

### Savannah River Nuclear Solutions Mission Status

Stuart MacVean SRNS President and CEO

S.C. Nuclear Advisory Council Oct. 13, 2016

#### Agenda

- SRNS Missions
- Safety Pause Status
- Workforce Sustainment
- Plutonium Down-Blending
- Transuranic Waste
- H Canyon Operations
- Environmental Stewardship

#### **SRS** Missions

# **Environmental Management**

Management, stabilization and disposition of nuclear materials Management and disposition of solid, liquid and transuranic wastes Spent fuel management Environmental remediation and cleanup

Tritium operations and extraction Helium-3 recovery Nonproliferation support Uranium blending and shipping Foreign fuel receipts

**5% Other federal agencies**, DOE sites and minor entities Private industry

National Nuclear

35%

Security Administration

Private industry

#### SRNS: Our four mission areas supply solutions around the world



Environmental Stewardship for soil, water and facilities



Supplying Tritium for nuclear weapons deterrent







Transforming Nuclear Materials into assets and stable wasteforms



#### Savannah River National Laboratory

putting science to work in:

Waste Treatment Materials Stabilization and Disposition Remediation and Cleanup Assessments and Verification Tritium R&D Plutonium Technology Homeland Security Nonproliferation Nuclear Forensics Hydrogen Production and Storage Nuclear Fuel Cycle R&D Renewable Energy Research

#### **SRNS Status**

## **Safety Pause**

A year of recovery

Positive impacts on safety culture

Effective Sustainment Plan implemented

Notable solid improvement

Improved performance resulted in FY16 scope completion plus additional scope



#### **SRNS Status**

### Workforce Sustainment

Effective Human Capital campaigns

Head count maintained; hiring 300-400 per year

> 48: Average age of employees (down from 54)



### Plutonium Down blend

**Resumed in K Area** 

Successfully conducted in 2012 in HB Line

Surplus non-pit plutonium never intended for MOX

Disposition path out of South Carolina



### Transuranic waste

96 percent legacy TRU waste shipped offsite

4,965 cubic meters disposed

Remaining waste repackaged, certified, ready for disposition

Reviewing new waste acceptance criteria to prepare for recertification

Will be ready when WIPP reopens



# **H** Canyon

Resumed all process operations

Achieved readiness to receive Canadian materials

Actively processing spent nuclear fuel

Recycling enriched uranium to be sent to TVA for commercial power





### Environmental Stewardship

Remediating 90-acre D Area Ash Basin (about 99 football fields)

Operating 36 systems for legacy soil and groundwater remediation

Met all (3,651) Federal Facility Agreements and RCRA milestones since 1993

> Completed 405 of 515 Federal Facility Agreement remediation projects

Reduced SRS operational footprint by 85 percent