National Nuclear Security Administration

Introductory Briefing
for
Governor's Nuclear Advisory Council
Columbia, SC

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Savannah River Site Office
National Nuclear Security Administration

September 2, 2004

Briefing Objectives

National Nuclear Security Administration

- Overview of NNSA Nuclear Weapons Complex
- Federal organizational structure at SRS
- Division of responsibilities among the DOE and NNSA offices at SRS
- Defense Programs National Security missions at SRS
- Tritium Extraction Facility
- Ten-Year Outlook for NNSA Missions at SRS

The NNSA Mission

National Nuclear Security Administration

The mission of the Administration shall be the following:

(1) To enhance United States national security through the military application of nuclear energy.

(2) To maintain and enhance the safety, reliability, and performance of the United States nuclear weapons stockpile, including the ability to design, produce, and test, in order to meet national security requirements.

(3) To provide the United States Navy with safe, militarily effective nuclear propulsion plants and to ensure the safe and reliable operation of those plants.

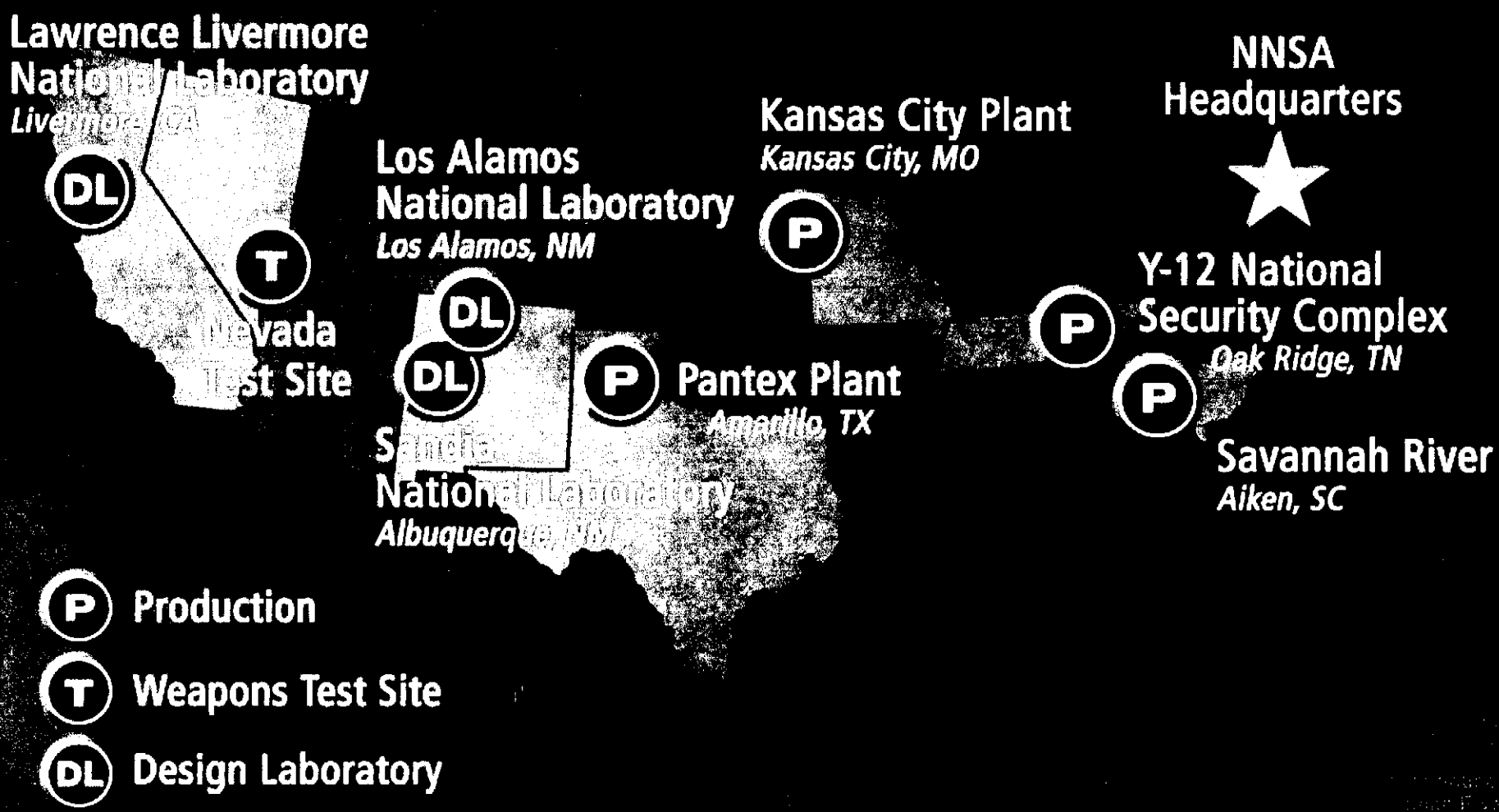
(4) To promote international nuclear safety and nonproliferation.

(5) To reduce global danger from weapons of mass destruction.

(6) To support United States leadership in science and technology.

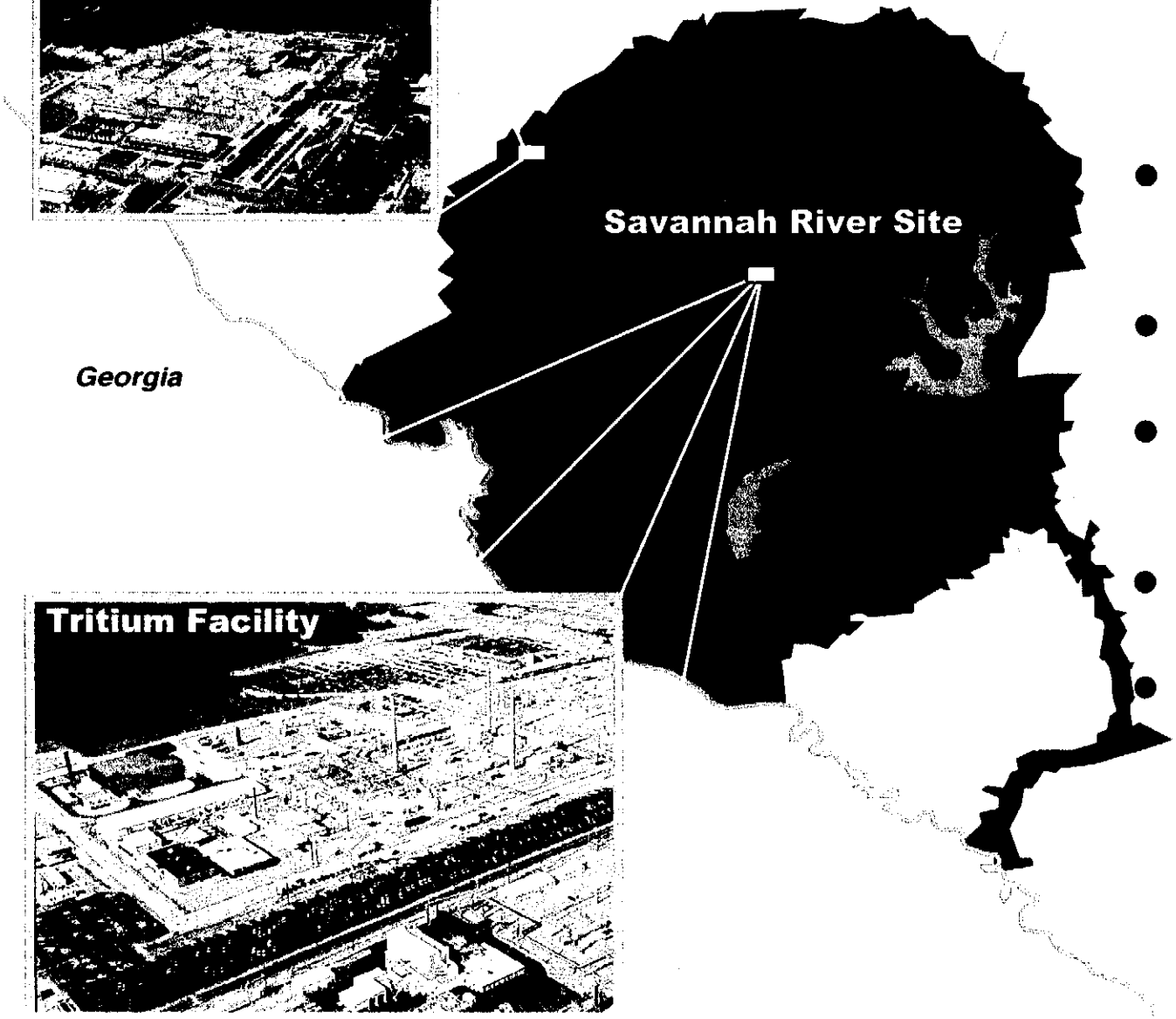
Source: Section 3211, National Defense Authorization Act for FY 2000
Effective: March 1, 2000

National Nuclear Security Administration
Nuclear Weapons Complex



Defense Programs (DP)
at the Savannah River Site

National Nuclear Security Administration



NNSA-DP at SRS

- FY04 Budget of $250M is about 15% of total site budget
- Operations & Maintenance portion is $150M
- Largest single project is the Tritium Extraction Facility at $506M
- Physical Security and Cyber budget is $13M
- Direct & Direct Support staffing for DP:
  - ~ 700 WSRC
  - ~ 25 WSI
  - 21 NNSA

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Organization

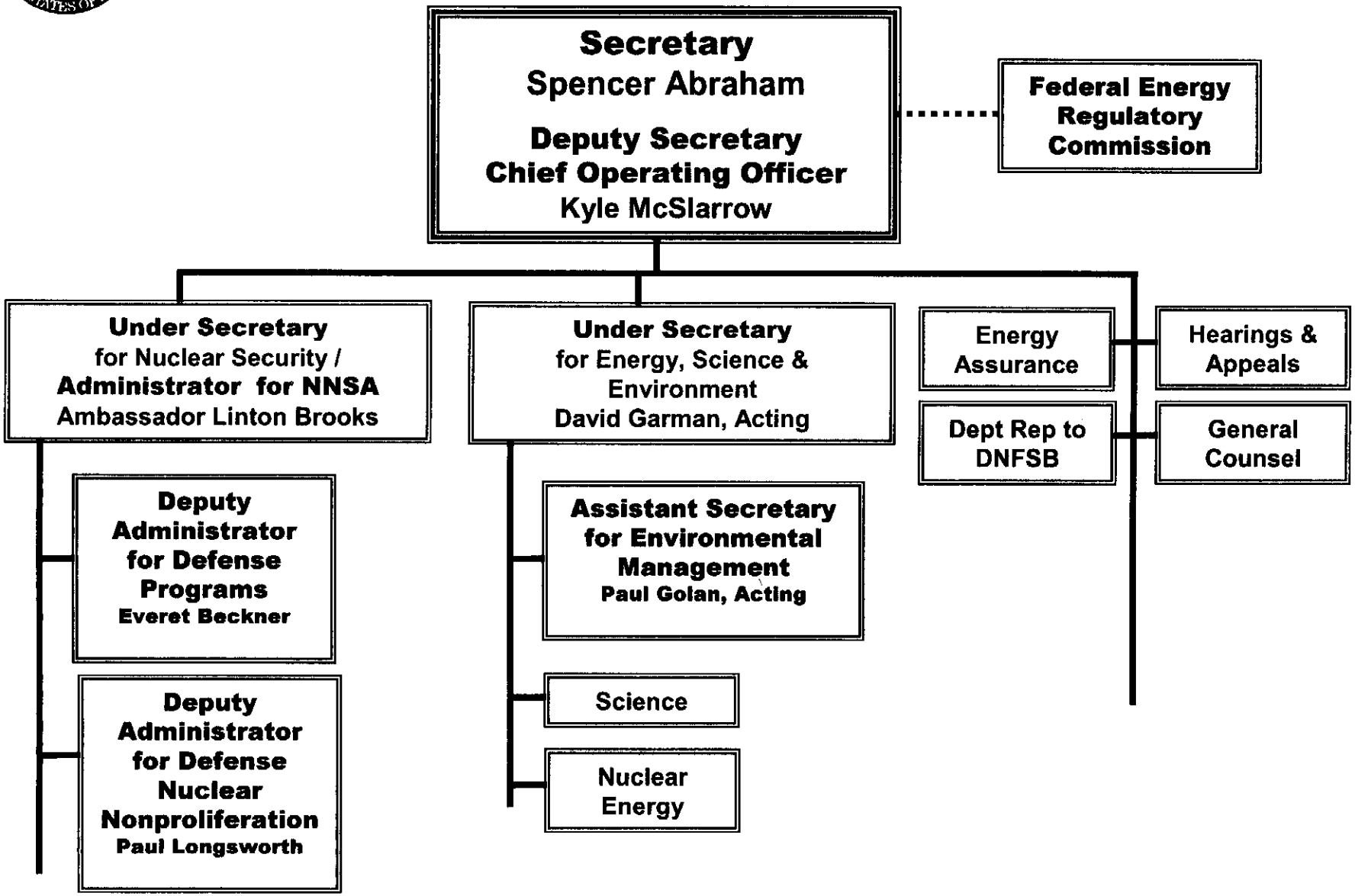
National Nuclear Security Administration

Department of Energy

National Nuclear Security Administration

Department of Energy

National Nuclear Security Administration



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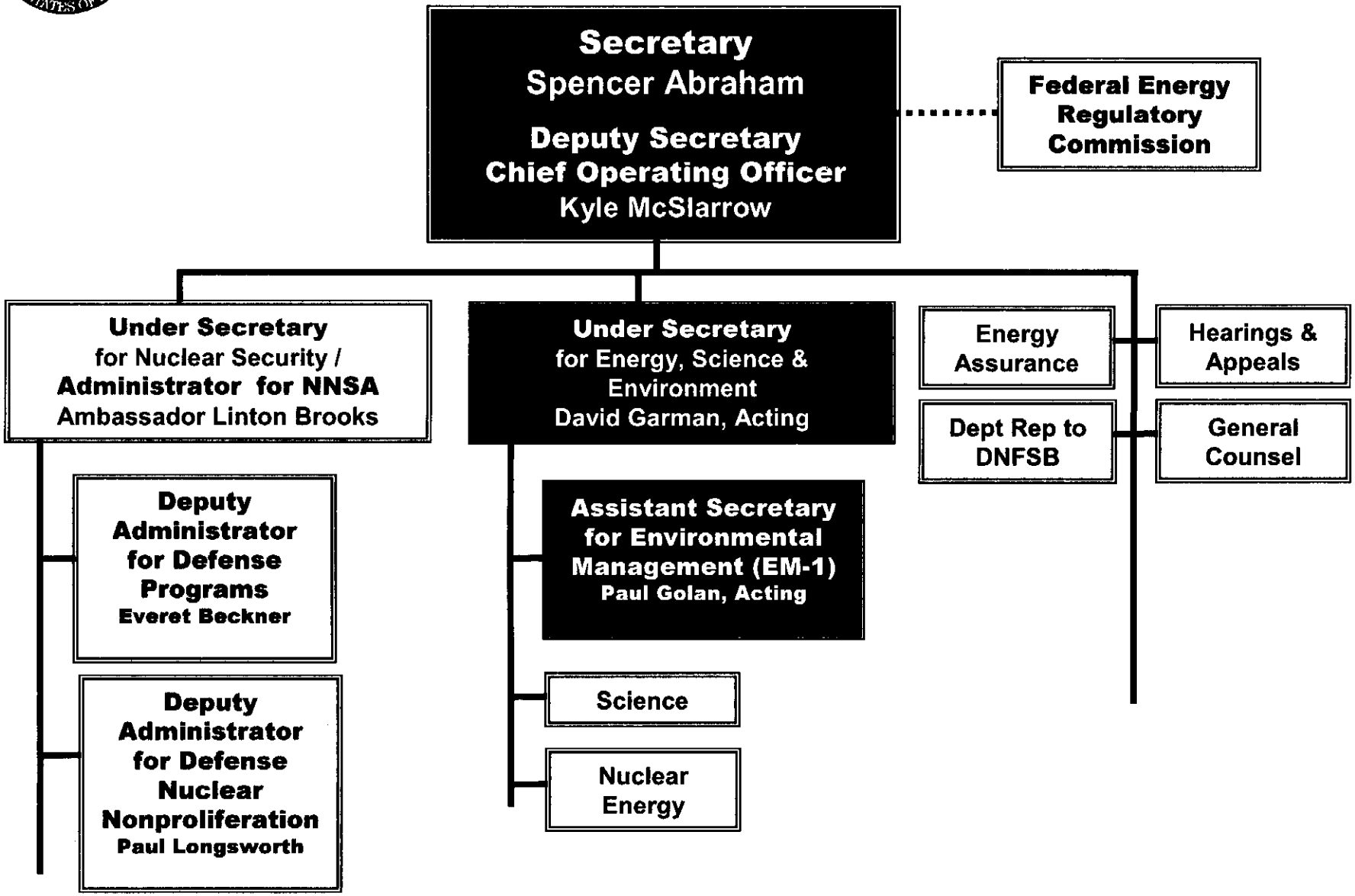
Department of Energy

National Nuclear Security Administration



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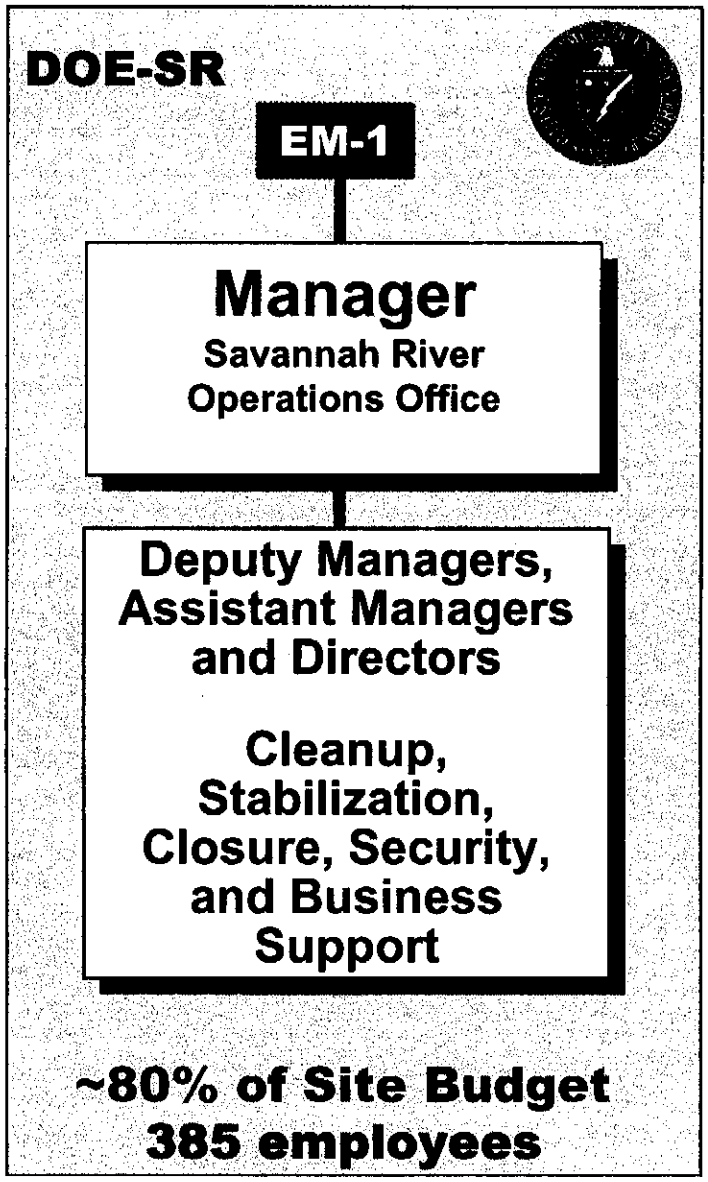
The Savannah River Site Federal Organization



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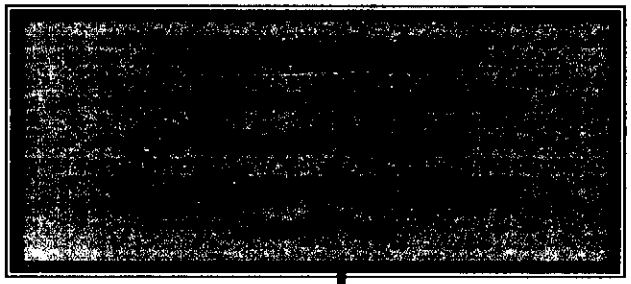

DNN - Deputy Administrator
Paul Longsworth

DP - Deputy Administrator
Everet Beckner

EO - Associate Administrator
Joseph Krol

I & E - Associate Administrator
Bruce Scott

M & A - Associate Administrator
Mike Kane

Security - Associate Administrator
Bill Desmond

Sandia Site Office
Patrice Wagner, Manager
Steve Goodrum, Deputy Mgr

Kansas City Site Office
Steve Taylor, Manager
Mike Jones, Deputy Mgr

Y12 Site Office
William Brumley, Manager
Theodore Sherry, Deputy Mgr

Livermore Site Office
Camille Yuan-Soo Hoo, Manager
Rich Mortensen, Deputy Mgr

Los Alamos Site Office
Ed Wilmot, Manager
Dennis Martinez, Deputy Mgr

Pantex Site Office
Dan Glenn, Manager
Donald White, Deputy Mgr

Savannah River Site Office
Rick Arkin, Manager
Bruce Wilson, Deputy Mgr

Nevada Site Office
Kathy Carlson, Manager
Jay Norman, Deputy Manager
Maureen Hunemuller, Dep Mgr

Service Center
Karen Boardman, Director

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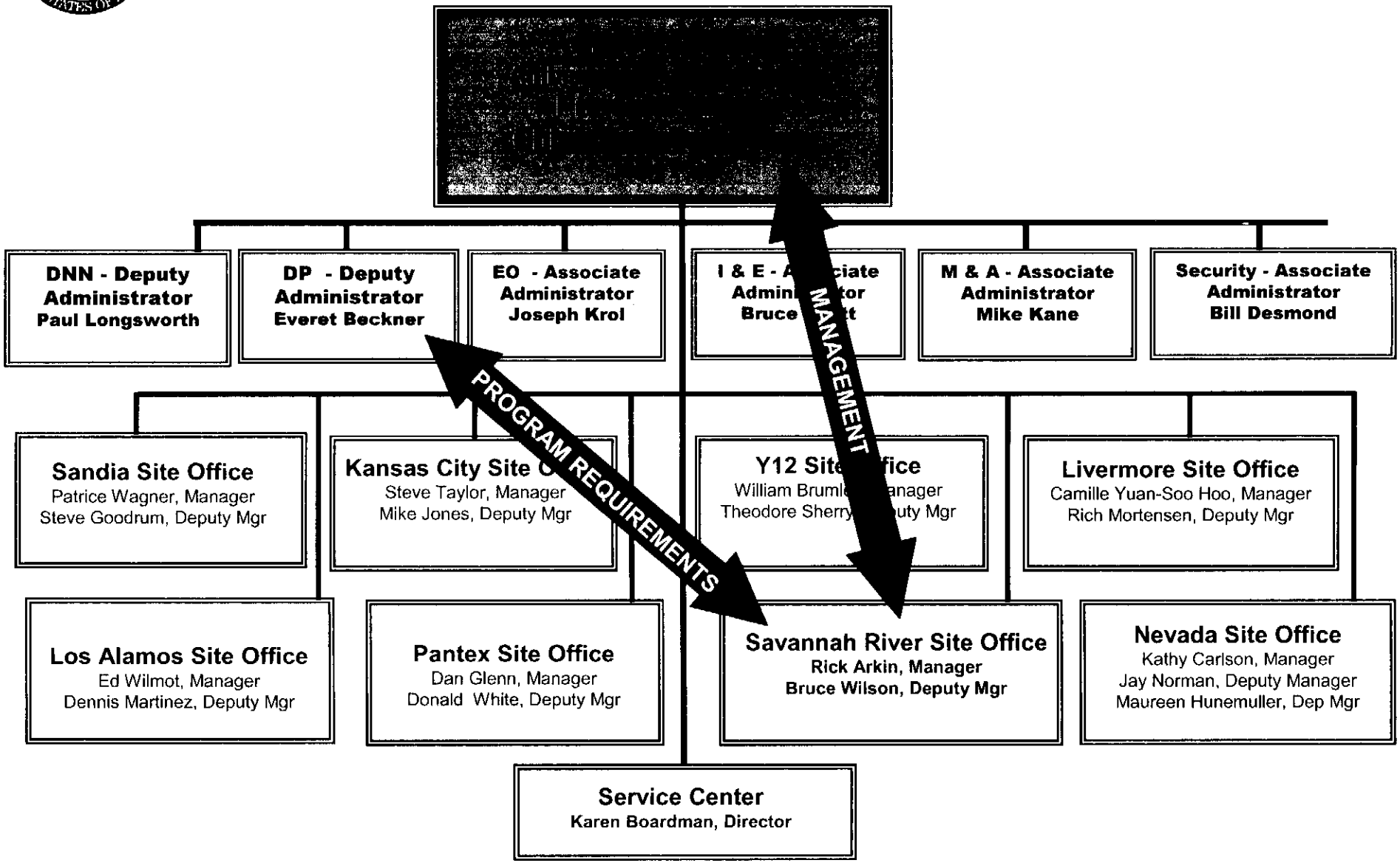

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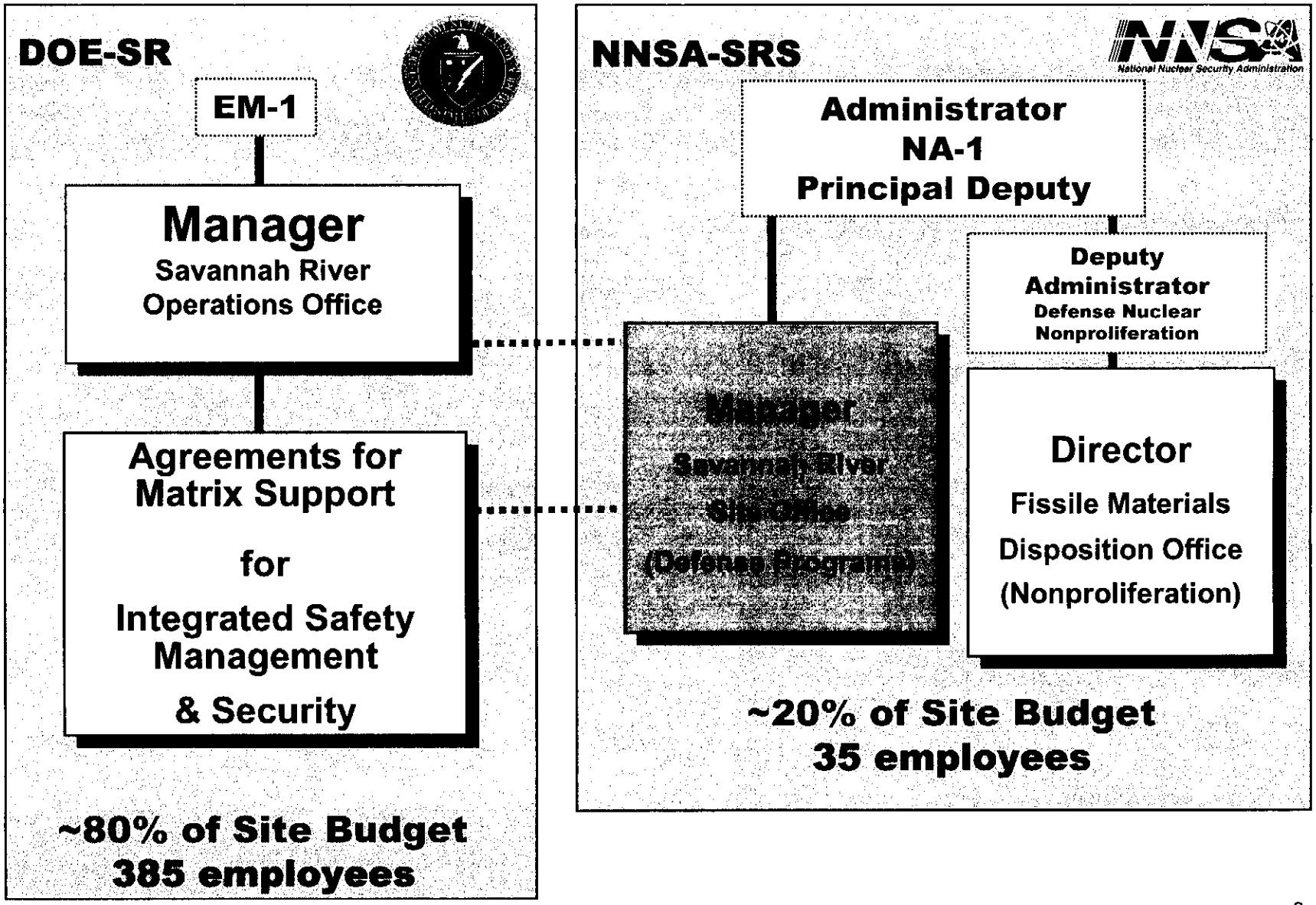

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Role of the NNSA Site Office

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- Provides operations oversight and contract administration for NNSA Defense Programs activities at SRS.
- Ensures that GOCO facilities are available to safely and securely conduct the NNSA missions.
- Ensures the long-term viability of the site to support NNSA missions and projects.
- The Site Office Manager establishes the operational requirements necessary to carry out missions assigned to SRS.
- The Site Office Manager acts as the agency's *risk acceptance* official.

Defense Programs Missions at SRS

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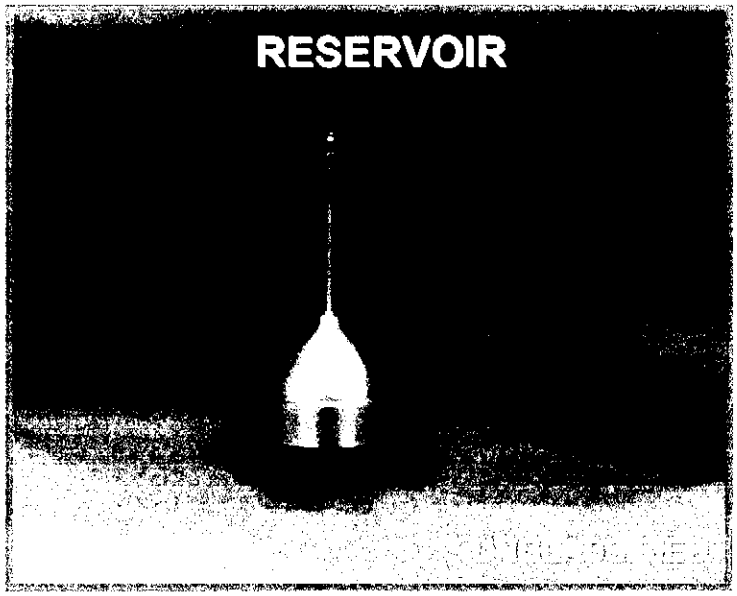
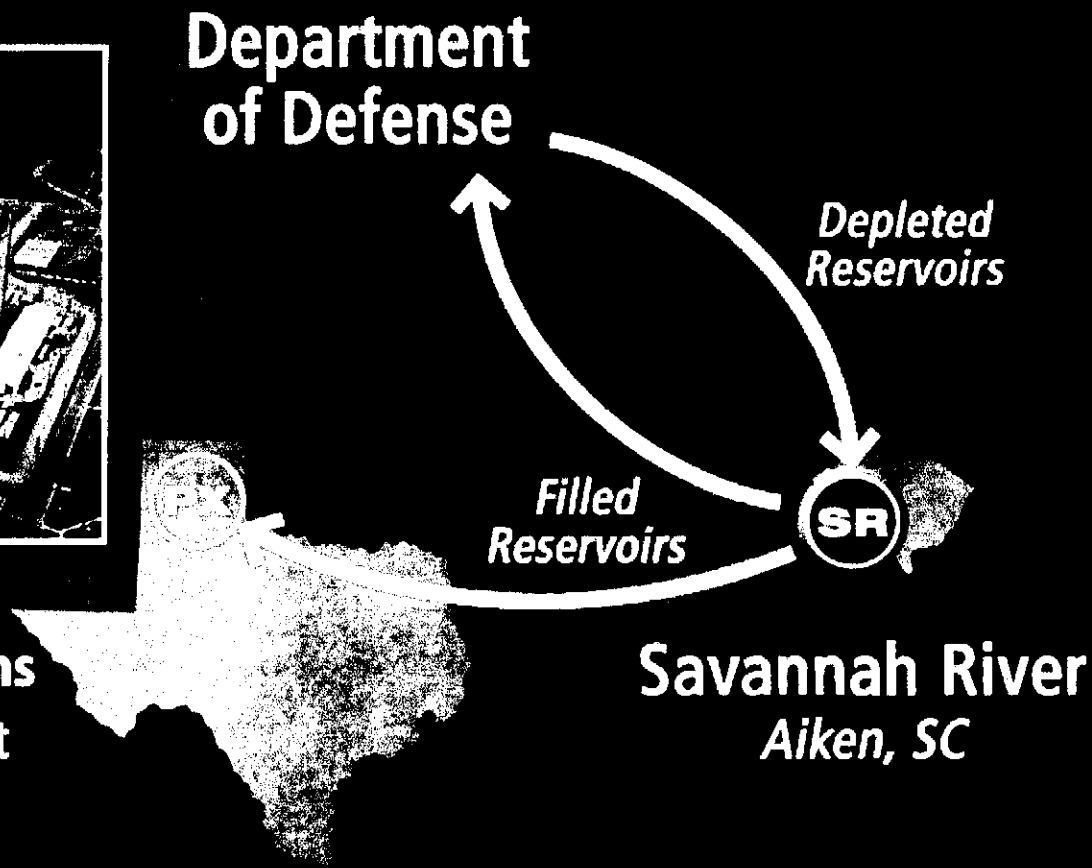
- Limited Life Component Exchange - recycle of tritium and loading, unloading & shipping of gas-filled reservoirs
- Surveillance - function testing, life storage, and materials testing of reservoirs
- Tritium Production - operation of new Tritium Extraction Facility
- Modern Pit Facility support as directed by NNSA-HQ



National Nuclear Security Administration
Nuclear Weapons Complex



Savannah River Missions

- Limited Life Component Exchange
- Tritium Supply
- Reservoir Surveillance

Tritium Extraction Facility

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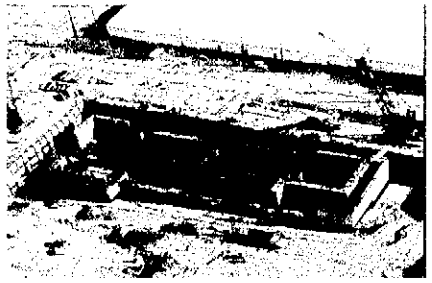
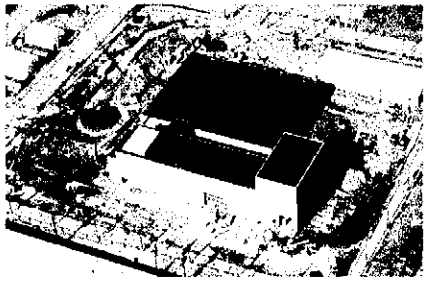
- $506 Million Project
- Project Duration: 1999 - 2007
- Will provide capability to extract tritium from targets (TPBARs) irradiated in TVA reactors
- Scheduled for operation in July 2007

Tritium Extraction Facility Timeline

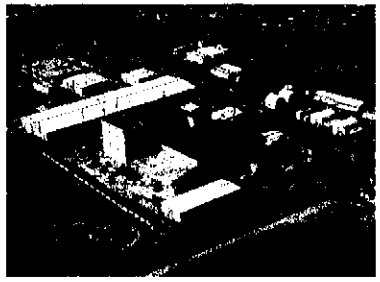
Secretary Richardson
Leads Groundbreaking



Remote Handling Building
Shield Walls

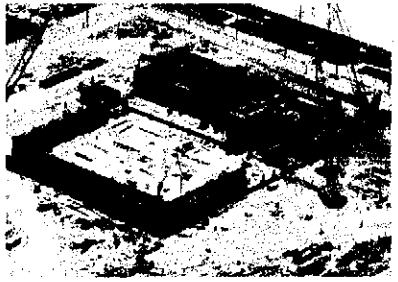


Stack Foundation Poured

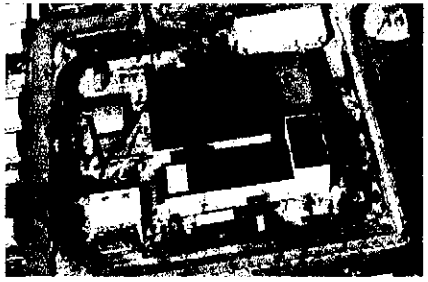


Support Building Near
Completion

Remote Handling Building
Foundation Work



Tritium Processing Building
Takes Shape



Stack Erected, Substation,
Diesel Generator installed and
Support Building Started

2000 2001 2002 2003 2004 2005

10-Year Outlook

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- Building 232-H (1955 vintage) will be deactivated in 2005.
- Tritium reservoir loading workload will decrease as weapons stockpile is reduced.
- Reservoir surveillance workload will remain stable.
- *Center for Hydrogen Research* will be operational in late 2005.
- *Tritium Extraction Facility* will be operational in 2007.
- New Defense Programs buildings will be added:
  - Office Building
  - Tritium Facility Warehouse
  - Construction Support Building
- Existing buildings will continue to be modernized to provide 40 more years of service.