

NNSA-SRSO Ten-Year Site Plan FY 2012 – FY 2021

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**SRS
Tritium Facilities**



**SRS Nuclear Nonproliferation Facilities
Under Construction (January 2011)**

1.0 EXECUTIVE SUMMARY

NNSA Missions at SRS

At the Savannah River Site (SRS), the two largest NNSA programs are focused on the integrated tritium supply chain and plutonium disposition. Additional NNSA support is provided by SRNL for nuclear materials transportation, safeguards and monitoring. The SRS Tritium Programs are managed by the Savannah River Site Office (SRSO) as part of the Defense Programs organization (NA-10), and the SRS Plutonium Disposition Program is managed by the Office of Fissile Materials Disposition (OFMD) as part of the Nuclear Nonproliferation organization (NA-20).

The facilities and infrastructure supporting the integrated tritium supply chain activities at SRS are the central focus of this document. These facilities have been operational for a number of years (beginning in 1955) and are readily evaluated based on the TYSP guidance. The Plutonium Disposition Program facilities are currently in various phases of construction and are scheduled to begin to operations over the next 10 years. The mission and related program plans associated with plutonium disposition at SRS will be presented to illustrate the expansion of NNSA missions at SRS.

The NNSA missions presented in this plan include:

- ***Tritium Supply*** – extraction of tritium from irradiated target rods and management of the tritium inventory for the nuclear stockpile.
- ***Nuclear Stockpile Maintenance*** – loading of tritium and deuterium into reservoirs that are used in the gas transfer system of a nuclear weapon.
- ***Nuclear Stockpile Evaluation*** – surveillance of gas transfer systems to assure reliability in the absence of nuclear testing.
- ***Helium-3 Recovery*** – recovery of this byproduct of tritium's radioactive decay for use in neutron detectors and various commercial applications.
- ***Plutonium Disposition*** – Conversion of at least 34 metric tons of weapons grade plutonium into mixed oxide fuel for use in commercial nuclear power plants. Once irradiated, the plutonium can no longer readily be used for weapons purposes.

FY 2010 Highlights

Tritium Programs

SRNS continued to execute the Tritium missions successfully in FY 2010. All required reservoir products were delivered on schedule, while meeting quality targets. All required gas transfer system (GTS) surveillance data were delivered to the Design Agencies to support the annual certification of the stockpile. Tritium was extracted from cycle 9A tritium-producing burnable absorption rods (TPBARs) four weeks ahead of schedule. All helium-3 commitments were met while addressing infrastructure needs. SRS work scope associated with all 41 NNSA Level 2 Milestones was completed.

The Tritium Project organization consistently executed projects on schedule and within budget. A few of the key accomplishments include completing remote air monitoring of the H Area Old Manufacturing (HAOM) facility, stripper system piping modifications in the H Area New Manufacturing (HANM) facility, and modernization of the Automated Reservoir Management System (ARMS). The Tritium Project Building and the Tritium Extraction Facility (TEF) Warehouse were constructed and turned over to Operations.

Work in the Tritium facilities was executed safely, as evidenced by a Total Recordable Case (TRC) Rate of 0.25 for Operations and 0.00 for Construction.

Figure 1-1: New Tritium Support Buildings



SRNS continued to drive business discipline to improve cost effectiveness. For example, the Tritium protective force structure was realigned, saving \$2.8M in FY 2010 and \$4.5M annually in FY 2011 and subsequent years. Cross-trained personnel from other Tritium facilities were successfully utilized to perform the annual extraction in TEF; this “Responsive Operations” strategy saves \$12M per year. An aggressive Continuous Improvement (CI) training program was launched, involving a large percentage of the workforce. Implementation of comprehensive Governance Reform was also begun. Cost transparency was advanced by implementing new financial tools and improving understanding of support costs. Intensive cross training, coupled with small-project work, was conducted to achieve centralized control of all operations in the HANM facility by FY 2012.

Plutonium Disposition Programs

The Plutonium Disposition Program (PDP) is one of the Office of Fissile Materials Disposition (OFMD) primary objectives and is designed to fulfill U.S. policy related to nuclear nonproliferation and associated diplomatic obligations. SRS plays a major role in U.S. nonproliferation initiatives with three line item projects providing facilities that are expected to be operating within the next ten years. These new facilities include the Mixed Oxide (MOX) Fuel Fabrication Facility (MFFF), the Pit Disassembly and Conversion (PDC) capability, and the Waste Solidification Building (WSB). Significant FY 2010 PDP accomplishments at SRS are shown below:

MFFF

- Installed more than 3,600 tons of reinforcing steel (rebar) and placed more than 22,000 cubic yards of concrete.
- Completed assembly and testing of the first MOX process glovebox.
- Started installation of process piping and heating, ventilation, and air conditioning (HVAC).
- Completed the new electrical substation to provide power to MOX and WSB.
- Completed design of all MOX process gloveboxes.
- Completed construction of the MOX Secured Warehouse.
- The MFFF Administration Building was certified as Leadership in Energy and Environmental Design (LEED) Gold by the U.S. Green Building Council.

WSB

- Completed all site preparations and installation of underground utilities.
- The structural basemat was completed and work continues on facility wall construction.
- Major long-lead procurement activities were completed, including electrical substation, High-Efficiency Particulate Air (HEPA) filter housings, glove boxes, evaporators, and ventilation fans.

PDC

- The Critical Decision 1 / Conceptual Design Report (CD-1 / CDR) package was developed to meet the accelerated schedule and submitted to NNSA for approval.
- The Integrated Project Team (IPT) supported independent reviews of project design and cost estimates, in addition to periodic reviews with the Defense Nuclear Facilities Safety Board (DNBSB).
- Implemented improvements supporting IPT operations, including installation of a secure network connection with the Design Agency located in Denver and establishing a PDC project web “Portal” to improve information sharing between project participants at Los Alamos National Laboratory (LANL), Pacific Northwest National Laboratory (PNNL), URS Denver, and SRS personnel.

General

- Supported the development of a notice of intent and public scoping meetings for a revision to the Surplus Plutonium Disposition Environmental Impact Statement (DOE/EIS-0283, 1999).

Current State and Future Plans

SRSO and OFMD are working cooperatively with the DOE-SR (Office of Environmental Management) to support the development of future missions for SRS based on national interests, site assets, and core competencies as detailed in the SRS Strategic Plan (2010). With respect to NNSA operations at SRS, the SRSO manages the integrated tritium supply chain and provides the safety, security and contracts functions for all NNSA programs. The OFMD is currently managing the three line item projects focused on plutonium disposition and the program to integrate functions between these new facilities, other DOE sites, and external customers.

With much of the current plutonium inventory and associated storage facilities at SRS managed by DOE-SR, the NNSA is evaluating the transition of material and facility ownership from EM to NNSA. This transition is being managed as part of the Critical Decision process for the PDC project anticipating participation of both SRSO and OFMD in the future management and operation of the plutonium disposition process at SRS.

Tritium Programs

Although the Tritium missions continue to be executed successfully, sustainment of mission capability is an overarching concern that encompasses multiple challenges in the realms of People, Plant, and Processes. These are discussed below, along with the plans to address them.

People

SRNS is fortunate to have many experienced, Tritium-knowledgeable people who contribute heavily to continual mission success, but many of them are now eligible to retire. To address the expected increase in attrition, SRNS will continue to “fill the pipeline” with Operators and Engineers, and begin filling the Maintenance pipeline. SRNS will also continue to aggressively cross train personnel to improve workforce utilization and to enable centralized control of all operations from the HANM facility in FY 2012. By establishing “HANM-centric” operations, the shift complement can be reduced from 21 to 17 people on four shifts.

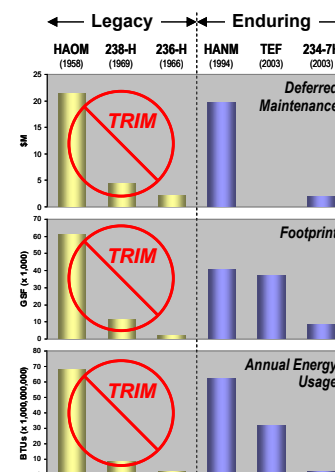
Much of the Science, Technology, and Engineering (ST&E) base that SRNS depends on for mission sustainment resides in Savannah River National Laboratory (SRNL) scientists. In addition to research and development (R&D) of future technologies supporting the changing stockpile and the Tritium plant, their unique expertise is frequently called upon to resolve technical issues associated with today’s one-of-a-kind Tritium processes. Maintaining a healthy ST&E base is essential, but dedicated funding is no longer available via the Readiness Campaign. To minimize the impact, SRS is mining cost efficiencies to fund Plant- and Laboratory-Directed R&D (PDRD and LDRD) projects, and focusing them on needed Tritium scope.

Plant

SRS’ current Mission Critical footprint is comprised of older, Cold War-legacy facilities and more modern facilities that will endure throughout the 10- and 20-year planning horizons. The older facilities and associated infrastructure are expensive to maintain, larger than necessary to support the current stockpile, and energy-inefficient. The vision for the next ten years is to expedite relocation and right-sizing of the remaining functions from these older facilities into the more modern facilities via an initiative known as Tritium Responsive Infrastructure Modifications (TRIM).

TRIM has many discrete elements that can be accomplished with available funding via capital equipment / general plant projects (CE/GPPs), but relocation of some of the remaining functions in the HAOM facility cannot. The Corporate Physical Infrastructure Business Plan for FY 2011 – FY 2041 (CPIBP) includes a proposed line item that would complete the TRIM scope: “Sustaining HAOM Facility, SRS,” scheduled for FY 2020 – FY 2026.

Figure 1-2: Current Mission Critical SRS Tritium Facilities



Processes

The significant “People” and “Plant” challenges described above require funding to address, and increased pension cost will reduce the buying power of available funding. Therefore, SRNS will continue to drive improved business processes into the Tritium culture to improve cost effectiveness and maximize utilization of available funding.

Continuous Improvement is a good example. Many of the Tritium employees who were trained in the use of CI tools during FY 2010 are now deployed on multiple CI projects to reduce the cost of operations, and CI objectives are included in their performance reviews to stimulate ongoing use of the tools. SRSO and SRNS will continue to jointly drive comprehensive Governance Reform, which also has great potential to take cost out of the Tritium business. SRNS will minimize the pension impact by taking advantage of new Employee Retirement Income Security Act (ERISA) law that allows payments to be made over several years, and will manage funds in a multi-year mode to help level-load cost with budget.

Plutonium Disposition Programs

NNSA is establishing the capability to disassemble surplus plutonium pits and process weapons grade plutonium as feedstock for the production of MOX fuel and subsequent irradiation in commercial nuclear power reactors. The production of MOX fuel assemblies at SRS aligns with the SRS mission to support national priorities and builds on the existing site core competencies and assets. Three major projects at SRS are in various stages of implementation to establish the required infrastructure for production of MOX fuel from weapons grade plutonium. The principal functions of each facility are as follows:

- PDC will disassemble pits and process, stabilize, and package plutonium for MFFF feedstock.
- MFFF will purify the plutonium feedstock from PDC (and smaller amounts from other DOE sources) and blend with depleted uranium oxide as an intermediate step in the production of MOX fuel assemblies.
- WSB will process the liquid waste from PDC and MFFF to generate solid waste forms for disposal.

Figure 1-3: MFFF Welders



In the next ten years, MFFF will finish construction, conduct start-up testing, and begin operations. The project continues to experience issues with locating vendors who have programs and processes that meet the NQA-1 nuclear quality assurance standards and that can supply materials and equipment that meets those standards. The contractor has stationed engineering and quality assurance personnel in vendor facilities to mitigate this concern. Further, the contractor has experienced competition for skilled and highly qualified engineers and craft as the balance of the nuclear industry begins to go through the “nuclear renaissance.”

Construction of the WSB started in December 2009, and is scheduled to be completed in June 2012, with approval for start-up expected around September 2013. WSB will initially process MFFF water runs followed by waste from MFFF chemical runs scheduled for June 2014. The facility will begin radioactive operations as early as June 2015. The MFFF processing rate will increase over the first three years after radioactive start-up and is expected to reach design production capacity in 2020. Sometime after 2019, the PDC project will be completed and begin operations, adding a small liquid waste stream to WSB. WSB concerns include on-schedule delivery of long-lead procurement items (e.g., cementation glove boxes and emergency diesel generators) with the appropriate Quality Assurance (QA) pedigree.

There are currently a limited number of vendors that can support NQA-1 requirements needed for construction of nuclear facilities. An additional challenge facing WSB is the ability of construction subcontractors to meet

Figure 1-4: WSB Rebar Installed Prior to Basemat Pour



schedule requirements. In response, the WSB team holds a weekly review with subcontractors to identify obstacles and expedite delivery as needed.

Construction options for the PDC capability are being developed as part of facility design and will be evaluated as part of the Critical Decision (CD) process. As such, the information presented in this TYSP is based upon the CD-1/CDR package submitted in December 2010, which estimates PDC project completion in FY 2025. However, the PDC Integrated Project Team is evaluating opportunities that can be implemented during preliminary design to significantly reduce construction footprint and schedule. Current PDC operational concerns include the performance of custom process equipment used in facility design. To alleviate this concern, a Demonstration and Testing program at LANL is evaluating equipment designs and working to resolve difficulties as identified. There is also some uncertainty associated with the composition of alternative feed materials that will be processed in MFFF, so the available process history and existing measurement results are being evaluated to minimize the associated risks. Schedule and budget constraints impacting PDC design, construction, and start-up are challenges the PDC Integrated Project Team continues to manage and define opportunities for process improvements and cost savings.

2.0 SITE OVERVIEW AND SNAPSHOT

Location: Aiken, South Carolina

Type: Multi-Program Site

Web site: www.srs.gov

Site Overview:

At SRS, NNSA executes Tritium and plutonium disposition missions in support of U.S. national security.

The Tritium area occupies approximately 29 acres in H Area. Tritium's enduring missions have been executed successfully since operations began in 1955. Savannah River Nuclear Solutions, LLC (SRNS) currently manages and operates the Tritium facilities with a combined (direct and support) staff of approximately 700 full-time equivalents (FTEs). Core capabilities include Tritium Operations and R&D and Infrastructure Support Facilities.

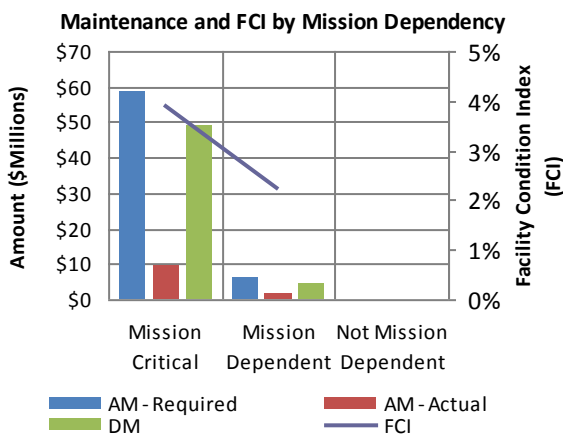
Current projects will establish NNSA capability to execute the nuclear nonproliferation objectives aligned with the Plutonium Disposition Program. As part of the nonproliferation mission, PDC will disassemble surplus plutonium pits and convert plutonium into feedstock for production of MOX fuel. The MFFF will use plutonium feedstock from PDC (and smaller amounts from other DOE sources) to manufacture MOX fuel assemblies for use in commercial nuclear power reactors. WSB will process the liquid waste streams from PDC and MFFF to generate solid waste forms for disposal. The MFFF and WSB facilities are under construction in F Area while the location for PDC construction has not been finalized.

All Tritium real property assets exist for the purpose of maintaining core capabilities to execute mission and program requirements. The same will be true of OFMD real property assets when constructed.

Note: All information shown below is for Tritium Programs (as of the end of FY 2010). OFMD information was excluded because the facilities are currently line item projects.

Real Property:

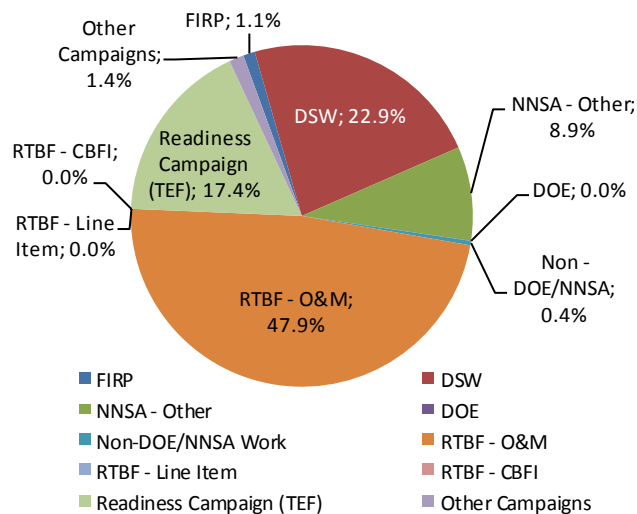
- 29 Acres (Owned)
- 55 Buildings/Trailers:
 - 305,843 gsf Active & Operational
 - 71,966 gsf Non-Operational
 - 0 gsf Leased
- Replacement Plant Value: \$ 1.469B
- Deferred maintenance: \$ 53.4M
- Facility Condition Index:
 - Mission Critical: 3.9%
 - Mission Dependent: 2.2%
 - Asset Utilization Index (Overall): 100% (AUI excludes deactivated building 232-H)



FY 2010 Funding by Source (New Budget Authority):

- FY 2010 Total Site Operating Cost: \$180.353 M
- FY 2010 Total NNSA Funding: \$179.561 M
- FY 2010 Total DOE (non-NNSA) Funding: \$0.042 M
- FY 2010 Total Other Funding: \$0.750 M

FY 2010 Funding by Source (New Budget Authority)



NNSA - Other: Security (FS20, FS21) & Radiological Assistance Program

3.0 ASSUMPTIONS

1. **Funding** – This TYSP assumes the level of funding cited in Appendix F, “FYNSP Funding Profiles” of the FY 2012 to FY 2021 TYSP Guidance, dated January 31, 2011. Appendix F included a place holder for RTBF Operations of Facilities planning targets, which were subsequently provided in the FY 2012 President’s Budget with site splits, issued February 17, 2011.
2. **Tritium Programs** – NNSA will approve cessation of reservoir reclamation operations in FY 2015.
3. **MFFF** – Los Alamos National Laboratory will supply the initial plutonium oxide feed before October 2016 to support start up and fuel production.
4. **PDC** – Required infrastructure and footprint will remain consistent with the conceptual design presented in the CD-1 package.
5. **MFFF, PDC, and WSB** – Congressional authorization will be consistent with commitments identified in the FY 2011 Project Data Sheets and the approved project baselines. Transportation resources and certified packaging are available for nuclear material and waste shipments needed to operate at full capacity.

4.0 CHANGES FROM PRIOR YEAR TYSP

Key changes from the NNSA-SRSO Limited Ten Year Site Plan, FY 2011 – FY 2020 (issued August 2010) include:

- Pension requirements will be consistent with new ERISA law.
- Funding in Readiness in Technical Base and Facilities (RTBF) Operations of Facilities was significantly increased in FY 2013 – FY 2017.
- Execution of TRIM elements will be accelerated by maximizing allocation of available funding to this priority.
- TRIM planning has matured.
- Two of the TRIM-enabling buildings that were previously planned – Project Building 217-3H and TEF Warehouse 263-170H – have been constructed, and two others – Engineering Building 246-1H and Process Support Building 246-2H – are currently being constructed.
- Construction of a small (three turnstiles) Entrance Control Facility on the south fence is in progress.
- Narrative was updated to reflect the status of OFMD projects.

5.0 FUTURE VISION AND CORE CAPABILITIES

5.1 Tritium Operations and R&D Capability

Tritium Operations capabilities are utilized in the SRS Tritium facilities to execute NNSA's Tritium missions, which are expected to endure throughout the 10- and 20-year planning horizons.

Mission	Deliverables	Operations	Tritium Process Facilities (Year Built)					
			HAOM (1958)	236-H (1966)	238-H (1969)	HANM (1994)	TEF (2003)	234-7H (2003)
Tritium Supply	Tritium gas	Tritium extraction						
		Reservoir unloading						
Nuclear Stockpile Maintenance	War Reserve (WR)-quality reservoirs filled with T ₂ /D ₂ or inert gases	WR component receipt						
		Reservoir reclamation						
		Gas processing						
		Reservoir loading	Inert			T ₂ /D ₂		
		Reservoir finishing						
		Final inspection						
		Packaging						
		Reservoir storage						
Nuclear Stockpile Evaluation	Reports containing GTS surveillance data supporting the annual certification of the stockpile	Environmental conditioning						
		Function testing						
		Burst testing						
		Material characterization						
		Life storage (reservoir aging)						
Helium-3 Recovery	Helium-3 cylinders	Helium-3 purification						
		Cylinder loading						

SRNL's research and development (R&D) capabilities are also essential to execute the Tritium missions. SRNL applies science to the Tritium plant and to the new gas transfer systems needed for the stockpile Life Extension Programs (LEPs).

Figure 5-1 shows the anticipated DSW-funded workload for the next ten years for Tritium operations. The LEPs are introducing reservoirs that require additional processing time, which is reflected in the workload increase from FY 2017 to FY 2020. LEP reservoirs will continue to be produced thereafter, but workload is expected to gradually decline as the stockpile size is reduced. The planned infrastructure modifications described in Section 5.2 will enable cost-effective operations with a smaller workload.

Figure 5-1: Reservoir Operations Workload

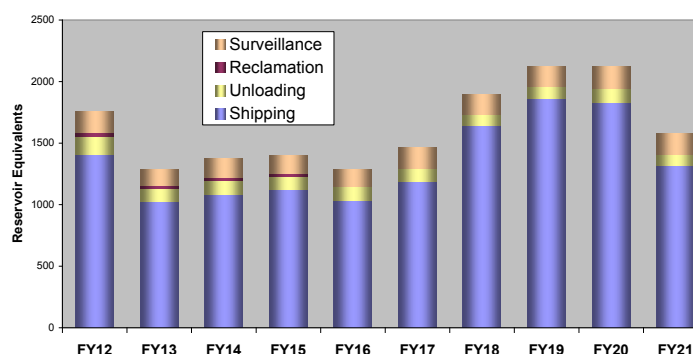
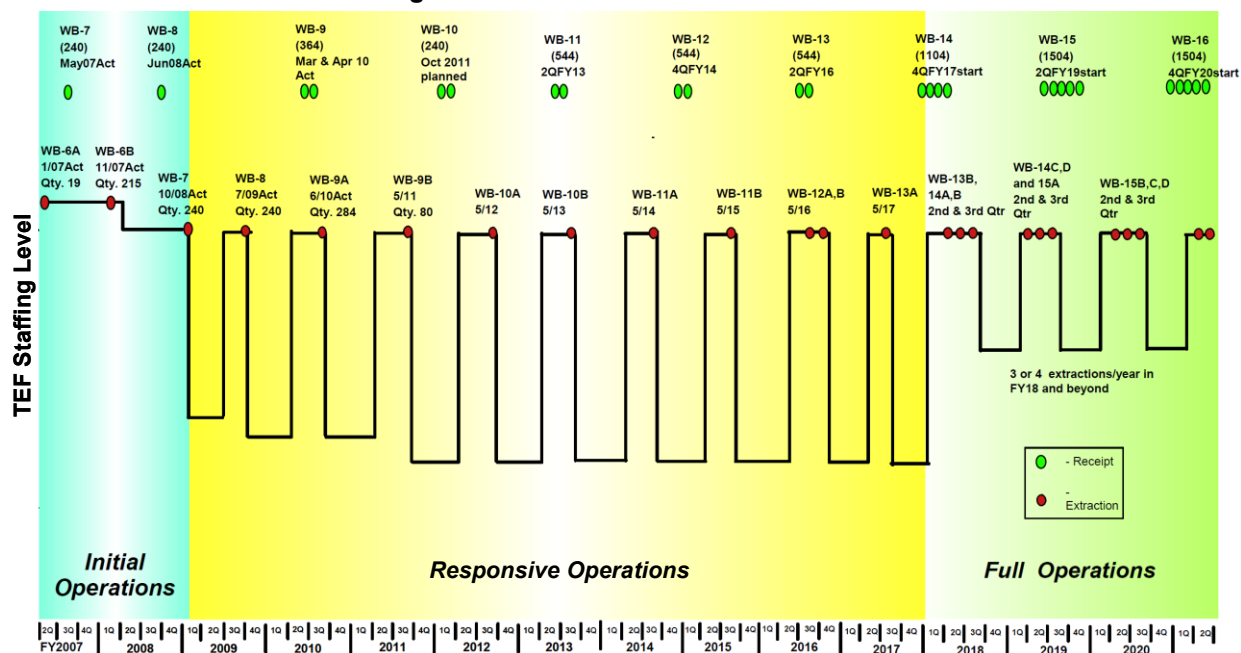


Figure 5-2 depicts both the vision and workload for the Tritium Readiness Campaign-funded extraction activities through FY 2021. "TEF Responsive Operations," which involves cost-effective sharing of cross-trained personnel between facilities, will be conducted through FY 2017 before transitioning to full operations. The workload beyond FY 2021 is expected to remain fairly constant, as shown for full operations. Target irradiation and extraction schedules are based on Nuclear Posture Review requirements.

Figure 5-2: Tritium Extraction Workload



5.2 Infrastructure Support Facilities Capability

Tritium Programs

Continual capability to execute NNSA's enduring Tritium missions depends on having adequate facilities and infrastructure. SRS' current Mission Critical footprint is comprised of older, Cold War-legacy facilities and more modern facilities that will endure throughout the 10- and 20-year planning horizons. The older facilities are expensive to operate, larger than necessary to support the current stockpile, and energy-inefficient. The vision for the next ten years is to expedite relocation and right-sizing of the remaining functions from these older facilities into the more modern facilities via an initiative known as Tritium Responsive Infrastructure Modifications (TRIM). Some of the key benefits include:

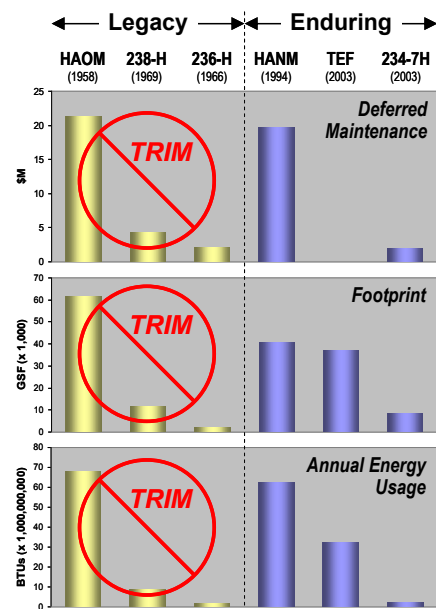
- Reducing annual operating cost by \$20M and avoiding the \$145M to \$195M cost to maintain the HAOM facility in a minimum safe operating condition for another 20 years
- Reducing active Mission Critical footprint by 44% (160K to 89K GSF)
- Reducing energy usage by 86 billion BTUs per year (43%)

To the maximum practical extent, this vision will be realized via CE/GPPs. Several initiatives are being pursued to reduce operating cost and thereby maximize the amount of available funding that can be allocated to these CE/GPPs. Examples include:

- An aggressive Continuous Improvement program
- Governance reform
- Cross training personnel
- Centralizing control of all operations in the HANM facility

With available funding maximized by cost reductions, most TRIM scope can be accomplished via CE/GPPs, but relocation of some of the

Figure 5-3: Current Mission Critical SRS Tritium Facilities



remaining functions in the HAOM facility cannot. The Corporate Physical Infrastructure Business Plan for FY 2011 – FY 2041 (CPIBP) includes a proposed line item that would complete the TRIM scope: “Sustaining HAOM Facility, SRS,” scheduled for FY 2020 – FY 2026.

Current CE/GPPs are establishing new office space for personnel who currently reside in the HAOM facility. (See Section 6.1 for more detailed information.) This is the only significant impact of these consolidation plans to real property assets, and it is being adequately addressed.

Because the HANM facility will receive most of the TRIM-relocated functions and become the control center for all Tritium operations, it will be important to maximize its life via ongoing maintenance and recapitalization / upgrade projects. For this reason, the long-term vision includes a line item project to refurbish the HANM facility (FY 2036 – FY 2041) to extend its life by approximately 20 years.

Plutonium Disposition Program

NNSA’s current MFFF, PDC, and WSB line item projects will establish the core capability needed to execute the OFMD plutonium disposition objectives presented in Section 5.3.

5.3 Fissile Materials Disposition

At SRS, the Plutonium Disposition Program is responsible for establishing a new core capability supporting U.S. nuclear nonproliferation objectives. As such, the Plutonium Disposition Program’s mission is to convert at least 34 metric tons of weapons grade plutonium into MOX fuel for use in commercial nuclear power production. Once irradiated, the plutonium can no longer readily be used for weapons purposes.

Figure 5-4: Mixed Oxide Fuel Fabrication Facility (February 2011)



NNSA is currently establishing this capability via three projects that are providing the required facilities. In the next ten years, all three OFMD projects at SRS are anticipated to finish construction, conduct start-up testing, and begin operations.

Construction of the WSB started in December 2009, and is scheduled to be completed by June 2012. The WSB expects approval to begin operating around September 2013 to support MFFF water runs and will be prepared to process radioactive waste from MFFF by June 2015.

The MFFF processing rate will increase in a stepwise manner over the first three years following radioactive start-up and is expected to reach design production capacity in 2020. Once the PDC project becomes operational, additional feedstock will become available for the production of MOX fuel and a small additional liquid waste stream for WSB.

Figure 5-5: Waste Solidification Building (January 2011)



6.0 REAL PROPERTY ASSET MANAGEMENT

Prudent management of real property assets is essential to long-term mission success. This section discusses the key aspects of real property asset management, particularly in the Tritium facilities, which will undergo significant transformation in the coming years.

The table below provides a summary of key information about the Tritium facilities as of the end of FY 2010.

6.1 Site Footprint (Current & Future)

Potential impacts to office, laboratory, and warehouse space as a result of ongoing and future transformation are addressed below:

- **Office Space** – Personnel who currently reside in the HAOM facility will be displaced when its remaining functions are relocated per the TRIM strategy. However, adequate office space is currently being provided via GPPs in the new Engineering (246-1H), Process Support (246-2H), and Project (217-3H) buildings.
- **Laboratory Space** – Building 234-7H laboratory space is adequate for existing missions. TRIM plans include reserving some space within the enduring facilities in the event future R&D work is needed that requires tritium confinement.
- **Warehouse Space** – With the addition of the new TEF warehouse (263-170H) via GPP in FY 2011, warehouse space is adequate for the foreseeable future.

Replacement Plant Value (RPV)		\$1,468.6	Million		
Total Deferred Maintenance (DM)		\$53.4	Million		
Site Wide Facility Condition Index (FCI)		3.6%**			
		Facility Condition Index (FCI)	Asset Utilization Index (AUI)	# of Assets	Gross Square Feet (GSF) Buildings & Trailers (000s)
Mission Dependency	Mission Critical*	3.9%	100%	8	160,747
	Mission Dependent*	2.2%	100%	46	145,096
	Not Mission Dependent*	0%	0%	0	0
Facility Use	Office	2.4%	100%	12	85,569
	Warehouse	2.8%	100%	3	13,853
	Laboratory	3.9%	100%	8***	160,747
	Housing	N/A	N/A	N/A	N/A

* Tritium has one additional asset, Building 232-H (71,966 GSF), that does not fit within these Mission Dependency categories because it is currently deactivated and in long-term surveillance and maintenance.

** TEF, which has no deferred maintenance and a relatively large RPV, artificially masks the condition of the other Mission Critical facilities.

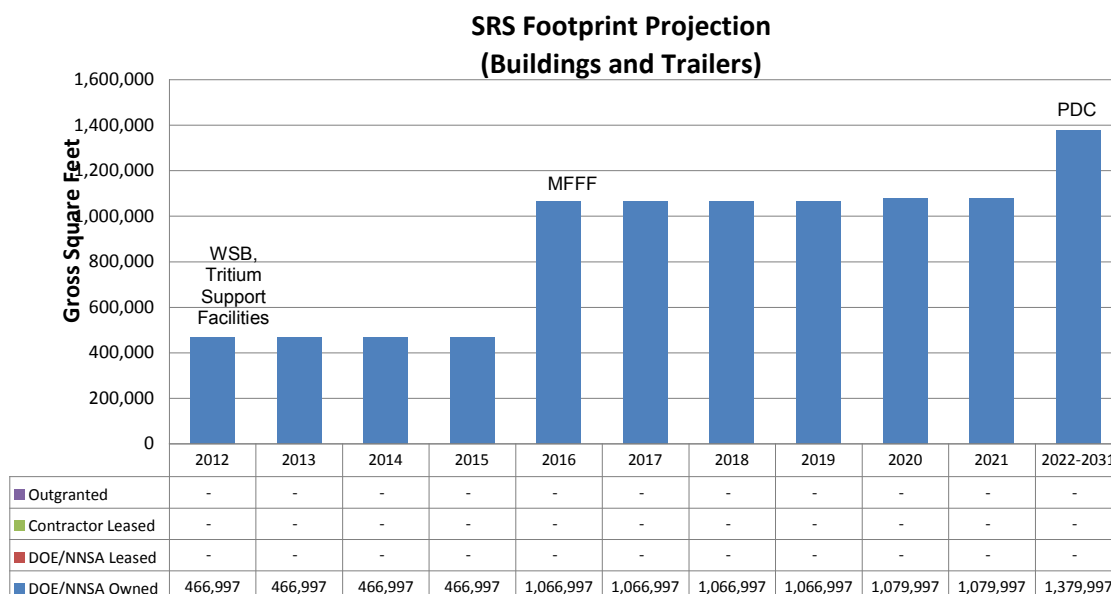
*** In FIMS, all of Tritium's Mission Critical facilities are classified as "Laboratory."

As a site, SRS meets and exceeds the Congressional requirement for footprint reduction for current operations and for all projected new construction, and is well situated to offset any new footprint requirements for NNSA new-construction priorities, including the new NN facilities. The total footprint of the Tritium facilities at the end of FY 2010 was 377,809 GSF. When constructed, the NN facilities will have a total footprint of 933,000 GSF. All permanent facilities required to execute the NN mission will be completed by the line item projects. No other facility needs are anticipated throughout the lifetime of the NN mission. The following table provides information about footprint changes in the coming years:

FY	GSF Δ	Reason
2011	+14,700	Project Building 217-3H constructed – replacement for 1957 Shop Storage Building 232-1H and provides office space for Project personnel (TRIM enabler).
2011	+14,000	TEF Warehouse 263-170H constructed – provides needed storage space for TEF equipment and materials.
2011	+768	New Entrance Control “Facility” (3 turnstiles) constructed on west fence.
2012	+16,150	Engineering Building 246-1H constructed – provides office space for Engineering personnel (TRIM enabler).
2012	+10,570	Process Support Building 246-2H constructed – provides office space for process-support personnel (TRIM enabler).
2012	+33,000	WSB constructed.
2015	0	Building 249-H renovated to receive HAOM functions, reclassifying 10,417 GSF of footprint from Mission Dependent Not Critical to Mission Critical.
2016	+600,000	MFFF constructed.
2020	+13,000	NNSA Site Office constructed.
2025	+300,000*	PDC constructed.

* The estimated PDC completion date and footprint are based on the CD-1 package submitted in December 2010. If the critical decision process authorizes PDC construction based on current conceptual design, the PDC footprint will include 150,000 GSF for radioactive operations and up to 150,000 GSF of new support facilities.

Figure 6-1: SRS Footprint Projection
(Includes Tritium and NN Facilities)



No Plutonium Disposition Program facilities are expected to be eligible for excess and dispositioning during the 10- or 20-year planning horizons.

To take advantage of the radioactive decay of tritium, deactivated facilities are maintained in a cost-effective long-term surveillance and maintenance (LTSM) mode. Building 232-H (71,966 GSF) is currently deactivated, and LTSM costs approximately \$250K per year. A similar minimal cost is expected for LTSM of the HAOM Facility when it is deactivated. Because of the LTSM strategy, deactivated buildings are not declared excess until they are funded for disposition. As TRIM is executed, other facilities will be deactivated that either were not exposed to tritium or had low levels of tritium and could be demolished with dedicated funding. The TRIM strategy is to maximize utilization of available funding to relocate remaining functions from the older facilities into the more modern facilities. Facilities that could be declared excess and demolished within the 10-year planning period include:

Building	Earliest FY	Footprint Reduction (GSF)
232-1H	2013	11,622
Modular Offices (7 total)	2013	10,269
236-H	2014	1,622
237/238-H	2018	16,672
Total:		40,185

No on-site space is currently leased, and there are no plans to lease on-site space in the future. Shaw-Areva MOX Services is leasing approximately 100,000 GSF of off-site warehouse space to temporarily store process equipment and materials until they can be installed in the facility. This is a cost-effective arrangement because the alternative was to build on-site additional warehouse space that would no longer be needed after two years.

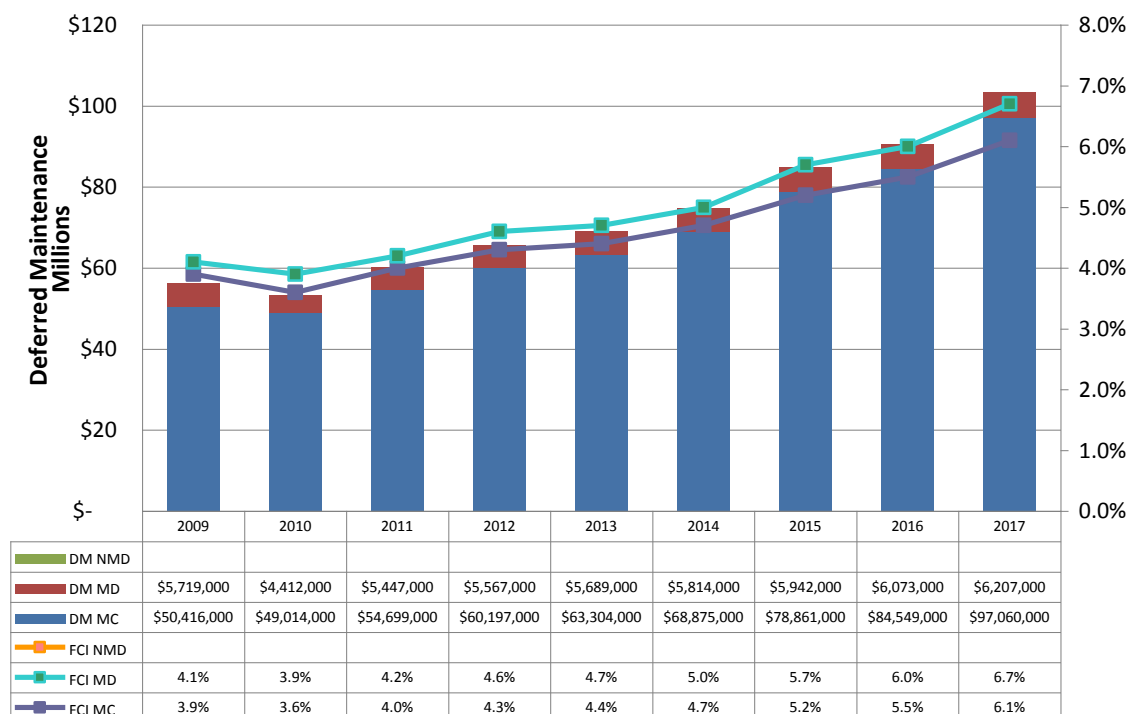
6.2 Deferred Maintenance / Facility Condition

The NN facilities have no deferred maintenance (DM) because they are currently under construction, and no DM is projected during the ten-year planning period. DM growth in the NN facilities will be minimized in the following ten years by ongoing investment in maintenance and facility infrastructure repairs and upgrades.

In the SRS Tritium facilities, DM is calculated based on comprehensive facility condition assessments that are performed every five years, primarily by the Engineering staff. The first of these assessments was conducted in FY 2003, and a DM baseline of \$52.0M was established. Through the effective utilization of Facilities and Infrastructure Recapitalization Program (FIRP) funding, this “legacy” DM has been reduced to \$26.7M. The most recent comprehensive assessment of the Tritium facilities was completed in FY 2008, and overall DM was determined to be \$53.7M. DM calculations are updated annually. At the end of FY 2010 Tritium had \$53.4M of DM.

Figure 6-2 and Attachment F-2 show that Tritium’s overall DM and the associated Facility Condition Index (FCI) will grow steadily. This reflects the TRIM strategy, and should be viewed as the short-term cost of establishing viable facilities and infrastructure for the enduring Tritium missions. Available funding will continue to be allocated to all corrective, preventive, and predictive maintenance required to execute the Tritium missions. However, discretionary recapitalization of obsolete, end-of-life systems will be deferred as long as possible to expedite TRIM implementation. For example, the Capability Based Facilities and Infrastructure (CBFI) projects are focused on implementation of TRIM and reduction of risk in the enduring HANM facility. Although these projects will make a modest contribution to DM reduction in the near term, the real goal is to complete TRIM, thereby reducing the overall DM by approximately 50%.

Figure 6-2: Projection of Tritium Deferred Maintenance and Facility Condition Index



The DM for Tritium’s Mission Dependent Not Critical facilities is projected to remain stable throughout the 10-year planning period. Tritium’s most modern Mission Critical facilities are TEF and 234-7H. DM growth is

expected as these facilities mature, beginning shortly after the 10-year planning period. Most of the near-term DM growth will be experienced in the HANM Facility, as more systems become obsolete and reach end of life. The current Tritium operations have little impact on facility condition because they are robust, protected from the environment, and were designed for a much larger throughput. Projected Facility Condition Index (FCI) versus NNSA's goals is shown below:

Goal	Projection
Mission Critical: FCI < 5% by 2015	The current FCI of Tritium's Mission Critical facilities is 4.2%, but is projected to rise to 5.7% by FY 2015. <i>[It should be noted that TEF, which has no DM and a relatively large RPV, artificially masks the true condition of the other Mission Critical facilities.]</i>
Mission Dependent: FCI < 8% by 2015	The FCI for Tritium's Mission Dependent Not Critical facilities will remain stable at approximately 2.5%, easily meeting this goal.
Not Mission Dependent: FCI < 10 % by 2015	Not applicable – Tritium has no Not Mission Dependent facilities.

6.3 Space Utilization and Consolidation

Space utilization and consolidation are key factors of the TRIM strategy. SRNS carefully plans the movement of people and equipment / infrastructure to ensure a smooth transition with continual mission success. For people, a database is maintained that shows all offices in the facility, who resides in each, and which offices are empty. This planning tool was used to assess the additional office space needed in the new Engineering (246-1H), Process Support (246-2H), and Project (217-3H) buildings when people are moved out of the HAOM facility. Formal Conceptual Design Proposals are completed before moving any equipment / infrastructure.

6.4 Sustainability

SRS has a single Site Sustainability Plan (SSP) and associated Consolidated Energy Data Report (CEDR) for the entire site. A Tritium-specific program was established in FY 2010 as part of the SSP, including a new Energy Manager position. Initial activities focused on gathering information, establishing metrics, and identifying specific actions to support the site's sustainability performance goals. Status of meeting the goals, planned actions, and key issues are documented in the SRS SSP.

Projects identified in the Attachment A-series Cost Projection spreadsheets that were included in the SRS SSP CEDR – Worksheet 5: Conservation & Renewable Energy Measures are cross referenced to the SSP in Attachment A-3d. This attachment also includes a new metering project.

7.0 PLANNED PROJECTS AND COST

The SRS Tritium Facilities' Change Control Board (CCB) meets regularly to manage the changing necessities required by ongoing facility operations and emergent NNSA needs. The CCB membership includes functional and facility management.

An ongoing, prioritized, multi-year list of CE/GPPs, approved by the CCB, is maintained for the programs. The CCB utilizes a formal prioritization process that considers worker safety, the Authorization Basis, regulatory compliance, mission/facility, Conduct of Operations, and cost effectiveness. As funding becomes available through completed project underruns, cost-savings initiatives, or supplemental funding, the CCB recommends initiation of new projects based on the priority listing and emergent needs. Once a new project is approved by the CCB, a formal Project Authorization and associated Baseline Change Proposal are prepared and routed for approval.

No significant challenges are anticipated with specific current and planned CE/GPPs.

Nominal Schedule of Real Property Projects																														
FY	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31										
Current and Approved Line Items – per TYSP Attachment A-1																														
HAOM Sustainment (TRIM)																														
MOX																														
Waste Solidification Building																														
PDC																														
Proposed NEW Line Items – per TYSP Attachment A-2																														
(None)																														
RTBF/Operations of Facilities – per TYSP Attachment A-3																														
234-7H Supply & Exhaust		C	C																											
Finishing, HANM			C																											
Relocate Receipt Inspection			C																											
Renovate 249-H			C	C																										
Relocate Vault				C																										
Relocate Finishing, 249-H					C																									
Relocate Lab 270							C																							
Renovate 234-7H				C	C																									
Relocate Inert Met Lab								C																						
Relocate Packaging							C																							
Relocate Recertification						C																								
Relocate Hot Cal Lab								C																						
Move SRNL Equipment to 234-7H					C	C																								
Move Assembly								C																						
Move Inert Loading								C	C																					
Move Pre-Loading									C																					
Stripper System Piping (2 GPPs)		M																												
Replace Hydride Beds			C	C	C																									
Replace O2 Monitors		M																												
SS Glovebox Stripper System Piping		M	M																											
Emerging Repairs & Replacements			C	C																										
Replace GTS Unloading Laser					C																									
Refurbish HANM Supply Air Handler					C	C																								
Replace HANM Hot & Cold N2 Chillers						C																								
Facility Metering		M																												
Facilities and Infrastructure Recapitalization Projects – per TYSP Attachment A-4																														
(None after FY11)																														
Other Facilities & Infrastructure Projects – per TYSP Attachment A-5																														
Replace TEF DCS		M	M																											
Shield Door Rail Replacement	C																													
TEF Diffuser Stacking			M																											
Zn-65 Abatement				C	C																									
Replace TEF Oxygen Monitors				M	M																									

NOTE: This table was prepared in accordance with the TYSP Guidance, which specified designation of major projects (undefined) with an “M” and critical path projects with a “C.” Critical path is defined as “required to meet a site’s core capability and/or a Line Item on sheet A-1 and A-2.”

Attachments

Attachment A **Summary**
Facilities and Infrastructure Cost Projection Spreadsheet
Projects for Savannah River Site - NNSA
(\$000s)

Backup Sheet (Attachment)	Site Name	Title	Total	Prior Years Funding	FY 2011 Current	FY 2012 FYNSP	FY 2013 FYNSP	FY 2014 FYNSP	FY 2015 FYNSP	FY 2016 FYNSP	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
A-1	<Select>	Costs for All NNSA Site Line Items	5,206,239	2,991,066	612,788	647,699	715,762	481,173	463,773	444,805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-1	<Select>	Costs for ALL Non-NNSA <Provide Program Name> Line Items	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-1	<Select>	Costs for ALL Non-NNSA <Provide Program Name> Line Items	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-2	<Select>	Costs for All NNSA Site Line Items	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-2	<Select>	Costs for ALL Non-NNSA <Provide Program Name> Line Items	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-2	<Select>	Costs for ALL Non-NNSA <Provide Program Name> Line Items	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-3a	<Select>	RTBF/Operations of Facilities (Facilities & Infrastructure reported under this category)	122,900	-	-	-	8,000	14,200	11,200	15,500	7,000	18,000	30,500	27,000	-	-	-	-	-	-	-	-	-	-	-
A-3b	<Select>	RTBF/Capability Based Facilities & Infrastructure - Recapitalization Projects	33,600	-	-	-	4,500	5,000	10,100	10,000	7,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-3c	<Select>	RTBF/Capability Based Facilities & Infrastructure - Disposition Projects	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-3d	<Select>	RTBF/Capability Based Facilities & Infrastructure - Sustainability Projects	3,500	-	-	-	500	-	-	-	3,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-4	<Select>	Facilities and Infrastructure Recapitalization Program (FIRP)	6,480	2,000	1,480	1,500	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-5	<Select>	Costs for NNSA Program A Other Facilities and Infrastructure Costs	3,631	3,631	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-5	<Select>	Costs for NNSA Program B Other Facilities and Infrastructure Costs	4,340	3,000	1,340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-5	<Select>	Costs for ALL Non-NNSA <Provide Program Name> Other Facilities and Infrastructure Costs	31,846	5,571	1,000	2,000	5,000	8,000	5,000	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-5	<Select>	Costs for ALL Non-NNSA <Provide Program Name> Other Facilities and Infrastructure Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL			5,412,536	3,005,268	616,608	651,199	735,262	508,373	490,073	474,305	17,000	18,000	30,500	27,000	-	-	-	-	-	-	-	-	-	-	-

Attachment A-1
Facilities and Infrastructure Line Item Cost Projection Spreadsheet
APPROVED Line Item Projects for Savannah River Site - NNSA
(\$000s)

[illegible]

Attachment A-2
Facilities and Infrastructure Line Item Cost Projection Spreadsheet
PROPOSED Line Item Projects for Savannah River Site - NNSA
(\$000s)

[illegible]

Note: The purpose of this spreadsheet is to allow each Site to propose/forecast **NEW** high-priority NNSA line item construction projects and resubmit **UPDATED** construction projects previously notsupported or prioritized by the CWG for Headquarters consideration. Sites may propose projects that are above their FYNSP constraints. However, budget realities, program priorities, and other factors will limit/dictate which projects ultimately receive funding. Each site may also list its proposed Non-NNSA Program line item projects by program.

Attachment A-3a
Facilities and Infrastructure Project Cost Projection Spreadsheet
RTBF Operations of Facilities Projects for Savannah River Site - NNSA
(\$000s)

Site Name	Fiscal Year	Fund Source	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Included in the SSP? (Y/N)	Priority	Score	Mission Code	Core Capability Code	Special Interest Code #1	Special Interest Code #2	FIMS		FIRP		Deferred Maintenance Reduction	FIMS		GSF Added or Eliminated	Fund Type	Total	Prior Years Funding	FY 2011 Current	FY 2012 FYNSP	FY 2013 FYNSP	FY 2014 FYNSP	FY 2015 FYNSP	FY 2016 FYNSP	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Notes						
												Property Sequence Number*	Facility Name*	Deferred Maintenance Identifier(s)	Legacy Deferred Maintenance Reduction		Mission Dependency	Mission Dependency Program																																
(59)	(23)	(26)	(45)	(49)	(33)	(47)	(56)	(39)	(8)	(61)	(62)	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46)	(28)	(29)	(29)	(29)	(29)	(29)	(29)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(43)							
SRS		RTBF - OPS	234-7H Supply & Exhaust	TBD	No	2		M1	C4	RC	DM	201879	Material Test Facility				MC	DSW	-	GPP	8,000				7,400	600																		Moving and Downsizing equipment reduces HAOM deferred maintenance						
SRS		RTBF - OPS	Finishing, HANM	TBD	No	4		M1	C4	RC	DM	111612	New Manufacturing Facility				MC	DSW	-	GPP	6,800					6,800																		Moving and Downsizing equipment reduces HAOM deferred maintenance						
SRS		RTBF - OPS	Relocate Receipt Inspection	TBD	No	5		M1	C4	RC	DM	112066	Service Building RTF				MC	DSW	-	GPP	3,000					3,000																		Moving and Downsizing equipment reduces HAOM deferred maintenance						
SRS		RTBF - OPS	Renovate 249-H	TBD	No	3		M1	C4	RC	DM	112066	Service Building RTF				MC	DSW	-	GPP	9,000					3,800	5,200																	Moving and Downsizing equipment reduces HAOM deferred maintenance						
SRS		RTBF - OPS	Relocate Vault	TBD	No	14		M1	C4	RC	DM	204717	Tritium Extraction Facility				MC	DSW	-	GPP	2,500						2,500																	Moving and Downsizing equipment reduces HAOM deferred maintenance						
SRS		RTBF - OPS	Relocate Finishing, 249-H	TBD	No	7		M1	C4	RC	DM	112066	Service Building RTF				MC	DSW	-	GPP	4,000							4,000																Moving and Downsizing equipment reduces HAOM deferred maintenance						
SRS		RTBF - OPS	Relocate Lab 270	TBD	No	11		M1	C4	RC	DM	204717	Tritium Extraction Facility				MC	DSW	-	GPP	3,000									3,000														Moving and Downsizing equipment reduces HAOM deferred maintenance						
SRS		RTBF - OPS	Renovate 234-7H	TBD	No	6		M1	C4	RC	DM	201879	Material Test Facility				MC	DSW	-	GPP	9,500						3,500	6,000																	Moving and Downsizing equipment reduces HAOM deferred maintenance					
SRS		RTBF - OPS	Relocate Inert Met Lab	TBD	No	12		M1	C4	RC	DM	111612	New Manufacturing Facility				MC	DSW	-	GPP	8,000									8,000														Moving and Downsizing equipment reduces HAOM deferred maintenance						
SRS		RTBF - OPS	Relocate Packaging	TBD	No	10		M1	C4	RC	DM	112066	Service Building RTF				MC	DSW	-	GPP	9,000									9,000															Moving and Downsizing equipment reduces HAOM deferred maintenance					
SRS		RTBF - OPS	Relocate Recertification	TBD	No	9		M1	C4	RC	DM	112066	Service Building RTF				MC	DSW	-	GPP	6,000								3,500	2,500															Moving and Downsizing equipment reduces HAOM deferred maintenance					
SRS		RTBF - OPS	Relocate Hot Cal Lab	TBD	No	13		M1	C4	RC	DM	204717	Tritium Extraction Facility				MC	DSW	-	GPP	6,000								3,500	2,500															Moving and Downsizing equipment reduces HAOM deferred maintenance					
SRS		RTBF - OPS	Move SRNL Equipment to 234-7H	TBD	No	8		M1	C4	RC	DM	201879	Material Test Facility				MC	DSW	-	GPP	9,000							5,500	3,500																Moving and Downsizing equipment reduces HAOM deferred maintenance					
SRS		RTBF - OPS	Move Assembly	TBD	No	15		M1	C4	RC	DM	112066	Service Building RTF				MC	DSW	-	GPP	10,000										10,000														Moving and Downsizing equipment reduces HAOM deferred maintenance					
SRS		RTBF - OPS	Move Inert Loading	TBD	No	16		M1	C4	RC	DM	111612	New Manufacturing Facility				MC	DSW	-	GPP	10,000									10,000	10,000														Moving and Downsizing equipment reduces HAOM deferred maintenance					
SRS		RTBF - OPS	NNSA Site Office	TBD	No	18		M1	C4	None	None	NA	NNSA Site Office				MC			13,000	GPP	7,000									7,000																			
SRS		RTBF - OPS	Move Pre-Loading	TBD	No	17		M1	C4	RC	DM	111612	New Manufacturing Facility				MC	DSW		GPP	10,000										10,000															Moving and Downsizing equipment reduces HAOM deferred maintenance				
SRS		RTBF - OPS	Stripper System Piping (2 GPPs)	TBD	No	1		M1	C4	RC	DM	111612	New Manufacturing Facility				MC	DSW	-	GPP	2,100				600																					Replaces corroded stripper system piping				
TOTAL RTBFOperations of Facilities (Facilities & Infrastructure reported under this category)															-	-			13,000		122,900	-	-	-	8,000	14,200	11,200	15,500	7,000	18,000	30,500	27,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Column Headers in green - when applicable: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

(\$000s)

TBF/Capability Based Facilities & Infrastructure - Recapitalization Projects (Facilities & Infrastructure reported under this category)

* Column Headers in green - **when applicable**: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Attachment A-3c
Facilities and Infrastructure Project Cost Projection Spreadsheet
RTBF/Capability Based Facilities & Infrastructure - **Disposition Projects for Savannah River Site - NNSA**
(\$000s)

Site Name	Fiscal Year	Fund Source	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Included in the SSP? (Y/N)	Priority	Score	Mission Code	Core Capability Code	Special Interest Code #1	Special Interest Code #2	FIMS		FIRP		Deferred Maintenance Reduction	FIMS		GSF Added or Eliminated	Fund Type	Total	Prior Years Funding	FY 2011 Current	FY 2012 FYNSP	FY 2013 FYNSP	FY 2014 FYNSP	FY 2015 FYNSP	FY 2016 FYNSP	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Notes								
												Property Sequence Number*	Facility Name*	Deferred Maintenance Identifier(s)	Legacy Deferred Maintenance Reduction		Mission Dependency	Mission Dependency Program																																		
(59)	(23)	(26)	(48)	(49)	(33)	(47)	(56)	(39)	(8)	(61)	(62)	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46)	(28)	(29)	(29)	(29)	(29)	(29)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(43)									
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																							None due to funding								
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
<Select>		CBFI - DISP			<Select>			<Select>	<Select>	<Select>	<Select>										-																															
TOTAL																-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
RTBF/Capability Based Facilities & Infrastructure - Disposition Projects (Facilities & Infrastructure reported under this category)																-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Column Headers in green - **when applicable**: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Attachment A-3d
Facilities and Infrastructure Project Cost Projection Spreadsheet
RTBF/Capability Based Facilities & Infrastructure - **Sustainability Projects for Savannah River Site - NNSA**
(\$000s)

Site Name	Fiscal Year	Fund Source	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Included in the SSP? (Y/N)	Priority	Score	Mission Code	Core Capability Code	Special Interest Code #1	Special Interest Code #2	FIMS		FIRP		Deferred Maintenance Reduction	FIMS		GSF Added or Eliminated	Fund Type	Total	Prior Years Funding	FY 2011 Current	FY 2012 FYNSP	FY 2013 FYNSP	FY 2014 FYNSP	FY 2015 FYNSP	FY 2016 FYNSP	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Notes							
												Property Sequence Number*	Facility Name*	Deferred Maintenance Identifier(s)	Legacy Deferred Maintenance Reduction		Mission Dependency	Mission Dependency Program																																	
(59)	(23)	(26)	(48)	(49)	(33)	(47)	(56)	(39)	(8)	(61)	(62)	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46)	(28)	(29)	(29)	(29)	(29)	(29)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(43)								
SRS	17	CFBI - SUSY	Replace HANM Hot & Cold Nitrogen Chillers	NA	Yes	13		M1	C4	LR	<Select>	111612	New Manufacturing Facility			NA	MC	DSW	NA	GPP	3,000							3,000																Code of Federal Regulation							
SRS	13	CFBI - SUSY	Facility Metering	NA	Yes	21		M1	C4	RC	<Select>	Various	Various			NA	MC	DSW	NA	GPP	500				500																										
SRS		CFBI - SUSY			<Select>			M1	C4	<Select>	<Select>										-																														
<Select>		CFBI - SUSY			<Select>			<Select>	<Select>	<Select>	<Select>										-																														
<Select>		CFBI - SUSY			<Select>			<Select>	<Select>	<Select>	<Select>										-																														
<Select>		CFBI - SUSY			<Select>			<Select>	<Select>	<Select>	<Select>										-																														
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<Select>		CFBI - SUSY			<Select>			<Select>	<Select>	<Select>	<Select>										-																														
TOTAL															-	-				-	3,500	-	-	-	500	-	-	-	3,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Column Headers in green - when applicable; data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Attachment A-4
NNSA Facilities and Infrastructure Project Cost Projection Spreadsheet
Facilities and Infrastructure Recapitalization Program (FIRP) for Savannah River Site - NNSA
(\$000s)

Site Name	Fiscal Year	Fund Source	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Included in the SSP? (Y/N)	Priority	Score	Mission Code	Core Capability Code	Special Interest Code #1	Special Interest Code #2	FIMS		FIRP		Deferred Maintenance Reduction	FIMS		GSF Added or Eliminated	Fund Type	Total	Prior Years Funding	FY 2011 Current	FY 2012 FYNSP	FY 2013 FYNSP	FY 2014 FYNSP	FY 2015 FYNSP	FY 2016 FYNSP	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Notes										
												Property Sequence Number*	Facility Name*	Deferred Maintenance Identifier(s)	Legacy Deferred Maintenance Reduction		Mission Dependency	Mission Dependency Program																																				
(59)	(23)	(26)	(48)	(49)	(33)	(47)	(56)	(39)	(8)	(61)	(62)	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46)	(28)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(29)	(43)									
SRS	10	FIRP	Control Room Cooling HANM	SR-R-10-01	No	1	55	M6	C4	RC	DM	111612	New Manufacturing Bldg	SR-DM-XX-11 SR-DM-XX-15	1,600	0	MC	DSW	NA	GPP	2,000	2,000	-																															
SRS	11	FIRP	Control and Instrumentation Deficiencies, HANM (Replace UPS)	SR-R-11-01	No	1	55	M6	C4	RC	DM	111612	New Manufacturing Bldg	SR-DM-06-02	1480	-	MC	DSW	NA	GPP	1,480	-	1,480																															
SRS	12	FIRP	Control Instrumentation and Monitoring Deficiencies (Environmental Conditioning and SS/GS PLC Replacement)	SR-R-12-01	No	1	55	M6	C4	RC	DM	111612	New Manufacturing Bldg	SR-DM-XX-05 SR-DM-06-02	2520	-	MC	DSW	NA	GPP	1,500		1,500																															
SRS	13	FIRP	Mech Support Eqp and Control and Inst. Deficiencies (Breathing Air Replacement with Controls)	SR-R-13-01	No	1	55	M7	C5	RC	DM	111612	New Manufacturing Bldg	SR-DM-XX-12 SR-DM-XX-14	2740	-	MC	DSW	NA	GPP	1,500																																	
																					-																																	
																					-																																	
TOTAL															8,340	-			-		6,480	2,000	1,480	1,500	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FIRP Projects (Facilities & Infrastructure reported under this category)																																																						

Column Headers in green - **when applicable**: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Attachment A-5
Facilities and Infrastructure Project Cost Projection Spreadsheet for Savannah River Site - NNSA
(\$000s)

Site Name	Fiscal Year	Fund Source	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #	Included in the SSP? (Y/N)	Priority	Score	Mission Code	Core Capability Code	Special Interest Code #1	Special Interest Code #2	Property Sequence Number*	FIMS Facility Name*	FIRP Deferred Maintenance Identifier(s)	Legacy Deferred Maintenance Reduction (36)	Deferred Maintenance Reduction (13)	FIMS Mission Dependency (40)	FIMS Mission Dependency Program (41)	GSF Added or Eliminated (32)	Fund Type (27)	Total (64)	Prior Years Funding (46)	FY 2011 Current (28)	FY 2012 FYNSP (29)	FY 2013 FYNSP (29)	FY 2014 FYNSP (29)	FY 2015 FYNSP (29)	FY 2016 FYNSP (29)	FY 2017 (30)	FY 2018 (30)	FY 2019 (30)	FY 2020 (30)	FY 2021 (30)	FY 2022 (30)	FY 2023 (30)	FY 2024 (30)	FY 2025 (30)	FY 2026 (30)	FY 2027 (30)	FY 2028 (30)	FY 2029 (30)	FY 2030 (30)	FY 2031 (30)	Notes (43)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
A. NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program A)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

Attachment A-6(a) - FY 2011 - FY 2017
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Currently FUNDED or APPROVED Security Infrastructure Projects for Savannah River Site - NNSA
(\$000s)

							Planned Funding Source (26)										
Priority	Fiscal Year	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Mission Dependency	Mission Dependency Program	Total	Line Item A-1	RTBF-OPS A-3a	RTBF-CBFI-RCAP A-3b	RTBF-CBFI-DISP A-3c	RTBF-CBFI-SUSY A-3d	FIRP A-4	Other A-5	DBT Related? Y or N	Funded or Approved?		
(47)	(23)	(48)	(49)	(40)	(41)	(64)											
FY 2011 Projects																	
3	2011	720-H Chiller Replacement	Y523	MD	RTBF	1,100							X	N	Approved		
2	2011	Security Automated Gates and Upgrades	Y601	MD	RTBF	2,980							X	N	Approved		
1	2011	Classified Storage	Y622	MD	RTBF	210							X	N	Approved		
FY 2012 Projects																	
1	2012	None													Approved		
2	2012														<Select>		
3	2012														<Select>		
ETC.															<Select>		
FY 2013 Projects																	
1	2013														<Select>		
2	2013														<Select>		
3	2013														<Select>		
ETC.															<Select>		
FY 2014 Projects																	
1	2014														<Select>		
2	2014														<Select>		
3	2014														<Select>		
ETC.															<Select>		
FY 2015 Projects																	
1	2015														<Select>		
2	2015														<Select>		
3	2015														<Select>		
ETC.															<Select>		
FY 2016 Projects																	
1	2016														<Select>		
2	2016														<Select>		
3	2016														<Select>		
ETC.															<Select>		
FY 2017 Projects																	
1	2017														<Select>		
2	2017														<Select>		
3	2017														<Select>		
ETC.															<Select>		
Note: Prioritize for each Fiscal Year (FY11, FY12 and FY13) in sequential order site Security Infrastructure projects/activities.																	
* Column Headers in green - when applicable : data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)																	

Attachment A-6(b) - FY 2011 - FY 2017
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Currently *UN-FUNDED* Security Infrastructure Projects for Savannah River Site - NNSA
(\$000s)

Priority	Fiscal Year	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Mission Dependency	Mission Dependency Program	Total	Planned Funding Source (26)								
							Line Item A-1	RTBF-OPS A-3a	RTBF-CBFI- RCAP A-3b	RTBF-CBFI- DISP A-3c	RTBF-CBFI- SUSY A-3d	FIRP A-4	Other A-5	DBT Related? Y or N	Funded or Approved?
(47)	(23)	(48)	(49)	(40)	(41)	(64)									
FY 2011 Projects															
1	2011	None													
2	2011														
3	2011														
4	2011														
5	2011														
6															
ETC.															
FY 2012 Projects															
1	2012	Tritium Argus	NA	MD	RTBF	1,000							X	N	
2	2012	K Area Argus	NA	MD	RTBF	1,000							X	N	
3	2012	K Area PIDAS	NA	MD	RTBF	1,000							X	N	
ETC.		Obsolete Equip/Minor Mods	NA	MD	RTBF	2,411							X	N	
FY 2013 Projects															
1	2013	Tritium Argus	NA	MD	RTBF	2,800							X	N	
2	2013	K Area Argus	NA	MD	RTBF	2,800							X	N	
3	2013	K Area PIDAS	NA	MD	RTBF	3,000							X	N	
ETC.		Obsolete Equip/Minor Mods	NA	MD	RTBF	1,150							X	N	
FY 2014 Projects															
1	2014	Tritium Argus	NA	MD	RTBF	700							X	N	
2	2014	K Area Argus	NA	MD	RTBF	700							X	N	
3	2014	K Area PIDAS	NA	MD	RTBF	600							X	N	
ETC.		Obsolete Equip/Minor Mods	NA	MD	RTBF	595							X	N	
FY 2015 Projects															
1	2015	Tritium Tech Enhancments	NA	MD	RTBF	200							X	N	
2	2015	K Area Tech Enhancements	NA	MD	RTBF	200							X	N	
3	2015														
ETC.															
FY 2016 Projects															
1	2016	Tritium Tech Enhancments	NA	MD	RTBF	200							X	N	
2	2016	K Area Tech Enhancements	NA	MD	RTBF	200							X	N	
3	2016														
ETC.															
FY 2017 Projects															
1	2017	Tritium Tech Enhancments	NA	MD	RTBF	200							X	N	
2	2017	K Area Tech Enhancements	NA	MD	RTBF	200							X	N	
3	2017														
ETC.															

Note: This input is based upon an assumption that K-Area will transition to NNSA in FY 2013. The upgrades identified as unfunded security infrastructure are required to sustain the current facility mission irrespective of the opportunity to locate the Pit Disassembly and Conversion capability in K-Area.

Note: Prioritize for each Fiscal Year (FY11, FY12 and FY13) in sequential order site Security Infrastructure projects/activities.

Attachment E-1
Footprint - Disposition Plan for Savannah River Site - NNSA
FY 2012 - FY2021

[illegible]

Attachment E-2 Plan
Footprint - New Construction for Savannah River Site - NNSA
FY 2012 to FY 2021

[illegible]

Attachment E-3
FY 2011 Leased Space for Savannah River Site - NNSA

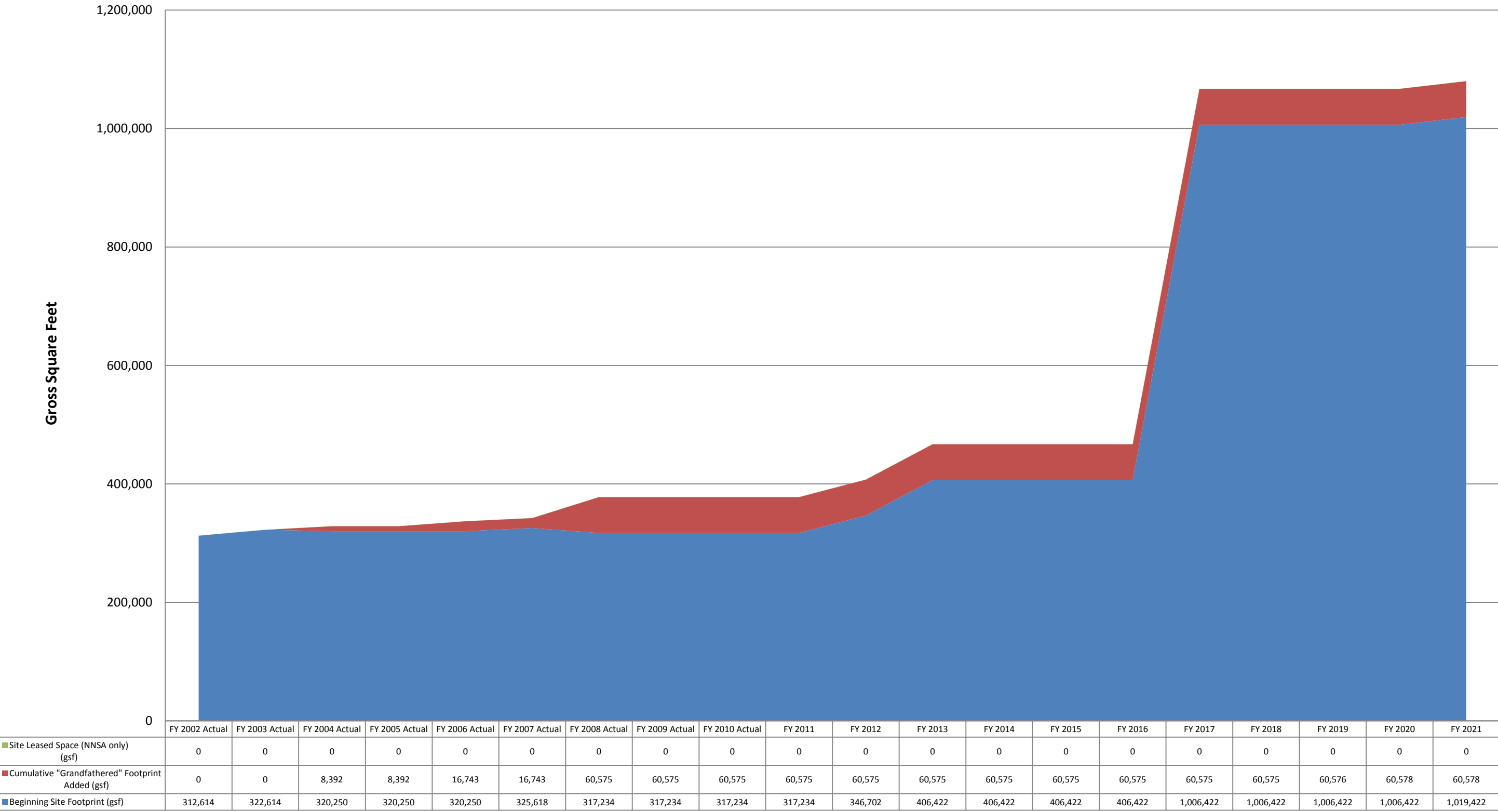
Fiscal Year	Funding Source	Per FIMS												Rental Rate per Rentable SF	Annual Cost	Leased Type	Lease Term - yrs	Exp. Month / Year	Renewal Options	Notes
(23)	(26)	Property Sequence Number (50)	Facility ID Number (21)	Facility Name (22)	Property Type (B/L/S/T) (51)	Ownership (45)	Mission Dependency ((40)	Mission Dependency Program (41)	Status (63)	Gross Square Feet (GSF) (32)	# of Occupants (44)	Excess Year (19)	Actual Annual Maintenance Cost (20)	(54)	(2)	(35)	(34)	(20)	(53)	(43)
																				None
Totals										-	0		\$ -	\$ -	\$ -					

Attachment E-4(a)
FOOTPRINT TRACKING SUMMARY SPREADSHEET
Savannah River Site - NNSA

Fiscal Year (Note 1)	Beginning Site Footprint (gsf)	Excess Facilities Footprint Elimination (gsf)	New Construction/ Footprint Added (gsf)	Site Footprint Reduction by FY (gsf)	Footprint "Banked" (gsf)	Waiver/ Transfer (gsf)	"Grandfathered" Footprint Added (gsf)	Cumulative "Grandfathered" Footprint Added (gsf)	Site Total Footprint (NNSA only) (gsf)	Site Leased Space (NNSA only) (gsf)	Weapons Activities Account (gsf)
(23)	(6)	(17)	(42)	(57)	(25)	(65)	(31)	(9)	(60)	(58)	(66)
FY 2002 Actual	312,614	0	0	312,614	0	0	0	0	312,614	0	0
FY 2003 Actual	322,614	-2,364	0	320,250	-2,364	0	0	0	320,250	0	0
FY 2004 Actual	320,250	0	0	320,250	-2,364	0	8392	8,392	328,642	0	0
FY 2005 Actual	320,250	0	0	320,250	-2,364	0	0	8,392	328,642	0	0
FY 2006 Actual	320,250		5,368	325,618	3,004	0	8,351	16,743	342,361	0	0
FY 2007 Actual	325,618	-8,384	0	317,234	-5,380	0		16,743	333,977	0	0
FY 2008 Actual	317,234	0	0	317,234	-5,380	0	43,832	60,575	377,809	0	0
FY 2009 Actual	317,234	0	0	317,234	-5,380	0	0	60,575	377,809	0	0
FY 2010 Actual	317,234	0	0	317,234	0	0	0	60,575	377,809	0	0
FY 2011	317,234	0	29,468	346,702	0	0	0	60,575	407,277	0	0
FY 2012	346,702	0	59,720	406,422	59,720	0	0	60,575	466,997	0	0
FY 2013	406,422	0	0	406,422	59,720	0	0	60,575	466,997	0	0
FY 2014	406,422	0	0	406,422	59,720	0	0	60,575	466,997	0	0
FY 2015	406,422	0	0	406,422	59,720	0	0	60,575	466,997	0	0
FY 2016	406,422	0	600,000	1,006,422	659,720	0	0	60,575	1,066,997	0	0
FY 2017	1,006,422	0	0	1,006,422	659,720	0	0	60,575	1,066,997	0	0
FY 2018	1,006,422	0	0	1,006,422	659,720	0	0	60,575	1,066,997	0	0
FY 2019	1,006,422	0	0	1,006,422	659,720	0	1	60,576	1,066,998	0	0
FY 2020	1,006,422	0	13,000	1,019,422	672,720	0	2	60,578	1,080,000	0	0
FY 2021	1,019,422	0	0	1,019,422	672,720	0	0	60,578	1,080,000	0	0

Adders	GSF	FY
Proj Support Bldg	14,700	2011
TEF Warehouse	14,000	2011
New ECF	768	2011
Eng Support Bldg	16,150	2012
Proc Supt Bldg	10,570	2012
WSB	33,000	2012
MFFF	600,000	2016
NNSA Site Office	13,000	2020

Attachment E-4(a) Chart
FOOTPRINT TRACKING SUMMARY SPREADSHEET
Savannah River Site - NNSA



Attachment E-4(b)
FOOTPRINT TRACKING SUMMARY SPREADSHEET
Savannah River Site - Site Wide (Multi-Program)

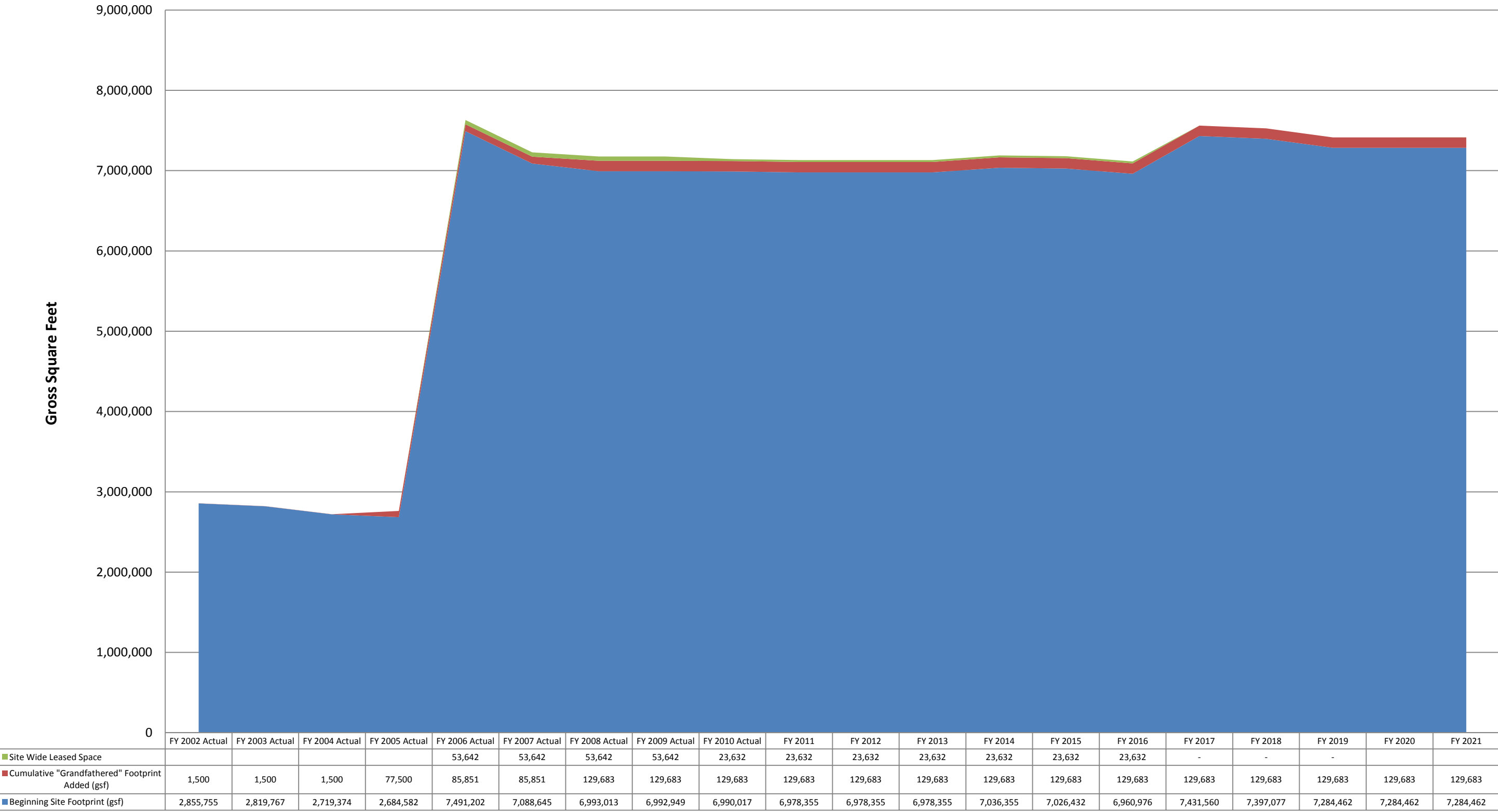
Fiscal Year	Beginning Site Footprint (gsf)	Excess Facilities Footprint Elimination (gsf)	New Construction/ Footprint Added (gsf)	Site Footprint Reduction by FY (gsf)	Footprint "Banked" (gsf)	Waiver/ Transfer (gsf)	"Grandfathered" Footprint Added (gsf)	Cumulative "Grandfathered" Footprint Added (gsf)	Site Wide Total Footprint (gsf)	Site Wide Leased Space	Weapons Activities Account (gsf)
(23)	(6)	(17)	(42)	(57)	(25)	(65)	(31)	(9)	(60)	(58)	(66)
FY 2002 Actual	2,855,755	-35,988	0	2,819,767	-35,988	0	1500	1,500	2,821,267		
FY 2003 Actual	2,819,767	-121,866	21,473	2,719,374	-136,381	0	0	1,500	2,720,874		
FY 2004 Actual	2,719,374	-101,792	67,000	2,684,582	-171,173	0	0	1,500	2,686,082		
FY 2005 Actual	2,684,582	-20,496	55,000	2,719,086	-136,669	0	76,000	77,500	2,796,586		
FY 2006 Actual	7,491,202	-402,557	0	7,088,645	-1,357,487	0	8,351	85,851	7,174,496	53,642	
FY 2007 Actual	7,088,645	-138,992	43,360	6,993,013	-1,453,119	0	0	85,851	7,078,864	53,642	
FY 2008 Actual	6,993,013	-64	0	6,992,949	-1,453,183	0	43,832	129,683	7,122,632	53,642	
FY 2009 Actual	6,992,949	-2,932	0	6,990,017	-1,456,115	0	0	129,683	7,119,700	53,642	
FY 2010 Actual	6,990,017	-11,662	0	6,978,355	-1,467,777	0	0	129,683	7,108,038	23,632	
FY 2011	6,978,355	0	29,468	7,007,823	-1,438,309	0	0	129,683	7,137,506	23,632	
FY 2012	6,978,355	0	59,720	7,038,075	-1,378,589	0	0	129,683	7,167,758	23,632	
FY 2013	6,978,355	0	0	6,978,355	-1,378,589	0	0	129,683	7,108,038	23,632	
FY 2014	7,036,355	-9,923	0	7,026,432	-1,388,512	0	0	129,683	7,156,115	23,632	
FY 2015	7,026,432	-143,456		6,882,976	-1,531,968	0	0	129,683	7,012,659	23,632	
FY 2016	6,960,976	-129,416	600,000	7,431,560	-1,061,384	0	0	129,683	7,561,243	23,632	
FY 2017	7,431,560	-34,483	0	7,397,077	-1,095,867	0	0	129,683	7,526,760	-	
FY 2018	7,397,077	-112,615	0	7,284,462	-1,208,482	0	0	129,683	7,414,145	-	
FY 2019	7,284,462	-829,728	0	6,454,734	-2,038,210	0	0	129,683	6,584,417	-	
FY 2020	7,284,462	-829,728	13,000	6,467,734	-2,854,938	0	0	129,683	6,597,417		
FY 2021	7,284,462	-829,728	0	6,454,734	-3,684,666	0	0	129,683	6,584,417		

Adders	GSF	FY
Proj Support Bldg	14,700	2011
TEF Warehouse	14,000	2011
New ECF	768	2011
Eng Support Bldg	16,150	2012
Proc Supt Bldg	10,570	2012
WSB	33,000	2012
MFFF	600,000	2016
NNSA Site Office	13,000	2020

Attachment E-4(b) Chart

FOOTPRINT TRACKING SUMMARY SPREADSHEET

Savannah River Site - Site Wide (Multi-Program)



Attachment F-1
NNSA FIRP Legacy (FY03 and FY04) Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction from Baseline
at Savannah River Site - NNSA
(\$000s)

Category of Maintenance	Spreadsheet Intruccion #	Legacy (FY03 & FY04) Baseline	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
1. FIRP LEGACY DEFERRED MAINTENANCE (DM) BASELINE (FY03 & FY04) (Excludes Programmatic Real Property or Equipment)	(37)	52,038	45,504	35,072	31,672	31,622	30,099	28,219	26,869	24,761	22,241	19,501								
2. LEGACY DEFERRED MAINTENANCE BASELINE (DM) REDUCTION TOTAL	(38)	8,459	6,534	10,432	3,400	50	1,523	1,880	1,147	2,108	2,520	2,740								
A. Reduction in Legacy DM Baseline (total due to FIRP ONLY) for all F&I	(38)	7,077	5,460	6,432	1,500	50	1,523	243	1,147	2,108	2,520	2,740								
i. Reduction in Legacy DM for <u>Mission-Critical</u> F&I (due to FIRP ONLY)	(38)				1,500	-	1,523	243	1,147	1,933	2,520	2,740								
ii. Reduction in Legacy DM for <u>Mission Dependent, Not Critical</u> F&I (due to FIRP ONLY)	(38)				-	50	-	-	-	175	-	-								
iii. Reduction in Legacy DM for <u>Not Mission Dependent</u> F&I (due to FIRP ONLY)	(38)				-	-	-	-	-	-	-	-								

Attachment F-2
NNSA Total Deferred Maintenance and Projected Deferred Maintenance Reduction
at Savannah River Site - NNSA
(\$000s)

<Site name>	Spreadsheet Intruccion #	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
1. ANNUAL REQUIRED MAINTENANCE for F&I	(4)					28,334	29,083	29,823	30,843	31,779	32,498	34,308	37,546	40,794	44,225	45,209	46,204	47,220	48,259	48,365
2. ANNUAL PLANNED MAINTENANCE <u>TOTAL</u>	(3)	19,022	20,678	18,971	22,132	25,766	28,694	30,458	31,042	31,567	35,217	38,831	35,134	33,039	38,192	40,883	31,852	32,475	30,660	30,660
a. Direct	(3)	16,080	17,805	17,676	19,645	24,172	27,047	28,757	29202	29,595	33,180	36,726	32,959	30,793	35,872	38,486	29,524	30,096	28,229	28,229
b. Indirect	(3)	2,942	2,873	1,294	2,487	1,594	1,647	1,701	1,840	1,972	2,037	2,105	2,175	2,246	2,320	2,397	2,328	2,379	2,431	2,431
3. DEFERRED MAINTENANCE (DM) <u>TOTAL</u> (Excludes Programmatic Real Property or Equipment) = Inflation Prior Year DM Total + DM New - Prior Year DM Reduction	(15)	52,038	45,504	36,801	45,743	50,243	53,655	56,135	58,673	63,486	80,019	95,619	111,783	128,528	145,870	163,824	182,410	201,643	221,541	242,124
i. Backlog Inflation Rate (%)	(5)		0.0%	4.9%	2.0%	2.2%	2.6%	2.5%	-1.9%	2.0%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
ii. DM Inflation	(11)		-	1,729	736	1,006	1,306	1,341	(1,067)	1,173	1,206	1,520	1,817	2,124	2,442	2,772	3,113	3,466	3,831	4,209
iii. DM NEW	(12)		-	-	11,844	3,500	3,629	3,300	3,605	3,639	15,327	14,080	14,348	14,621	14,900	15,183	15,473	15,767	16,068	16,374
A. DM, <u>Mission-Critical</u> F&I ONLY	(5,11,12,15)				40,896	45,289	50,508	50,416	48,388	51,910	65,079	78,498	92,173	106,107	120,306	134,774	149,518	164,541	179,850	195,450
B. DM, <u>Mission-Dependent, Not Critical</u> F&I ONLY	(5,11,12,15)				4,847	4,954	5,083	5,719	5,330	5,447	7,605	8,265	8,938	9,625	10,326	11,041	11,770	12,513	13,272	14,045
C. DM, <u>Not Mission-Dependent</u> F&I ONLY	(5,11,12,15)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. DEFERRED MAINTENANCE (DM) REDUCTION TOTAL	(14)	8,459	6,534	10,432	3,638	50	1,523	2,162	-	-	-	-	-	-	-	-	-	-	-	-
i. Reduction Total attributed to FIRP ONLY	(52)	7,077	5,460	6,432	1,605	50	1,523	243	1,147	2,108	2,520	2,740								
A. Reduction in DM for <u>Mission-Critical</u> F&I	(14)				3,638	50	1,523	2,162												
1. Reduction attributed to FIRP ONLY	(52)				1,605	-	1,523	243	1,147	1,933	2,520	2,740								
B. Reduction in DM for <u>Mission-Dependent, Not Critical</u> F&I	(14)				-	-	-	-	-											
1. Reduction attributed to FIRP ONLY	(52)				-	50	-	-	-	175	-	-								
C. Reduction in DM for <u>Not Mission-Dependent</u> F&I	(14)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1. Reduction attributed to FIRP ONLY	(52)				-	-	-	-	-	-	-	-								
5. REPLACEMENT PLANT VALUE (RPV) for Facilities and Infrastructure (F&I) = Inflation of PY RPV + Increase or Decrease due to other causes	(55)	735,604	867,805	942,376	837,348	1,337,922	1,372,708	1,430,726	1,464,116	1,503,898	1,532,472	1,561,589	1,591,259	1,621,493	1,652,301	1,683,695	1,715,685	1,748,283	1,781,501	1,815,349
A. RPV for <u>Mission-Critical</u> F&I ONLY	(55)				672,789	1,148,255	1,178,110	1,228,466	1,256,721	1,292,355	1,316,910	1,341,931	1,367,428	1,393,409	1,419,884	1,446,861	1,474,352	1,502,364	1,530,909	1,559,997
B. RPV for <u>Mission-Dependent, Not Critical</u> F&I	(55)				164,559	189,667	194,598	202,260	207,395	211,543	215,774	220,089	224,491	228,981	233,560	238,231	242,996	247,856	252,813	257,869
C. RPV for <u>Not Mission-Dependent</u> F&I	(55)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D. RPV Increase from prior year attributed to inflation	(55)				63,100	53,400	34,786	58,018	32,918	29,282	28,574	29,117	29,670	30,234	30,808	31,394	31,990	32,598	33,217	33,849
E. RPV increase / decrease attributed to causes other than inflation (provide separate supporting narrative behind E-2 exhibit)	(55)				(168,128)	447,174	-	-	472	10,500	-	-	-	-	-	-	-	-	-	-

Facility Condition Index (FCI)	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
FCI TOTAL	7.1%	5.2%	3.9%	5.5%	3.8%	3.9%	3.9%	4.0%	4.2%	5.2%	6.1%	7.0%	7.9%	8.8%	9.7%	10.6%	11.5%	12.4%	13.3%
FCI Mission Critical				6.1%	3.9%	4.3%	4.1%	3.9%	4.0%	4.9%	5.8%	6.7%	7.6%	8.5%	9.3%	10.1%	11.0%	11.7%	12.5%
FCI Mission Dependent, Not Critical				2.9%	2.6%	2.6%	2.8%	2.6%	2.6%	3.5%	3.8%	4.0%	4.2%	4.4%	4.6%	4.8%	5.0%	5.2%	5.4%
FCI Not Mission Dependent				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Asset Condition Index (ACI)	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
ACI TOTAL	0.93	0.95	0.96	0.95	0.96	0.96	0.96	0.96	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87
ACI Mission Critical				0.94	0.96	0.96	0.96	0.96	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.87
ACI Mission Dependent, Not Critical				0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.95
ACI Not Mission Dependent				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!