Atoms for Peace

Providing enriched uranium to supply the world’s power needs

Radioisotope production for medicinal and industrial needs

Developing new materials through neutron analysis
Nuclear Medicine

“If at some time a heavenly angel should ask what the Laboratory in the hills of East Tennessee did to enlarge man’s life and make it better, I daresay the production of radioisotopes for scientific research and medical treatment will surely rate as a candidate for first place.”

America Calls

What is Oak Ridge today

• World renown nuclear science
• The heart of America’s nuclear security enterprise
• A pace setter in DOE’s environmental remediation
• A leader in STEM education
Oak Ridge National Laboratory
Confidence in our ability to execute has brought us a host of new projects

Neutrons
- Proton Power Upgrade
- Second Target Station

Computing
- OLCF-4: Summit (in operation)
- OLCF-5: Frontier Exascale Computing Project

Nuclear
- US ITER
- Material-Plasma Exposure Experiment
- Transformational Challenge Reactor

Isotopes
- Domestic Uranium Enrichment Centrifuge Experiment
- Stable Isotope Production Facility
- Stable Isotope Production and Research Center
- January 2019: CD-0

Multiple programs
- Translational Research Capability
- Advanced Imaging Facility

“From those to whom much has been given, much is expected”
Y-12 Delivering the Mission Together

- Completed the decade-long W76-1 Life Extension Program
- Completed 240% of the W76-2 Initial Operating Capability
- Produced all necessary components under our control for B61-12 and W88 Alt 370 First Production Units

Pantex

100% W76-1 LEP
95% W76-2 LEP
97% Dismantlements

100% Combined Production

Y-12

100% W76-1 LEP
104% B61-12 LEP
110% DSW Base Surveillance
108% Dismantlements

73% Reduction in lost workdays, reflecting a decrease in the severity of injuries
17% Decrease in Incidents of Security Concern
Progress toward reclaiming properties

Environmental Cleanup
• Demolished 5.5 million square feet of facilities and structures

Waste Disposition
• Disposed of 28+ million cubic yards of waste with no NOVs or spills
• Managed/treated 782+ million gallons of low-level wastewater

Federal Land Reuse
• K-31 site for CNS/UPF project
• K-1065 warehouse complex for CNS shipping and receiving

Brownfield Delivered
Transferred 1,200+ acres for redevelopment/reuse
• Duct Island parcel for Coqui
• ED-10 to UniTech
The opportunities for the future

• Factory built Small Modular and next generation reactors
  • 3D printing reactor parts that are “born” certified
  • Redeveloping the supply chain for nuclear qualified parts
• Restarting the enrichment industry in America
  • New types of nuclear fuels that burn more efficiently
• Radioisotope production
• Safety and training of the next generation nuclear workforce
• The cleanup work is far from done