



U.S. DEPARTMENT OF
ENERGY

*Presentation to the SRS CAB
Strategic & Legacy Management Committee*

SRS Performance Measures Update

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EM *Environmental Management*
safety ♦ performance ♦ cleanup ♦ closure

Acronyms

ARRA	American Recovery & Reinvestment Act
D&D	Deactivation & Decommissioning
EM	Environmental Management
ER	Environmental Responsibility
HW	Hazardous Waste
LLW	Low Level Waste
LLMW	Low Level Mixed Waste
NNSA	National Nuclear Security Administration
SNF	Spent Nuclear Fuel
TRU	Transuranic Waste



Purpose

- Provide an update of the DOE-SR effort to develop a site-wide set of performance measures aligned with the 82 SRS Strategies and the SRS vision.
- Provide a response to CAB recommendation # 265 that requests DOE-SR provide performance metrics in specific areas of SRS operations.



Background

DOE-SR

- The 2009 SRS Strategic Plan was finalized and distributed in May 2009 with 82 Site Strategies identified in support of DOE's 5 Strategic Themes and the SRS vision.
- A DOE-SR initiative was launched to develop a site-wide set of performance measures aligned with the 82 SRS Strategies and the SRS vision.

CAB

- CAB recommendation #265 has requested an interim set of performance metrics to more fully communicate site quantitative progress in ER, D&D, Waste Management Operations, Nuclear Materials Disposition and ARRA.



Site-wide set of Performance Measures

Progress to Date

- 1st draft of defined performance measures was completed on October 1.
- Federal and Contractor / Tenant responsibilities have been mapped to strategies.
- Performance Measures are tied to contractor Performance Based Incentives (PBI's) and/or contracts with EM / NNSA.
- CAB interests have been incorporated into efforts.

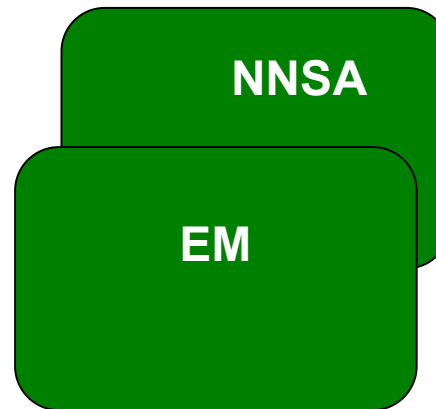


Site-wide set of Performance Measures

DOE Supporting Themes

25 Environmental Responsibility
11 Nuclear Security
13 Scientific Discovery & Innovation
14 Energy Security
19 Management Excellence

82
Strategies



SRNS
SRR
Shaw Areva
WSI
Parsons
Ameresco
SREL
Forest Svc

165
Performance Measures Identified
by Lead Federal & Contractor/ Tenant



Site-wide set of Performance Measures

Statistical Analysis

- 165 Performance Measures Identified for 2010

- DOE Theme Distribution

Environmental Responsibility	46
Nuclear Security	30
Energy Security	18
Scientific Discovery & Innovation	20
Management Excellence	<u>51</u>
	165

- 80% of the 82 Strategies are supported by Performance Measures



Site-wide set of Performance Measures

Statistical Analysis (cont)

Distribution of 165 PM's by Federal Oversight Organizations

EM

Nuclear Material	23
Liquid Waste	7
Closure	17
SRNL	30
Safety & Quality Assurance	4
Safeguards & Emergency Svcs	4
Business Systems	31
ARRA	<u>23</u>
	139

NNSA

Defense Program - Tritium	6
Nuclear Nonproliferation	<u>20</u>
	26



CAB Recommendation # 265

- DOE-SR has reviewed the CAB's request to establish an interim set of Performance Metrics.
- Responses to specific suggestions are included on the following pages.



DOE-SR Response to CAB Recommendation # 265

Item	CAB Recommendation	DOE-SR Response
	<u>Solid Waste</u>	
1.b.i	Modify the PBS 13 metrics to show the acceleration of legacy solid waste disposition by category (LLW, LLMW, and TRU).	Included in the DOE-SR Interim Performance Measures
1.b.ii	Add a new metric to PBS 13 that specifically addresses the minimization and disposition of newly generated solid wastes.	Included in the DOE-SR Interim Performance Measures
1.d	Devise a metric that disaggregates the data for TRU waste drums, large boxed TRU wastes, and drummed and boxed TRU wastes on TRU Pad #1.	Included in the DOE-SR Interim Performance Measures. SRS tracking by RH, CH and PAD 1



DOE-SR Response to CAB Recommendation # 265

Item	CAB Recommendation	DOE-SR Response
	<u>Liquid Waste</u>	
1.e	Reaffirm, revise as necessary, and republish the total number V-HLW canisters expected to be produced by DWPF and the number of GWSBs expected to be built to temporarily store the canisters.	Included in the DOE-SR Interim Performance Measures
1.f	Devise a metric that disaggregates "liquid waste eliminated" and publish as separate items the sludge, salt waste and curies processed and by the facilities where the liquid wastes were processed.	Included in the DOE-SR Interim Performance Measures
1.g	Devise a metric that disaggregates the number of tanks cleaned, partially cleaned, and annuli cleaned compared to the number of tanks with and without annuli to be cleaned.	Proposed Measures will provide a status of the various stages of tank preparation and closure from bulk waste removal through regulatory approval to final closure
1.h	Publish the number of HLW curies and volumes stored and treated and to be treated each year (in canisters; in liquid waste eliminated; etc.). The total number of curies of HLW that have been disposed should also be expressed as a percentage of the total curies	The total number of curies has been identified in the tanks. However, as part of the current vitrification process, specific curie measurement by canister is not performed. A curie measure will be established based on samplings of each sludge batch before vitrification processing



DOE-SR Response to CAB Recommendation # 265

Item	CAB Recommendation	DOE-SR Response
	<u>Nuclear Materials</u>	
1.a	Provide relevant metrics for PBS 11 (Pu and U packaged for disposition) and 12 (SNF packaged for disposition) that show progress for FY09 and each year beyond.	Pu and Enriched Uranium metrics have been included. Metrics for SNF will be established coincident with the start of SNF dispositioning which is targeted for 2011
	<u>Remediation</u>	
1.i	For PBS 30 (ER) and PBS 40 (D&D), publish the percentage of sites completed in addition to the number of sites cleaned, and publish the amount of work in progress (e.g., "20% of site ____ (site identity listed) is finished" etc.).	Included in the DOE-SR Interim Performance Measures
	<u>Recovery Act</u>	
1.c	a. Devise a new metric for ER and D&D to measure the acceleration in onsite remediation as a result of ARRA, and provide metrics for all projects with funding directly impacted by ARRA by displaying the old milestone and the impact of ARRA on each project	A significant number Performance Measures have been developed to address all the aspects of ARRA and are included in the DOE-SR Interim Performance Metrics.



CAB Interim Performance Measures

DOE-SR Proposed set of Interim Performance Measures

- DOE-SR has identified 30 performance measures for 2010 to address the interests of the CAB.
- 2009 Actuals and 2010 Targets for these measures will be provided at the November CAB meeting.
- It is proposed that a Performance Measures Report will be provided to the CAB on a Quarterly basis starting FY 2010.



CAB Interim Performance Metrics

Liquid Waste		Unit of Measure	2009 Actual	Cum thru 2009	2010		Cum thru 2010	End State
Measure					Actual YTD	Target Annual		
DWPF Canisters Poured & Tested								
Canisters Produced	Canisters							
Canister Storage Available	Spaces							
Tank Preparation and Closure								
Bulk Waste Removed	Tanks							
Tanks Cleaned	Tanks							
Annuli Cleaned	Tanks							
Tanks Isolated	Tanks							
SCDHEC & EPA Approval Received	Tanks							
Operationally Closed	Tanks							
SPF Salt Solution Processed								
Salt Solution Processed	(000) Gallons							
Radioactivity								
Curies Stabilized in Canisters	(000) Curies							
(Est. based on Sludge Batch Samplings)								



CAB Interim Performance Metrics

Nuclear Materials				2010		Cum thru 2010	End State
Measure	Unit of Measure	2009 Actual	Cum thru 2009	Actual YTD	Target Annual		
Plutonium & Enriched Uranium							
Plutonium							
Dispositioned to Waste	TBD						
Dispositioned to MOX	TBD						
Total Pu Dispositioned							
HEU Dispositioned (As LEU to Commercial Vendor)	TBD						
LEU Prepared & Loaded for Shipment	Trailers						



CAB Interim Performance Metrics

Recovery Act		Unit of Measure	2009 Actual	2010		Cum thru 2010	Recovery Act Total Target End of 2011
Measure				Actual YTD	Target Annual		
Jobs							
Jobs Saved- Cum							
Jobs Created- Cum							
Total Cum Jobs Saved / Created	Jobs						<u>3,000</u>
Funding Spent							
SRNS							1,400,000
SRR							<u>200,000</u>
Total	\$ (000)						1,600,000
Deactivation & Decommissioning							
Facilities - D&D Completed							
Industrial Facilities							
Radioactive Facilities							
Nuclear Facilities							
Total Facilities D&D'd	Facilities						
Facility Sq Footage Deinventoried	Sq Feet						
Facility Sq Footage Demolished	Sq Feet						
Soil & Water Remediation							
Remediation Complete	Release Sites						
Operational Footprint Reduction							
Site Remediated/ Footprint Reduction	Acres						



CAB Interim Performance Metrics

Recovery Act		Unit of Measure	2009 Actual	2010		Cum thru 2010	Recovery Act Total Target End of 2011
Measure				Actual YTD	Target Annual		
Solid Waste Disposition							
RH-TRU Waste Dispositioned	Cubic Meters						
CH-TRU Waste Dispositioned	Cubic Meters						
Total TRU Dispositioned	Cubic Meters						
PAD 1 Waste Dispositioned	Cubic Meters						
Newly Generated							
LLW -Accumulated Waste	Cubic Meters						< 400
MLLW - In Storage Time Frame	Months						< 12
Nuclear Material Disposition							
Depleted Uranium Oxide Shipped	Metric Tons						



Summary and Path Forward

- Efforts will continue to finalize the performance measures and develop a consistent reporting process across contractors, tenants and federal organizations.
- The interim set of performance measures will be provided to the CAB on a quarterly basis starting FY 2010 (Jan Report).

