

# DOE-ID Update

# Office of Nuclear Energy

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U.S. DEPARTMENT OF  
**ENERGY**

Idaho  
Operations Office

# “Excellence in Federal Stewardship”

- Multi-Program Diversity
  - Nuclear Energy Initiatives
  - Clean Energy Initiatives
  - National Security Initiatives
- Responsible Environmental Management
  - Site Treatment Plan
  - Idaho Settlement Agreement
- Community Partnership
  - Local Communities
  - Shoshone Bannock Tribes

# Fiscal Year 2023 Significant Accomplishments

- Nuclear Energy Related
  - MARVEL completed its 90% design review.
  - Laboratory for Operations and Testing in the United States (LOTUS) achieved CD-1.
  - PELE project delivered the draft Preliminary Safety Analysis Report (PSAR).
  - Completed first Uranium-fueled chloride-salt irradiation in history.
    - Only facility in the world with this capability.
  - Advanced Test Reactor return to thermal irradiation operations.

# Fiscal Year 2023 Significant Accomplishments

- Clean Energy Related
  - Commissioned the Biomass Feedstock National User Facility.
  - DCS-800, first-of-its-kind Electric Field Assisted Sintering (EFAS) technology.
  - INL created and demonstrated the “Microgrid in a Box”.
  - INL deployed “Caldera Cast” with commercial partners (utilities, community planners, etc.).

# Fiscal Year 2023 Significant Accomplishments

- National Security Related
  - Cyber Vulnerability Program.
    - INL researchers identified cyber vulnerabilities in industrial control systems (ICS) deployed across US energy infrastructure as part of the DOE-sponsored Cyber Testing for Resilient Industrial Control Systems (CyTRICS) program.
  - Ukraine Support.
    - INL supported Ukraine's security establishment efforts to find, procure, and ship six military transport planes' worth of essential power grid equipment which Ukraine is using to repair their infrastructure and restore power following targeted Russian attacks.

# Fiscal Year 2023 Significant Accomplishments

- Other Important Accomplishments
  - Completed a 5-year extension (through FY2029) of the BEA Prime Contract.
    - Increased contract value by **\$14.33B** with a new total contract value of **\$41.51B**.
  - Held the “Cleanup to Clean Energy” Information Day yesterday in Idaho Falls.
    - 83 respondents to attend (10-12 nuclear companies).
    - Senior DOE Officials in attendance included:
      - ✓ Assistant Secretary for Nuclear Energy (NE-1) – Dr. Kathryn (Katy) Huff
      - ✓ DOE General Counsel (GC-1) – Mr. Samuel Walsh, Esq.
      - ✓ Director of DOE Office of Management (MA-1) – Ms. Ingrid Kolb

# Responsible Environmental Management

- **NE-related STP Milestones Completed.**
  - INL initiated offsite shipments of sodium contaminated waste to Waste Control Specialists (WCS) marking the first treatment batch of sodium contaminated low-level waste using Veolia's GeoMelt Technology.
  - A total of 4.3 m<sup>3</sup> was delivered to WCS this year.
- **1995 Settlement Agreement Progress.**
  - Treated 295 pounds of sodium bonded fuel.
    - Rolling three-year average (CY21/22/23) is 220 pounds (well above the 165-pound requirement).

# Community Partnership

- INL's K-12 STEM Education programs in FY 2023
  - Hosted 216 events, the laboratory reached over 25,600 K-12 students, 856 educators, and more than 3,000 parents
- Expanded relationship with the Shoshone Bannock Tribes – 2020 Memorandum of Understanding
  - FY 2023 included a project and place-based STEM curriculum for students in grades 6-12.
  - This program helped Shoshone-Bannock Jr./Sr. High School earn a STEM School designation from the Idaho State Board of Education.
- INL & IEC partnered to support the creation of the Idaho Advanced Energy Consortium (IAEC)
  - A new non-profit convening, advocacy, and economic development focused organization staffed by industry professionals and supported by private, public, education, and supplier partners.
- Creation of Energy Days
  - Connects lab leadership, technical staff and the LINE Commission to communities across the state, community college and university students via four regional events.
- The Lab has established itself as a regional convener for innovation and advanced nuclear energy
  - Bringing together Idaho, Alaska, Wyoming, and Utah to advance common energy interests and build capacity for significant nuclear investments.
  - What the lab and private industry are doing in our region is going to have positive impacts across the globe.



# Economic Impact / Budget Outlook

*The FY 2024 Continuing Resolution (CR) allows the Office of Nuclear Energy (NE) mission to continue. The CR says that “funding shall be spent in the most limited manner possible to continue projects and activities, as Congress has not made final funding determinations for fiscal year 2024.” This CR expires on November 17, 2023.*

- FY 2022 Economic Impact
  - \$1.63B with an [Economic Impact](#) of \$3.38B (total output), \$2.42B in Gross State Product, and added 16,445 Idaho jobs.
- FY 2023 Budget Authority (appropriations) exceeded \$1.8B
- FY 2024 (Continuing Resolution)
  - President’s Request was \$1.562B
  - House (H.R. 4394) was \$1.783B
  - Senate (S.R. 2443) was \$1.551B
  - DOE and INL carryover allows for some flexibility in continued operations should a lapse of appropriations occur.



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ECONOMIC  
IMPACT  
SUMMARY

FY 2022  
IDAHO  
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