



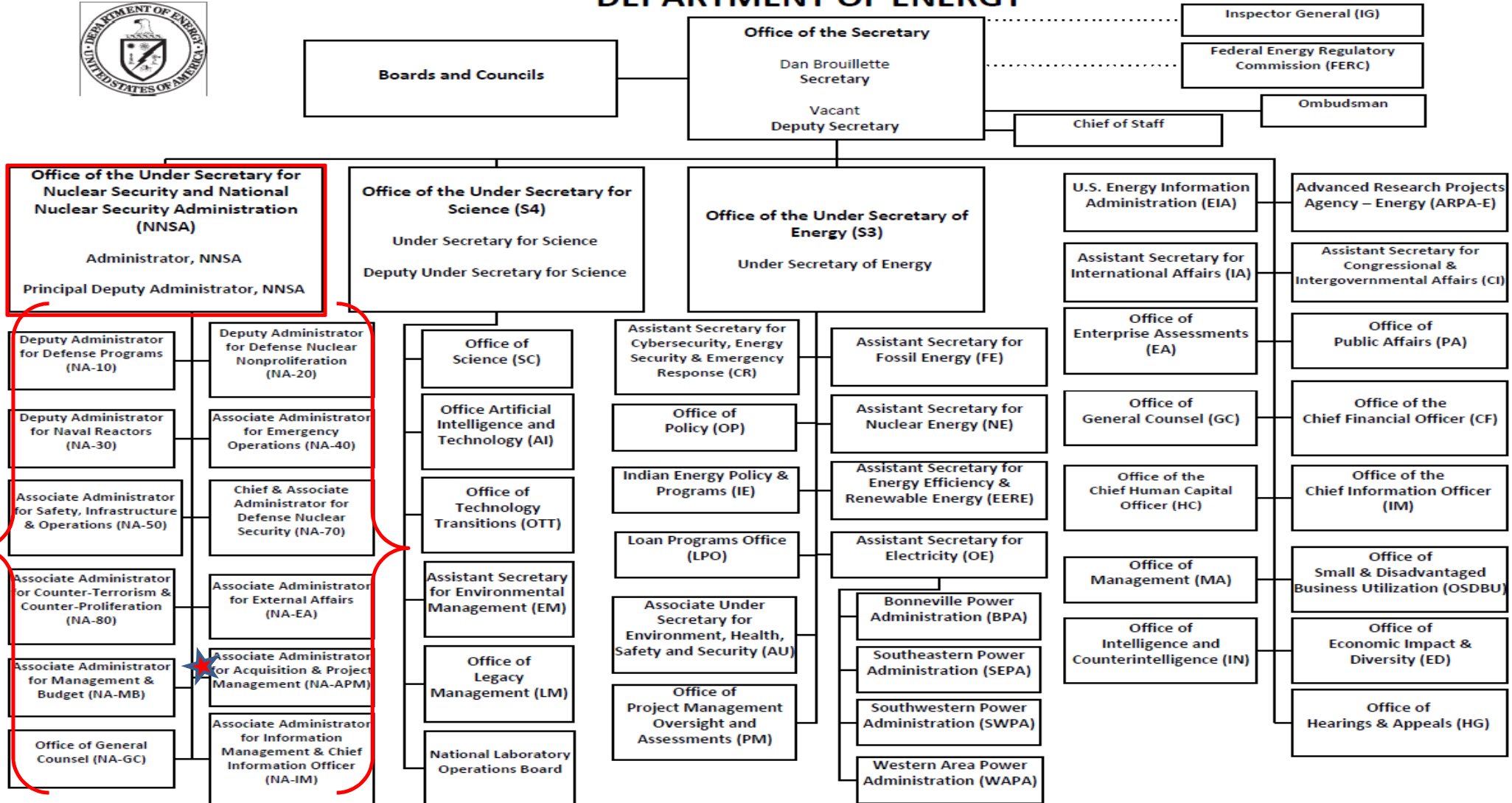
NNSA Acquisition and Project Management

Cameron Manning
Director, Office of Enterprise
Project Management



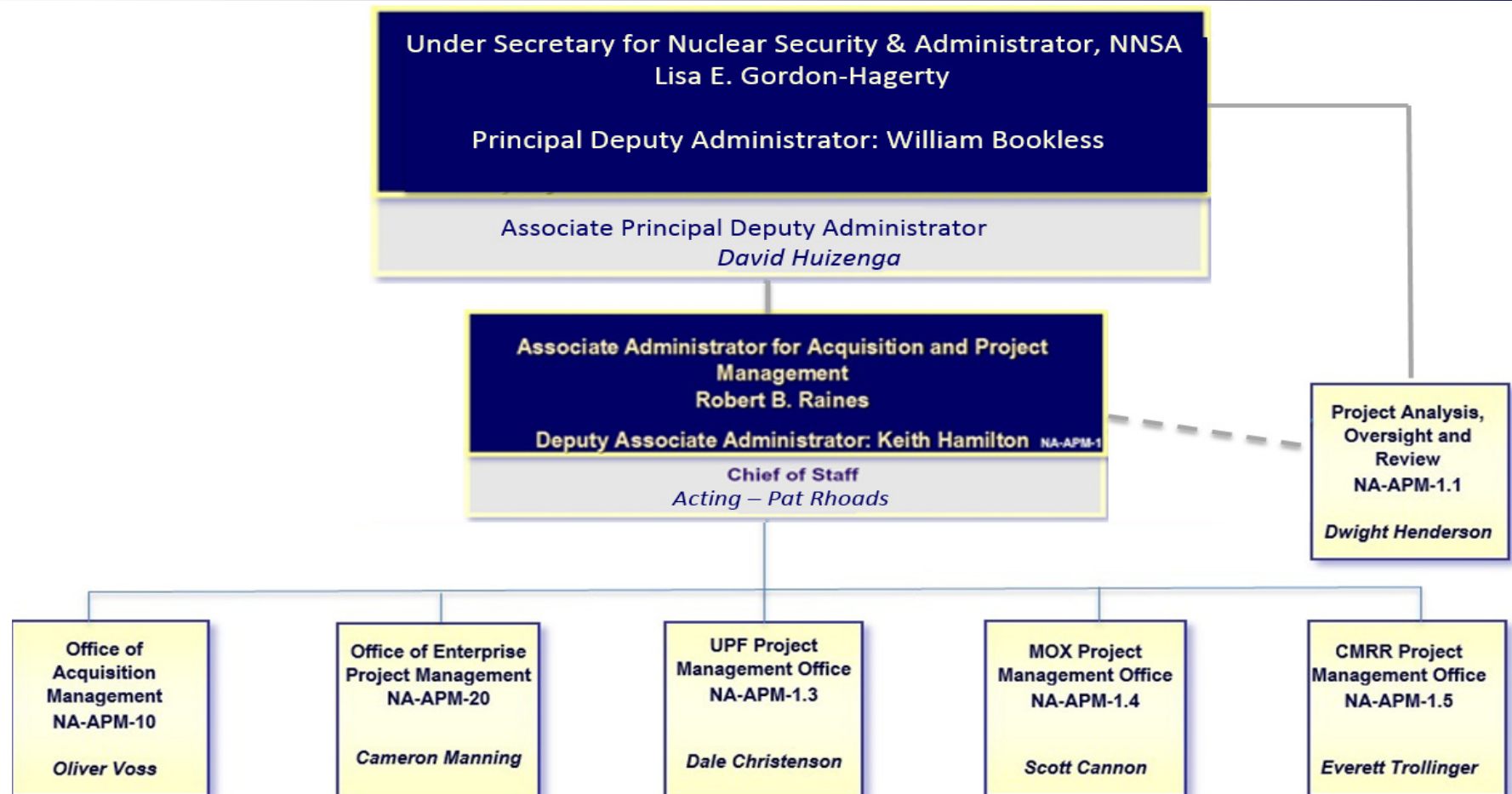


DEPARTMENT OF ENERGY





NNSA Office of Acquisition and Project Management





National Nuclear Security Administration (NNSA)



- NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science.

Department of Energy DOE Programs FY21 Budget

- **National Nuclear Security Administration \$19.8B**
 - Includes \$2.1B in Capital Asset Projects
- Science \$5.8B
- Energy \$3.6B
- Environmental Management \$6.1B
- Administration and Oversight \$0.1B

DOE Total \$35.4B

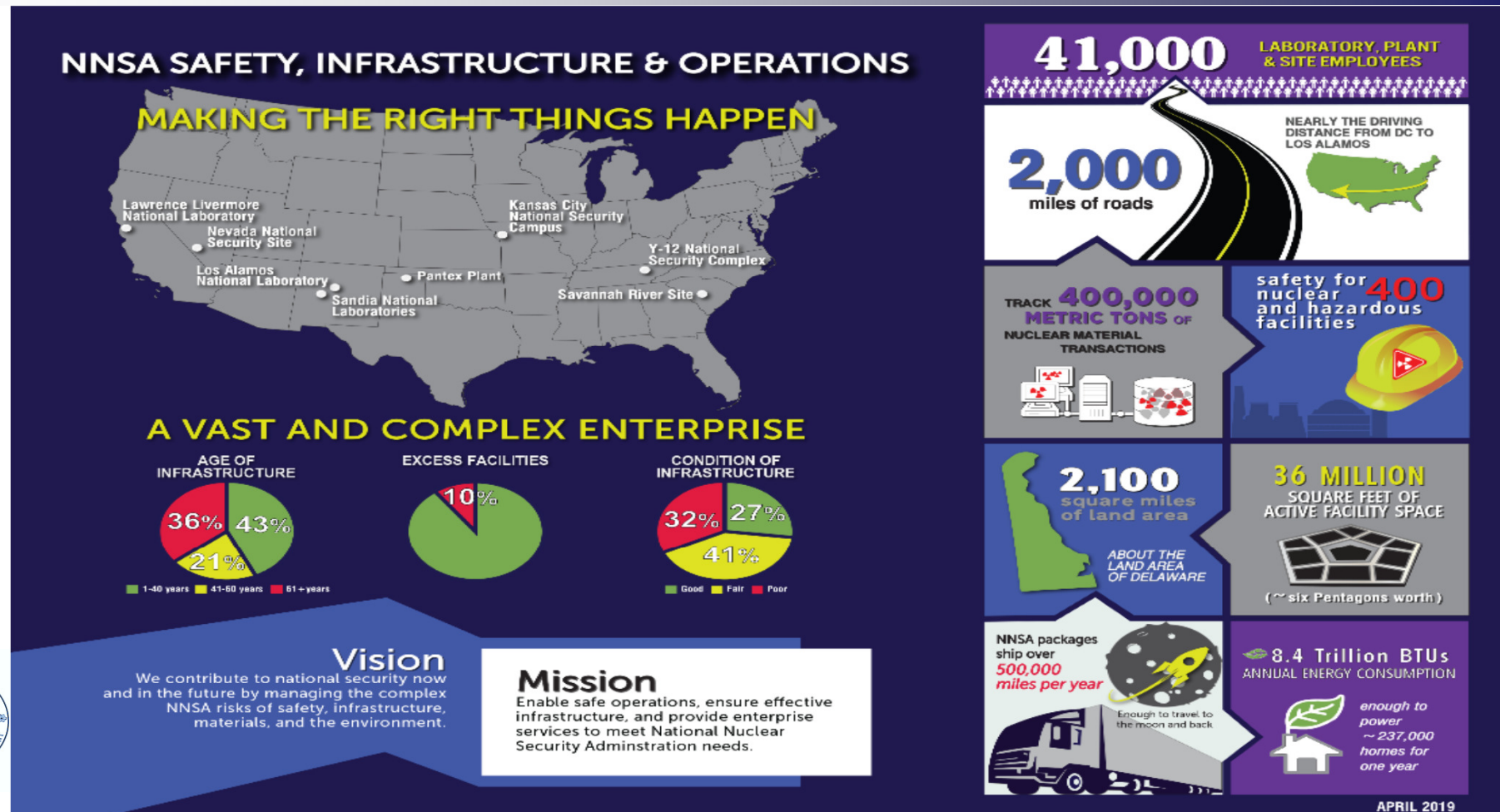
NNSA Mission:

- ❖ Managing the Nuclear Weapons Stockpile
 - ❖ Nuclear Materials Non-Proliferation
 - ❖ Powering the Nuclear Navy
 - ❖ Emergency Response, world-wide
 - ❖ Infrastructure Recapitalization
 - ❖ Countering Nuclear Terrorism
- Majority of NNSA business is conducted via individual site Management and Operating contractors (M&Os)
 - Partnering with DoD for budget support of Nuclear Weapons Complex





NNSA Locations and Infrastructure





Minor Construction Opportunities



Site	Number of Projects (< \$5M)	Value of Projects (\$ in M)
Kansa City National Security Campus (KC)	7	\$49
Knolls Atomic Power Laboratory (KL)	1	\$19
Lawrence Livermore National Laboratory (LLNL)	7	\$59
Los Alamos National Laboratory (LANL)	11	\$82
Nevada National Security Site (NNSS)	7	\$53
Oak Ridge National Laboratory (Y12)	19	\$108
Pantex (PTX)	3	\$66
Sandia National Laboratory (SNL)	10	\$50
Savannah River Site (SRS)	8	\$37
Grand Total	73	\$524



Source: FY 2021 Congressional Budget Justification



NA-APM Responsibilities

- Mission: to deliver timely best value ACQUISITION solutions and safe quality CONSTRUCTION on budget.
 - Ensures NNSA implements federal acquisition and project management policies and regulations.
 - Awards and administers all NNSA contracts, with particular emphasis on Management and Operating Contracts.
 - Acquisition planning, design and construction of capital asset projects (\$20M and above) including those governed by DOE Order 413 in accordance with the terms and conditions of the contracts.
 - Building the \$6.5B Uranium Processing Facility (UPF), the \$2.0B Chemistry Metallurgy Research Replacement Project (CMRR), the \$1.1B* Advanced Sources and Detectors (ASD) project and the \$4.6B* Savannah River Plutonium Processing Facility, among others
 - NNSA's procurement authority resides with NA-APM's Senior Procurement Executive and Head of Contracting Activity

(*) denotes top end of current range



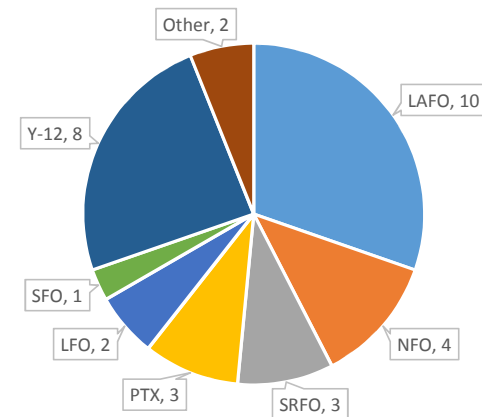


APM Overview



- Integrated acquisition and project management organization
 - Follows the Department of Defense model and industry practices
 - Provides NNSA Administrator & Program Offices independent counsel
 - NNSA manages its projects through contracts
- APM is responsible for NNSA contract award, policy, staff development
 - 90% of NNSA's budget spent on contract
 - Management & Operating (M&O) contracts valued at ~\$11.0 B to manage and operate NNSA labs and plants
 - M&O model = government owned, contractor operated
 - ~2,000 contract actions annually, including over 200 new contracts valued at ~\$2.0 B
- APM is responsible for all NNSA post Analysis of Alternatives (AoA) line item construction projects
 - 33 projects and subprojects valued at over \$21B
 - 14 projects under construction valued at \$8B
 - » Includes 6 Major System Acquisition subprojects projects and 8 other projects
 - 19 projects are in design and are valued at \$13B

Post AoA Projects by Location





M&O Contracts Overview

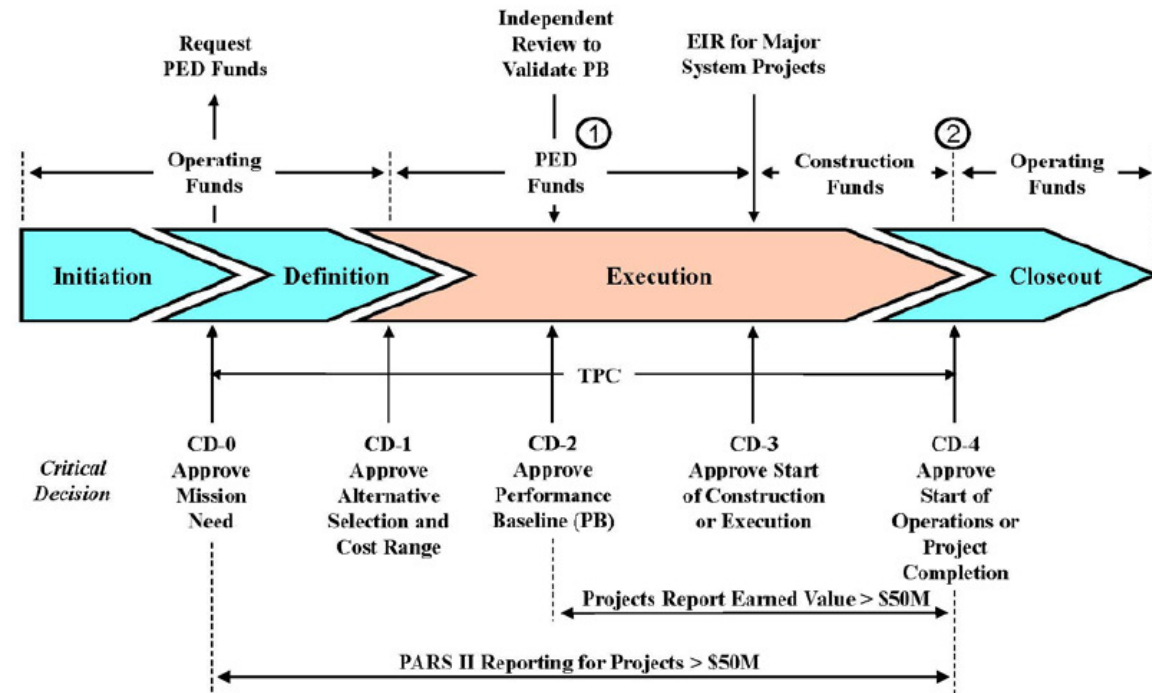
Facility	Contractor	Parent Companies	Award Date	Maximum Potential Expiration Date	Total Value Over 10 Years	Procurement POC
NNSA Production Office (NPO) /Pantex & Y-12	Consolidated Nuclear Security, LLC (CNS)	Bechtel National, Leidos, ATK Launch Systems, SOC	1/8/2013	6/30/2024	\$23B	Mr. Michael R. Vermeulen Senior Director, Contracts michael.vermeulen@cns.doe.gov 865-574-1255
Kansas City National Security Campus	Honeywell FM&T	Honeywell Corporation	7/9/2015	9/30/2025	\$8B	Mr. Curtis Mears Director of Procurement CMears@kcncs.doe.gov 816-488-4805
Lawrence Livermore National Laboratory	Lawrence Livermore National Security, LLC (LLNS)	Becthel National, Univ. of California, Babcox & Wilcox, AECOM	5/9/2007	9/30/2026	\$25B*	Charles "Chuck" Duff - Supply Chain Manager duff6@llnl.gov 925-422-0426
Sandia National Laboratories	National Technology and Engineering Solutions of Sandia (NTESS)	Honeywell International, Inc.	12/16/2016	4/30/2027	\$26B	Sandia Business Point of Contact (primary contact for suppliers interested in doing business at Sandia) supplier@sandia.gov 1-800-765-1678
Nevada National Security Site	Mission Support and Test Services LLC (MSTS)	Honeywell International Inc., Jacobs Engineering Group Inc., and Stoller Newport News Nuclear Inc. (SN3)	5/12/2017	9/30/2027	\$7B	MSTS Procurement POC: Sharon Nanez NanezSR@nv.doe.gov 702-295-2649
Bettis/Knolls Atomic Power Laboratory	Fluor Marine Propulsion, LLC	Fluor Corporation	7/12/2018	9/30/2028	\$17B	Juliana Heynes Juliana.Heynes@nnp.doe.gov 412-476-7241
Los Alamos National Laboratory	Triad National Security, LLC (Triad)	Battelle Memorial Institute, The Regents of University of California, Regents of Texas A&M University Subcontractor: Fluor	6/8/2018	10/31/2028	\$24B	Drew Fuller Procurement Director dfuller@lanl.gov 505-667-9182
Savannah River Site (EM Contract)	Savannah River Nuclear Solutions LLC (SRNS)	Fluor, Newport News Nuclear, and Honeywell	1/10/2008	7/31/2019	\$12B	Cory Price cory.price@nnsa.doe.gov 803-208-2653



DOE Acquisition Process for Capital Assets (>\$50M in size)



- Phase-gate Project Management Process defines the following Critical Decisions:
 - CD-0**, Approve Mission Need
 - CD-1**, Approve Alternative Selection and Cost Range
 - CD-2**, Approve Performance Baseline
 - CD-3**, Authorize Construction
 - CD-4**, Acceptance/Project Completion
- Project Management Executives approve these CDs indicating readiness to proceed, acceptance of risk, and commitment of resources
- Contracting/acquisition process works in concert with this project management process



NOTES:

1. PED funds can be used after CD-3 for design.
2. Operating Funds may be used prior to CD-4 for transition, startup, and training costs.





Upcoming Critical Decisions

Project	Site	TOR/TPC \$M	CD Achieved / to be achieved	Month	Forecast / Actual (F/A)
Surplus Plutonium Disposition (SPD)	SRFO	620	1/3A	December 19, 2019	A
Exascale Computing Facility Modernization Project (ECFM)	LFO	111	2	December 19, 2019	A
Lithium Production Capabilities (LPC)	Y12	1,645	1	December 19, 2019	A
UPF Substation	Y12	60	4	December 19, 2019	A
Electrical Power Capacity Upgrade (EPCU)	LAFO	300	AoA	December 20, 2019	A
Tritium Finishing Facility (TFF)	SRFO	640	1	December 20, 2019	A
Power Source Capability	TBD	320	AoA	February 28, 2020	F
Digital Infrastructure Capability Expansion (DICE) (formerly DIF B-256-NCC)	LFO	89	0	February 28, 2020	F
Energetic Materials Characterization (EMC)	LAFO	330	0	March 31, 2020	F
Calcliner	Y12	105	2	May 20, 2020	F
Combined Radiation Environments for Survivability Testing (CREST)	TBD	1,250	AoA	June 1, 2020	F
Exascale Class Computer Cooling Equipment (ECCCE)	LAFO	56	4	June 12, 2020	F
Power Source Capability	TBD	320	AoA	June 30, 2020	F
CMRR PF-4 Equipment Installation Phase 1 (PEI-1)	LAFO	394	4	June 30, 2020	F
Digital Infrastructure Capability Expansion (DICE) (formerly DIF B-256-NCC)	LFO	89	AoA	June 30, 2020	F
Domestic Uranium Enrichment (DUE) Capability	TBD	14000	AoA	June 30, 2020	F
Energetic Materials Characterization (EMC)	LAFO	330	AoA	July 31, 2020	F
138 kV Power Transmission System Replacement	NFO	90	2	September 23, 2020	F
Material Staging Facility (MSF)	PTX	1,700	1	September 30, 2020	F
Device Assembly Facility (DAF) Argus - IP	NFO	24	4	September 30, 2020	F
High Explosive Science & Engineering (HESE)	PTX	195	2	September 30, 2020	F
Expand Electrical Distribution System (EEDS)	LFO	33.8	4	September 30, 2020	F
Savannah River Pu Processing Facility (SRPPF)	SRFO	4,600	1	September 30, 2020	F



Major Systems Projects



Uranium Processing Facility (UPF)

- ❑ On schedule to deliver on the commitment of \$6.5B by the end of 2025
 - President's FY21 Budget = \$750M
 - ✓ \$42M increase from FY19
 - ✓ \$3.5B expensed to date

Chemistry and Metallurgy Research Building Replacement (CMRR)

- ❑ On schedule to deliver on the commitment of \$1.9B by the end of 2022
 - President's FY21 Budget = \$169M
 - ✓ PF-4 Equipment Installation, Phase 1 (PEI-1) at \$394M
 - ✓ RLUOB Equipment Installation, Phase 2 (REI-2) at \$633M
 - ✓ \$730M expensed to date
 - ✓ More than \$1B of additional equipment installation and other infrastructure scope that is currently being designed (subprojects PEI-2 and RC3)

Plutonium Pit Production

- ❑ Design, D&D, and installation of processing equipment and related infrastructure at LANL to increase pit production from 10 pits per year (ppy) to 30 ppy
 - President's FY21 Budget = \$226M





Upcoming Major System Acquisition Projects



Advanced Sources and Detectors

- Mission need approved Sep. 2014; CD-1 approved February 6, 2019
- CD-1 preliminary cost range \$500M - \$1.1B
- Conceptual Design complete

Savannah River Plutonium Processing Facility (SRPPF)

- Mission need approved Nov. 2015; CD-1 planned for 2020
- Cost range \$1.8B - \$4.6B
- Analysis of Alternatives and Engineering Assessment complete. Savannah River Site picked as the preferred site
- Conceptual Design underway





What NNSA needs from you



- To Realize NNSA's Budget is Increasing
- To Realize NNSA's infrastructure will be a focus area in the coming years
- To understand that our infrastructure is not all nuclear – recent projects:
 - Office Space, Emergency Operations Centers, Electrical Upgrades; HVAC Upgrades; Parking Garages
- To seek out our M&O partners to understand opportunities
- To increase competition for NNSA work





Acquisition Forecast

- NNSA's Multi-Year Acquisition Forecast
 - Prime DOE/NNSA Contracting Opportunities
 - Subcontracting Opportunities Available from M&O Contractors
- Web URL <https://hqlnc.doe.gov/support/nnsaforecast.nsf>

Click on: "by Opportunity ID" on the left column and you will see our more recent opportunities.

- The best all-around link is: <https://www.energy.gov/osdbu/acquisition-forecast>
 - This is DOE's site and covers all the program offices. There is a downloadable spreadsheet at the bottom of the page for the Department's Acquisition Forecast.





Small Business Contact Information

Pantex Plant (TX)	NNSA	Los Alamos (NM)
<p>Ryan Johnston Small Business Program Manager 806-573-4417 ryan.johnston@cns.doe.gov http://pantex.energy.gov/</p>	<p>Greg Gonzales Small Business Program Manager Albuquerque: U.S. Department of Energy National Nuclear Security Administration P.O. Box 5400 Albuquerque, NM 87115 (505) 845-5420 gregory.gonzales@nnsa.doe.gov</p>	<p>Chris Fresquez Small Business Office Leader (505) 665-7175 chrisjf@lanl.gov</p>
<p>Y-12 National Security Complex Oak Ridge, (TN) Lisa Copeland Small Business Program Manager 865-576-2090 lisa.copeland@cns.doe.gov http://www.y12.doe.gov</p>	<p>Gary Lyttek Senior Business Source Manager Headquarters: U.S. Department of Energy 1000 Independence Ave. SW Washington, DC 20585 ATTN: NA-APM-1 (202) 586-8304 gary.lyttek@nnsa.doe.gov</p>	<p>James Carrigan Small Business Advocate (505) 667-4940 carrigan_james@lanl.gov</p>





BACKUP SLIDES





Design Opportunities

Project Title	Site	TPC (\$M)	CD-1
TA-55 Reinvestment Project Phase 3 (TRP III)	LAFO	170 - 238	6/21/2021
High Explosive Synthesis, Formulation, and Production (HESFP)	PTX	96 - 240	11/2/2020
Savannah River Pu Processing Facility (SRPPF)	SRFO	1,800 - 4,600	9/30/2020
Electrical Power Capacity Upgrade (EPCU)	LAFO	110 - 300	9/30/2021
Power Source Capability	TBD	80 - 320	9/30/2021



Dates and Dollar Amounts Subject to Change



Construction Opportunities



Project Title	Site	TPC (\$M)	CD-2/3
Calcliner (CALP)	Y12	107	5/20/2020
High Explosive Science & Engineering (HESE)	PTX	100 - 195	9/30/2020
SNL Emergency Operations Center (EOC)	SFO	40	9/28/2020
LLNL Emergency Operations Center (EOC)	LFO	32	9/30/2020
U1a Complex Enhancements Project (UCEP) Subproject 020	NFO	61 - 152	12/15/2020
138 kV Power Transmission System Replacement	NFO	42 - 90	9/23/2020
West End Protected Area Reduction (WEPAR)	Y12	43 - 172	12/31/2021
Advanced Sources and Detectors (ASD) (ECSE)	LAFO	500 - 1,054	9/30/2022
Surplus Plutonium Disposition (SPD)	SRFO	448 - 620	9/30/2022
Y-12 Emergency Operations Center (EOC)	Y12	28	9/30/2020
Y-12 Fire Station	Y12	29	9/30/2020

Dates and Dollar Amounts Subject to Change





Major Construction Uranium Processing Facility



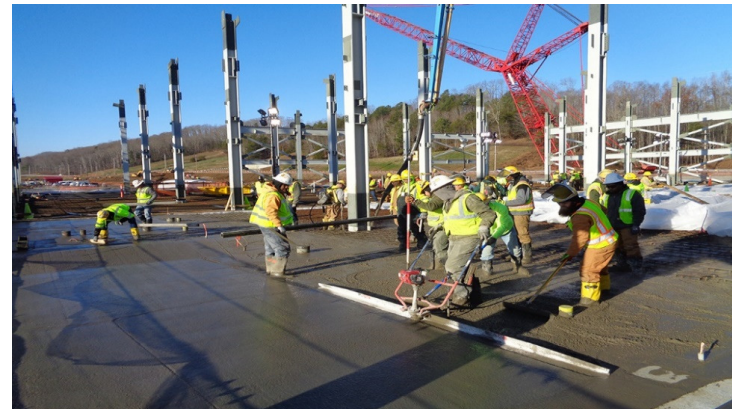
Mechanical Electrical Building Rebar



MPB West and Gas Pad Formwork



1st Floor NE Quad Fireproofing Complete and HVAC Duct Installation Prep



First Elevated Slab Concrete Placement





Major Construction Underway



Chemistry & Metallurgy Research Replacement Project, LANL



Exascale Cooling Facilities Modernization, LLNL



Low Level Waste, LANL



Albuquerque Complex Project, SNL





Major Construction Completed



Transuranic Waste Facility, LANL



High Explosive Pressing Facility, Pantex Plant



Test Capabilities Revitalization Phase 2 Project, SNL



Nuclear Materials Safeguards and Security Upgrades Project, LANL

