

BSC

Design Calculation or Analysis Cover Sheet

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Complete only applicable items.

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Attachments			Total Number of Pages				
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DISCLAIMER

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ACRONYMS

CRCF	Canister Receipt and Closure Facility
IHF	Initial Handling Facility
ITS	important to safety
RF	Receipt Facility
SSC	structure, system, or component
SSCs	structures, systems, and components
WHF	Wet Handling Facility

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1. PURPOSE

Portions, parts, subparts, or subsystems of a non-important to safety (ITS) structure, system, or component (SSC) could potentially fail and adversely interact with an ITS SSC and prevent it from performing its required safety function. The purpose of this analysis is to identify potential interactions between structures, systems, and components (SSCs) that have been previously classified as ITS and SSCs that have been previously classified as non-ITS. Once these interactions are identified, they are categorized according to the nature of the interaction. Depending on the results of the categorization process, recommendations may be made, if necessary, for the reduction of the frequency of the interaction through the use of operating procedures. It should be noted that an interactions analysis is typically begun during detailed design and completed after a facility is constructed; the potential interactions are supplemented during walk-down inspections of the facility during and following construction.

This analysis does not classify SSCs as ITS or non-ITS; the SSC classification analysis has previously been performed in preclosure safety analysis calculations that serve as input to this analysis. In addition, the purpose of this analysis is not to identify hazards or initiating events involving internal events, external events, or interactions between one or more SSC previously identified as ITS. This analysis is a supplement to the preclosure safety analyses that identify hazards, identify initiating events, develop event sequences and categorize them, and identify the ITS SSCs required to reduce the frequency or mitigate the consequences of those potential event sequences. None of these activities are accomplished in this analysis, other than the identification of potential interactions between ITS and non-ITS SSCs and the identification of operating procedures to prevent such interactions, as applicable. The *Seismic Event Sequence Quantification and Categorization Analysis* (Ref. 2.2.24) has included spatial interactions that might be induced by earthquakes. This analysis, therefore, does not consider seismic interactions.

2. REFERENCES

2.1 PROCEDURES/DIRECTIVES

- 2.1.1. BSC (Bechtel SAIC Company) 2007. *Quality Management Directive*. QA-DIR-10, Rev.2. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.1.2. EG-PRO-3DP-G04B-00037, Rev. 10. *Calculations and Analyses*. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.1.3. IT-PRO-0011, Rev. 7. *Software Management*. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.1.4. LS-PRO-0201, Rev 5. *Preclosure Safety Analysis Process*. Las Vegas, Nevada: Bechtel SAIC Company.

2.2 DESIGN INPUTS

- 2.2.1. BSC 2008. *Preclosure Nuclear Safety Design Bases*. 000-30R-MGR0-03500-000-000. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.2. BSC 2007. *Initial Handling Facility Preliminary Layout Ground Floor Plan*. 51A-P0K-IH00-10101-000 REV 00B. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.3. BSC 2007. *Initial Handling Facility Preliminary Layout Second Floor Plan*. 51A-P0K-IH00-10102-000 REV 00B. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.4. BSC 2007. *Canister Receipt and Closure Facility #1 Preliminary Layout Ground Floor Plan*. 060-P0K-CR00-10101-000 REV 00B. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.5. BSC 2007. *Canister Receipt and Closure Facility #1 Preliminary Layout Second Floor Plan*. 060-P0K-CR00-10102-000 REV 00B. Las Vegas, Nevada: Bechtel SAIC Company. ACC: ENG.20070418.0004.
- 2.2.6. BSC 2007. *Receipt Facility Preliminary Layout Ground Floor Plan*. 200-P0K-RF00-10101-000 REV 00A. Las Vegas, Nevada: Bechtel SAIC Company. ACC: ENG.20070222.0002.
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- 2.2.8. BSC 2007. *Wet Handling Facility Preliminary Layout Ground Floor and Pool Basement Floor Plans*. 050-P0K-WH00-10101-000 REV 00A. Las Vegas, Nevada: Bechtel SAIC Company.

- 2.2.9 BSC 2007. *Wet Handling Facility Preliminary Layout Second Floor Plan*. 050-P0K-WH00-10102-000 REV 00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.10 BSC 2008. *IHF Event Sequence Development Analysis*. 51A-PSA-IH00-00100-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.11 BSC 2008. *CRCF Event Sequence Development Analysis*. 060-PSA-CR00-00100-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.12 BSC 2008. *WHF Event Sequence Development Analysis*. 050-PSA-WH00-00100-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.13 BSC 2008. *RF Event Sequence Development Analysis*. 200-PSA-RF00-00100-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.14 BSC 2008. *Subsurface Operations Event Sequence Development Analysis*. 000-PSA-MGR0-00400-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.15 BSC 2008. *Intra-Site Operations Event Sequence Development Analysis*. 000-PSA-MGR0-00800-000-00A. Las Vegas, Nevada: Bechtel SAIC Company..
- 2.2.16 BSC 2008. *IHF Reliability and Event Sequence Categorization Analysis*. 51A-PSA-IH00-00200-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.17 BSC 2008. *CRCF Reliability and Event Sequence Categorization Analysis*. 060-PSA-CR00-00200-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.18 BSC 2008. *WHF Reliability and Event Sequence Categorization Analysis*. 050-PSA-WH00-00200-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.19 BSC 2008. *RF Reliability and Event Sequence Categorization Analysis*. 200-PSA-RF00-00200-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.20 BSC 2008. *Subsurface Operations Reliability and Event Sequence Categorization Analysis*. 000-PSA-MGR0-00500-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.21 BSC 2008. *Intra-Site Operations Reliability and Event Sequence Categorization Analysis*. 000-PSA-MGR0-00900-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.22 BSC 2007. *Repository System Codes*. 000-30X-MGR0-01200-000 REV 00E. Las Vegas, Nevada: Bechtel SAIC Company.
- 2.2.23 BSC 2008. *Basis of Design for the TAD Canister-Based Repository Design Concept*. 000-3DR-MGR0-00300-000-002. Las Vegas, Nevada: Bechtel SAIC Company.

- 2.2.24 BSC 2008. *Seismic Event Sequence Quantification and Categorization Analysis*. 000-PSA-MGR0-01100-000-00A. Las Vegas, Nevada: Bechtel SAIC Company.

2.3 DESIGN CONSTRAINTS

- 2.3.1 10 CFR 63. 2007. Energy: Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada.

2.4 DESIGN OUTPUTS

This document may be used as input for other calculations, analyses, and/or other Yucca Mountain Project documents, including the license application. The output from this analysis may not be used for procurement, fabrication, or construction purposes.

3. ASSUMPTIONS

3.1 ASSUMPTIONS REQUIRING VERIFICATION

There are no assumptions requiring verification in this analysis.

3.2 ASSUMPTIONS NOT REQUIRING VERIFICATION

There are no assumptions not requiring verification in this analysis.

4. METHODOLOGY

4.1 QUALITY ASSURANCE

As determined from Section 2.1.C.1.1 of the *Quality Management Directive* (Ref. 2.1.1), the activity under which this analysis was developed is subject to the repository Quality Assurance Program requirements because this analysis examines potential hazards that may be applicable to ITS items, as defined by 10 CFR 63.2 (Ref. 2.3.1), and it is part of the preclosure safety analysis. Therefore, the approved version of this document is designated as “QA: QA.” This analysis is prepared in accordance with EG-PRO-3DP-G04B-00037, *Calculations and Analyses* (Ref. 2.1.2), and LS-PRO-0201, *Preclosure Safety Analyses Processes* (Ref. 2.1.4).

4.2 USE OF SOFTWARE

The operating environment used in writing this analysis included the use of Microsoft Word 2003 software installed on a Dell OPTIPLEX 745 personal computer. The operating system used on this computer is Microsoft Windows XP Professional Version 5.1.2600. The use of Microsoft Word software is classified as Level 2 software usage per Attachment 12 of *Software Management* (Ref. 2.1.3, Attachment 12). No software (approved for quality assurance work or commercially available) was used for any calculation in this analysis.

4.3 CRITERIA

In 10 CFR 63.2 (Ref. 2.3.1) ITS (with reference to SSCs) means those engineered features of the geologic repository operations area whose functions are (1) to provide reasonable assurance that high-level radioactive waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the requirements of 10 CFR 63.111(b)(1) for Category 1 event sequences or (2) to prevent or mitigate Category 2 event sequences that could result in radiological exposures exceeding the values specified in 10 CFR 63.111(b)(2) to any individual located on or beyond any point on the boundary of the site.

As defined in 10 CFR 63.2 (Ref. 2.3.1), an event sequence includes one or more initiating events and associated combinations of repository system component failures that could potentially lead to exposure of individuals to radiation (including nuclear criticality). Category 1 event sequences are those event sequences that are expected to occur one or more times before permanent closure; Category 2 event sequences are other event sequences that have at least one chance in 10,000 of occurring before permanent closure of the repository (Ref. 2.3.1, Section 63.2). An event sequences can be classified as beyond Category 2 if the frequency of the event sequence is less than 10^{-6} per year. Beyond Category 2 event sequences can be screened from further consideration. The duration of the preclosure period for the surface facilities is 50 years, while the subsurface facilities have a 100-year period of operation (Ref. 2.2.23, Section 2.2.2.7).

Implementation of the regulatory definition of ITS has produced the following specific criteria in the preclosure safety analysis to classify SSCs:

An SSC is classified as ITS if it appears in an event sequence and at least one of the following criteria apply:

- The SSC is relied upon to reduce the frequency of an event sequence from Category 1 to Category 2.
- The SSC is relied upon to reduce the frequency of an event sequence from Category 2 to beyond Category 2.
- The SSC is relied upon to reduce the aggregated dose of Category 1 event sequences by reducing the event sequence mean frequency.
- The SSC is relied upon to perform a dose mitigation or criticality control function.

An SSC is classified as ITS in order to ensure safety function availability over the operating lifetime of the repository. The results of the safety classifications of SSCs (as ITS or non-ITS) to support the license application for construction authorization at Yucca Mountain have been summarized in *Preclosure Nuclear Safety Design Bases* (Ref. 2.2.1). This report has been used as the basis for the selection of ITS and non-ITS SSCs considered for potential interaction in this analysis. The results of the classification of repository SSCs are presented in Table A-1.

4.4 METHOD

Due to the complexity and variety of functions to be performed by both the ITS and non-ITS SSCs at the repository, instances where ITS and non-ITS SSCs could potentially interact must be identified. These interactions could include the following four potential interaction categories:

- **Functional Dependence**—One component or system depends on another to supply vital functions. An example of this type of dependence could include an ITS confinement heating, ventilation, and air-conditioning system (classified as ITS) that is dependent on the electrical power system (which is comprised of both ITS and non-ITS SSCs).
- **Environmental Dependence**—The functionality of a system is dependent on maintaining the environment within designed or qualified limits. An example of environmental dependence is a non-ITS waste package survey system or non-ITS waste package decontamination system ensuring that a waste package surface contamination level is in compliance with applicable limits for emplacement.
- **Spatial Dependence**—One system or component fails by virtue of close proximity to another, and the failure can be caused by common events such as seismic, fire, flood, or other external events. An example of spatial dependence could involve an interaction between an ITS cask-handling crane and a non-ITS maintenance crane.
- **Human Dependence**—A system, component, or function fails because of a human activity involved with the process. Examples of this dependence could include any activity involving human interaction with ITS mechanical-handling equipment such as a site transporter, site prime mover, or cask transfer trolley.

Portions, parts, subparts, or subsystems of a non-ITS SSC could potentially fail and adversely interact with an ITS SSC and prevent it from performing its safety function. When identified in

Attachments B through G, operating procedures are suggested to reduce the frequency of occurrence of the hazard. In the future, interactions between ITS SSCs and non-ITS SSCs will be managed using the following SSC interaction criteria:

1. The interaction will be prevented or eliminated through either a redesign or through the use of operating procedures. If not,
2. The probability of the event sequence involving the interaction will be shown to be beyond Category 2; or
3. The calculated dose consequence for the event sequence involving the interaction will be shown to be in compliance with the performance requirements of 10 CFR 63.111(b).

To implement this strategy, the functions of the ITS and non-ITS SSCs are required to be explicitly examined as is done in Attachments B through G.

4.5 LIMITATIONS

The level of complexity of the analysis of the interactions between ITS and non-ITS SSCs presented in this document is reflective of the current state of the repository design. This level of detail is consistent with that presented in the preclosure safety analysis that supports the repository license application. The repository architecture is divided into systems and subsystems, as presented in *Repository System Codes* (Ref. 2.2.22). The SSCs that have been categorized as ITS and non-ITS are presented in Table A-1 by system and subsystem or function. Design details for many of the systems, subsystems, and/or SSCs that comprise the systems and subsystems presented in Table A-1 have not been developed at this time; they have been developed to the level required to support the license application. As the level of design detail increases, future analysis will reflect the increase in design detail through an increase in the complexity of the interactions analysis. For example, rather than analyze the interactions between an ITS SSC and non-ITS SSCs at the current state of design (e.g., an ITS cask handling crane and a non-ITS maintenance crane), interactions between such subsystem SSCs as non-ITS heating, ventilation, and air-conditioning ducts and ITS electrical cabinets will be analyzed as these design details associated with those SSCs evolve. Thus, this document is limited to analyzing SSCs as presented at the current major-component level of design detail. It should again be noted that the purpose of this analysis is not to identify or analyze internal events, external events, or initiating events that could lead to event sequences, nor to classify SSCs as ITS or non-ITS. These activities are accomplished in Ref. 2.2.2 through Ref. 2.2.21. Earthquake-induced interactions are analyzed in Reference 2.2.24.

5. LIST OF ATTACHMENTS

	Number of Pages
Attachment A. Preclosure Safety Classification of Repository SSCs	18
Attachment B. ITS SSC/Non-ITS SSC Interactions in the IHF	26
Attachment C. ITS SSC/Non-ITS SSC Interactions in the CRCF	32
Attachment D. ITS SSC/Non-ITS SSC Interactions in the WHF	38
Attachment E. ITS SSC/Non-ITS SSC Interactions in the RF	18
Attachment F. ITS SSC/Non-ITS SSC Interactions for the Intra-Site Operations	8
Attachment G. ITS SSC/Non-ITS SSC Interactions for the Subsurface Operations	10

6. BODY OF CALCULATION

6.1 Compilation of Applicable ITS and Non-ITS SSCs

To implement the interaction analysis methodology presented in Section 4.4, an examination of the functions of the repository ITS and non-ITS SSCs is required. Ref. 2.2.10 through Ref. 2.2.15 were used as the primary input to this analysis for a description of each facility/operational area under review, including the Initial Handling Facility (IHF), Cask Receipt and Closure Facility (CRCF), Wet Handling Facility (WHF), Receipt Facility (RF), Subsurface Operations, and Intra-site Operations, respectively. The attachments to each of these references provide a description of each facility/operational area, the equipment found in each area, as well as a description of the operations that occur in these areas. Ref. 2.2.1 and Ref. 2.2.16 through Ref. 2.2.21 provide an identification of the repository ITS SSCs and their safety functions (in addition to their nuclear safety design bases). Ref. 2.2.2 through Ref. 2.2.9 were used for the purposes of identifying the room numbers in the surface facilities where potential interactions between the ITS SSCs and non-ITS SSCs could occur (as applicable).

6.2 Identification of ITS SSC and Non-ITS SSC Interactions

Tables B-1 through G-1 present the interaction analyses for the IHF, CRCF, WHF, RF, Intra-site Operations, and Subsurface Operations, respectively. The content of these tables is based on the list of ITS and non-ITS SSCs presented in Table A-1, facility layout sketches (Ref. 2.2.2 through Ref. 2.2.9), the descriptions of the facilities/operations areas presented in Ref. 2.2.10 through Ref. 2.2.15, and the methodology presented in Section 4. This information is sorted by the following information:

- System or facility
- Subsystem (as applicable)
- ITS SSC
- Non-ITS SSC that could potentially interact with the ITS SSC
- Location of the interaction
- Type of interaction
- Operating procedures, if needed.

7. RESULTS AND CONCLUSIONS

Tables B-1 through G-1 present the interactions analysis for the IHF, CRCF, WHF, RF, Intra-site Operations, and Subsurface Operations, respectively. None of the identified interactions have indicated a need for a redesign of any of the ITS and non-ITS SSCs. Where applicable, operating procedures were developed to reduce the frequency of an interaction between the respective ITS SSCs and non-ITS SSCs.

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ATTACHMENT A
PRECLOSURE SAFETY CLASSIFICATION OF REPOSITORY SSCs

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Table A-1. Preclosure Safety Classification of Repository SSCs

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Aging Facility	Aging Facility	Aging Pad	ITS
		Horizontal Aging Module (HAM) (170-HAC0-ENCL-00001)	ITS
		Mobile Platform (170-HAP0-PLAT-00001-2)	Non-ITS
		Support Structures (including utility buildings, if applicable)	Non-ITS
	Aging Handling/Cask Transfer	Cask Tractor (for use with the Cask Transfer Trailer) (170-HAT0-HEQ-00001)	ITS
		Cask Transfer Trailers (for use with Transportation Casks and Horizontal Shielded Transfer Casks) (PWR DPC: 170-HAT0-TRLY-00001) (BWR DPC: 170-HAT0-TRLY-00002)	ITS
		Mobile Cranes (170-HAT0-CRN-00001-2)	Non-ITS
		Site Transporter (170-HAT0-MEQ-00001)	ITS
	Aging Handling/Aging Overpack	Horizontal Shielded Transfer Cask (STC) (for use with Horizontal Aging Module [HAM]) (170-HAC0-HEQ-00001)	ITS
		Aging Overpack (AO) (TAD: 170-HAC0-ENCL-00003) (Vertical DPC: 170-HAC0-ENCL-00002)	ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Balance of Plant Facilities	Balance of Plant facilities that include Administration, Security, Utilities, Emergency Response, Offsite, Warehouse and Non-Nuclear Receipt; Materials and Consumables, Maintenance and Repair, Transportation, Balance of Plant Construction, Central Control Center, and Infrastructure	Structures	Non-ITS
	Balance of Plant	Roads, Rails for Commercial Railcars	Non-ITS
		Surface Rails for the Transport and Emplacement Vehicle (TEV)	Non-ITS
		Flood Control Features	ITS
Canister Receipt and Closure Facility	Canister Receipt and Closure Facility (CRCF)	Structure	ITS
		Rails for the Commercial Railcars (Inside the Building)	Non-ITS
		Rails for the TEV (Inside the Waste Package Loadout Room)	ITS
		Shield Windows	Non-ITS
		Shield Doors (Including Anchorages) and Equipment Confinement Doors	ITS
		ALARA Shielding Features ¹	Non-ITS
		DOE Canister Slide Gates (060-HTC0-HTCH-00005, 6, 7, 8, 9)	ITS
		Cask Port Slide Gates (060-HTC0-HTCH-00001, 2)	ITS
		TAD Slide Gates (060-HTC0-HTCH-00010, 11)	ITS
		Waste Package Port Slide Gates (060-HTC0-HTCH-00003, 4)	ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Canister Receipt and Closure Facility (continued)	Canister Receipt and Closure Facility (CRCF) (continued)	Cask Preparation Platform (060-HMH0-PLAT-00001)	ITS
		Waste Package Transfer Carriage Docking Stations (060-HL00-75-00001, 2)	Non-ITS
		CRCF Loadout Platforms (060-HL00-PLAT-00001, 2, 3)	Non-ITS
Cask/Canister/Waste Package Process System	Cask Cavity Gas Sampling	Entire (IHF, RF, CRCF, WHF)	Non-ITS
	Cask Cooling	Cask/DPC Overpressure Protection Features (WHF)	ITS
		System Components Other than Cask/DPC Overpressure Protection Features (WHF)	Non-ITS
	Cask, Canister, and Waste Package Inerting	Entire (IHF, CRCF, WHF)	Non-ITS
	Decontamination Water Treatment	Entire (WHF)	Non-ITS
	Waste Package Survey	Entire (IHF, CRCF)	Non-ITS
	Waste Package Decontamination	Entire (IHF, CRCF)	Non-ITS
	TAD Drying	Entire (WHF)	Non-ITS
Communications System	Communications	Entire	Non-ITS
Digital Control and Management Information System	Digital Control & Management Information System	Entire	Non-ITS
DOE and Commercial Waste Package System	DOE and Commercial Waste Package	Entire	ITS
	Defense High-Level Waste/DOE SNF Codisposable	DOE Standardized Canister	ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
DOE and Commercial Waste Package System (continued)	Defense High-Level Waste/DOE SNF Codisposable (continued)	HLW Canister	ITS
	Canistered Spent Nuclear Fuel	Dual-Purpose Canister (DPC)	ITS
		TAD Canister	ITS
Electrical Power System	Switchyard and Standby Power	Entire	Non-ITS
	ITS Power	ITS Distribution (Feeders Up to and including ITS Loads, ITS Direct Current Power, ITS Uninterruptible Power Supply Power)	ITS
		ITS Diesel Generators A and B (including ITS diesel generator fuel oil system, ITS diesel generator air start system, ITS diesel generator jacket water cooling system, ITS diesel generator lubricating oil system, ITS diesel generator air intake and exhaust system)	ITS
	Emergency Power (Life Safety)	Entire	Non-ITS
	Normal Power	Entire	Non-ITS
	Normal Direct Current Electrical Power	Entire	Non-ITS
	Normal Uninterruptible Power Supply Power	Entire	Non-ITS
	Site Electrical Distribution (for Normal Power)	Entire	Non-ITS
	Renewable Energy	Entire	Non-ITS
	Standby Diesel Generator	Entire	Non-ITS
Electrical Support System	Lighting	Entire	Non-ITS
	Grounding	Entire	Non-ITS
	Lightning Protection	Entire	Non-ITS
	Cathodic Protection	Entire	Non-ITS
	Heat Tracing	Entire	Non-ITS
	Cable Raceway	Entire	Non-ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Emergency Diesel Generator Facility	Emergency Diesel Generator Facility	Structure	Non-ITS
Emplacement and Retrieval /Drip Shield Installation System	Emplacement and Retrieval /Drip Shield Installation System	Transport and Emplacement Vehicle (TEV)	ITS
		Drip Shield Gantry	Non-ITS
		Inspection Gantry	Non-ITS
Environmental/Meteorological Monitoring System	Environment and Meteorological Monitoring	Entire	Non-ITS
Fire Protection System	Fire Water	Entire	Non-ITS
	Fire Barriers	Entire	Non-ITS
	Explosion Protection	Entire	Non-ITS
	Fire Suppression	Preaction valves, sprinkler heads, and system actuation panels associated with double-interlock preaction suppression systems that protect areas where there is a potential for canister breach (CRCF, WHF)	ITS
		Fire suppression system components other than those associated with double-interlock preaction suppression systems that protect areas where there is a potential for canister breach	Non-ITS
	Fire Detection	Fire Detection System for the ITS preaction valves with associated detectors and control box (CRCF, WHF)	ITS
		Fire Detection System or all other systems except the preaction valve with associated detectors and control box	Non-ITS
	Fire Alarm	Entire	Non-ITS
Initial Handling Facility	Initial Handling Facility (IHF)	Structure	ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Initial Handling Facility (continued)	Initial Handling Facility (continued)	Rails for the Commercial Railcars (Inside the Building)	Non-ITS
		Rails for the TEV (Inside the Waste Package Loadout Room)	ITS
		Shield Doors (Including Anchorages)	ITS
		ALARA Shielding Features ²	Non-ITS
		Cask Port Slide Gate (51A-HTC0-HTCH-00001)	ITS
		Waste Package Port Slide Gate (51A-HTC0-HTCH-00002)	ITS
		Cask Preparation Platform (51A-HMH0-PLAT-00001)	ITS
		Waste Package Transfer Carriage Docking Station (51A-HL00-75-00001)	Non-ITS
		IHF Loadout Platforms (51A-HL00-PLAT-00001-2)	Non-ITS
Low-Level Radioactive Waste Management System	Low-Level Radioactive Waste Management	Entire	Non-ITS
Low-Level Waste Facility	Low-Level Waste Facility	Structure	Non-ITS
Mechanical Handling System	Cask Handling	Transportation Cask	ITS
		Site Prime Mover	ITS
		Cask Handling Yoke (CRCF: 060-HM00-BEAM-00001; IHF: 51A-HM00-BEAM-00001; RF: 200-HM00-BEAM-00001; WHF: 050-HM00-BEAM-00001)	ITS
		Pool Cask Handling Yoke (WHF: 050-HM00-BEAM-00002)	ITS
		Platform Shield Plate (RF: 200-HM00-BUF-00001) (CRCF: 060-HM00-BUF-00001-2) (WHF: 050-HM00-BUF-00001)	Non-ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Handling Crane (IHF: 300-ton; 51A-HM00-CRN-00001) (CRCF: 200-ton; 060-HM00-CRN-00001) (RF: 200-ton; 200-HM00-CRN-00001) (WHF: 200-ton; 050-HM00-CRN-00001)	ITS
		Decontamination Pit Equipment – Spray Nozzle (WHF: 050-HM00-NZL-00001)	Non-ITS
		Decontamination Pit Equipment – Pump Module (WHF: 050-HM00-P-00001)	Non-ITS
		Long Reach Tool Adapter (WHF: 050-HM00-TOOL-00001)	Non-ITS
		Pool Yoke Lift Adapter (WHF: 050-HM00-TOOL-00002)	ITS
		Cask Transfer Trolley and Pedestals Trolleys: (IHF: 51A-HM00-TRLY-00001; CRCF: 060-HM00-TRLY-00001-2; RF: 200-HM00-TRLY-00001; WHF: 050-HM00-TRLY-00001) Pedestals: (IHF: 51A-HM00-PED-00001-2; CRCF: 060-HM00-PED-00001-2; RF: 200-HM00-PED-00001; WHF: 050-HM00-PED-00001-5) Naval Cask Pedestal: (IHF: [51A-HM00-PED-00003])	ITS
		Cask Preparation Crane; 30-ton (IHF: 51A-HM00-CRN-00002)	ITS
		Horizontal Cask Stand (RF: 200-HM00-RK-00001)	Non-ITS
		Mobile Lift (CRCF: 060-HM00-ELEV-00001; RF: 200-HM00-ELEV-00001; WHF: 050-HM00-ELEV-00001)	Non-ITS
	Cask Handling/Cask Receipt	Entrance Vestibule Crane; 20-ton (WHF: 050-HMC0-CRN-00001)	ITS
		Cask Tilting Frame (CRCF: 060-HMC0-FRM-00001; RF: 200-HMC0-FRM-00001; WHF: 050-HMC0-FRM-00001)	Non-ITS
		Mobile Access Platform (IHF: 51A-HMC0-PLAT-00001; CRCF: 060-HMC0-PLAT-00001; RF: 200-HMC0-PLAT-00001; WHF: 050-HMC0-PLAT-00001)	Non-ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Mechanical Handling System (continued)	Cask Handling/Cask Receipt (continued)	Impact Limiter Lifting Device (IHF: 51A-HMC0-HEQ-00001-2; CRCF: 060-HMC0-HEQ-00001-8, 19-20; RF: 200-HMC0-HEQ-00001, 3, 5, 7, 9, 11, 14; WHF: 050-HMC0-HEQ-00001-9)	Non-ITS
		Personnel Barrier Lifting Device (IHF: 51A-HMC0-HEQ-00003-4; CRCF: 060-HMC0-HEQ-00010-17, 21-22; RF: 200-HMC0-HEQ-00002, 4, 6, 8, 10, 12, 13; WHF: 050-HMC0-HEQ-00010-18)	Non-ITS
		Lid Bolting Room Crane; 10-ton (RF: 200-HMC0-CRN-00001)	ITS
		Naval Cask Lift Bail (IHF: 51A-HMC0-BEAM-00001)	ITS
		Naval Cask Lift Plate (IHF: 51A-HMC0-HEQ-00005)	ITS
		Horizontal Lifting Beam (RF: 200-HMC0-BEAM-00001)	ITS
	Cask Handling/Cask Preparation	Auxiliary Pool Crane; 10-ton (WHF: 050-HMH0-CRN-00001)	ITS
		Preparation Station Jib Cranes (1 and 2) (WHF: 050-HMH0-CRN-00002, 3)	ITS
		Cask Support Frame (Preparation Station #2) (WHF: 050-HMH0-FRM-00001)	ITS
		Cask Lid Lifting Grapples (CRCF: 060-HMH0-HEQ-00012; RF: 200-HMH0-HEQ-00008) Lid Lifting Grapples (WHF: 050-HMH0-HEQ-00001-4, 6) Truck Cask Lid Lifting Grapples (WHF: 050-HMH0-HEQ-00007-9)	ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Mechanical Handling System (continued)	Cask Handling/Cask Preparation (continued)	Truck Cask Lid Adapters (WHF: 050-HMH0-HEQ-00010-11)	ITS
		Rail Cask Lid Adapters (WHF: 050-HMH0-HEQ-00012-13; CRCF: 060-HMH0-HEQ-00003-4; RF: 200-HMH0-HEQ-00002; IHF: 51A-HMH0-HEQ-00002)	
		Truck Cask Lid Adapters (CRCF: 060-HMH0-HEQ-00001-2; IHF: 51A-HMH0-HEQ-00001)	Non-ITS
		Cask Lid Bolt Impact Wrench (RF: 200-HMH0-HEQ-00003)	Non-ITS
		DPC Lid Adapter (CRCF: 060-HMH0-HEQ-00005-6; WHF: 050-HMH0-HEQ-00014; RF: 200-HMH0-HEQ-00001)	ITS
		Cask Shield Ring (WHF: 050-HMH0-HEQ-00015-19)	Non-ITS
		Long Reach Grapple Adapter (WHF: 050-HMH0-TOOL-00001-2)	ITS
	Cask Handling/Waste Package Preparation	Waste Package Handling Crane; 100-ton (IHF: 51A-HMP0-CRN-00001; CRCF: 060-HMP0-CRN-00001)	ITS
		Waste Package Pallet Yoke (IHF: 51A-HMP0-BEAM-00001; CRCF: 060-HMP0-BEAM-00001)	Non-ITS
	Cask Handling/Cask Restoration	Entire	Non-ITS
	Waste Transfer/Fuel Assembly Transfer	Spent Fuel Transfer Machine (WHF: 050-HTF0-FHM-00001)	ITS
		PWR Lifting Grapples (WHF: 050-HTF0-HEQ-00001)	ITS
		BWR Lifting Grapples (WHF: 050-HTF0-HEQ-00002)	
		W74 Upper Basket Lifting Device (WHF: 050-HTF0-HEQ-00003)	Non-ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Mechanical Handling System (continued)	Waste Transfer/Fuel Assembly Transfer (continued)	SNF Staging Racks (WHF: 050-HTF0-RK-00001 [PWR SNF]) (WHF: 050-HTF0-RK-00010 [BWR SNF]) (WHF: 050-HTF0-RK-00011 [DFCA SNF])	ITS
		Truck Cask Handling Frame (WHF: 050-HTF0-RK-00007)	ITS
	Waste Transfer/Canister Transfer	Canister Transfer Machine Maintenance Crane; 15-tons (IHF: 51A-HTC0-CRN-00001, CRCF: 060-HTC0-CRN-00001; WHF: 050-HTC0-CRN-00001)	Non-ITS
		Canister Transfer Machine Maintenance Crane; 15-tons (RF: 200-HTC0-CRN-00001)	ITS
		Canister Transfer Machine (IHF: 51A-HTC0-FHM-00001; CRCF: 060-HTC0-FHM-00001-2; RF: 200-HTC0-FHM-00001; WHF: 050-HTC0-FHM-00001)	ITS
		Canister Grapples (IHF: 51A-HTC0-HEQ-00003, 4; CRCF: 060-HTC0-HEQ-00003-7) Canister Transfer Machine Grapples (IHF: 51A-HTC0-HEQ-00001; CRCF: 060-HTC0-HEQ-00001-2; RF: 200-HTC0-HEQ-00001; WHF: 050-HTC0-HEQ-00001)	ITS
		Naval Canister Lifting Adapter (IHF: 51A-HTC0-HEQ-00005)	ITS
		DOE Waste Package Inner Lid Grapple (IHF: 51A-HTC0-HEQ-00007)	ITS
		Naval Waste Package Inner Lid Grapple (IHF: 51A-HTC0-HEQ-00008)	ITS
		TAD Canister Staging Racks (and Thermal Barrier) (CRCF: 060-HTC0-RK-00011-12)	ITS
		DOE Canister Staging Racks (and Thermal Barrier) (CRCF: 060-HTC0-RK-00006-10)	ITS
		Shielded Transfer Cask (STC) (TAD: 050-HT00-HEQ-00001) (DPC: 050-HT00-HEQ-00002)	ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Mechanical Handling System (continued)	Waste Package Closure	Robotic Arms. (IHF: 51A-HWH0-HEQ-00001-2; CRCF: 060-HWH0-HEQ-00001-2)	Non-ITS
		Remote Handling System Bridge (Included as part of: IHF: 51A-HWH0-HEQ-00003; CRCF: 060-HWH0-HEQ-00003, 5)	ITS
		Portions of Remote Handling System That Do Not Include The Bridge (Included as part of: IHF: 51A-HWH0-HEQ-00003; CRCF: 060-HWH0-HEQ-00003, 5)	Non-ITS
		Remote Handling System Manipulator Arm (IHF: 51A-HWH0-HEQ-00004; CRCF: 060-HWH0-HEQ-00004)	Non-ITS
		Lid Handling Tool (IHF: 51A-HWH0-TOOL-00001; CRCF: 060-HWH0-TOOL-00001)	Non-ITS
		Waste Package Closure Room Crane; 15-ton (IHF: 51A-HW00-CRN-00001; CRCF: 060-HW00-CRN-00001)	Non-ITS
		Closure Support Room Cranes; 5-ton (CRCF: 060-HW00-CRN-00002 [north]-3 [south])	Non-ITS
		Process Opening Cover (IHF: 51A-HW00-HTCH-00001; CRCF: 060-HW00-HTCH-00001-2)	Non-ITS
	TAD Closure	TAD Closure Jib Crane (WHF: 050-HC00-CRN-00001)	ITS
		Cask Support Frame (TAD Closure Station) (WHF: 050-HC00-FRM-00001)	ITS
		TAD Canister Welding Machine (WHF: 050-HC00-TOOL-00001)	Non-ITS
	Waste Package Loadout	Waste Package Shield Ring Lift Beam (IHF: 51A-HL00-BEAM-00001; CRCF: 060-HL00-BEAM-00001)	Non-ITS
		Waste Package Shield Rings (IHF: 51A-HL00-HEQ-00001-2; CRCF: 060-HL00-HEQ-00001-6)	ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Mechanical Handling System (continued)	Waste Package Loadout (continued)	Waste Package Transfer Trolley (including Pedestals, Seismic Rail Restraints, and Rails) Trolleys: (IHF: 51A-HL00-TRLY-00001; CRCF: 060-HL00-TRLY-00001-2) Pedestals: (CRCF: 060-HL00-PED-00001-8; IHF: 51A-HL00-PED-00001-4)	ITS
		Waste Package Transfer Carriage (IHF: 51A-HL00-TRLY-00002; CRCF: 060-HL00-TRLY-00004-5)	Non-ITS
	Dual-Purpose Canister Cutting	DPC Cutting Machine (WHF: 050-HD00-TOOL-00001)	Non-ITS
		Siphon Tube Shear Tool (WHF: 050-HD00-TOOL-00002)	Non-ITS
		DPC Cutting Jib Crane (WHF: 050-HD00-CRN-00001)	ITS
		Cask Support Frame (DPC Cutting Station) (WHF: 050-HD00-FRM-00001)	ITS
		DPC Lid Receptacle (WHF: 050-HD00-RCP-00001)	Non-ITS
		DPC Adapter Plate Types 1, 2, 3 (WHF: 050-HD00-HEQ-00002, 3, 4)	Non-ITS
		DPC Shield Plug Lift Adapter (WHF: 050-HD00-HEQ-00005)	Non-ITS
	Naval SNF Waste Package System	Naval SNF Waste Package	Entire
Naval SNF Canister		Entire	ITS
Non-Nuclear Handling System	Non-Nuclear Handling	Entire	Non-ITS
Non-Radiological Waste Management System	Non-Radiological Waste Management	Entire	Non-ITS
Plant Services System	Plant Services	Entire	Non-ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Pool Water Treatment and Cooling System	Pool Water Treatment and Cooling	Entire	Non-ITS
Radiation/Radiological Monitoring System	Radiation/Radiological Monitoring	Entire	Non-ITS
Receipt Facility	Receipt Facility (RF)	Structure	ITS
		Rails for Railcars	Non-ITS
		Shield Doors (Including Anchorages)	ITS
		ALARA Shielding Features ³	Non-ITS
		Cask Port Slide Gate (200-HTC0-HTCH-00001)	ITS
		AO Port Slide Gate (200-HTC0-HTCH-00002)	ITS
		Cask Preparation Platform (200-HMH0-PLAT-00001)	ITS
		Lid Bolting Room Platform (200-HMC0-PLAT-00003)	ITS
Safeguards and Security System	Safeguards and Security	Entire	Non-ITS
Subsurface Facility	Subsurface Facility	Rails	Non-ITS
		Emplacement Drift Doors	Non-ITS
	Emplacement	Nonemplacement Openings	Non-ITS
		Ground Support for Emplacement Drifts	Non-ITS
		Ground Support for Nonemplacement Openings	Non-ITS
		Emplacement Drifts	Non-ITS
		Emplacement Drift Invert (Steel and Ballast)	Non-ITS
		Waste Package Emplacement Pallet	Non-ITS
		Drip Shield	Non-ITS
		Drip Shield Emplacement Gantry	Non-ITS
	Post-emplacment	Entire	Non-ITS
	Subsurface Development	Excavation	Non-ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Subsurface Ventilation System	Subsurface Ventilation	Entire	Non-ITS
Surface Non-Confinement HVAC System	Surface Non-Confinement HVAC	Portions of the surface non-confinement HVAC system that do not support the cooling of ITS electrical equipment and battery rooms (IHF, CRCF, WHF, RF, EDGF)	Non-ITS
		Portions of the surface non-confinement HVAC system that support the cooling of ITS electrical equipment and battery rooms (EDGF)	ITS
Surface Nuclear Confinement HVAC System	Surface Nuclear Confinement HVAC	Portions of the surface nuclear confinement HVAC system that exhaust from areas with a potential for a breach (WHF and CRCF)	ITS
		Portions of the surface nuclear confinement HVAC system that support the cooling of ITS electrical equipment and battery rooms (WHF and CRCF)	ITS
		Portions of the surface nuclear confinement HVAC system that do not exhaust from areas with a potential for a breach or do not support the cooling of ITS electrical equipment and battery rooms, including SSCs that supply ITS confinement areas (IHF, CRCF, WHF, RF)	Non-ITS
Wet Handling Facility	Wet Handling Facility (WHF)	Structure	ITS
		Rails for Railcars	Non-ITS
		Shield Doors (Including Anchorages) and Equipment Confinement Doors	ITS
		ALARA Shielding Features ⁴	Non-ITS
		Pool Structure	ITS
		Cask Port Slide Gate (050-HTC0-HTCH-00002)	ITS
		Overpack Port Slide Gate (050-HTC0-HTCH-00001)	ITS
		Aging Overpack Access Platform (050-HAC0-PLAT-00001)	ITS
		TAD Closure Station (050-HC00-PLAT-00001)	ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Wet Handling Facility (continued)	Wet Handling Facility (continued)	DPC Cutting Station (050-HD00-PLAT-00001)	ITS
		Preparation Station #1 (050-HMH0-PLAT-00001)	ITS
		Preparation Station #2 (050-HMH0-PLAT-00002)	ITS
		DPC Transfer Station (050-HTF0-RK-00002)	Non-ITS
		Staging Shelf Transfer Station (050-HTF0-RK-00008)	Non-ITS
		Staging Shelf Dual Transfer Station (050-HTF0-RK-00009)	Non-ITS
		DPC Unloading Bay Gate (050-WH00-DR-00002)	Non-ITS
		Deep Remediation Station (050-HR00-RK-00001)	Non-ITS
		RC Transfer Station (050-HTF0-RK-00004)	Non-ITS
		STC/TAD Transfer Station (050-HTF0-RK-00003)	Non-ITS
		TC Transfer Station (050-HTF0-RK-00005)	Non-ITS
		(Pool) Crush Pads (050-HM00-ABS-00001-5)	Non-ITS
		Decontamination Pit; Decontamination Pit Seismic Restraints (050-HM00-BRAC-00001)	ITS
		Decontamination Pit Cover (050-HM00-HTCH-00001)	Non-ITS

Table A-1. Preclosure Safety Classification of Repository SSCs (continued)

System or Facility	Subsystem or Function (as Applicable)	Component ⁵	Preclosure Safety Classification
Wet Handling Facility (continued)	Wet Handling Facility (continued)	Decontamination Pit Platform (050-HM00-PLAT-00002)	Non-ITS

NOTE: ALARA = as low as is reasonably achievable; AO = aging overpack; BWR = boiling water reactor; CRCF = Canister Receipt and Closure Facility; DFCA = damaged fuel canister assembly; DOE = U.S. Department of Energy; DPC = dual-purpose canister; EDGF = Emergency Diesel Generator Facility; HAM = horizontal aging module; HLW = high-level radioactive waste; HVAC = heating, ventilation, and air-conditioning; IHF = Initial Handling Facility; ITS = Important to Safety; PWR = pressurized water reactor; RC = rail cask; RF = Receipt Facility; SNF = spent nuclear fuel; SSCs = systems, structures, and components, STC = shielded transfer cask; TAD = transportation, aging, and disposal; TC = transportation cask; TEV = transport and emplacement vehicle; WHF = Wet Handling Facility.

1. ALARA shielding features for the CRCF include the shielding function of the platforms
2. ALARA shielding features for the IHF include the shielding function of the platforms
3. ALARA shielding features for the RF include the shielding function of the platforms
4. ALARA shielding features for the WHF include the shielding function of the platforms, the decontamination pit, and the Cask Preparation Area Equipment Confinement Door
5. The numbers appearing in parentheses are component numbers

Source: Ref. 2.2.1.

ATTACHMENT B
ITS SSC/NON-ITS SSC INTERACTIONS IN THE IHF

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Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
DOE and Commercial Waste Package System	DOE and Commercial Waste Package	DOE and Commercial Waste Package	Cask/Canister/ Waste Package Process System: Waste Package Decontamination System, Waste Package Survey System	Room 1005	Environmental Dependence – maintain to specified limits	None Identified
			Cask/Canister/ Waste Package Process System: Waste Package Inerting System	Room 2004	Environmental Dependence – maintain to specified limits	None Identified
			Cask/Canister/ Waste Package Process System: Waste Package Decontamination System, Waste Package Survey System	Room 1005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Cask/Canister/ Waste Package Process System: Waste Package Inerting System	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			IHF Loadout Platforms (51A-HL00-PLAT-00001-2)	Room 1005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
DOE and Commercial Waste Package System (continued)	DOE and Commercial Waste Package (continued)	DOE and Commercial Waste Package (continued)	Non-ITS waste package closure equipment, including welding equipment, materials, remote handling system, welding robots, etc.	Rooms 2004, 1006	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The non-ITS waste package closure equipment shall be located out of proximity of the filled waste or partially filled package when not in use.
			Process Opening Cover (51A-HW00-HTCH-00001)	Rooms 2004, 1006	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Shield Ring Lift Beam (51A-HL00-BEAM-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Transfer Carriage (51A-HL00-TRLY-00002)	Rooms 1005, 1006, 1007	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Transfer Carriage Docking Stations (51A-HL00-75-00001)	Room 1005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
	Defense High-Level Waste/DOE SNF Codisposal	HLW Canister	None Identified	N/A	N/A	N/A

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Emplacement and Retrieval and Drip Shield Installation	Emplacement and Retrieval and Drip Shield Installation	Transport and Emplacement Vehicle (TEV)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Room 1005	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Room 1005	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Room 1005	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1005	Human Dependence – human control of/interface with this SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Emplacement and Retrieval and Drip Shield Installation (continued)	Emplacement and Retrieval and Drip Shield Installation (continued)	Transport and Emplacement Vehicle (TEV) (continued)	Waste Package Transfer Carriage (51A-HL00-TRLY-00002)	Room 1005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
Initial Handling Facility	Initial Handling Facility	Structure	None Identified	N/A	N/A	N/A
		Rails for the TEV (inside the Waste Package Loadout Room)	None Identified	N/A	N/A	N/A
		Shield Doors (Including Anchorages)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize doors	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Initial Handling Facility (continued)	Initial Handling Facility (continued)	Shield Doors (Including Anchorages) (continued)	Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize doors	None Identified
			Digital Control & Management Information System	Throughout IHF , Rooms 1008, 1012, 1007, 1006, 1005	Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Throughout IHF , Rooms 1008, 1012, 1007, 1006, 1005	Human Dependence – human control of/interface with this SSC	None Identified
		Cask Port Slide Gate (51A-HTC0-HTCH-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified
		Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified	

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Initial Handling Facility (continued)	Initial Handling Facility (continued)	Cask Port Slide Gate (51A-HTC0-HTCH-00001) (continued)	Canister Transfer Machine Maintenance Crane; 15-tons (51A-HTC0-CRN-00001)	Room 2005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity of the cask port slide gate when not in use.
			Digital Control & Management Information System	Rooms 2005, 1007, 1008, Throughout the IHF	Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 2005, 1007, 1008, Throughout the IHF	Human Dependence – human control of/interface with this SSC	None Identified
		Waste Package Port Slide Gate (51A-HTC0-HTCH-00002)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Initial Handling Facility (continued)	Initial Handling Facility (continued)	Waste Package Port Slide Gate (51A-HTC0-HTCH-00002) (continued)	Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified
			Canister Transfer Machine Maintenance Crane; 15-tons (51A-HTC0-CRN-00001)	Room 2005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity of the waste package port slide gate when not in use.
			Digital Control & Management Information System	Rooms 2005, 1007, 1008, Throughout the IHF	Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 2005, 1007, 1008, Throughout the IHF	Human Dependence – human control of/interface with this SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Initial Handling Facility (continued)	Initial Handling Facility (continued)	Cask Preparation Platform (51A-HMH0-PLAT-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize motors, etc.	None Identified
			Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize motors, etc.	None Identified
Mechanical Handling System	Cask Handling	Transportation Cask	Cask/Canister/ Waste Package Process System: Cask Cavity Gas Sampling	Room 1012	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Cask/Canister/ Waste Package Process System: Cask Cavity Gas Sampling	Room 1012	Environmental Dependence – maintain to specified limits	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Transportation Cask (continued)	Mobile Access Platform (51A-HMC0-PLAT-00001)	Room 1012	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of a filled transportation cask when not in use.
			Impact Limiter Lifting Device (51A-HMC0-HEQ-00001-2)	Room 1012	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Personnel Barrier Lifting Device (51A-HMC0-HEQ-00003-4)	Room 1012	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
		Site Prime Mover	N/A (Operator)	Rails or roadway leading to IHF; Room 1012	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.10 and 2.2.16])
		Mobile Access Platform		Room 1012	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of a loaded site prime mover when not in use.

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Handling Yoke (51A-HM00-BEAM-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Rooms 1008/2005; throughout IHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 1008/2005; throughout IHF	Human Dependence – human control of/interface with this SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Handling Crane; 300-ton (51A-HM00-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Room 1012; throughout IHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1012; throughout IHF	Human Dependence – human control of/interface with this SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Transfer Trolley and Pedestals Trolley: (IHF: 51A-HM00-TRLY-00001;) Pedestals: (51A-HM00-PED-00001-2) Naval Cask Pedestal: (51A-HM00-PED-00003)	Plant Services System – General Purpose Air	Throughout IHF; Rooms 1008, 1012	Functional Dependence - Cask Transfer Trolley air pallet is dependent on general purpose air from Plant Services System	None identified
			N/A (Operator)	Rooms 1008, 1012	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.10 and 2.2.16])

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Preparation Crane; 30-ton (51A-HM00-CRN-00002)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Room 1012; throughout IHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1012; throughout IHF	Human Dependence – human control of/interface with this SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Naval Cask Lift Bail (51A-HMC0-BEAM-00001)	None Identified	N/A	N/A	N/A
		Naval Cask Lift Plate (51A-HMC0-HEQ-00005)	None Identified	N/A	N/A	N/A
		Rail Cask Lid Adapters (51A-HMH0-HEQ-00002)	None Identified	N/A	N/A	N/A
		Waste Package Handling Crane (51A-HMP0-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Waste Package Handling Crane (51A-HMP0-CRN-00001) (continued)	Digital Control & Management Information System	Room 1005; throughout IHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1012; throughout IHF	Human Dependence – human control of/interface with this SSC	None Identified
	Waste Transfer/ Canister Transfer	Canister Transfer Machine (51A-HTC0-FHM-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Canister Transfer Machine (51A-HTC0-FHM-00001) (continued)	Digital Control & Management Information System	Room 2005, Throughout the IHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 2005, Throughout the IHF	Human Dependence – human control of/interface with this SSC	None Identified
			Canister Transfer Machine Maintenance Crane; 15-tons (51A-HTC0-CRN-00001)	Room 2005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity of the canister transfer machine when not in use.
		Canister Grapples (51A-HTC0-HEQ-00003, 4) Canister Transfer Machine Grapples (51A-HTC0-HEQ-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Canister Grapples (51A-HTC0-HEQ-00003, 4)	Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified
		Canister Transfer Machine Grapples (51A-HTC0-HEQ-00001) (continued)				
			Digital Control & Management Information System	Rooms 1008/2005; throughout IHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 1008/2005; throughout IHF	Human Dependence – human control of/interface with this SSC	None Identified
		Naval Canister Lifting Adapter (51A-HTC0-HEQ-00005)	None Identified	N/A	N/A	N/A

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	DOE Waste Package Inner Lid Grapple (51A-HTC0-HEQ-00007)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Rooms 1008/2005; throughout IHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 1008/2005; throughout IHF	Human Dependence – human control of/interface with this SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Naval Waste Package Inner Lid Grapple (51A-HTC0-HEQ-00008)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Rooms 1008/2005; throughout IHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 1008/2005; throughout IHF	Human Dependence – human control of/interface with this SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Package Closure	Remote Handling System Bridge (51A-HWH0-HEQ-00003)	Waste Package Closure Room Crane; 15-ton (51A-HW00-CRN-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The closure room support crane shall be located out of proximity of the remote handling system bridge when not in use.
	Waste Package Loadout	Waste Package Shield Rings (51A-HL00-HEQ-00001-2)	Waste Package Closure Room Crane; 15-ton (51A-HW00-CRN-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The waste package closure room crane shall be located out of proximity of the waste package transfer trolley (and shield rings) holding a filled waste package when not in use.
			Waste Package Shield Ring Lift Beam (51A-HL00-BEAM-00001)	Room 1005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
		Non-ITS waste package closure equipment, including welding equipment, materials, remote handling system, welding robots, etc.	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The waste package closure equipment shall be located out of proximity of the filled or partially filled waste package when not in use.	

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Package Loadout (continued)	Waste Package Transfer Trolley (including Pedestals, Seismic Rail Restraints, and Rails) (Trolley: 51A-HL00-TRLY-00001) (Pedestals: 51A-HL00-PED-00001-4)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout IHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout IHF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Throughout IHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Throughout IHF	Human Dependence – human control of/interface with this SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Package Loadout (continued)	Waste Package Transfer Trolley (including Pedestals, Seismic Rail Restraints, and Rails) (Trolley: 51A-HL00-TRLY-00001) (Pedestals: 51A-HL00-PED-00001-4) (continued)	Waste Package Transfer Carriage (51A-HL00-TRLY-00002)	Rooms 1005, 1006, 1007	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Transfer Carriage Docking Station (51A-HL00-75-00001)	Room 1005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
Naval SNF Waste Package System	Naval SNF Waste Package	Entire	Cask/Canister/ Waste Package Process System: Waste Package Decontamination System, Waste Package Survey System	Room 1005	Environmental Dependence – maintain to specified limits	None Identified
			Cask/Canister/ Waste Package Process System: Waste Package Inerting System	Room 1006	Environmental Dependence – maintain to specified limits	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Naval SNF Waste Package System (continued)	Naval SNF Waste Package (continued)	Entire (continued)	Cask/Canister/ Waste Package Process System: Waste Package Decontamination System, Waste Package Survey System	Room 1005	Spatial Dependence– Non-ITS SSC in proximity to ITS SSC	None Identified
			Cask/Canister/ Waste Package Process System: Waste Package Inerting System	Room 1006	Spatial Dependence– Non-ITS SSC in proximity to ITS SSC	None Identified
			IHF Loadout Platforms (51A-HL00-PLAT-00001-2)	Room 1005	Spatial Dependence– Non-ITS SSC in proximity to ITS SSC	None Identified
			Non-ITS waste package closure equipment, including welding equipment, materials, remote handling system, welding robots, etc.	Rooms 2004, 1006	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The waste package closure equipment shall be located out of proximity of the filled or partially filled waste package when not in use.
			Process Opening Cover (51A-HW00-HTCH-00001)	Rooms 2004, 1006	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table B-1. ITS SSC/Non-ITS SSC Interactions for the IHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Naval SNF Waste Package System (continued)	Naval SNF Waste Package (continued)	Entire (continued)	Waste Package Shield Ring Lift Beam (51A-HL00-BEAM-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Transfer Carriage (51A-HL00-TRLY-00002)	Rooms 1005, 1006, 1007	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Transfer Carriage Docking Stations (51A-HL00-75-00001)	Room 1005	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
	Naval SNF Canister	Naval SNF Canister	None Identified	N/A	N/A	N/A

NOTE: DOE = U.S. Department of Energy; HLW = high-level radioactive waste; IHF = Initial Handling Facility; ITS = important to safety; N/A = not applicable; SNF = spent nuclear fuel; SSC = structure, system, or component; SSCs = structures, systems, and components; TEV = transport and emplacement vehicle.

ATTACHMENT C
ITS SSC/NON-ITS SSC INTERACTIONS IN THE CRCF

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Table C-1 ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Aging	Aging Handling/ Cask Transfer	Site Transporter (170-HAT0-MEQ-00001)	Mobile Lift (060-HM00-ELEV-00001)	Room1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the site transporter when not in use.
			Mobile Access Platform (060-HMC0-PLAT-00001)	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of the site transporter when not in use.
			N/A (Operator)	Rooms 1027, 1026, 1023, 1024	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.11 and 2.2.17])
	Aging Handling/ Aging Overpack	Aging Overpack (TAD: [170-HAC0-ENCL-00003]) (Vertical DPC: [170-HAC0-ENCL-00002])	Mobile Lift (060-HM00-ELEV-00001)	Room1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of a loaded aging overpack when not in use.
			Mobile Access Platform (060-HMC0-PLAT-00001)	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of a loaded aging overpack when not in use.

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Canister Receipt and Closure Facility	Canister Receipt and Closure Facility (CRCF)	Structure	None Identified	N/A	N/A	N/A
		Rails for the Transport and Emplacement vehicle (TEV) (Inside Waste Package Loadout Room)	None Identified	N/A	N/A	N/A
		Shield Doors (Including Anchorages) and Equipment Confinement Doors	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize doors	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Canister Receipt and Closure Facility (continued)	Canister Receipt and Closure Facility (CRCF) (continued)	Shield Doors (Including Anchorages) and Equipment Confinement Doors (continued)	Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize doors	None Identified
			Digital Control & Management Information System	Throughout CRCF, Rooms 1026, 1027, 1036, 1023, 1024, 1018, 1019, 1015	Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Throughout CRCF, Rooms 1026, 1027, 1036, 1023, 1024, 1018, 1019, 1015	Human Dependence – human control of/interface with this SSC	None Identified
			Mobile Lift (060-HM00-ELEV-00001)	Rooms 1023, 1024, 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the shield doors when not in use.

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Canister Receipt and Closure Facility (continued)	Canister Receipt and Closure Facility (CRCF) (continued)	DOE Canister Slide Gates (060-HTC0-HTCH-00005, 6, 7, 8, 9)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF, Room 2004	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Canister Transfer Machine Maintenance Crane; 15-tons (060-HTC0-CRN-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity of the DOE canister slide gates when not in use.
			Digital Control & Management Information System	Rooms 2004, 1022, 1025, Throughout CRCF	Functional Dependence – control of this SSC	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Canister Receipt and Closure Facility (continued)	Canister Receipt and Closure Facility (CRCF) (continued)	DOE Canister Slide Gates (060-HTC0-HTCH-00005, 6, 7, 8, 9) (continued)	Digital Control & Management Information System	Rooms 2004, 1022, 1025, Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified
			Surface Nuclear-Confinement HVAC System – Non-ITS Confinement Subsystems	Room 2004 and Rooms 1021 and 1025	Environmental Dependence – Slide gate maintains confinement boundary between Non-ITS confinement zone and ITS confinement zone	None Identified
		Cask Port Slide Gates (060-HTC0-HTCH-00001, 2)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF, Room 2004	Functional Dependence – power to energize system	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Canister Receipt and Closure Facility (continued)	Canister Receipt and Closure Facility (CRCF) (continued)	Cask Port Slide Gates (060-HTC0-HTCH-00001, 2 (continued))	Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Canister Transfer Machine Maintenance Crane; 15-tons (060-HTC0-CRN-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity of the cask port slide gates when not in use.
			Digital Control & Management Information System	Room 2004, Rooms 1023, 1024, Throughout CRCF	Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Room 2004, Rooms 1023, 1024, Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified
			Surface Nuclear-Confinement HVAC System – Non-ITS Confinement Subsystems	Room 2004 and Rooms 1023 and 1024	Environmental Dependence – Slide gate maintains confinement boundary between Non-ITS confinement zone and ITS confinement zone	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Canister Receipt and Closure Facility (continued)	Canister Receipt and Closure Facility (CRCF) (continued)	TAD Slide Gates (060-HTC0-HTCH-00010, 11)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF, Room 2004	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Canister Transfer Machine Maintenance Crane; 15-tons (060-HTC0-CRN-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity of the TAD slide gates when not in use.
			Digital Control & Management Information System	Room 2004, Rooms 1022, 1025, Throughout CRCF	Functional Dependence – control of this SSC	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Canister Receipt and Closure Facility (continued)	Canister Receipt and Closure Facility (CRCF) (continued)	TAD Slide Gates (060-HTC0-HTCH-00010, 11) (continued)	Digital Control & Management Information System	Room 2004, Rooms 1022, 1025, Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified
			Surface Nuclear-Confinement HVAC System – Non-ITS Confinement Subsystems	Room 2004 and Rooms 1017 and 1022	Environmental Dependence – Slide gate maintains confinement boundary between Non-ITS confinement zone and ITS confinement zone	None Identified
		Waste Package Port Slide Gates (060-HTC0-HTCH-00003, 4)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF, Room 2004	Functional Dependence – power to energize system	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Canister Receipt and Closure Facility (continued)	Canister Receipt and Closure Facility (CRCF) (continued)	Waste Package Port Slide Gates (060-HTC0-HTCH-00003, 4) (continued)	Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Canister Transfer Machine Maintenance Crane; 15-tons (060-HTC0-CRN-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity of the waste package port slide gates when not in use.
			Digital Control & Management Information System	Room 2004, Rooms 1018, 1019, Throughout CRCF	Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Room 2004, Rooms 1018, 1019, Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified
			Surface Nuclear-Confinement HVAC System – Non-ITS Confinement Subsystems	Room 2004 and Rooms 1018 and 1019	Environmental Dependence – Slide gate maintains confinement boundary between Non-ITS confinement zone and ITS confinement zone	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Canister Receipt and Closure Facility (continued)	Canister Receipt and Closure Facility (CRCF) (continued)	Cask Preparation Platform (060-HMH0-PLAT-00001)	Mobile Lift (060-HM00-ELEV-00001)	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask preparation platform when not in use.
			Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize motors, etc.	None Identified
			Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize motors, etc.	None Identified
DOE and Commercial Waste Package System	DOE and Commercial Waste Package	DOE and Commercial Waste Package	Cask/Canister/Waste Package Process System; Waste Package Decontamination System; Waste Package Survey System	Room 1015	Environmental Dependence – maintain to specified limits	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
DOE and Commercial Waste Package System (continued)	DOE and Commercial Waste Package (continued)	DOE and Commercial Waste Package (continued)	Cask/Canister/ Waste Package Process System: Waste Package Inerting System	Room 2007	Environmental Dependence – maintain to specified limits	None Identified
			Cask/Canister/ Waste Package Process System: Waste Package Decontamination System, Waste Package Survey System	Room 1015	Spatial Dependence– Non-ITS SSC in proximity to ITS SSC	None Identified
			Cask/Canister/ Waste Package Process System: Waste Package Inerting System	Room 2007	Spatial Dependence– Non-ITS SSC in proximity to ITS SSC	None Identified
			CRCF Loadout Platforms (060-HL00-PLAT-00001, 2, 3)	Room 1015	Spatial Dependence– Non-ITS SSC in proximity to ITS SSC	None Identified
			Non-ITS waste package closure equipment, including welding equipment, materials, remote handling system, welding robots, etc.	Room 2007, 1018, 1019	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The waste package closure equipment shall be located out of proximity of the filled or partially filled waste package when not in use.

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
DOE and Commercial Waste Package System (continued)	DOE and Commercial Waste Package (continued)	DOE and Commercial Waste Package (continued)	Process Opening Cover (060-HW00-HTCH-00001-2)	Rooms 1018, 1019	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Shield Ring Lift Beam (060-HL00-BEAM-00001)	Room 1015	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Transfer Carriage (060-HL00-TRLY-00004-5)	Rooms 1015, 1018, 1019,	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Transfer Carriage Docking Stations (060-HL00-75-00001, 2)	Room 1015	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
	Defense High-Level Waste/DOE SNF Codisposal	DOE Standardized DOE Canister	None Identified	N/A	N/A	N/A
			HLW Canister	None Identified	N/A	N/A
	Canistered Spent Nuclear Fuel	Dual-Purpose Canister (DPC)	None Identified	N/A	N/A	N/A
		Transport, Aging, and Disposal (TAD) Canister	None Identified	N/A	N/A	N/A

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Electrical Power System	ITS Power	ITS Distribution (ITS equipment and feeders up to and including ITS Loads, ITS Direct Current Power, ITS Uninterruptible Power Supply Power)	Digital control and management information system	Throughout the CRCF; Outside of CRCF	Functional dependence— automatic control of this SSC	None Identified
			Digital Control & Management Information System	Throughout CRCF; Outside of CRCF	Human Dependence – human interface with this SSC	
Emplacement and Retrieval and Drip Shield Installation (HE)	Emplacement and Retrieval and Drip Shield Installation	Transport and Emplacement Vehicle (TEV)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Room 1005	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Room 1015	Functional Dependence – carries power to energize system	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Emplacement and Retrieval and Drip Shield Installation (continued)	Emplacement and Retrieval and Drip Shield Installation (continued)	Transport and Emplacement Vehicle (TEV) (continued)	Digital Control & Management Information System	Room 1015	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1015	Human Dependence – human control of/interface with this SSC	None Identified
			Waste Package Transfer Carriage (060-HL00-TRLY-00004-5)	Room 1015	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Fire Protection System	Fire Suppression	Preaction valve, sprinkler heads, and system actuation panels associated with double-interlock preaction suppression systems that protect areas where there is a potential for canister breach	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Throughout CRCF	Human Dependence – human interface with this SSC	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Fire Protection System	Fire Detection	Fire Detection System for the ITS preaction valves with associated detectors and control box	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Throughout CRCF	Human Dependence – human interface with this SSC	None Identified
Mechanical Handling System	Cask Handling	Transportation Cask	Cask/Canister/ Waste Package Process System: Cask Cavity Gas Sampling	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Transportation Cask (continued)	Cask/Canister/Waste Package Process System: Cask Cavity Gas Sampling	Room 1026	Environmental Dependence – maintain to specified limits	None Identified
			Cask Tilting Frame (060-HMC0-FRM-00001)	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Mobile Access Platform (060-HMC0-PLAT-00001)	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of the transportation cask when not in use.
			Impact Limiter Lifting Device (060-HMC0-HEQ-00001-8, 19-20)	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Personnel Barrier Lifting Device (060-HMC0-HEQ-00010-17, 21-22)	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Mobile Lift (060-HM00-ELEV-00001)	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the transportation cask when not in use.
			Mobile Access Platform (060-HMC0-PLAT-00001;	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of the transportation cask when not in use.

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Site Prime Mover	N/A (Operator)	Rails or roadway leading to CRCF; Rooms 1036A, 1036, 1026	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.11 and 2.2.17])
				Mobile Lift (060-HM00-ELEV-00001)	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask site prime mover when not in use.
				Mobile Access Platform (060-HMC0-PLAT-00001)	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of the site prime mover when not in use.
		Cask Handling Yoke (060-HM00-BEAM-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize system	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Handling Yoke (060-HM00-BEAM-00001) (continued)	Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Rooms 2004, 1026; Throughout CRCF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 2004, 1026; Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified
		Cask Handling Crane; 200-ton (060-HM00-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize system	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Handling Crane; 200-ton (060-HM00-CRN-00001) (continued)	Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Room 1026; Throughout CRCF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1026; Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified
		Cask Transfer Trolley and Pedestals Trolleys: (CRCF: 060-HM00-TRLY-00001-2) Pedestals: (CRCF: 060-HM00-PED-00001-2)	Plant Services System – General Purpose Air	Throughout CRCF; Rooms 1026, 1023, 1024	Functional Dependence - Cask Transfer Trolley air pallet is dependent on general purpose air from Plant Services System	None identified
		Mobile Lift (060-HM00-ELEV-00001)	Room 1026	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask transfer trolley when not in use.	

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Cask Cask	Mechanical Handling System (continued)	Cask Transfer Trolley and Pedestals Trolleys: (CRCF: 060-HM00-TRLY-00001-2) Pedestals: (CRCF: 060-HM00-PED-00001-2) (continued)	N/A (Operator)	Rooms 1026, 1023, 1024	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.11 and 2.2.17])
	Handling/Cask Receipt	Horizontal Lifting Beam (200-HMC0-BEAM-00001) (shared with RF)	None Identified	N/A	N/A	N/A
	Handling/Cask Preparation	Cask Lid Lifting Grapples (060-HMH0-HEQ-00012)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize system	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling/Cask Preparation (continued)	Cask Lid Lifting Grapples (060-HMH0-HEQ-00012) (continued)	Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Rooms 2004, 1026; Throughout CRCF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 2004, 1026; Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified
		DPC Lid Adapter (060-HMH0-HEQ-00005-6)	None Identified	N/A	N/A	N/A
		Rail Cask Lid Adapters (060-HMH0-HEQ-00003-4)	None Identified	N/A	N/A	N/A

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling/Cask Preparation (continued)	Waste Package Handling Crane (060-HMP0-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Room 1015; Throughout CRCF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1015; Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer	Canister Transfer Machine (CTM) (060-HTC0-FHM-00001-2)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Room 2004. Throughout CRCF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 2004, Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures	
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Canister Transfer Machine (CTM) (060-HTC0-FHM-00001-2)	Canister Transfer Machine Maintenance Crane; 15-tons (060-HTC0-CRN-00001)	Room 2004, Throughout CRCF	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity of the canister transfer machine when not in use.	
		Canister Grapples (060-HTC0-HEQ-00003-7)	Canister Transfer Machine Grapples (060-HTC0-HEQ-00001-2)	Throughout CRCF	Functional Dependence – power to energize system	None Identified	
		Canister Transfer Machine Grapples (060-HTC0-HEQ-00001-2)					Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator
		Electrical Support System – Cable Raceway					Throughout CRCF
Digital Control & Management Information System	Rooms 1022, 1023, 1024, 1025, 1018, 1019, 2004; Throughout CRCF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified				

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Canister Grapples (060-HTC0-HEQ-00003-7) Canister Transfer Machine Grapples (060-HTC0-HEQ-00001-2) (continued)	Digital Control & Management Information System	Rooms 1022, 1023, 1024, 1025, 1018, 1019, 2004; Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified
		TAD Canister Staging Racks (and Thermal Barrier) (060-HTC0-RK-00011-12)	None Identified	N/A	N/A	N/A
		DOE Canister Staging Racks (and Thermal Barrier) (060-HTC0-RK-00006-10)	None Identified	N/A	N/A	N/A
	Waste Package Closure	Remote Handling System Bridge (060-HWH0-HEQ-00003)	Closure Support Room Cranes; 5-ton (060-HW00-CRN-00002 [north]-3 [south])	Room 2007	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The closure room support crane shall be located out of proximity of the RHS bridge when not in use.
	Waste Package Loadout	Waste Package Shield Rings (060-HL00-HEQ-00001-6)	Waste Package Closure Room Crane; 15-ton (060-HW00-CRN-00001)	Room 2007	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The waste package closure room crane shall be located out of proximity of the waste package transfer trolley (and shield rings) when not in use.

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Package Loadout (continued)	Waste Package Shield Rings (060-HL00-HEQ-00001-6) (continued)	Waste Package Shield Ring Lift Beam (060-HL00-BEAM-00001)	Room 1015	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Non-ITS waste package closure equipment, including welding equipment, materials, remote handling system, welding robots, etc.	Room 2007	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The waste package closure equipment shall be located out of proximity of the filled or partially filled waste package when not in use.
		Waste Package Transfer Trolley (including Pedestals, Seismic Rail Restraints, and Rails) (Trolleys: 060-HL00-TRLY-00001, 2) (Pedestals: 060-HL00-PED-00001-8)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout CRCF	Functional Dependence – power to energize system	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Package Loadout (continued)	Waste Package Transfer Trolley (including Pedestals, Seismic Rail Restraints, and Rails) (Trolleys: 060-HL00-TRLY-00001, 2) (Pedestals: 060-HL00-PED-00001-8) (continued)	Electrical Support System – Cable Raceway	Throughout CRCF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Rooms 1015, 1018, 1019, Throughout CRCF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 1015, 1018, 1019, Throughout CRCF	Human Dependence – human control of/interface with this SSC	None Identified
			Waste Package Transfer Carriage (060-HL00-TRLY-00004-5)	Rooms 1015, 1018, 1019	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Transfer Carriage Docking Stations (060-HL00-75-00001, 2)	Room 1015	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table C-1. ITS SSC/Non-ITS SSC Interactions for the CRCF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Surface Nuclear Confinement HVAC System	Surface Nuclear Confinement HVAC	Portions of the surface nuclear confinement HVAC system that exhaust from areas with a potential for a breach	Digital Control & Management Information System	Various locations in CRCF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Various locations in CRCF	Human Dependence – human interface with this SSC	None Identified
			Surface Nuclear-Confinement HVAC System – Non-ITS Supply Subsystems Serving ITS Secondary Confinement Areas	Various locations in CRCF (C-3 Areas including Rooms 1017, 1021, 1022, 1025, 1026, 1023, 1024, 1018, 1019)	Spatial Dependence – Not-ITS SSC in proximity to ITS SSC	None Identified
		Portions of the surface nuclear confinement HVAC system that support the cooling of ITS electrical and controls equipment	Digital Control & Management Information System	Various locations in CRCF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Various locations in CRCF	Human Dependence – human interface with this SSC	None Identified

NOTE: CRCF = Canister Receipt and Closure Facility; CTM = canister transfer machine; DOE = U.S. Department of Energy; DPC = dual-purpose canister; HLW = high-level radioactive waste; HVAC = heating, ventilation, and air-conditioning; ITS = important to safety; N/A = not applicable; RF = Receipt Facility; SNF = spent nuclear fuel; SSC = structure, system, or component; SSCs = structures, systems, and components; TAD = transportation, aging, and disposal; TEV = transport and emplacement vehicle.

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ITS SSC/NON-ITS SSC INTERACTIONS IN THE WHF

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Table D-1 ITS SSC/Non-ITS Interactions for the WHF ITS SSCs

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Aging	Aging Handling/ Cask Transfer	Site Transporter (170-HAT0-MEQ-00001)	N/A (Operator)	Rooms 1023, 1007	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.12 and 2.2.18])
		Cask Tractor (170-HAT0-HEQ-00001)	Mobile Access Platform (050-HMC0-PLAT-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of a cask tractor (pulling a loaded cask transfer trailer) when not in use.
			Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of a cask tractor (pulling a loaded cask transfer trailer) when not in use.
		Cask Transfer Trailer (PWR DPC: [170- HAT0-TRLY-00001]) (BWR DPC: [170- HAT0-TRLY-00002])	N/A (Operator)	Rooms 1001, 1016	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.12 and 2.2.18])
			Mobile Access Platform (050-HMC0-PLAT-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of a cask transfer trailer (holding a loaded cask) when not in use.
			Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of a cask transfer trailer (holding a loaded cask) when not in use.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Aging (continued)	Aging Handling/ Cask Transfer (continued)	Cask Transfer Trailer (PWR DPC: [170-HAT0-TRLY-00001]) (BWR DPC: [170-HAT0-TRLY-00002]) (continued)	N/A (Operator)	Rooms 1001, 1016	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.12 and 2.2.18])
	Aging Handling/ Aging Overpack	Aging Overpack (TAD: [170-HAC0-ENCL-00003]) (Vertical DPC: [170-HAC0-ENCL-00002])	None Identified	N/A	N/A	N/A
Cask/Canister/ Waste Package Process System	Cask Cooling	Cask/DPC Overpressure Protection Features	Plant Services System	Room 1016	Functional dependence— Plant Service System supplies cooling medium	N/A
DOE and Commercial Waste Package System	Canistered Spent Nuclear Fuel	Dual-Purpose Canister (DPC)	DPC Cutting Machine (050-HD00-TOOL-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The DPC cutting machine shall be located out of proximity of the DPC when not in use.
			Siphon Tube Shear Tool (050-HD00-TOOL-00002)	Pool P001	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The siphon tube shear tool shall be located out of proximity of the DPC when not in use.
			DPC Adapter Plate Types 1, 2, 3 (050-HD00-HEQ-00002, 3, 4)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
DOE and Commercial Waste Package System (continued)	Canistered Spent Nuclear Fuel (continued)	Dual-Purpose Canister (DPC) (continued)	DPC Shield Plug Lift Adapter (050-HD00-HEQ-00005)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			DPC Transfer Station (050-HTF0-RK-00002)	Pool P0001	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			DPC Unloading Bay Gate (050-WH00-DR-00002)	Pool P0001	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
		Transport, Aging, and Disposal Canister (TAD)	TAD Welding Machine (050-HC00-TOOL-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The TAD canister welding machine shall be located out of proximity of the TAD canister when not in use.
			SNF Assembly Drying System	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			SNF Assembly Drying System	Room 1016	Environmental Dependence – maintain (dry the SNF) to specified limits	None Identified.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
DOE and Commercial Waste Package System (continued)	Canistered Spent Nuclear Fuel (continued)	Transport, Aging, and Disposal Canister (TAD) (continued)	Cask/Canister/ Waste Package Process System: Canister Inerting	Room 1016	Environmental Dependence – maintain to specified limits	None Identified.
			Cask/Canister/ Waste Package Process System: Canister Inerting	Room 1016	Spatial Dependence– Non-ITS SSC in proximity to ITS SSC	None Identified.
			Decontamination Pit Platform (050-HM00-PLAT-00002)	Decon Pit P002	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Decontamination Pit Cover (050-HM00-HTCH-00001)	Room 1016, Decon Pit P002	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
Electrical Power System	ITS Power	ITS Distribution (ITS equipment and feeders up to and including ITS Loads, ITS Direct Current Power, ITS Uninterruptible Power Supply Power)	Digital Control & Management Information System	Throughout WHF; Outside of WHF	Human Dependence – human interface with this SSC for monitoring	None Identified.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Fire Protection System	Fire Suppression	Preaction valves, sprinkler heads, and system actuation panels associated with double-interlock preaction suppression systems that protect areas where there is a potential for canister breach	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified.
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified.
			Digital Control & Management Information System	Throughout WHF	Human Dependence – human interface with this SSC for monitoring	None Identified.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Fire Protection System (continued)	Fire Detection	Fire Detection System for the ITS preaction valves with associated detectors and control box	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified.
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified.
			Digital Control & Management Information System	Throughout WHF	Human Dependence – human interface with this SSC	None Identified.
Mechanical Handling System	Cask Handling	Transportation cask	Cask/Canister/ Waste Package Process System: Cask Cavity Gas Sampling	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Cask/Canister/ Waste Package Process System: Cask Cavity Gas Sampling	Room 1016	Environmental Dependence – maintain to specified limits	None Identified.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Transportation cask (continued)	Decontamination Pit Cover (050-HM00-HTCH-00001)	Room 1016, Decon Pit P002	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Decontamination Pit Platform (050-HM00-PLAT-00002)	Decon Pit P002	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Cask Tilting Frame (050-HMC0-FRM-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Mobile Access Platform (050-HMC0-PLAT-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of the transportation cask when not in use.
			Impact Limiter Lifting Device (050-HMC0-HEQ-00001-9)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Personnel Barrier Lifting Device (050-HMC0-HEQ-00010-18)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Transportation cask (continued)	Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the transportation cask when not in use.
			Deep Remediation Station (050-HR00-RK-00001)	Pool P0001	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Rail Cask (RC) Transfer Station (050-HTF0-RK-00004)	Pool P0001	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Truck Cask (TC) Transfer Station (050-HTF0-RK-00005)	Pool P0001	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
		Site Prime Mover	N/A (Operator)	Rails or roadway leading to WHF; Rooms 1001, 1016	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.12 and 2.2.18])

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Site Prime Mover (continued)	Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask site prime mover when not in use.
			Mobile Access Platform (050-HMC0-PLAT-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of the site prime mover when not in use.
		Cask Handling Yoke (050-HM00-BEAM-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Handling Yoke (050-HM00-BEAM-00001) (continued)	Digital Control & Management Information System	Room 1016; Throughout WHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1016; Throughout WHF	Human Dependence – human control of/interface with this SSC	None Identified
		Pool Cask Handling Yoke (050-HM00-BEAM-00002)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Pool Cask Handling Yoke (050-HM00-BEAM-00002) (continued)	Digital Control & Management Information System	Room 1016; Throughout WHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1016; Throughout WHF	Human Dependence – human control of/interface with this SSC	None Identified
		Cask Handling Crane; 200-ton (050-HM00-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Handling Crane; 200-ton (050-HM00-CRN-00001) (continued)	Digital Control & Management Information System	Room 1016; Throughout WHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1016; Throughout WHF	Human Dependence – human control of/interface with this SSC	None Identified
		Pool Yoke Lift Adapter (050-HM00-TOOL-00002)	None Identified	N/A	N/A	N/A
		Cask Transfer Trolley and Pedestals Trolley: (050-HM00-TRLY-00001) Pedestals: (050-HM00-PED-00001-5)	Plant Services System – General Purpose Air	Throughout WHF; Rooms 1016, 1008	Functional Dependence - Cask Transfer Trolley air pallet is dependent on general purpose air from Plant Services System	None identified
			Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask transfer trolley when not in use.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Transfer Trolley and Pedestals Trolley: (050-HM00-TRLY-00001) Pedestals: (050-HM00-PED-00001-5) (continued)	N/A (Operator)	Rooms 1016, 1008	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.12 and 2.2.18])
	Cask Handling/ Cask Receipt	Entrance Vestibule Crane (050-HMC0-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling/ Cask Receipt (continued)	Horizontal Lifting Beam (200-HMC0-BEAM-00001) (shared with RF)	None Identified	N/A	N/A	N/A
		Truck Cask Lid Adapters (050-HMH0-HEQ-00010-11) Rail Cask Lid Adapters (050-HMH0-HEQ-00012-13)	None Identified	N/A	N/A	N/A

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling/Cask Preparation	Auxiliary Pool Crane; 10 ton (050-HMH0-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Room 1016; Throughout WHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1016; Throughout WHF	Human Dependence – human control of/interface with this SSC	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling/Cask Preparation (continued)	Preparation Station Jib Cranes (1 and 2) (050-HMH0-CRN-00002, 3)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified
			N/A (Operator)	Room 1016	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.12 and 2.2.18])
		Cask Support Frame (Preparation Station #2) (WHF: 050-HMH0-FRM-00001)	Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask support frame when not in use.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling/Cask Preparation (continued)	Lid Lifting Grapples (050-HMH0-HEQ-00001-4, 6)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
		Truck Cask Lid Lifting Grapples (050-HMH0-HEQ-00007-9)	Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified
		Digital Control & Management Information System	Room 1016; Throughout WHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified	
		Digital Control & Management Information System	Room 1016; Throughout WHF	Human Dependence – human control of/interface with this SSC	None Identified	

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling/Cask Preparation (continued)	DPC Lid Adapter (050-HMH0-HEQ-00014)	None Identified	N/A	N/A	N/A
		Long Reach Grapple Adapter (050-HMH0-TOOL-00001-2)	None Identified	N/A	N/A	N/A
	Waste Transfer/Fuel Assembly Transfer	Spent Fuel Transfer Machine (050-HTF0-FHM-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/Fuel Assembly Transfer (continued)	Spent Fuel Transfer Machine (050-HTF0-FHM-00001) (continued)	Digital Control & Management Information System	Throughout WHF	Human Dependence – Human interface with this SSC for monitoring	None Identified
		PWR Lifting Grapples (050-HTF0-HEQ-00001) BWR Lifting Grapples (050-HTF0-HEQ-00002)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
		Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified	
		Digital Control & Management Information System	Throughout WHF	Human Dependence – human interface with this SSC for monitoring	None Identified	

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/Fuel Assembly Transfer (continued)	SNF Staging Rack (050-HTF0-RK-00001)	None Identified	N/A	N/A	N/A
		Truck Cask Handling Frame (050-HTF0-RK-00007)	None Identified	N/A	N/A	N/A
	Waste Transfer/Canister Transfer	Canister Transfer Machine (050-HTC0-FHM-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Canister Transfer Machine (050-HTC0-FHM-00001) (continued)	Digital Control & Management Information System	Room 2004. Throughout WHF	Functional Dependence – automatic control of this SSC Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Room 2004, Throughout WHF	Human Dependence – human control of/interface with this SSC	None Identified
			Canister Transfer Machine Maintenance Crane; 15-tons (050-HTC0-CRN-00001)	Room 2004, Throughout WHF	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity of the canister transfer machine when not in use.
		Canister Transfer Machine Grapples (050-HTC0-HEQ-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Canister Transfer Machine Grapples (050-HTC0-HEQ-00001) (continued)	Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Room 1016; Throughout WHF	Functional Dependence – automatic control of this SSC Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Room 1016; Throughout WHF	Human Dependence – human control of/interface with this SSC	None Identified
		Shielded Transfer Cask (STC) (TAD: 050-HT00-HEQ-00001) (DPC: 050-HT00-HEQ-00002)	Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of a vertical STC when not in use.
		TAD Canister Welding Machine (050-HC00-TOOL-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The TAD canister welding machine shall be located out of proximity of a vertical STC when not in use.	

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Shielded Transfer Cask (STC) (TAD: 050-HT00-HEQ-00001) (DPC: 050-HT00-HEQ-00002) (continued)	DPC Cutting Machine (050-HD00-TOOL-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The DPC cutting machine shall be located out of proximity a vertical STC when not in use.
			DPC Transfer Station (050-HTF0-RK-00002)	Pool P001	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			STC/TAD Transfer Station (050-HTF0-RK-00003)	Pool P001	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			DPC Unloading Bay Gate (050-WH00-DR-00002)	Pool P001	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	TAD Closure	TAD Closure Jib Crane (050-HC00-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified
			N/A (Operator)	Room 1016	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.12 and 2.2.18])
		Cask Support Frame (TAD Closure Station) (050-HC00-FRM-00001)	Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask support frame when not in use.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Dual-Purpose Canister Cutting	DPC Cutting Jib Crane (050-HD00-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified
			N/A (Operator)	Rooms 1001, 1016	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.12 and 2.2.18])
		Cask Support Frame (DPC Cutting Station) (050-HD00-FRM-00001)	Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask support frame when not in use.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Surface Nuclear Confinement HVAC System	Surface Nuclear Confinement HVAC	Portions of the surface nuclear confinement HVAC system that exhaust from areas with a potential for a breach	Digital Control & Management Information System	Various locations in WHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Various locations in WHF	Human Dependence – human interface with this SSC	None Identified
			Surface Nuclear-Confinement HVAC System – Non-ITS Supply Subsystems Serving ITS Secondary Confinement Areas	Various locations in WHF (C-3 Areas)	Spatial Dependence – Not-ITS SSC in proximity to ITS SSC	None Identified
		Portions of the surface nuclear confinement HVAC system that support the cooling of ITS electrical and controls equipment	Digital Control & Management Information System	Various locations in WHF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Various locations in WHF	Human Dependence – human interface with this SSC	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility	Wet Handling Facility (WHF)	Structure	None Identified	N/A	N/A	N/A
		Shield Doors (Including Anchorages)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize doors	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize doors	None Identified
			Digital Control & Management Information System	Throughout WHF, Rooms	Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Throughout WHF, Rooms	Human Dependence – human control of/interface with this SSC	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility	Wet Handling Facility (WHF)	Shield Doors (Including Anchorages) (continued)	Mobile Lift WHF: 050-HM00-ELEV-00001)	Rooms 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the shield doors when not in use.
		Pool Structure	None Identified	N/A	N/A	N/A
		Cask Port Slide Gate (050-HTC0-HTCH-00002)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified
			Canister Transfer Machine Maintenance Crane; 15-ton (050-HTC0-CRN-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity the cask port slide gate when not in use.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility (continued)	Wet Handling Facility (WHF) (continued)	Cask Port Slide Gate (050-HTC0-HTCH-00002) (continued)	Digital Control & Management Information System	Rooms 2004, 1008, Throughout WHF	Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 2004, 1008, Throughout WHF	Human Dependence – human control of/interface with this SSC	None Identified
			Surface Nuclear-Confinement HVAC System – Non-ITS Confinement Subsystems	Room 2004 and Room 1008	Environmental Dependence – Slide gate maintains confinement boundary between Non-ITS confinement zone and ITS confinement zone	None Identified
		Overpack Port Slide Gate (050-HTC0-HTCH-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize system	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility (continued)	Wet Handling Facility (WHF) (continued)	Overpack Port Slide Gate (050-HTC0-HTCH-00001) (continued)	Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize system	None Identified
			Canister Transfer Machine Maintenance Crane; 15-ton (050-HTC0-CRN-00001)	Room 2004	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The canister transfer machine maintenance crane shall be located out of proximity the overpack port slide gate when not in use.
			Digital Control & Management Information System	Rooms 2004, 1007, Throughout WHF	Functional Dependence – control of this SSC	None Identified
			Digital Control & Management Information System	Rooms 2004, 1007, Throughout WHF	Human Dependence – human control of/interface with this SSC	None Identified
			Surface Nuclear-Confinement HVAC System – Non-ITS Confinement Subsystems	Room 2004 and Room 1007	Environmental Dependence – Slide gate maintains confinement boundary between Non-ITS confinement zone and ITS confinement zone	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility (continued)	Wet Handling Facility (WHF) (continued)	Aging Overpack Access Platform (050-HAC0-PLAT-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize motors, etc.	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize motors, etc.	None Identified
		TAD Closure Station (050-HC00-PLAT-00001)	Mobile Lift (050-HM00-ELEV-00001)	Rooms 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the TAD closure station when not in use.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility (continued)	Wet Handling Facility (WHF) (continued)	TAD Closure Station (050-HC00-PLAT-00001) (continued)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize motors, etc.	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize motors, etc.	None Identified
			TAD Canister Welding Machine (WHF: 050-HC00-TOOL-00001)	Rooms 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
		DPC Cutting Station (050-HD00-PLAT-00001)	Mobile Lift (050-HM00-ELEV-00001)	Rooms 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the DPC cutting station when not in use.

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility (continued)	Wet Handling Facility (WHF) (continued)	DPC Cutting Station (050-HD00-PLAT-00001) (continued)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize motors, etc.	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize motors, etc.	None Identified
			DPC Cutting Machine (WHF: 050-HD00-TOOL-00001)	Rooms 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
		Preparation Station #1 (050-HMH0-PLAT-00001)	Truck Cask Lid Adapters (050-HMH0-HEQ-00010-11) Rail Cask Lid Adapters (050-HMH0-HEQ-00012-13)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility (continued)	Wet Handling Facility (WHF) (continued)	Preparation Station #1 (050-HMH0-PLAT-00001) (continued)	Mobile Lift (050-HM00-ELEV-00001)	Room 1016	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of preparation station #1 when not in use.
			Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize motors, etc.	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize motors, etc.	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility (continued)	Wet Handling Facility (WHF) (continued)	Preparation Station #2 (050-HMH0-PLAT-00002)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout WHF	Functional Dependence – power to energize motors, etc.	None Identified
			Electrical Support System – Cable Raceway	Throughout WHF	Functional Dependence – carries power to energize motors, etc.	None Identified
		Decontamination Pit, Decontamination Pit Seismic Restraints (050-HM00-BRAC-00001)	Decontamination Pit Platform (050-HM00-PLAT-00002)	Decontamination Pit P002	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table D-1. ITS SSC/Non-ITS Interactions for the WHF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Wet Handling Facility (continued)	Wet Handling Facility (WHF) (continued)	Decontamination Pit, Decontamination Pit Seismic Restraints (050-HM00-BRAC-00001) (continued)	Decontamination Pit Cover (050-HM00-HTCH-00001)	Room 1016; Decontamination Pit P002	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

NOTE: BWR = boiling water reactor; CRCF = Canister Receipt and Closure Facility; DOE = U.S. Department of Energy; DPC = dual-purpose canister; HVAC = heating, ventilation, and air-conditioning; ITS = important to safety; N/A = not applicable; PWR = pressurized water reactor; RC = rail cask; RF = Receipt Facility; SNF = spent nuclear fuel; SSC = structure, system, or component; SSCs = structures, systems, and components; STC = shielded transfer cask; TAD = transportation, aging, and disposal; TC = truck cask; WHF = Wet Handling Facility.

ATTACHMENT E
ITS SSC/NON-ITS SSC INTERACTIONS IN THE RF

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Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Aging	Aging Handling/ Cask Transfer	Site Transporter (170-HAT0-MEQ-00001)	N/A (Operator)	Rooms 1001, 1002, 1013	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.13 and 2.2.19])
		Cask Tractor (170-HAT0-HEQ-00001)	Mobile Lift (200-HM00-ELEV-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of a cask tractor (pulling a loaded cask transfer trailer) when not in use.
			Mobile Access Platform (200-HMC0-PLAT-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of a cask tractor (pulling a loaded cask transfer trailer) when not in use.
		N/A (Operator)	Rooms 1017, 1021	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.13 and 2.2.19])	
		Cask Transfer Trailer (PWR DPC: [170- HAT0-TRLY-00001]) (BWR DPC: [170- HAT0-TRLY-00002])	Mobile Lift (200-HM00-ELEV-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of a cask transfer trailer (holding a loaded cask) when not in use.
			Mobile Access Platform (200-HMC0-PLAT-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of a cask transfer trailer (holding a loaded cask) when not in use.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Aging (continued)	Aging Handling/ Cask Transfer (continued)	Cask Transfer Trailer (PWR DPC: [170-HAT0-TRLY-00001]) (BWR DPC: [170-HAT0-TRLY-00002]) (continued)	N/A (Operator)	Rooms 1017, 1021	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.13 and 2.2.19])
	Aging Handling/ Aging Overpack	Aging Overpack (TAD: [170-HAC0-ENCL-00003]) (Vertical DPC: [170-HAC0-ENCL-00002])	None Identified	N/A	N/A	N/A
DOE and Commercial Waste Package System	Canistered Spent Nuclear Fuel	Dual-Purpose Canister (DPC)	None Identified	N/A	N/A	N/A
		Transport, Aging, and Disposal (TAD) Canister	None Identified	N/A	N/A	N/A
Mechanical Handling System	Cask Handling	Transportation Cask	Cask/Canister/Waste Package Process System: Cask Cavity Gas Sampling	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
		Cask/Canister/Waste Package Process System: Cask Cavity Gas Sampling	Cask/Canister/Waste Package Process System: Cask Cavity Gas Sampling	Room 1017	Environmental Dependence – maintain to specified limits	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Transportation Cask (continued)	Mobile Lift (200-HM00-ELEV-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the transportation cask when not in use.
			Mobile Access Platform (200-HMC0-PLAT-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of a loaded transportation cask when not in use.
			Impact Limiter Lifting Device (200-HMC0-HEQ-00001, 3, 5, 7, 9, 11, 14)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Personnel Barrier Lifting Device (200-HMC0-HEQ-00002, 4, 6, 8, 10, 12, 13)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Horizontal Cask Stand (200-HM00-RK-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.
			Cask Tilting Frame (200-HMC0-FRM-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Site Prime Mover	N/A (Operator)	Rails or roadway leading to RF; Rooms 1021A, 1021, 1017A, 1017	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.13 and 2.2.19])
			Mobile Lift (200-HM00-ELEV-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of a site prime mover (pulling or pushing a conveyance holding a loaded cask) when not in use.
			Mobile Access Platform (200-HMC0-PLAT-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile access platform shall be located out of proximity of a site prime mover (pulling or pushing a conveyance holding a loaded cask) when not in use.
	Cask Handling Yoke (200-HM00-BEAM-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF	Functional Dependence – power to energize system	None Identified	
		Electrical Support System – Cable Raceway	Throughout RF	Functional Dependence – carries power to energize system	None Identified	

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Handling Yoke (200-HM00-BEAM-00001) (continued)	Digital Control & Management Information System	Room 1017, throughout the RF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Room 1017, throughout the RF	Human Dependence – human control of/interface with this SSC	None Identified
		Cask Handling Crane; 200-ton (200-HM00-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF	Functional Dependence – power to energize system	None Identified.
			Electrical Support System – Cable Raceway	Throughout RF	Functional Dependence – carries power to energize system	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Cask Handling Crane; 200-ton (200-HM00-CRN-00001) (continued)	Digital Control & Management Information System	Room 1017; Throughout RF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified.
			Digital Control & Management Information System	Room 1017; Throughout RF	Human Dependence – human control of/interface with this SSC	None Identified.
		Cask Transfer Trolley and Pedestal Trolley: (RF: 200-HM00-TRLY-00001) Pedestal: (200-HM00-PED-00001)	Plant Services System – General Purpose Air	Throughout RF; Rooms 1017, 1015	Functional Dependence - Cask Transfer Trolley air pallet is dependent on general purpose air from Plant Services System	None identified
		Mobile Lift (200-HM00-ELEV-00001)	Rooms 1017, 1015	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask transfer trolley when not in use.	
		N/A (Operator)	Rooms 1017, 1015	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.13 and 2.2.19])	

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling/ Cask Receipt	Lid Bolting Room Crane (200-HMC0-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF; Room 1002	Functional Dependence – power to energize system	None identified.
			Electrical Support System – Cable Raceway	Throughout RF	Functional Dependence – carries power to energize system	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Cask	Cask Handling/ Cask Receipt (continued)	Horizontal Lifting Beam (200-HMC0-BEAM-00001)	None Identified	N/A	N/A	N/A
	Handling/Cask Preparation	Cask Lid Lifting Grapples (200-HMH0-HEQ-00008)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF	Functional Dependence – power to energize system	None Identified.
			Electrical Support System – Cable Raceway	Throughout RF	Functional Dependence – carries power to energize system	None Identified.
			Digital Control & Management Information System	Room 1017; Throughout RF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling/Cask Preparation (continued)	Cask Lid Lifting Grapples (200-HMH0-HEQ-00008) (continued)	Digital Control & Management Information System	Room 1017; Throughout RF	Human Dependence – human control of/interface with this SSC	None Identified.
		Rail Cask Lid Adapters (200-HMH0-HEQ-00002)	None Identified	N/A	N/A	N/A
		DPC Lid Adapter (200-HMH0-HEQ-00001)	None Identified	N/A	N/A	N/A
	Waste Transfer/ Canister Transfer	CTM Maintenance Crane (200-HTC0-CRN-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF; Room 2007	Functional Dependence – power to energize system	None identified.
			Electrical Support System – Cable Raceway	Throughout RF	Functional Dependence – carries power to energize system	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Canister Transfer Machine (200-HTC0-FHM-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF; Room 2007	Functional Dependence – power to energize system	None Identified.
			Electrical Support System – Cable Raceway	Throughout RF; Room 2007	Functional Dependence – carries power to energize system	None Identified.
			Digital Control & Management Information System	Room 2007. Throughout RF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified.
			Digital Control & Management Information System	Room 2007, Throughout RF	Human Dependence – human control of/interface with this SSC	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Canister Transfer Machine Grapples (200-HTC0-HEQ-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF	Functional Dependence – power to energize system	None Identified.
			Electrical Support System – Cable Raceway	Throughout RF	Functional Dependence – carries power to energize system	None Identified.
			Digital Control & Management Information System	Room 2007; Throughout RF	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Waste Transfer/ Canister Transfer (continued)	Canister Transfer Machine Grapples (200-HTC0-HEQ-00001) (continued)	Digital Control & Management Information System	Room 2007; Throughout RF	Human Dependence – human control of/interface with this SSC	None Identified.
Receipt Facility	Receipt Facility	Structure	None Identified	N/A	N/A	N/A
		Shield Doors (Including Anchorages)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF, Rooms 1017, 1015, 1013	Functional Dependence – power to energize doors	None Identified.
		Electrical Support System – Cable Raceway		Throughout RF	Functional Dependence – carries power to energize doors	None Identified.
		Digital Control & Management Information System		Throughout RF, Rooms 1017, 1015, 1013	Functional Dependence – control of this SSC	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Receipt Facility (continued)	Receipt Facility (continued)	Shield Doors (Including Anchorages) (continued)	Digital Control & Management Information System	Throughout RF, Rooms 1017, 1015, 1013	Human Dependence – human control of/interface with this SSC	None Identified.
			Mobile Lift (200-HM00-ELEV-00001)	Rooms 1017, 1015	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the shield doors when not in use.
		Cask Port Slide Gate (200-HTC0-HTCH-00001)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF; Rooms 2007, 1015, 1013,	Functional Dependence – power to energize system	None Identified.
		Electrical Support System – Cable Raceway	Throughout RF	Functional Dependence – carries power to energize system	None Identified.	
		Digital Control & Management Information System	Rooms 2007, 1015, 1013, Throughout RF	Functional Dependence – control of this SSC	None Identified.	

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Receipt Facility (continued)	Receipt Facility (continued)	Cask Port Slide Gate (200-HTC0-HTCH-00001) (continued)	Digital Control & Management Information System	Rooms 2007, 1015, 1013, Throughout RF	Human Dependence – human control of/interface with this SSC	None Identified.
		AO Port Slide Gate (200-HTC0-HTCH-00002)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF; Room 2007	Functional Dependence – power to energize system	None Identified.
		Electrical Support System – Cable Raceway		Throughout RF	Functional Dependence – carries power to energize system	None Identified.
		Digital Control & Management Information System		Rooms 2007, 1015, 1013, Throughout RF	Functional Dependence – control of this SSC	None Identified.
		Digital Control & Management Information System		Rooms 2007, 1015, 1013, Throughout RF	Human Dependence – human control of/interface with this SSC	None Identified.

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Receipt Facility (continued)	Receipt Facility (continued)	Cask Preparation Platform (200-HMH0-PLAT-00001)	Mobile Lift (200-HM00-ELEV-00001)	Room 1017	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile lift shall be located out of proximity of the cask preparation platform when not in use.
			Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF	Functional Dependence – power to energize motors, etc.	None Identified
			Electrical Support System – Cable Raceway	Throughout RF	Functional Dependence – carries power to energize motors, etc.	None Identified

Table E-1. ITS SSC/Non-ITS SSC Interactions for the RF ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Receipt Facility (continued)	Receipt Facility (continued)	Lid Bolting Room Platform (200-HMC0-PLAT-00003)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout RF	Functional Dependence – power to energize motors, etc.	None Identified
			Electrical Support System – Cable Raceway	Throughout RF	Functional Dependence – carries power to energize motors, etc.	None Identified

NOTE: AO = aging overpack; BWR = boiling water reactor; CTM = canister transfer machine; DOE = U.S. Department of Energy; DPC = dual-purpose canister; IHF = Initial Handling Facility; ITS = important to safety; N/A = not applicable; PWR = pressurized water reactor; RF = Receipt Facility; SSC = structure, system, or component; SSCs = structures, systems, and components; TAD = transport, aging, and disposal.

ATTACHMENT F
ITS SSC/NON-ITS SSC INTERACTIONS FOR THE INTRA-SITE OPERATIONS

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Table F-1. ITS SSC/Non-ITS SSC Interactions for the Intra-Site Operations ITS SSCs

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Aging Facility	Aging Facility	Aging Pad	None Identified	N/A	N/A	N/A
		Horizontal Aging Module (HAM) (170-HAC0-ENCL-00001)	Mobile Platform (170-HAP0-PLAT-00001-2)	Aging Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile platform shall be located out of proximity of the loaded HAM when not in use.
		Mobile Crane (170-HAT0-CRN-00001-2)	Aging Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile crane shall be located out of proximity of the loaded HAM when not in use.	
	Aging Handling/Cask Transfer	Cask Tractor (for use with the Cask Transfer Trailer) (170-HAT0-HEQ-00001)	Mobile Platform (170-HAP0-PLAT-00001-2)	Aging Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile platform shall be located out of proximity of a cask tractor pulling a loaded cask transfer trailer when not in use.
			Mobile Crane (170-HAT0-CRN-00001-2)	Aging Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile crane shall be located out of proximity of a cask tractor pulling a loaded cask transfer trailer when not in use.
		N/A (Operator)	Aging Facility; roadways in Balance of Plant	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.15 and 2.2.21])	

Table F-1. ITS SSC/Non-ITS SSC Interactions for the Intra-Site Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Aging Facility (continued)	Aging Handling/Cask Transfer (continued)	Cask Transfer Trailer (PWR DPC: [170-HAT0-TRLY-00001]) (BWR DPC: [170-HAT0-TRLY-00002])	Mobile Platform (170-HAP0-PLAT-00001-2)	Aging Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The mobile platform shall be located out of proximity of a cask transfer trailer (holding a loaded cask) when not in use.
			Mobile Crane (170-HAT0-CRN-00001-2)	Aging Facility	Spatial dependence— non-ITS SSC in proximity to ITS SSC	The mobile crane shall be located out of proximity of a cask transfer trailer (holding a loaded cask) when not in use.
			N/A (Operator)	Aging Facility; roadways in Balance of Plant	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.15 and 2.2.21])
		Site Transporter (170-HAT0-MEQ-00001)	Mobile Platform (170-HAP0-PLAT-00001-2)	Aging Facility	Spatial dependence— non-ITS SSC in proximity to ITS SSC	The mobile platform shall be located out of proximity of a loaded site transporter when not in use.
			Mobile Crane (170-HAT0-CRN-00001-2)	Aging Facility	Spatial dependence— non-ITS SSC in proximity to ITS SSC	The mobile crane shall be located out of proximity of a loaded site transporter when not in use.
			N/A (Operator)	Aging Facility; roadways in Balance of Plant	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.15 and 2.2.21])

Table F-1. ITS SSC/Non-ITS SSC Interactions for the Intra-Site Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Aging Facility (continued)	Aging Handling/Aging Overpack	Horizontal Shielded Transfer Cask (HSTC) (170-HAC0-HEQ-00001)	Mobile Platform (170-HAP0-PLAT-00001-2)	Aging Facility	Spatial dependence—non-ITS SSC in proximity to ITS SSC	The mobile platform shall be located out of proximity of a loaded horizontal shielded transfer cask when not in use.
			Mobile Crane (170-HAT0-CRN-00001-2)	Aging Facility	Spatial dependence—non-ITS SSC in proximity to ITS SSC	The mobile crane shall be located out of proximity of a loaded horizontal shielded transfer cask when not in use.
		Aging Overpack (TAD canister [170-HAC0-ENCL-00003]) (Vertical DPC [170-HAC0-ENCL-00002])	Mobile Platform (170-HAP0-PLAT-00001-2)	Aging Facility	Spatial dependence—non-ITS SSC in proximity to ITS SSC	The mobile platform shall be located out of proximity of a loaded aging overpack when not in use.
			Mobile Crane (170-HAT0-CRN-00001-2)	Aging Facility	Spatial dependence—non-ITS SSC in proximity to ITS SSC	The mobile crane shall be located out of proximity of a loaded aging overpack when not in use.
Balance of Plant	Flood Prevention	Flood Control Features	None Identified.	N/A	N/A	N/A
DOE and Commercial Waste Package System	Defense High-Level Waste/DOE SNF Codisposal	DOE Standardized Canister	None Identified.	N/A	N/A	N/A
		HLW Canister	None Identified.	N/A	N/A	N/A
	Canistered Spent Nuclear Fuel	Dual-purpose canister (DPC)	None Identified.	N/A	N/A	N/A
		TAD Canister	None Identified.	N/A	N/A	N/A

Table F-1. ITS SSC/Non-ITS SSC Interactions for the Intra-Site Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Electrical Power System	ITS Power	ITS Distribution (ITS equipment and feeders up to and including ITS loads, ITS direct current power, ITS uninterruptible power supply power)	Digital Control and Management Information System	Throughout the site	Human dependence—human interface with this SSC for monitoring	None Identified.
		ITS Diesel Generators A and B	Electrical Support System – Cable Raceway	Emergency Diesel Generator Facility (EDGF); throughout the site	Functional Dependence – carries power	None Identified
			Digital Control and Management Information System	EDGF; throughout the site	Functional dependence—interface with control system provided with the SSC for control of this SSC	None Identified.
			Digital Control and Management Information System	EDGF; throughout the site	Human dependence – human control of/ interface with this SSC	
			EDGF Structure	EDGF	Spatial dependence—non-ITS SSC in proximity to ITS SSC	None Identified.
Mechanical Handling System	Cask Handling	Transportation cask	None Identified.	N/A	N/A	N/A

Table F-1. ITS SSC/Non-ITS SSC Interactions for the Intra-Site Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Mechanical Handling System (continued)	Cask Handling (continued)	Site Prime Mover	N/A (Operator)	Balance of Plant (Buffer Areas, rails and roadways leading to the IHF, RF, CRCF, and WHF)	Human Dependence – human interface with/control of this SSC	N/A (This dependence is accounted for in the preclosure safety event sequence analysis [Refs. 2.2.15 and 2.2.21]).
Surface Non-Confinement HVAC System	Surface Non-Confinement HVAC	Portions of the surface non-confinement HVAC system that support the cooling of ITS electrical and controls equipment (EDGF)	Digital Control & Management Information System	EDGF; throughout the site	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified.
			Digital Control & Management Information System	EDGF; throughout the site	Human Dependence – human control of/interface with this SSC	None Identified.
Naval SNF Waste Package System	Naval SNF	Naval SNF Canister	None Identified.	N/A	N/A	N/A

NOTE: BWR = boiling water reactor; CRCF = Canister Receipt and Closure Facility; DOE = U.S. Department of Energy; DPC = dual-purpose canister; EDGF = Emergency Diesel Generator Facility; HAM = horizontal aging module; HLW = high-level radioactive waste; HSTC = horizontal shielded transfer cask; HVAC = heating, ventilation, and air-conditioning; IHF = Initial Handling Facility; ITS = important to safety; N/A = not applicable; PWR = pressurized water reactor; RF = Receipt Facility; SNF = spent nuclear fuel; SSC = structure, system, or component; SSCs = structures, systems, and components; TAD = transport, aging, and disposal canister; WHF = Wet Handling Facility.

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ATTACHMENT G
ITS SSC/NON-ITS SSC INTERACTIONS FOR THE SUBSURFACE OPERATIONS

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Table G-1. ITS SSC/Non-ITS SSC Interactions for the Subsurface Operations ITS SSCs

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
DOE and Commercial Waste Package System	DOE and Commercial Waste Package	DOE and Commercial Waste Package	Nonemplacement Openings	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Ground Support for Emplacement Drifts	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Ground Support for Nonemplacement Openings	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Emplacement Drifts	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Emplacement Drift Invert (Steel and Ballast)	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Emplacement Pallet	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table G-1. ITS SSC/Non-ITS SSC Interactions for the Subsurface Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
DOE and Commercial Waste Package System (continued)	DOE and Commercial Waste Package (continued)	DOE and Commercial Waste Package (continued)	Drip Shield	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Drip Shield Emplacement Gantry	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Inspection Gantry	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Subsurface Ventilation	Subsurface Facility	Environmental Dependence—maintain environment; provide cooling to SNF	None Identified

Table G-1. ITS SSC/Non-ITS SSC Interactions for the Subsurface Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Emplacement and Retrieval System/Drip Shield Installation System	Emplacement and Retrieval/Drip Shield Installation System	Transport and Emplacement Vehicle (TEV)	Electrical Power System – Switchyard and Standby Power, Normal Power, Emergency Power (Life Safety), Normal Direct Current Electrical Power, Normal Uninterruptible Power Supply Power, Site Electrical Distribution, Renewable Energy, Standby Diesel Generator	Throughout the site, subsurface	Functional Dependence – power to energize system	None Identified
			Electrical Support System – Cable Raceway	Throughout the site, subsurface	Functional Dependence – carries power to energize system	None Identified
			Digital Control & Management Information System	Throughout the site, subsurface	Functional Dependence – interface with control system provided with the SSC for control of this SSC	None Identified
			Digital Control & Management Information System	Throughout the site, subsurface	Human Dependence – human control of/interface with this SSC	None Identified

Table G-1. ITS SSC/Non-ITS SSC Interactions for the Subsurface Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Emplacement and Retrieval System/Drip Shield Installation System (continued)	Emplacement and Retrieval/Drip Shield Installation System (continued)	Transport and Emplacement Vehicle (TEV) (continued)	Rails (for the TEV)	Surface Facility; Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Emplacement Drift Doors	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Nonemplacement Openings	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Ground Support for Emplacement Drifts	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Ground Support for Nonemplacement Openings	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Emplacement Drifts	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table G-1. ITS SSC/Non-ITS SSC Interactions for the Subsurface Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Emplacement and Retrieval System/Drip Shield Installation System (continued)	Emplacement and Retrieval/Drip Shield Installation System (continued)	Transport and Emplacement Vehicle (TEV) (continued)	Emplacement Drift Invert (Steel and Ballast)	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Waste Package Emplacement Pallet	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Drip Shield	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Drip Shield Emplacement Gantry	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The waste package emplacement gantry shall be located out of proximity of a TEV carrying a filled and sealed waste package.
			Inspection Gantry	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	The inspection gantry shall be located out of proximity of a TEV carrying a filled and sealed waste package.

Table G-1. ITS SSC/Non-ITS SSC Interactions for the Subsurface Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Emplacement and Retrieval System/Drip Shield Installation System (continued)	Emplacement and Retrieval/Drip Shield Installation System (continued)	Transport and Emplacement Vehicle (TEV) (continued)	Subsurface Ventilation	Subsurface Facility	Environmental Dependence—maintain environment; provide cooling to SNF	None Identified
Naval SNF Waste Package System	Naval SNF Waste Package	Naval SNF Waste Package	Nonemplacement Openings	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Ground Support for Emplacement Drifts	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Ground Support for Nonemplacement Openings	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Emplacement Drifts	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Emplacement Drift Invert (Steel and Ballast)	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified

Table G-1. ITS SSC/Non-ITS SSC Interactions for the Subsurface Operations ITS SSCs (continued)

System or Facility	Subsystem (as Applicable)	ITS SSC	Non-ITS SSC	Location of Interaction	Type of Interaction	Operating Procedures
Naval SNF Waste Package System (continued)	Naval SNF Waste Package (continued)	Naval SNF Waste Package (continued)	Waste Package Emplacement Pallet	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Drip Shield	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Drip Shield Emplacement Gantry	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Inspection Gantry	Subsurface Facility	Spatial Dependence – Non-ITS SSC in proximity to ITS SSC	None Identified
			Subsurface Ventilation	Subsurface Facility	Environmental Dependence–maintain environment; provide cooling to SNF	None Identified

NOTE: DOE = U.S. Department of Energy; ITS = important to safety; SNF = spent nuclear fuel; SSC = structure, system, or component; SSCs = structures, systems, and components; TEV = transport and emplacement vehicle.

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