Agency Priority Goal Action Plan

Nuclear Stockpile Annual Assessment

**Goal Leaders:**

Dr. Charles Verdon, Deputy Administrator for Defense Programs, National Nuclear Security Administration,
Philip Calbos, Principal Assistant Deputy Administrator for Defense Programs, National Nuclear Security Administration

Performance.gov
Fiscal Year 2020, Quarter 4
Overview

Goal Statement
Provide to the President of the United States the annual status of the U.S. nuclear weapons stockpile safety, security, reliability, and effectiveness to meet our nation’s goals of deterring adversaries and underpinning the Nation’s security. No later than March 15 of each calendar year, complete an annual assessment of the stockpile using surveillance of existing systems, experiments, and computational analysis to inform the assessment.

Challenge
- Maintain a credible nuclear stockpile without nuclear explosive testing.
- Execute the Stockpile Stewardship Program through the course of the fiscal year to identify technical issues and concerns.
  - Some of these issues may be assessed as particularly significant.
  - If not resolved, they may eventually result in an impact to the assessed safety, reliability or performance of a warhead/bomb.

Opportunity
- Each annual assessment builds on continuing experience with each weapon system and incorporates new information from stockpile maintenance, surveillance, experiments, simulations, and other sources to enhance the technical basis of each weapon type.
The goal of the Annual Assessment is to ensure the U.S. nuclear weapons stockpile remains safe, secure, reliable, and effective. The Annual Assessment philosophy and approach involves quantification of weapon characteristics and rigorous review of the results and certification basis by teams of weapons scientists and engineers. The laboratory teams responsible for each weapon type and its assessment include individuals with extensive weapons experience and access to both historical and new data. The assessments and conclusions in the Annual Assessment Reports are reviewed by independent peers, Red Teams (subject matter experts appointed by each laboratory’s director), program managers, senior laboratory management, and the Laboratory Directors.

Leadership, Goal Structure & Strategies

Department of Energy

Los Alamos National Laboratory
Senior Lead: Dr. Thom Mason, Director
Team Lead: Sieg Shalles

Livermore National Laboratory
Senior Lead: Dr. Bill Goldstein, Director
Team Lead: Sue Taylor

Sandia National Laboratory
Senior Lead: Dr. James S. Peery, Director
Team Lead: Sandy Varro

NNSA/Defense Programs
Senior Leads: Dr. Charles Verdon, Philip Calbos

Department of Defense

White House

Department of Energy

Los Alamos National Laboratory
Senior Lead: Dr. Thom Mason, Director
Team Lead: Sieg Shalles

Livermore National Laboratory
Senior Lead: Dr. Bill Goldstein, Director
Team Lead: Sue Taylor

Sandia National Laboratory
Senior Lead: Dr. James S. Peery, Director
Team Lead: Sandy Varro

US Strategic Command
Senior Lead: Admiral Charles Richard, Commander

Department of Defense
December 1, the Commander of the United States Strategic Command (CDRUSSTRATCOM) submitted letters to Secretaries of Defense and Energy on the results of assessments and other programmatic issues.

December 3, the DOE/NNSA held the Annual Assessment meeting. The Secretary of Energy, the NNSA Administrator, the three National Security Laboratory Directors, and CDRUSSTRATCOM met to discuss the state and health of the Nation’s nuclear weapons stockpile.
January 14, DOE/NNSA distributed the FY21 Annual Assessment Tasking Letter and Execution Plan to the Laboratory Directors.

February 1, DOE and the Department of Defense finalized the FY20 Report on Stockpile Assessment (ROSA) and submitted it to the President.

February 12, Red Team charters and member lists were prepared and distributed by the Laboratories.

March 6, Laboratory internal drafts of the Annual Assessment Reports were developed and distributed by the DOE/NNSA and the Laboratories.

March 15, ROSA submitted to Congress.
April 17, NNSA distributed the Project Officers Group (POG) drafts of the Annual Assessment Reports (AARs) for review and comment.

May 12, NNSA provided feedback on the POG drafts to the National Laboratories.

The Stockpile Assessment Meeting at Sandia National Laboratories, originally scheduled June 2-4, was postponed due to the COVID-19 pandemic and has been tentatively rescheduled for September 1-3 at Offutt Air Force Base.

The AARs are on schedule to be published and released on July 27.
July 27, AARs were published and distributed by Laboratory Annual Assessment Coordinators.

September 1-3, the Stockpile Assessment meeting was held at Offutt Air Force Base in Omaha, Nebraska. NNSA participated via Joint Worldwide Intelligence Communications System (JWICS).

September 30, Laboratory Directors signed and submitted Annual Assessment Letters to Secretaries of Defense and Energy.
### Key Milestones

- The Annual Assessment is a continuous process.

<table>
<thead>
<tr>
<th>Key Milestone</th>
<th>Milestone Due Date</th>
<th>Milestone Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDRUSSTRATCOM submits Letter to Secretaries of Defense and Energy</td>
<td>Q1 FY20</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Report on Stockpile Assessment (ROSA) signed by Secretaries of Energy and</td>
<td>Q2 FY20</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Defense and submitted to President</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>President submits ROSA to Congress</td>
<td>Q2 FY20</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Annual Assessment Reports submitted to NNSA (one report per weapon system)</td>
<td>Q4 FY20</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Laboratory Directors sign and submit Annual Assessment Letters to Secretary</td>
<td>Q4 FY20</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>of Defense and Energy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDRUSSTRATCOM submits Letter to Secretaries of Defense and Energy</td>
<td>Q1 FY21</td>
<td>On-Track</td>
<td></td>
</tr>
<tr>
<td>ROSA signed by Secretaries of Energy and Defense and submitted to President</td>
<td>Q2 FY21</td>
<td>On-Track</td>
<td></td>
</tr>
<tr>
<td>President submits ROSA to Congress</td>
<td>Q2 FY21</td>
<td>On-Track</td>
<td></td>
</tr>
</tbody>
</table>
NNSA’s Annual Assessment activities and results are documented in Warhead specific Annual Assessment Reports and Weapon Reliability Reports; Laboratory Director’s and the USSTRATCOM Commander’s Annual Assessment Letters; and the Annual Assessment Execution Plan. These activities are based on Science-based Stockpile Stewardship tools and assessments performed at the weapon laboratories.
Contributing Programs

Programs:
- Directed Stockpile Work; Science; Engineering; Inertial Confinement Fusion Ignition and High-Yield; Advanced Simulation and Computing; Advanced Manufacturing Development; Stockpile Management; Stockpile Research, Technology, and Engineering.

Organizations:
- Los Alamos National Laboratory (LANL), Lawrence Livermore National Laboratory (LLNL) and Sandia National Laboratories (SNL) Directors and CDRUSSTRATCOM – complete an assessment of the safety, security, reliability, and effectiveness.
- Secretary of Defense – receive letters from Laboratory Directors on the results of assessments.

Regulations:
- 50 USC 2525 – Annual Assessments and Reports to the President and Congress Regarding the Condition of the United States Nuclear Weapons Stockpile.

Stakeholder / Congressional Consultations

NNSA proactively engages Congress, its committees and staff, and state and local stakeholders to sustain its ongoing relationship and openly communicate its mission, goals, and budget.