ENCLOSURE

FOURTH QUARTERLY REPORT
SUMMARY OF SIGNIFICANT UNRESOLVED ISSUES
WITH NEW DEFENSE NUCLEAR FACILITIES

SITE	FACILITY	TOTAL PROJECT COST ($M)	STATUS			ISSUES
			Critical Decision Approved	Design Completion	Construction Completion	
Hanford Site	**Waste Treatment Plant**	12,200			***(Operational 2019)***	
	a. Pretreatment Facility		CD-3	68%	25%	1. ~~Seismic ground motion—*resolved* (4)~~* 2. Structural engineering 3. ~~Chemical process safety—*resolved* (3)~~
	b. High Level Waste Treatment Facility		CD-3	82%	22%	1. ~~Seismic ground motion—*resolved* (4)~~ 2. Structural engineering 3. Fire protection
	c. Low Activity Waste Facility		CD-3	94%	53%	1. Fire protection
	d. Analytical Laboratory Facility		CD-3	88%	48%	1. Fire protection
	Demonstration Bulk Vitrification System Project	224	CD-1	95%	Some foundation work ***(Operational FY 2011)***	1. Confinement strategy
	K-Basin Closure Sludge Treatment Project	220 (Estimated using new conceptual design)	Returned to CD-0	0%	Starting ***(Operational to be determined)***	1. ~~Completeness of Preliminary Documented Safety Analysis—review terminated; document not relevant to new conceptual design (3)~~ 2. Adequacy of project management and engineering

* Numbers in parentheses indicate the quarterly report in which an issue was considered resolved or a new issue was identified.

SITE	FACILITY	TOTAL PROJECT COST ($M)	STATUS			ISSUES
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	Large Package and Remote Handled Waste Packaging Facility	390	CD-0	0%	Starting (***Operational to be determined,*** **post-2016)**	No issues identified
	Tank Retrieval and Waste Feed Delivery System	1,140	One subproject not using the formal CD process	Various degrees of completion	Various degrees of completion and operations	1. ~~Design pressure rating of waste transfer system~~ —***resolved*** **(3)** No issues remain
	Immobilized High-Level Waste Interim Storage Facility	100	CD-3	90%	Deferred (***Operational to be determined***)	No issues identified
Idaho National Laboratory	**Integrated Waste Treatment Unit Project**	462	CD-3	>90%	<10% Placement of foundation started (***Operational 2010***)	1. Pilot plant testing 2. Waste characterization 3. Distributed control system design
Los Alamos National Laboratory	**Chemistry and Metallurgy Research Replacement Project**	725–975 Being reevaluated	CD-1	80%	Some ground work (***Operational 2014***)	1. ~~Design-build acquisition strategy~~—***resolved*** **(2)** 2. Site characterization and seismic design 3. Safety-significant active ventilation system—~~*resolved (2)*~~ ***reopened because of issue 6 (3)*** 4. Safety-class fire suppression system 5. Safety-class and safety-significant container design 6. Deficiencies in Draft Preliminary Documented Safety Analysis
	Technical Area-55 Reinvestment Project	72	Phase A: CD-2 Phase B: CD-0	60%	(***Complete 2010***) (***Complete 2014***)	1. Adequacy of safety systems
	Upgrades to Pit Manufacturing Capability at Technical Area-55	Annual funding	Not formally implementing CD process		Work ongoing	1. Lack of adherence to DOE Order 413.3A

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	Radioactive Liquid Waste Treatment Facility Upgrade Project	96	CD-1		(*Operational 2011*)	No detailed review completed
	New Solid Transuranic Waste Facility Project	40	CD-0	60%	(*Operational 2011*)	No detailed review completed
	Nuclear Material Safeguards and Security Upgrades Project, Phase 2	240	CD-1	30%	(*Operational 2013*)	No detailed review completed
	Technical Area-55 Radiography Project	38	CD-0	90% on hold	(*Operational 2010*)	No detailed review completed
Nevada Test Site	**Device Assembly Facility—Criticality Experiments Facility**	150	CD-2/3A–D	90%	Long-lead procurement and facility modification in process (*Operational 2011*)	1. Structural cracks 2. Deficiencies in fire protection system—***new issue*** **(4)**
Oak Ridge National Laboratory	**Building 3019—Uranium-233 Downblending and Disposition Project**	371	CD-2/3A	90%	(*Operational 2012*)	1. Deficiencies in Preliminary Documented Safety Analysis
Pantex Plant	**Component Evaluation Facility**	112	CD-0	Project is on hold	*(Operational on hold)*	No detailed review completed
Savannah River Site	**Pit Disassembly and Conversion Facility**	2,450	CD-1	50%	(*Operational on hold*)	1. Assumption on combustible loading for seismically induced fire
	Salt Waste Processing Facility	900	CD-1	35%	(*Operational 2013*)	1. ~~Geotechnical investigation~~—***resolved (4)*** 2. Structural evaluation 3. ~~Quality assurance~~—***resolved*** **(2)**
	Container Surveillance and Storage Capability Project	79–97	CD-2A/3A	30%	Building preparations started (*Operational 2010*)	1. Fire protection strategy 2. Preliminary hazards analysis 3. ~~Criticality safety~~—***resolved*** **(4)** 4. ~~Design process control~~—***resolved*** **(2)**

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	Plutonium Disposition Project	500 Being reevaluated	CD-0	10%	Not started (***Operational 2013***)	No issues identified
	Waste Solidification Building	244	CD-1		Not started (***Operational 2016***)	No issues identified
Y-12 National Security Complex	**Highly Enriched Uranium Materials Facility**	549	CD-3	100%	60% (***Operational 2009***)	1. Water supply for fire protection system
	Uranium Processing Facility	1,400–3,500	CD-1	10%	(***Operational 2017***)	1. ~~Preliminary hazards analysis development~~—***resolved (2)*** 2. Nonconservative values for airborne release fraction and respirable release fraction