	0	0	0	0	0	0	0	0	0	0	0
Rover UBM FY-98	MGR	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
LWBR Scrap	MGR	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0

Table 5-55. (continued).

SNFDSP Transfers	To	Repos. Cont.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
LWBR Blanket	MGR	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	7	0	0	0	0	0	0	0	0	0	0
LWBR Seed	MGR	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	0	0	0	0
LWBR Scrap D Liner 15718	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
FSVR Colorado	MGR	293	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	73	73	74	0	0	0	0	0	0	0	0
TMI-2	MGR	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	72	72	72	65	0	0
TN-24P Cask (LOFT Center)	MGR	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Corner)	MGR	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TN-24P Cask (LOFT Standard)	MGR	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-1 rods)	MGR	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Scrap (Expoy, MTR, TMI, LOFT)	MGR	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0
Pulstar DRR	MGR	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	0
GA (RERTR & HTGR)	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
CP-5 Converter	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
B&W (Arkansas, Oconee, TMI-2)	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
ORR (Fast Reactor, HTGR, LWR, Scrap)	MGR	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4	0	0	0	0	0	0	0	0	0
ORR Intact Peach Bottom	MGR	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ANL-W (TRIGA, TREAT, Exper, Misc)	MGR	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0
SNL receipts	MGR	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	5	0	0
TN-24P Cask (DRCT)	MGR	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VSC-17 Cask (DRCT)	MGR	17	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GNS V/21 Cask (VEPCO)	MGR	21	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC-10 Cask (commercial assemblies)	MGR	18	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV Robert E. Ginna (REG)	MGR	40	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WV BRP	MGR	85	0	0	0	0	0	0	0	0	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (commercial)	MGR	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REA-2023 Cask (LOFT FP-2)	TBD	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NuPac 125-B Cask (TMI Epoxy)	TBD	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		1640	0	0	0	0	0	0	0	0	209	75	90	90	90	90	90	90	90	90	90	88	78	72	72	81	81	74	0	0

Appendix A

INEEL Spent Nuclear Fuel Path Forward Disposition Details Rev 1

Appendix A

INEEL Spent Nuclear Fuel Path Forward Disposition Details Rev 1

Table A-1 illustrates the INEEL SNF path forward details. The table shows the SNF starting location and the steps the SNF goes through before it is leaves the State of Idaho.

Table A-1. INEEL spent nuclear fuel path forward disposition details, Revision 1.

		Amounts		FY-03 Location		First	Interim	Onsite	Transfer	Second	Interim	Onsite	Transfer		Final	Offsite	Transfer	
	Fuel Description	Fuel Units	MTHM	Onsite	Offsite	Cask Type	Units per Load	Number of Casks Shipped	Location	Cask Type	Units per Load	Number of Casks Shipped	Location	Cask Type	No. Std Canisters	Units per Load	Number of Casks Shipped	Location
1	PBF Driver Core	2,425	0.5616	PBF Canal		HFEF-6	87	28	CPP-603/ IFSF	PB	174	14	SNFDSP	DOESC	14.0	9	1.6	MGR
Subtotal		**2,425**	**0.5616**					**28**				**14**			**14.0**		**1.6**	
2	ATR	1,760	1.4778	CPP-666		High-Load Charger	8	220	CPP-603/ IFSF	PB	16	110	SNFDSP	DOESC	74.0	9	8.2	MGR
3	Univ of Washington	26	0.0039	CPP-666		High-Load Charger	8	4	CPP-603/ IFSF	PB	16	2	SNFDSP	DOESC	1.0	9	0.1	MGR
4	HFBR	220	0.0585	CPP-666		High-Load Charger	8	28	CPP-603/ IFSF	PB	16	14	SNFDSP	DOESC	7.0	9	0.8	MGR
5	MURR	32	0.0219	CPP-666		High-Load Charger	8	4	CPP-603/ IFSF	PB	16	2	SNFDSP	DOESC	1.0	9	0.1	MGR
6	FERMI Driver	214	3.9321	CPP-666		High-Load Charger	4	54	CPP-603/ IFSF	PB	16	14	SNFDSP	DOESC	14.0	9	1.6	MGR
7	TRIGA (STD & FLIP)	280	0.0519	CPP-666		High-Load Charger	15	19	CPP-603/ IFSF	PB	72 or 90	3	SNFDSP	DOESC	3.0	9	0.3	MGR
8	BORAX V	36	0.0208	CPP-666		High-Load Charger	4	9	CPP-603/ IFSF	PB	18	2	SNFDSP	DOESC	2.0	9	0.2	MGR
9	Shippingport PWR	40	0.5217	CPP-666		PB	2	20	CPP-603/ IFSF	PB	1	40	SNFDSP	DOESC	40.0	9	4.4	MGR
10	Pathfinder	417	0.0534	CPP-666		HFEF-6	62	7	CPP-603/ IFSF	PB	62	7	SNFDSP	DOESC	7.0	9	0.8	MGR
11	SNAP	31	0.0291	CPP-666		High-Load Charger	2	16	CPP-603/ IFSF	PB	16	2	SNFDSP	DOESC	5.0	9	0.6	MGR
12	TORY-IIA	146	0.0486	CPP-666		High-Load Charger	4	37	CPP-603/ IFSF	PB	14	11	SNFDSP	DOESC	21.0	9	2.4	MGR
13	ANP	2	0.0011	CPP-666		High-Load Charger	2	1	CPP-603/ IFSF	PB (CWI 13-17)	*	*	SNFDSP	DOESC (CWI 13-17)	*	*	*	MGR
14	APPR & SPSS	2	0.0008	CPP-666		High-Load Charger	2	1	CPP-603/ IFSF	PB (CWI 13-17)	*	*	SNFDSP	DOESC (CWI 13-17)	*	*	*	MGR
15	BMI	3	0.0018	CPP-666		High-Load Charger	2	2	CPP-603/ IFSF	PB (CWI 13-17)	*	*	SNFDSP	DOESC (CWI 13-17)	*	*	*	MGR
16	GCRE	2	0.0010	CPP-666		High-Load Charger	2	1	CPP-603/ IFSF	PB (CWI 13-17)	*	*	SNFDSP	DOESC (CWI 13-17)	*	*	*	MGR
17	VBWR (Geneva)	4	0.0124	CPP-666		High-Load Charger	4	1	CPP-603/ IFSF	PB (CWI 13-17)	13	1	SNFDSP	DOESC (CWI 13-17)	2.0	9	0.2	MGR
18	GETR Filters	70	0.0044	CPP-666		High-Load Charger	7	10	CPP-603/ IFSF	PB	35	2	SNFDSP	DOESC	2.0	9	0.2	MGR
19	SM-1A	93	0.0658	CPP-666		High-Load Charger	4	24	CPP-603/ IFSF	PB	16	6	SNFDSP	DOESC	6.0	9	0.7	MGR
20	Pulstar - Buffalo	24	0.2522	CPP-666		High-Load Charger	4	6	CPP-603/ IFSF	PB	16	2	SNFDSP	DOESC	2.0	9	0.2	MGR
21	EBR-II Dry	3,256	1.7670	CPP-666		—	—	—	—	—	—	—	—	LWT	NA	40	82.0	ANL-W
22	EBR-II Wet	368	0.1997	CPP-666		—	—	—	—	—	—	—	—	HFEF-6	NA	16	23.0	ANL-W
23	Navy	4,233	13.2568	CPP-666		—	—	—	—	—	—	—	—	LCC	NA	30	143.0	NRF/ECF
24	ATR from TRA to CPP-666 (2003-2005)	168	0.1402		TRA/ATR	High-Load Charger	8	21	CPP-666	PB	16	11	SNFDSP	DOESC	7.0	9	0.8	MGR
Subtotal		**11,427**	**21.9229**					**485**				**2291**			**194.0**		**269.6**	

Table A-1. (continued).

		Amounts		FY-03 Location		First	Interim	Onsite	Transfer	Second	Interim	Onsite	Transfer		Final	Offsite	Transfer	
	Fuel Description	Fuel Units	MTHM	Onsite	Offsite	Cask Type	Units per Load	Number of Casks Shipped	Location	Cask Type	Units per Load	Number of Casks Shipped	Location	Cask Type	No. Std Canisters	Units per Load	Number of Casks Shipped	Location
25	TORY-IIC	655	0.0591	CPP-603/ IFSF		PB	28	23	SNFDSP	—	—	—	—	DOESC	22.0	9	2.5	MGR
26	Peach Bottom (Unit 1 Core 2 & FECF)	786	1.2821	CPP-603/ IFSF		PB	12	69	SNFDSP	—	—	—	—	DOESC	80.0	9	8.9	MGR
27	Peach Bottom (C-2 & PTE-1)	5	0.0105	CPP-603/ IFSF		PB	5	1	SNFDSP					DOESC	1.0	10	0.1	MGR
28	FSVR	744	8.6273	CPP-603/ IFSF		PB	4	188	SNFDSP	—	—	—	—	DOESC	149.0	9	16.6	MGR
29	Rover UBM FY-98	65	0.1198	CPP-603/ IFSF		PB	11	6	SNFDSP	—	—	—	—	DOESC	7.0	9	0.8	MGR
30	Ber-II TRIGA	21	0.0092	CPP-603/ IFSF		PB	11	2	SNFDSP	—	—	—	—	DOESC	2.0	9	0.2	MGR
31	TRIGA AL (CPP603)	558	0.1025	CPP-603/ IFSF		PB	72	7	SNFDSP	—	—	—	—	DOESC	5.0	9	0.5	MGR
32	TRIGA FRR (stored)	951	0.1723	CPP-603/ IFSF		PB	72	12	SNFDSP	—	—	—	—	DOESC	9.0	9	1.0	MGR
33	TRIGA High Power	267	0.0056	CPP-603/ IFSF		PB	267	1	SNFDSP	—	—	—	—	DOESC	1.0	9	0.1	MGR
34	ARMF/CFRMF	71	0.0129	CPP-603/ IFSF		PB	16	5	SNFDSP	—	—	—	—	DOESC	3.0	9	0.2	MGR
35	Aluminum Plate	189	0.1235	CPP-603/ IFSF		PB	16	11	SNFDSP	—	—	—	—	DOESC	8.0	9	0.9	MGR
36	Core Filter	1	0.2185	CPP-603/ IFSF		PB	1	1	SNFDSP	—	—	—	—	DOESC	1.0	1	1.0	MGR
37	WAPD (Na/K Bonded) & SPEC (ORME)	25	0.0090	CPP-603/ IFSF		—	—	—	—	—	—	—	—	HFEF-6	NA	25	1.0	ANL-W
38	MTR Canal Test Fuel	105	0.2613	MTR Canal		—	—	—	—	—	—	—	—	TBD	NA	11	10	Epoxy Treatment
39	ATR from TRA to IFSF (2006-2010)	560	0.4650		TRA/ATR	ATR Cask	8	70	CPP-603 IFSF	PB	16	35	SNFDSP	DOESC	24.0	9	2.7	MGR
Subtotal		**5,003**	**11.4786**					**396**							**312.0**		**46.5**	
40	Peach Bottom Unit 1 Core 1	814	1.6465	CPP-749		PB	18	46	SNFDSP	—	—	—	—	DOESC	86.0	9	9.5	MGR
41	LWBR Reflector	15	17.3302	CPP-749		PB	1	15	SNFDSP	—	—	—	—	DOESC	15.0	5	3.0	MGR
42	LWBR Blanket	12	16.7857	CPP-749		PB	1	12	SNFDSP	—	—	—	—	DOESC	24.0	9	2.7	MGR
43	LWBR Seed	12	5.1105	CPP-749		PB	1	12	SNFDSP	—	—	—	—	DOESC	12.0	9	1.3	MGR
44	LWBR 15681-C	1	0.7735	CPP-749		PB	1	1	SNFDSP					DOESC	1.0	5	0.2	MGR
45	LWBR Scrap	6	2.3489	CPP-749		PB	1	6	SNFDSP	—	—	—	—	DOESC	6.0	9	0.8	MGR
46	LWBR Scrap Module	1	0.2451	CPP-749		PB	1	1	SNFDSP	—	—	—	—	DOESC	1.0	9	0.1	MGR
47	Fermi Blanket	14	34.1715	CPP-749		PB	1	14	TBD	—	—	—	—	PB	N/A	1.0	14.0	Fermi Treatment
Subtotal		**875**	**78.4119**					**107**							**145.0**		**31.6**	
48	TMI-2	341	81.5880	CPP-1774		OS-197	12	29	SNFDSP	—	—	—	—	DOESC	341.0	9	37.9	MGR
Subtotal		**341**	**81.5880**					**29**							**341.0**		**37.9**	
49	FSVR	1,464	14.7295		FSV-ISFSI	TN-FSV	6	244	SNFDSP	—	—	—	—	DOESC	293.0	9	32.5	MGR
Subtotal		**1,464**	**14.7295**					**244**							**293.0**		**32.5**	
50	GNS V/21 Cask (VEPCO)	21	9.2722	TAN-791		GNS V-21	21	1	CPP-2707	GNS V-21	21	1	SNFDSP	DOESC	NA	24	0.9	MGR

Table A-1. (continued).

		Amounts		FY-03 Location		First	Interim	Onsite	Transfer	Second	Interim	Onsite	Transfer		Final	Offsite	Transfer	
	Fuel Description	Fuel Units	MTHM	Onsite	Offsite	Cask Type	Units per Load	Number of Casks Shipped	Location	Cask Type	Units per Load	Number of Casks Shipped	Location	Cask Type	No. Std Canisters	Units per Load	Number of Casks Shipped	Location
51	MC-10 Cask (BCD B-17-TURKEY POINT 3)	1	0.4118	TAN-791		MC-10 (CWI 51-53)	*	*	CPP-2707	MC-10 (CWI 51-53)	*	*	SNFDSP	DOESC (CWI 51-53)	NA	*	*	MGR
52	MC-10 Cask (TURKEY POINT)	5	2.2216	TAN-791		MC-10 (CWI 51-53)	*	*	CPP-2707	MC-10 (CWI 64-66)	*	*	SNFDSP	DOESC (CWI 51-53)	NA	*	*	MGR
53	MC-10 Cask (VEPCO)	12	5.3135	TAN-791		MC-10 (CWI 51-53)	18	1	CPP-2707	MC-10 (CWI 64-66)	18	1	SNFDSP	DOESC (CWI 51-53)	NA	24	0.8	MGR
54	VSC-17 Cask (DRCT)	17	15.0060	TAN-791		VSC-17	17	1	CPP-2707	VSC-17	17	1	SNFDSP	DOESC	NA	12	1.4	MGR
55	TN-24P Cask (DRCT)	7	6.1450	TAN-791		TN-24P (CWI 55-58)	*	*	CPP-2707	TN-24P (CWI 55-58)	*	*	SNFDSP	DOESC	NA	12	0.6	MGR
56	LOFT Center Fuel Module	4	0.8149	TAN-791		TN-24P (CWI 55-58)	*	*	CPP-2707	TN-24P (CWI 55-58)	*	*	SNFDSP	DOESC	4.0	9	0.4	MGR
57	LOFT Corner Fuel Module	4	0.2791	TAN-791		TN-24P (CWI 55-58)	*	*	CPP-2707	TN-24P (CWI 55-58)	*	*	SNFDSP	DOESC	2.0	9	0.3	MGR
58	LOFT Square Fuel Module	4	0.8130	TAN-791		TN-24P (CWI 55-58)	19	1	CPP-2707	TN-24P (CWI 55-58)	19	1	SNFDSP	DOESC	4.0	9	0.4	MGR
59	LOFT FP-2 (epoxied remains)	2	0.0999	TAN-791		REA-2023 (CWI 59-68)	*	*	CPP-2707	REA-2023 (CWI 59-68)	*	*	SNFDSP	LWT	N/A	2	1.0	Epoxy Treatment
60	LOFT FP-1 (202 rods)	1	0.2017	TAN-791		REA-2023 (CWI 59-68)	*	*	CPP-2707	REA-2023 (CWI 59-68)	*	*	SNFDSP	DOESC	1.0	9	0.1	MGR
61	35 Encapsul. Tubes	3	0.0939	TAN-791		REA-2023 (CWI 59-68)	*	*	CPP-2707	REA-2023 (CWI 59-68)	*	*	SNFDSP	DOESC (CWI 61-68)	NA	*	*	MGR
62	Connecticut Yankee (S004)	1	0.3938	TAN-791		REA-2023 (CWI 59-68)	*	*	CPP-2707	REA-2023 (CWI 59-68)	*	*	SNFDSP	DOESC (CWI 61-68)	NA	*	*	MGR
63	H.B. Robinson (B05)	1	0.2292	TAN-791		REA-2023 (CWI 59-68)	*	*	CPP-2707	REA-2023 (CWI 59-68)	*	*	SNFDSP	DOESC (CWI 61-68)	NA	*	*	MGR
64	Loose Fuel Rod Storage Basket (LFRSB)	1	0.3111	TAN-791		REA-2023 (CWI 59-68)	*	*	CPP-2707	REA-2023 (CWI 59-68)	*	*	SNFDSP	DOESC (CWI 61-68)	NA	*	*	MGR
65	Peach Bottom (PH0006 & PH0462)	2	0.2853	TAN-791		REA-2023 (CWI 59-68)	*	*	CPP-2707	REA-2023 (CWI 59-68)	*	*	SNFDSP	DOESC (CWI 61-68)	NA	*	*	MGR
66	Dresden I (E00161)	1	0.1099	TAN-791		REA-2023 (CWI 59-68)	*	*	CPP-2707	REA-2023 (CWI 59-68)	*	*	SNFDSP	DOESC (CWI 61-68)	NA	*	*	MGR
67	Dresden I (UN0064)	1	0.0573	TAN-791		REA-2023 (CWI 59-68)	*	*	CPP-2707	REA-2023 (CWI 59-68)	*	*	SNFDSP	DOESC (CWI 61-68)	NA	*	*	MGR
68	VEPCO Surry (9 rods)	1	0.0197	TAN-791		REA-2023 (CWI 59-68)	14	1	CPP-2707	REA-2023 (CWI 59-68)	14	1	SNFDSP	DOESC (CWI 61-68)	NA	24	0.5	MGR
69	TMI Core Debris (D-153 & D-388 epoxy)	2	0.0188	TAN-791		NuPac 125-B	7	1	CPP-2707	125-B	7	1	SNFDSP	LWT	NA	2	1.0	Epoxy Treatment
Subtotal		**91**	**42.0977**					**6**				**6**			**11.0**		**7.4**	
70	WV BRP-B	85	11.1880		WVDP	TN-BRP	85.0	1	CPP-2707	TN-BRP	85.0	1.0	SNFDSP	DOESC	NA	60	1.4	MGR
71	WV ROBERT E. GINNA	40	15.1270		WVDP	TN-REG	40	1	CPP-2707	TN-REG	40	1	SNFDSP	DOESC	NA	24	1.7	MGR
Subtotal		**125**	**26.3150**					**2**				**2**			**0.0**		**3.1**	
72	DRR ORR Peach Bottom	9	0.0106	2003–2021	Oak Ridge	PB	9	1	CPP-749	PB	9	1	SNFDSP	DOESC	1.0	24	0.1	MGR
73	DRR - CP-5 Converter	2	0.0012	2003–2021	ANL-E	TBD	2	1	CPP-603/ IFSF	PB	2	1	SNFDSP	DOESC	1.0	9	0.1	MGR
74	DRR ANL-W (TREAT, Exper, Misc)	2,302	4.7451	2003–2021	ANL-W	TBD	61	38	CPP-603/ IFSF	PB	61	38	SNFDSP	DOESC	38.0	9	4.2	MGR
75	DRR SNL	493	0.2430	2003–2021	SNL	TBD	5 or 120	17	CPP-603/	PB	5 or 72	19	SNFDSP	DOESC	17.0	9	1.9	MGR

Table A-1. (continued).

		Amounts		FY-03 Location		First	Interim	Onsite	Transfer	Second	Interim	Onsite	Transfer		Final	Offsite	Transfer	
	Fuel Description	Fuel Units	MTHM	Onsite	Offsite	Cask Type	Units per Load	Number of Casks Shipped	Location	Cask Type	Units per Load	Number of Casks Shipped	Location	Cask Type	No. Std Canisters	Units per Load	Number of Casks Shipped	Location
									IFSF									
76	DRR - ORR Receipts	62	0.2080	2003–2021	ORR	TN-FSV	15	5	CPP-603/ IFSF	PB	12	6	SNFDSP	DOESC	6.0	9	0.7	MGR
77	DRR - B&W (Arkansas, Oconee, TMI-2)	18	0.0439	2003–2021	B&W	TN-FSV	18	1	CPP-603/ IFSF	PB	9	2	SNFDSP	DOESC	1.0	9	0.1	MGR
78	DRR - GA	2	0.0052	2003–2021	GA	LWT	2	1	CPP-603/ IFSF	PB	2	1	SNFDSP	DOESC	1.0	9	0.1	MGR
79	TRIGA DRR/FRR	2,962	0.5679	2003–2021	Domestic/ Foreign	LWT	120	42	CPP-603/ IFSF	PB	52 or 90	51	SNFDSP	DOESC	27.0	9	3.0	MGR
80	DRR - Pulstar	65	0.8159	2003–2021	Domestic	LWT	16	5	CPP-603/ IFSF	PB	16	5	SNFDSP	DOESC	5.0	9	0.5	MGR
81	TRIGA DRR	1,716	0.3370	2022–2027	Domestic	LWT	62	28	SNFDSP	—	—	—	—	DOESC	16.0	9	1.8	MGR
82	Treated Epoxy	14	0.3800	2016–2020	Epoxy Treatment	LWT	1	14	SNFDSP	—	—	—	—	DOESC	14.0	9	1.6	MGR
Subtotal		**7,645**	**7.3578**					**153**				**124**			**127.0**		**14.1**	
Total		**29,396**	**284.46**					**1450**				**375**			**1437**		**444.2**	

Note: CWI—Combined with Items

Appendix B

INEEL Spent Nuclear Fuel Canister Inventory for the Monitored Geologic Repository

Appendix B

INEEL Spent Nuclear Fuel Canister Inventory for the Monitored Geologic Repository

B-1. DOCUMENT PURPOSE AND SCOPE

B-1.1 Purpose of Document

This appendix provides the technical baseline for packaging Idaho National Engineering and Environmental Laboratory (INEEL) spent nuclear fuel for future disposal in the monitored geologic repository (MGR). This plan describes the packaging strategy to ensure repository requirements are met. As new requirements are received and supporting engineering analyses are developed, this plan will be revised.

B-1.2 Introduction

In 1982, Congress enacted the Nuclear Waste Policy Act and, as amended in 1987, outlined a comprehensive plan for the management and safe disposal of SNF and forms of high-level radioactive waste (HLW). The U.S. Department of Energy (DOE), through its Office of Civilian Radioactive Waste Management (RW), was given the responsibility for planning, constructing, and operating such a disposal system.

Many options have been studied to determine the best environment for isolating radioactive materials over long periods of time. For instance, leaving the SNF and HLW at the reactor site, burying it in the ocean floor, putting it in polar ice sheets, and rocketing it into outer space were all considered. Most scientific organizations, including the National Academy of Sciences and the U.S. Geological Survey, have recommended underground geologic disposal as the long-term solution.

In the Nuclear Waste Policy Act, as amended, Congress directed the DOE to concentrate site characterization studies at Yucca Mountain, Nevada. Yucca Mountain is in an arid climatic zone about 161 km (100 mi) northwest of Las Vegas. The proposed depth of the MGR is about 300 m (1,000 ft) below the surface, but still about 240 m (800 ft) above the water table in a very hard rock called volcanic tuff.

The memorandum of agreement for the acceptance of DOE SNF and HLW, January 1999, establishes the terms and conditions under which RW will make available disposal services in the MGR for DOE-Office of Environmental Management (EM) SNF and HLW.

The INEEL is responsible for the disposition of approximately 234.7 metric tons of heavy metal (MTHM) of DOE-EM SNF. Included in this amount is the SNF already onsite and DOE-owned SNF at domestic and foreign locations that will be relocated to the INEEL for storage and disposition. The INEEL approach for the disposition of the SNF is to implement the Batt Agreement to remove all DOE SNF from the INEEL by 2035. This document has been enhanced from National Spent Nuclear Fuel Program documents, MGR requirements, and government regulations that are discussed in Sections 2, 3, and 4.

B-2. INEEL SNF PACKAGING STRATEGIES

SNF disposed at the MGR from DOE-EM will be codisposed with HLW. The only exception is DOE-EM-owned commercial origin fuel that meets or can be modified or packaged to meet the intent of the specifications for standard fuel contained in Appendix E of 10 CFR 961. The codisposal waste package, as shown in Figure B-1, contains five HLW canisters surrounding a single DOE standard 18-in. SNF canister. For DOE standard 24-in. canisters, the codisposal waste package will contain four HLW disposal canisters and one DOE standard 24-in. canister in the place of the fifth HLW disposal canister. A single DOE standard 18-in. SNF canister may or may not be placed in the middle of the package. The standard canister eliminates the need for handling individual SNF units and is suitable for direct insertion into the codisposal waste package.

The basic design for a DOE standard canister is found in report DOE/SNF/REP-011 and is shown in Figure B-2. Although almost all INEEL SNF can be packaged into DOE standard 15-ft × 18-in. SNF canisters, two additional canisters have been prepared, 10 ft × 18 in. and 15 ft × 24 in. as stated in the recent Integrated Acceptance Schedule issued July 11, 2001.

The standard 10-ft × 18-in. canisters are used to match the Savannah River Site HLW canisters that will be 10 ft in length. Savannah River Site has already begun generating HLW canisters, and by the time they have completed processing, they will have enough canisters for approximately 1,175 codisposal waste packages (5,871 HLW canisters) as stated in the Integrated Acceptance Schedule. To have early receipt into the MGR, the INEEL will need to focus on packaging 10-ft-length canisters, because the larger 15-ft-length HLW canisters will not be available from Hanford and the INEEL until later in the shipping schedule.

The standard 15-ft × 24-in. canisters would be used for 16 Shippingport Light Water Breeder Reactor (LWBR) SNF storage liners that are too large to fit intact in a standard 15-ft × 18-in. canister.

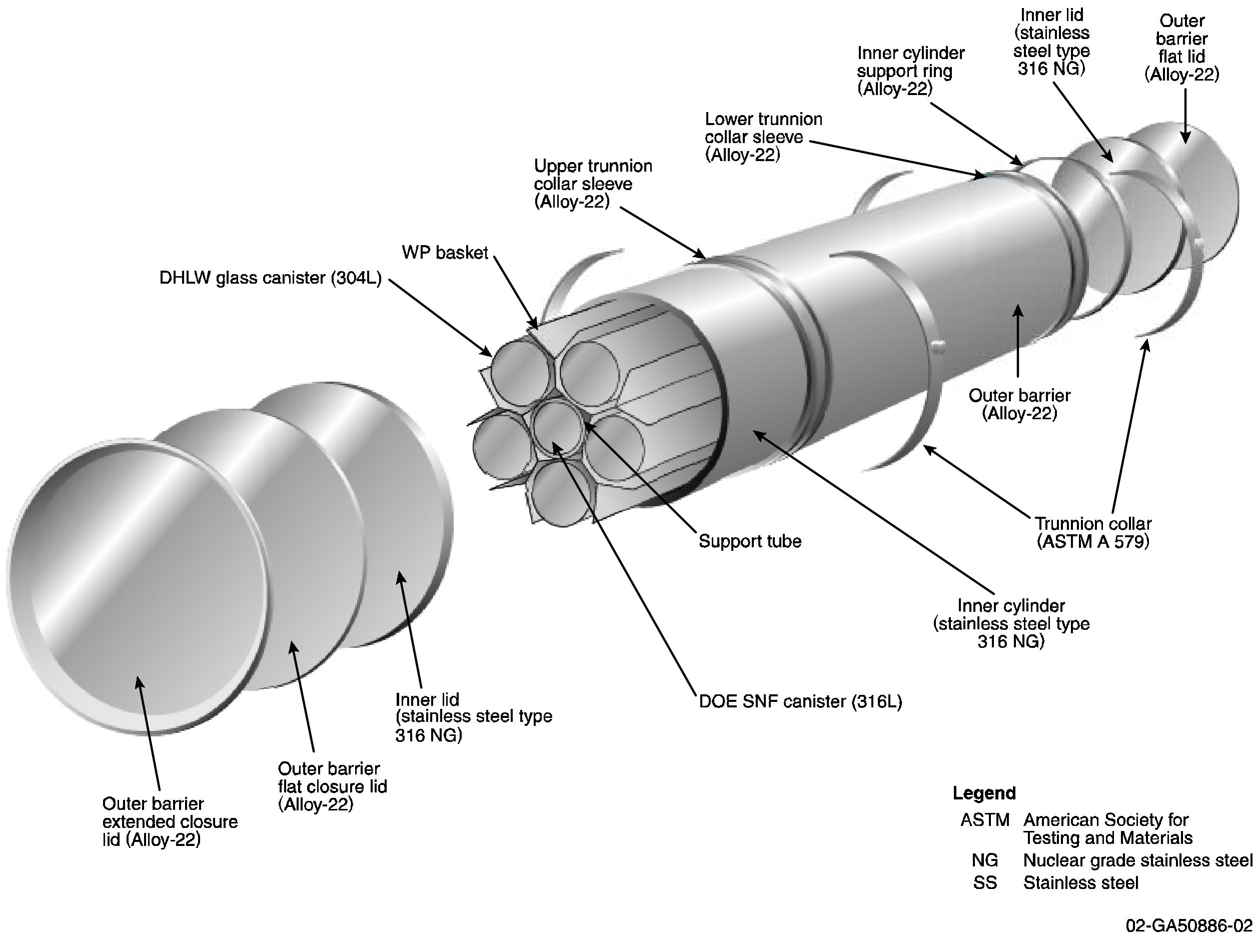

Figure B-1. DOE spent nuclear fuel and high-level waste codisposal waste package.

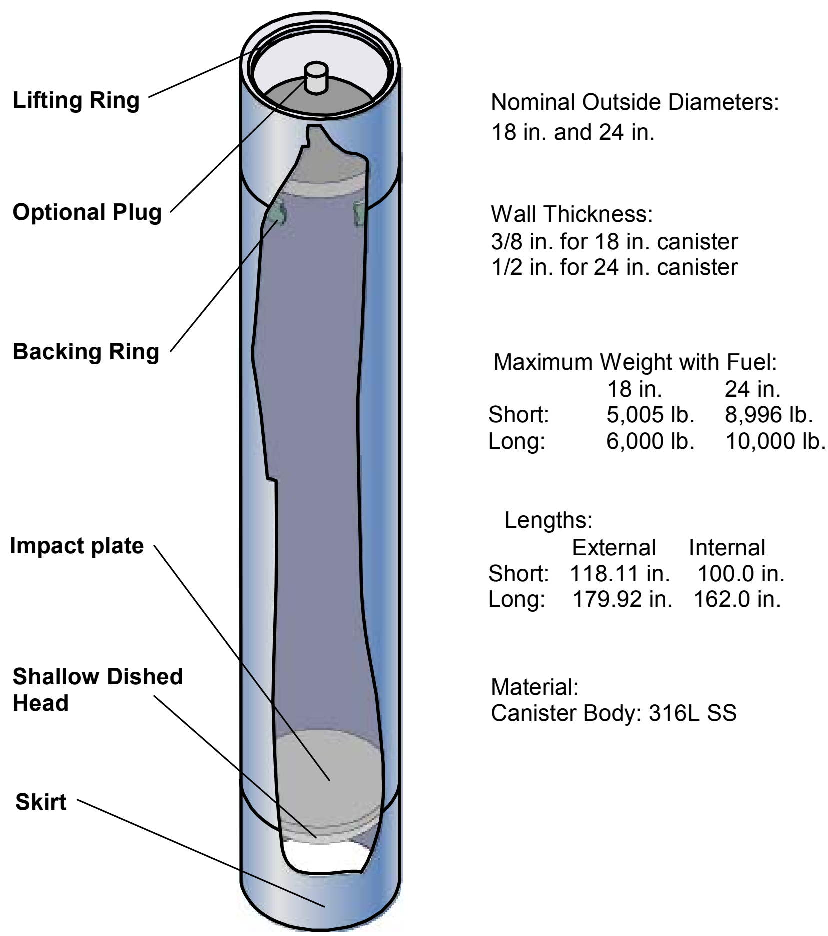

Figure B-2. U.S. Department of Energy standard canister.

B-3. INEEL STANDARD CANISTER LOADING

The INEEL will dispose of approximately 1,437 canisters of SNF in the MGR. Table B-3.1 has the breakdown between the different canister types, and Table B-5.1 at the end of this report has the detailed breakdown of canister loadings by SNF type. The main requirements for transportation and repository in loading the canister deal with criticality, physical mass, thermal output, and packaging.

Table B-3.1. Number of Idaho National Engineering and Environmental Laboratory standard canisters.

Canister Size	Amount
10 ft × 18 in.	180
15 ft × 18 in.	1,241
15 ft × 24 in.	16
Total canisters required	1,437

Note: The INEEL may need to have more 10-ft × 18-in. canisters. The Fort St. Vrain Reactor (FSVR) fuel and other SNF could be placed into these shorter canisters. Placing these fuels into short canisters would increase the total number of required canisters.

B-3.1 Criticality Analyses

The acceptance of the DOE SNF for disposal will rely on the ability to show with sufficient levels of confidence that the inclusion of DOE SNF will not impact the MGR's overall performance. Based on the proposed Nuclear Regulatory Commission regulation (10 CFR 63), RW has completed detailed features, events, and processes screening for the proposed MGR at Yucca Mountain. Criticality is an event that could potentially affect the performance of the proposed repository. RW has provided a report to the Nuclear Regulatory Commission entitled "Disposal Criticality Methodology Topical Report". This report indicates how the MGR criticality will be evaluated. Based on this report, DOE-EM has completed a number of detailed criticality analyses for nine fuel groups. The selection of the fuel types for detailed criticality analysis within each group was based on a number of criteria. Generally, those criteria included: (1) largest mass of fuel within that group, (2) fuel with most complete and available data needed to support analysis, (3) physical size of the fuel, and (4) highest enrichment of the isotopic species within that group. Specifically, criticality evaluations have been completed for the following DOE SNF.

- Fermi fuel representing the uranium alloy fuels
- Fast Flux Test Facility (FFTF) driver fuel assembly representing the mixed oxide fuel
- N-reactor fuel representing the uranium metal fuels
- Fort St. Vrain fuel representing the graphite/carbide fuels
- Shippingport Pressurized Water Reactor (PWR) representing the high-enriched uranium oxide fuels
- Shippingport LWBR fuel representing the uranium/thorium oxide fuels

- Training, Research, and Isotopes Reactor built by General Atomics (TRIGA) fuel representing the uranium zirconium hydride fuels.

One additional criticality evaluation is scheduled for completion in FY 2003. This evaluation for the Three Mile Island fuel represents the low-enriched uranium oxide fuels. In FY 2004, the aluminum plate SNF is scheduled to be reevaluated for direct disposal into the MGR. Current details for all the criticality analyses are shown in Table B-3.2.

In an ideal approach, all different SNF package configurations would be analyzed in the same detail as the specific types modeled in the nine fuel groups. Given the variety of the remaining SNF types, the number of packaging permutations (fuel sizes within a given basket design), and the multitude of differing SNF/basket configurations, this yields an unacceptably high number of packages to be analyzed. To analyze all the possible configurations is impossible at the time due to excessive cost and time needed to complete this effort. However, having completed detailed criticality analyses for the nine fuel types, the results originating from these analyses are intended to be employed for other fuel types and groups.

For the other SNF types and groups, a simplistic analysis needs to be done for each intact canister with intact fuel configuration and a known geometry. This requirement is derived from the stipulation that a criticality analysis be performed for configuration changes for any stored SNF. If the simplistic analysis produces a calculated k_{eff} less than the baseline case for an intact SNF canister (based on canister fissile load, enrichment, linear loading of the fuel, basket design thermal, physical weight, and shielding), then the new configuration should be deemed acceptable for all repository disposal conditions. Similarly, the criticality analysis for the intact fuel canister configuration would be applicable for transportation issues, even when multiple canisters form an array in a transport cask. When multiple canisters are placed in a transport cask, neutronically poisoned baskets or inserts inside the transport cask might be required.

The bounding case for the detailed criticality evaluations is a fully degraded SNF canister inside a failed codisposal waste package. For the simplistic criticality analysis, if none of the baseline parameters identified in the detailed evaluations are exceeded for the canister configuration, then on a deminimus basis, the SNF type would be qualified for repository disposal. In essence, the SNF package configurations with specified fissile loading (with any necessary poisons) have been "qualified" for repository disposal.

B-3.2 Physical Mass

The allowable physical weight of any SNF canister is limited by the combination of the weight of the canister itself, the internals (both basket and filler materials), and the fuel loading. These limits are shown in Table B-3.3.

B-3.3 Thermal Output (per loaded canister)

The Waste Acceptance System Requirements Document, DOE/RW-0351, limits the thermal output of codisposal waste package (five HLW canisters and one SNF canister) to 11.8 kW. The designed SNF canister portion of the thermal output is 1.976 kW. The heat generated (thermal load) could affect the MGR's long-term performance by reducing the ability of the MGR's natural and engineered barrier systems to isolate the waste from the human environment. Heat generated by the waste package temperatures could affect waste package corrosion rate and integrity. Heat generated could also affect the geochemistry, hydrology, and mechanical stability of the emplacement drifts, which in turn could lead to groundwater incursion and release of radionuclides into the near field environment.

Table B-3.2. Criticality analyses for the canister inventory.

	U Metal	MOX	UZr/UMo	U Oxide—HEU	U/Th Oxide	UZrHx	Graphite	U Oxide—LEU
Canister type	MCO	15 ft × 18 in.	10 ft × 18 in.	15 ft × 18 in.	15 ft × 18 in.	10 ft × 18 in.	15 ft × 18 in.	15 ft × 18 in.
Fuel type	N-reactor Mark IA/IV	FFTF	Fermi	Ship PWR	Ship LWBR (seed)	TRIGA flip	FSV	TMI debris
Number of fuel units	50,694 1A elements 52,986, IV elements	275 DFA 30 IDENT	215 cans	40 assemblies	12 assemblies (seed)	7,500+ elements	2,208 blocks	337 cans
Number per canister	288 1A elements 270 IV elements	5	24 (2-layers)	1	1	111 (3-layers)	5	1
Number of canisters	210 1A 230 IV	31	9	40	12	70+	442	337
Fissile type	U-235	Pu-239	U-235	U-235	U-233	U-235	U-235/ U-233	U-235
Fissile mass/ canister (kg)	54.98 1A 60.09 IV	42.34	115.6	19.5	16.6	15.2	7.4	13.72
Enrichment %	1.15 1A 0.947 IV	29.3 (Pu)	25.3	93.2	100	70 (max)	93.2	2.96 (max)
Poison rqd	No	Yes	Yes	No	Yes	Yes	No	No

Table B-3.2 Acronyms/Abbreviations:

Multi-Canister Overpack—MCO
highly enriched uranium—HEU
pressurized water reactor—PWR
Light Water Breeder Reactor—LWBR
low-enriched uranium—LEU
light water breeder reactor—LWBR
Ident-69 Pin Container—IDENT
Driver Fuel Assembly—DFA
Fort St. Vrain Project in Colorado—FSV
Required—rqd
Fast Flux Test Facility—FFTF
Three Mile Island—TMI
mixed oxide—MOX

Table B-3.3. Canister component weight limits.

Component Weights (kg)	10 ft × 18 in.	15 ft × 18 in.	10 ft × 24 in.[a]	15 ft × 24 in.
Maximum SNF payload	1,485	1,551	2,600	2,354[b]
Canister	330	487	647	944
Typical internal component[c]	455	683	833	1,237
Total weight limit[d]	2,270	2,721	4,080	4,535

a. The INEEL will not be using the 10-ft × 24-in. standard canister.

b. The payload weight for a 24-in.-diameter canister decreases as it increases in length. More support is required for the longer canister to meet drop specifications.

c. Typical internal components included two impact plates, an internal sleeve, and a five spoke-wheel basket.

d. The total weight limits are identified in DOE/SNF/REP-011.

Because most INEEL SNF was used in test and experimental reactors, has low burnup and multiple years in storage, the decay heat values are low. The worst INEEL SNF case is the decay heat from five Fort St. Vrain elements loaded into a 15 ft × 18 in. canister, which yields 0.776 kW in year 2010.

B-3.4 Packaging

Because of the number and variety of fuel types, a packaging strategy was adopted to maximize fissile loading per standard canister given the dimensional constraint of the fuel and available basket design. The physical shapes and sizes of some fuel types may dictate standard canister loading and basket design. Damaged fuel pieces, scrap materials, and test specimens may not lend themselves to individual packaging in any of the current basket designs. To provide additional confinement and structural support, these individual items may be packaged in a high integrity can (HIC) before loading into a standard canister.

A potential impact to the canister inventory is loading designs that reduce the available storage space inside a standard canister. One proposed design calls for the use of an 8-in.-thick shield plug to support the closure welding of a loaded SNF canister. Use of such a plug would impact the available space inside a disposal package by reducing the storage volume. This would increase the number of standard canisters needed for some of the conceptual fuel loads.

B-4. INEEL DISPOSITION OF DOE-OWNED PWR AND BWR ASSEMBLIES AND RODS

INEEL commercial SNF inventory consists of standard and nonstandard fuel assemblies discharged from pressurized water reactors (PWRs) and boiling water reactors (BWRs). Although the MGR will permit standard and nonstandard commercial SNF as defined in Appendix E of 10 CFR 961, the nonstandard commercial SNF may be disposed differently than the standard commercial SNF. Nonstandard commercial SNF includes canisters of intact commercial SNF assemblies, consolidated commercial SNF assemblies, canned commercial SNF rods and pieces, and oversized commercial SNF assemblies. Table B-4.1 contains the maximum physical dimensions for standard commercial SNF. A list of INEEL commercial SNF is provided in Table B-4.2. Table B-4.2 also establishes which INEEL commercial SNF meets the definition of standard SNF as defined in 10 CFR 961.

As currently planned, standard commercial SNF will be received at the MGR in commercial shipping casks and will be loaded into waste packages. Table B-4.3 contains characteristics of the five planned commercial SNF waste packages, and Figure B-4.1 shows the 21 PWR waste packages. Each waste package is being designed to hold as much SNF as possible without exceeding the physical and thermal load limits placed on the containers.

Table B-4.1. Maximum nominal physical dimension for standard commercial SNF-10 CFR 961.

	Boiling Water Reactor (BWR)	Pressurized Water Reactor (PWR)
Overall length	14 ft, 11 in.	14 ft, 10 in.
Active fuel length	12 ft, 6 in.	12 ft, 0 in.
Cross section	6 in. × 6 in.	9 in. × 9 in.

Note: Fuel that does not meet these specifications will be classified as nonstandard fuel.

Table B-4.2. Commercial spent nuclear fuel (SNF) the INEEL currently plans to send to the Monitored Geologic Repository (MGR).

Reactor	Number of Assemblies	MTHM	Type (manufacture, array, and reactor)	Standard Commercial SNF
Intact Assemblies				
Big Rock Point (Types B, C, D1, D2, E, EG, EP, & F)[a]	85	11.1881	BRP 7 × 7, 8 × 8, 9 × 9, & 11 × 11 BWR	No[b]
Dresden	1	0.110	GE 6 × 6 BWR	Yes
Robert E. Ginna[a]	40	15.127	WE 14 × 14 PWR	Yes
VEPCO Surry	32	14.145	WE 15 × 15 PWR	Yes
Turkey Point 3	5	2.222	WE 15 × 15 PWR	Yes
Assemblies with Rods Removed				
VEPCO Surry (T-11)	1	0.440	WE 15 × 15 PWR	Yes[c]
Turkey Point 3 (B-17)	1	0.412	WE 15 × 15 PWR	Yes[c]
CT Yankee	1	0.394	WE 15 × 15 PWR	Yes[c]
H. B. Robinson 2	1	0.229	WE 15 × 15 PWR	Yes[c]
Peach Bottom	2	0.285	GE 7 × 7 BWR	Yes[c]
Dresden	1	0.057	GE 6 × 6 BWR	Yes[c]
Consolidated Commercial Assemblies				
Dry Rod Consolidated Technology Cans[e]	48	21.151	WE 15×15 PWR	No[d]
Loose Rods and Pieces				
35 Encapsulation Tubes	3	0.094	Various	No[d]
Loose Fuel Rod Storage Basket (LFRSB)	1	0.311	Various	No[d]
VEPCO Surry (9 rods from T-11)	1	0.020	WE 15 × 15 PWR	No[d]
Totals				
PWR Assemblies	129	54.120		
BWR Assemblies	89	11.640		
Cans of Loose Rods and Pieces	5	0.425		
Total	223	66.185		

a. The majority of the West Valley assemblies contain damaged or leaking fuel rods. Sipping tests at the reactors and subsequent video inspections of the fuel indicate that 32 of the 40 REG and 68 of 85 BRP assemblies have one or more rods with failed cladding.

b. BRP assemblies exceed the maximum cross-section dimensions for BWR SNF. Other options will need to be investigated for these assemblies.

c. These assemblies are missing rods but can still be handled with normal SNF handling equipment. These assemblies may need to be repackaged.

d. The loose rods will need to be canned (two cans), and the canned rods may be included with the commercial SNF. The placement of this SNF in the MGR will need to be investigated.

e. Forty-eight commercial PWR assemblies were consolidated (2 assemblies per can). The disposition of this SNF will need to be investigated.

Table B-4.3. Physical dimensions of commercial waste package designs.

Waste Package Design	Outer Diameter mm (in.)	Outer Length mm (in.)	Mass of Empty Waste Package kg (lb)	Mass of Loaded Waste Package kg (lb)
21-PWR Absorber Plate	1,644 (64.7)	5,165 (203.3)	26,000 (57,300)	42,300 (93,300)
21-PWR Control Rod	1,644 (64.7)	5,165 (203.3)	26,000 (57,300)	42,300 (93,300)
12-PWR Long	1,330 (52.4)	5,561 (222.5)	19,500 (43,000)	30,100 (66,400)
44-BWR	1,674 (65.9)	5,165 (203.3)	28,000 (61,700)	42,500 (93,700)
24-BWR	1,318 (51.9)	5,105 (201)	19,400 (42,800)	27,300 (60,200)

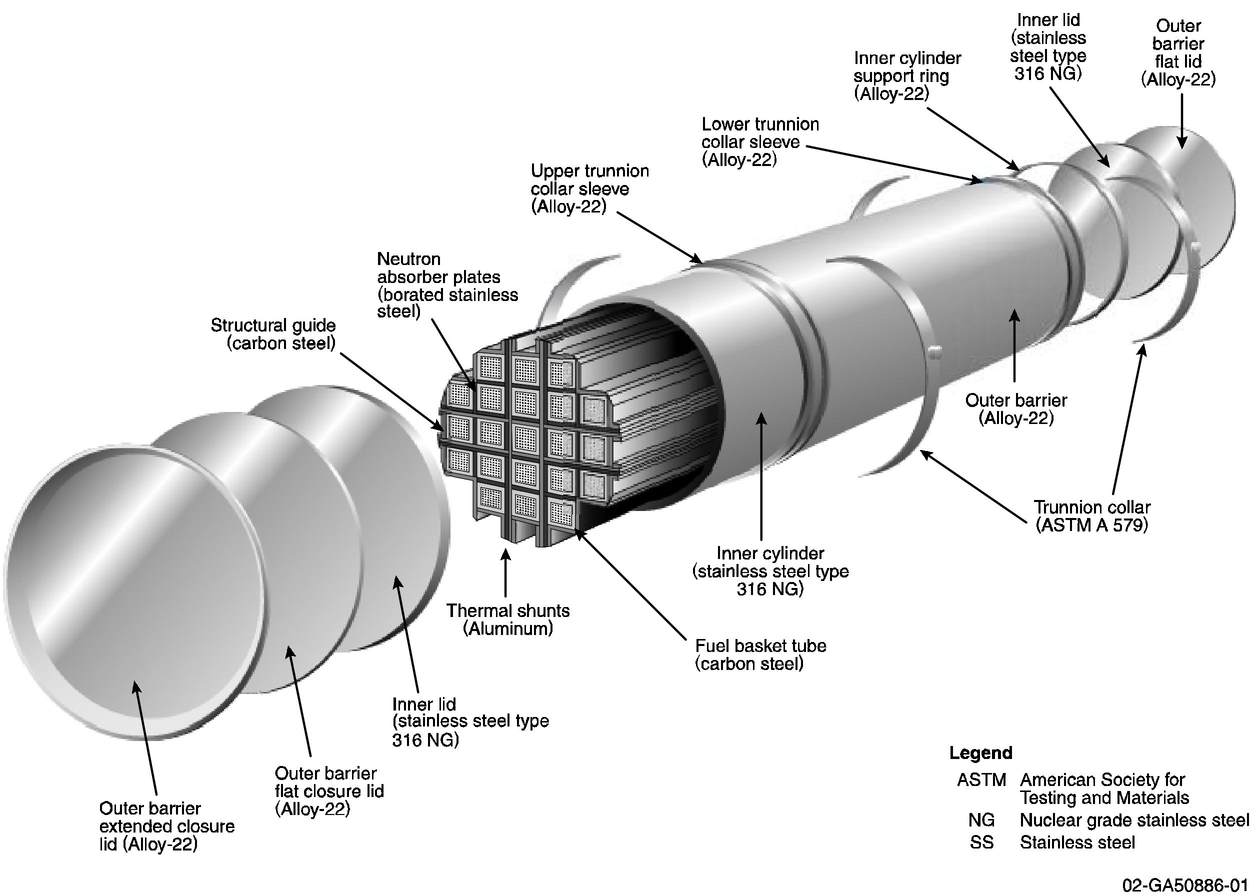

Figure B-3. Twenty-one pressurized water reactor (PWR) assemblies waste package reserved for PWR.

B-5. HIGH INTEGRITY CAN

A HIC is being designed as a special purpose container for the storage, transport, and disposal of DOE scrap and damaged SNF. The HIC will be used in situations where the bare fuel does not otherwise meet transportation requirements. The HIC will be used to provide confinement and structural support to the SNF packaged inside it. Table A-1 in Appendix A identifies candidate SNF types that may be required to be packaged into a HIC.

Table B-5.1. Detailed INEEL canister inventory.

Fuel Name	Fuel Units	MTHM	SNF Weight[a] (kg)	Fissileb[b] Mass (kg)	Fissile Type	SNF Type	Fuel Units Width/Diameter (cm)	Fuel Units[c] Height (cm)	Fuel Units Length (cm)	Fuel Units Per Canister[d]	Number of 10 ft × 18 in. Canisters	Number of 15 ft × 18 in. Canisters	Number of 15 ft × 24 in. Canisters	Fissile[a] Mass (kg) per Canister[d]	Canister Weight[d] (kg)	HIC Candidate
NE-ID/FWENC Contract SNF																
Peach Bottom Core 2	782	1.276	32,062.00	171.75	U-235/U-233	Graphite	8.89	N/A	320.04	10	0	79	0	2.20	410.00	No
Peach Bottom Core 1 FECF	4	0.003	80.00	0.56	U-235/U-233	Graphite	12.7	N/A	148.59	7	0	1	0	0.98	140.00	No
Peach Bottom Core 1 CPP-749	723	1.463	28,920.00	198.23	U-235/U-233	Graphite	11.38	N/A	388.62	10	0	73	0	2.74	400.00	No
Peach Bottom Core 1 CPP-749	91	0.184	3,640.00	24.98	U-235/U-233	Graphite	12.01	N/A	401.32	7	0	13	0	1.92	280.00	No
LWBR Reflector[e]	15	17.331	34,650.00	34.48	U-233	U/Th oxide	43.43	35.03	360.68	1	0	0	15	2.30	2,310.00	No
LWBR Liner 15681-C	1	0.774	1,200.00	2.15	U-233	U/Th oxide	TBD	TBD	TBD	1	0	0	1	2.15	1,200.00	No
TRIGA	1,600	0.298	5,421.46	62.40	U-235	UZrHx	3.75	N/A	73.41	108	15	0	0	4.21	365.95	No
INEEL CPP-666 Canned SNF																
SNAP	31	0.029	1,230.00	26.70	U-235	UZrHx	14.13	N/A	129.642	7	5	0	0	6.03	277.74	Yes
TORY-IIA	146	0.049	1,985.60	45.32	U-235	U-oxide HEU	14.13	N/A	136.27	7	21	0	0	2.17	95.20	Yes
ANP, APPR, SPSS, BMI, GCRE, & VBWR[e]	13	0.017	129.50	6.73	U-235	U-oxide HEU	14.13	N/A	135.255	7	2	0	0	3.62	69.73	Yes
GETR FILTERS	70	0.004	2,800.00	4.23	U-235	U-oxide HEU	14.03	N/A	8.79	35	2	0	0	2.12	1,400.00	Yes
SM-1A	93	0.066	837.93	74.20	U-235	U-oxide HEU	7.29	7.27	85.41	16	6	0	0	12.77	144.16	Yes
Pulstar - Buffalo (6%Rods)	24	0.252	1,512.00	15.27	U-235	U-oxide LEU	7.62	7.62	88.90	16	2	0	0	10.18	1,008.00	No
INTEC Aluminum Plate SNF																
ATR CPP-603 IFSF receipts (70 shipments)	560	0.465	5,096.00	602.00	U-235	U-Alx HEU	10.75	6.53	125.73	24	0	24	0	25.80	218.40	No
ATR CPP-666 receipts (21 shipments)	168	0.140	1,528.80	180.60	U-235	U-Alx HEU	10.75	6.53	125.73	24	0	7	0	25.80	218.40	No
ATR CPP-666	1,760	1.478	15,615.60	1,844.70	U-235	U-Alx HEU	10.75	6.53	125.73	24	0	74	0	25.16	212.94	No
Univ of Washington	26	0.004	71.24	3.65	U-235	U-Alx HEU	7.24	5.98	68.90	32	0	1	0	4.49	87.68	No
HFBR CPP-666	220	0.058	964.04	82.72	U-235	U-oxide HEU	7.31	8.17	62.23	32	0	7	0	12.03	140.22	No
MURR CPP-666	32	0.022	357.28	23.49	U-235	U-Alx HEU	9.14	7.75	82.55	32	0	1	0	23.49	357.28	No
ARMF/CFRMF	71	0.013	328.78	11.99	U-235	U-Alx HEU	8.26	8.28	98.74	32	0	3	0	5.40	148.18	No
Aluminum Plate IFSF (ATR, HFBR, MURR, & ORR)	189	0.124	1,490.56	166.86	U-235	U-Alx HEU	10.75	6.53	125.73	24 & 32	0	8	0	25.80	218.40	No
Core Filter	1	0.219	250.00	1.81	U-235	U-oxide HEU	22.86	N/A	76.20	1	1	0	0	1.81	250.00	No
Remaining INEEL SNF																
PBF Driver Core	2,425	0.562	5,577.50	105.73	U-235	U-oxide LEU	1.91	N/A	120.65	174	14	0	0	7.59	400.20	No
Fermi Driver	214	3.932	4,766.94	1,027.80	U-235	UZr/UMo	8.26	N/A	106.68	16	14	0	0	76.84	356.41	No
BORAX V (Superheater)	36	0.021	150.00	20.47	U-235	U-oxide HEU	9.31	9.23	64.14	18	2	0	0	10.24	75.00	No
Shippingport PWR	40	0.522	30,791.13	712.01	U-235	U-oxide HEU	18.80	18.80	265.43	1	0	40	0	17.80	769.78	No
Pathfinder (Superheater)	417	0.053	959.00	51.54	U-235	U-oxide HEU	2.35	N/A	198.76	62	7	0	0	7.66	142.59	No
TRIGA (STD, Al, & Flip)[e]	869	0.159	2,738.64	40.77	U-235	UZrHx	3.75	N/A	73.41	111	8	0	0	5.21	349.81	No

Table B-5.1. (continued).

Fuel Name	Fuel Units	MTHM	SNF Weight[a] (kg)	Fissileb[b] Mass (kg)	Fissile Type	SNF Type	Fuel Units Width/Diameter (cm)	Fuel Units[c] Height (cm)	Fuel Units Length (cm)	Fuel Units Per Canister[d]	Number of 10 ft × 18 in. Canisters	Number of 15 ft × 18 in. Canisters	Number of 15 ft × 24 in. Canisters	Fissile[a] Mass (kg) per Canister[d]	Canister Weight[d] (kg)	HIC Candidate
TRIGA (BER)	21	0.009	241.50	4.05	U-235	UZrHx	7.60	8.00	93.50	12	2	0	0	2.31	138.00	No
TRIGA High Power	267	0.006	172.22	11.02	U-235	UZrHx	1.38	N/A	76.53	288	1	0	0	11.02	172.22	No
Peach Bottom (Core 2 & PTE-1)	5	0.011	205.00	1.10	U-235/U-233	Graphite	8.89	N/A	320.04	7	0	1	0	1.54	287.00	No
TORY-IIC	655	0.059	2,227.00	55.02	U-235	U-oxide HEU	6.99	N/A	138.11	30	0	22	0	2.52	102.00	Yes
FSVR (Idaho)	744	8.627	95,232.00	305.16	U-235/U-233	Graphite	35.99	41.45	79.30	5	0	149	0	2.05	640.00	No
Rover UBM FY-98	65	0.120	260.00	111.42	U-235	U Carbide HEU	12.7	N/A	142.24	10	0	7	0	17.14	40.00	Yes
LWBR Scrap	6	2.349	3,700.00	35.91	U-233	U/Th oxide	TBD	TBD	TBD	1	0	6	0	5.99	616.67	No
LWBR Blanket[e]	12	16.786	33,600.00	287.48	U-233	U/Th oxide	56.57	49.00	360.68	0.5	0	24	0	11.98	1,400.00	No
LWBR Seed	12	5.115	10,800.00	191.61	U-233	U/Th oxide	24.36	28.12	360.68	1	0	12	0	15.97	900.00	No
LWBR Scrap D liner 15718	1	0.243	897.50	11.08	U-233	U/Th oxide	TBD	TBD	TBD	1	0	1	0	11.08	897.50	No
FSVR (Colorado)[g]	1,464	14.730	187,392.00	954.18	U-235/U-233	Graphite	35.99	41.45	79.30	5	0	293	0	3.26	640.00	No
TMI-2	341	81.588	324,154.60	2,083.38	U-235	U-oxide LEU	35.56	N/A	380.37	1	0	341	0	6.11	950.60	No
LOFT Center Module	5	1.017	3,489.96	41.17	U-235	U-oxide LEU	21.40	21.40	199.72	1	5	0	0	8.23	697.99	No
LOFT Corner Module	4	0.279	486.16	11.20	U-235	U-oxide LEU	19.29	19.29	199.72	2	2	0	0	5.60	243.08	No
LOFT Square Module	4	0.813	1,269.84	32.62	U-235	U-oxide LEU	21.40	21.40	199.72	1	4	0	0	8.16	317.46	No
Miscellaneous Scrap (Expoy, MTR, TMI, LOFT)	14	0.380	4,031.68	32.94	U-235	U-oxide LEU	Various	Various	Various	1	0	14	0	2.35	287.98	Yes
Subtotal	14,241	161.649	853,313.46	9,712.48							113	1201	16			
University, FRR, & Non DOE Domestic[f]																
TRIGA FRR/DRR[e]	3,998	0.763	13,546.86	155.92	U-235	UZrHx	3.75	N/A	73.41	111	36	0	0	4.33	376.11	No
Pulstar DRR	65	0.816	1,745.00	46.93	U-235	U-oxide LEU	8.00	6.96	96.47	16	5	0	0	11.55	429.54	No
GA (RERTR & HTGR)[e]	2	0.005	63.50	0.95	U-235	Various	13.34	N/A	99.15	16	1	0	0	0.95	63.50	Yes
CP-5 CONVERTER	2	0.001	4.80	1.15	U-235	U-oxide HEU	10.92	N/A	60.96	16	1	0	0	1.15	4.80	Yes
B&W (Arkansas, Oconee, & TMI-2)	18	0.044	77.05	0.48	U-235	U-oxide LEU	11.43	N/A	95.25	18	1	0	0	0.48	77.05	Yes
Subtotal	4,085	1.641	15,437.21	205.43							45	0	0			
ORR																
ORR (Fast Reactor, HTGR, LWR, Scrap)	62	0.208	3,527.70	19.23	Various	Various	12.065	N/A	88.265	12	6	0	0	3.72	682.78	Yes
ORR Intact Peach Bottom	9	0.011	370.00	1.61	U-235/U-233	Graphite	8.89	N/A	320.04	10	0	1	0	1.79	411.11	No
Subtotal	71	0.219	24,023.63	232.85							6	1	0			
ANL-W[f]																
TRIGA[e]	109	0.019	370.60	9.87	U-235	UZrHx	3.75	N/A	73.41	111	1	0	0	10.05	377.40	No
Treat	391	0.015	7,820.00	14.47	U-235	Graphite	10.06	10.06	122.24	21	0	19	0	0.78	420.00	No
EBR-II Experimental Fuel (Oxide/Nitride)	1,627	0.159	1,627.00	75.59	Pu-239/U-235	Pu/U-oxide/nitride HEU	1.31	N/A	155.00	200	9	0	0	9.29	200.00	No
FFTF & Sodium Loop Experimental	48	0.019	49.13	9.32	Pu-239/U-235	MOX	1.29	N/A	238.30	48	1	0	0	9.32	49.13	No

Table B-5.1. (continued).

Fuel Name	Fuel Units	MTHM	SNF Weight[a] (kg)	Fissileb[b] Mass (kg)	Fissile Type	SNF Type	Fuel Units Width/Diameter (cm)	Fuel Units[c] Height (cm)	Fuel Units Length (cm)	Fuel Units Per Canister[d]	Number of 10 ft × 18 in. Canisters	Number of 15 ft × 18 in. Canisters	Number of 15 ft × 24 in. Canisters	Fissile[a] Mass (kg) per Canister[d]	Canister Weight[d] (kg)	HIC Candidate
Miscellaneous ANL-W SNF	121	0.372	838.45	51.48	Pu-239/U-235	Various	1.07	N/A	385.78	65	0	2	0	27.65	450.41	Yes
Miscellaneous ANL-W RSWF SNF	6	4.161	6,240.00	10.32	U-235	U-oxide LEU	TBD	TBD	TBD	TBD	0	6	0	1.72	1,040.00	Yes
Subtotal	2,302	4.745	16,945.18	171.05							11	27	0			
Sandia[f]																
ACRR	251	0.121	1,004.00	25.50	U-235	U-oxide LEU	3.81	N/A	75.00	111	3	0	0	11.28	444.00	No
TRIGA	182	0.048	618.80	9.65	U-235	UZrHx	3.75	N/A	73.41	111	2	0	0	5.89	377.40	No
PLN MOX Experimental[e]	60	0.074	2,894.07	9.82	Pu-239/U-235	MOX	23.00	N/A	300.00	5	0	12	0	0.82	241.17	Yes
Subtotal	493	0.243	4,516.87	44.97							5	12	0			
TOTAL[h]	21,192	168.498	914,236.35	10,366.78							180	1241	16			

a. The SNF weight is the weight of the SNF fuel and support structure.
b. If the height is N/A the width is a diameter.
c. The fissile mass values used can be a combination of beginning-of-life (BOL) and end-of-life values the "most reactive" value was used in the table.
d. For fully loaded canister (maximum number of fuel unit or fissile mass for fuel type).
e. For fuel names/group with multiple dimensions, the typical or representative dimensions are provided.
f. Information for off-Site receipt is based on the National Spent Fuel Database. As this spent fuel is packaged for shipment to the INEEL the number of canisters required will be updated to reflect new storage and packaging constraints.
g. This SNF may be shipped from Colorado to the repository in existing canisters.
h. The Fermi Blanket if treated by the MEDEC process to remove sodium will require 37 standard canisters. This material is not included in the table because the treatment process has not been determined.