Department of the Air Force

Council for the Alaska Micro-reactor Program (CAMP)

28 AUG 2024

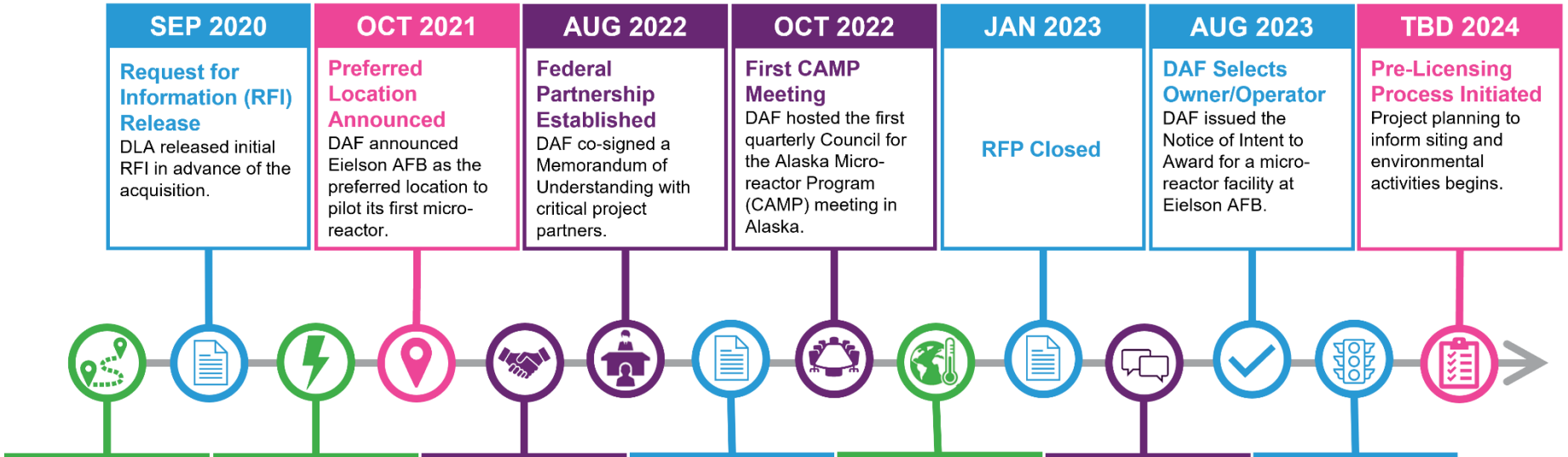
Agenda

- Opening Remarks
- Pilot Program Status Update
- Project Partner Updates
  - Eielson Air Force Base
  - Defense Logistics Agency Energy Office
  - Department of Energy
  - Idaho National Laboratory
  - U.S. Nuclear Regulatory Commission
- Project Stakeholder Updates
- Open Discussion
- Closing Remarks

OPENING REMARKS

Ms. Nancy Balkus
Deputy Assistant Secretary of the Air Force
(Infrastructure, Energy, and Environment)

Timeline and Status



SEP 2020
Request for Information (RFI) Release
DLA released initial RFI in advance of the acquisition.

OCT 2021
Preferred Location Announced
DAF announced Eielson AFB as the preferred location to pilot its first micro-reactor.

AUG 2022
Federal Partnership Established
DAF co-signed a Memorandum of Understanding with critical project partners.

OCT 2022
First CAMP Meeting
DAF hosted the first quarterly Council for the Alaska Micro-reactor Program (CAMP) meeting in Alaska.

JAN 2023
RFP Closed

AUG 2023
DAF Selects Owner/Operator
DAF issued the Notice of Intent to Award for a micro-reactor facility at Eielson AFB.

TBD 2024
Pre-Licensing Process Initiated
Project planning to inform siting and environmental activities begins.

JUL 2018
FY2019 NDAA
Required the Secretary of Energy to provide a report on a micro-reactor pilot program by December 31, 2027.

JAN 2021
EO 13972
The Executive Order directed demonstration of a micro-reactor at a domestic military installation.

OCT 2021
Initiated Community Outreach
DAF sent letters to notify Tribal Nations and local government leadership.

SEP 2022
Request for Proposal (RFP) Released
DLA released RFP.

OCT 2022
DAF Climate Action Plan Released
The plan included the micro-reactor pilot program as a Key Result.

AUG 2023
Public Town Hall
The inaugural town hall included a panel of speakers from DAF, NRC, and INL, and was moderated by University of Alaska-Fairbanks representatives.

SEP 2023
Acquisition Process Halted
Protest filing temporarily halts acquisition process.

BLUE: Procurement Actions
PURPLE: Partner and Stakeholder Engagement
GREEN: Policy Drivers
PINK: Licensing, Siting, and Operation

**The proposed timeline is tentative and subject to change*

Roundtable Partner Updates: Eielson AFB

Partner Information Sharing

Roundtable Partner Updates: DLA

Roundtable Partner Updates: NRC

Nuclear Regulatory Commission: Licensing Reviews

- The NRC is an independent federal agency with nearly 50 years of experience regulating the civilian use of nuclear materials, including power reactors.

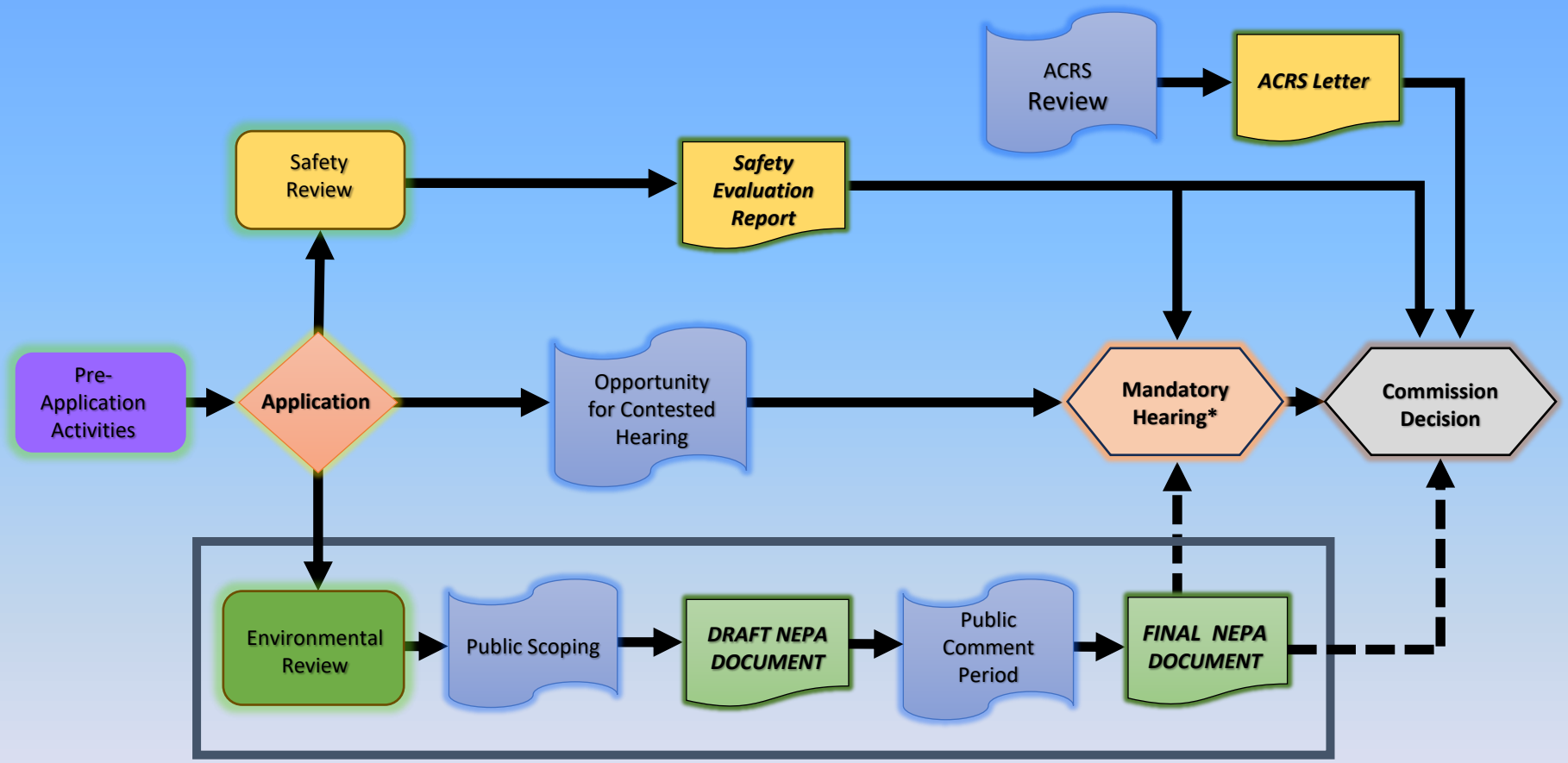
  OUR MISSION IS TO:

  - Protect public health and safety
  - Promote common defense and security
  - Protect the environment

- NRC has a two-part licensing process that is comprised of a safety review and an environmental review.
  - The safety review is required by the Atomic Energy Act and looks at the design and safety features of the plant and ensure the facility can be built and operated safely.
  - The National Environmental Policy Act (NEPA) requires Federal agencies to evaluate the environmental, social and economic impacts of proposed federal actions on the human environment.
    - The NRC staff will summarize its findings in a document which will be either an Environmental Impact Statement (EIS) or an Environmental Assessment (EA)
    - Public involvement is a cornerstone of NEPA, and comments are collected during a scoping period and after the draft NEPA document is published, as appropriate

U.S.NRC
UNITED STATES NUCLEAR REGULATORY COMMISSION
Protecting People and the Environment

NRC's Two-Part Licensing Process



ACRS – Advisory Committee on Reactor Safeguards
NEPA – National Environmental Policy Act

*Required for early site permits, construction permits, or combined licenses

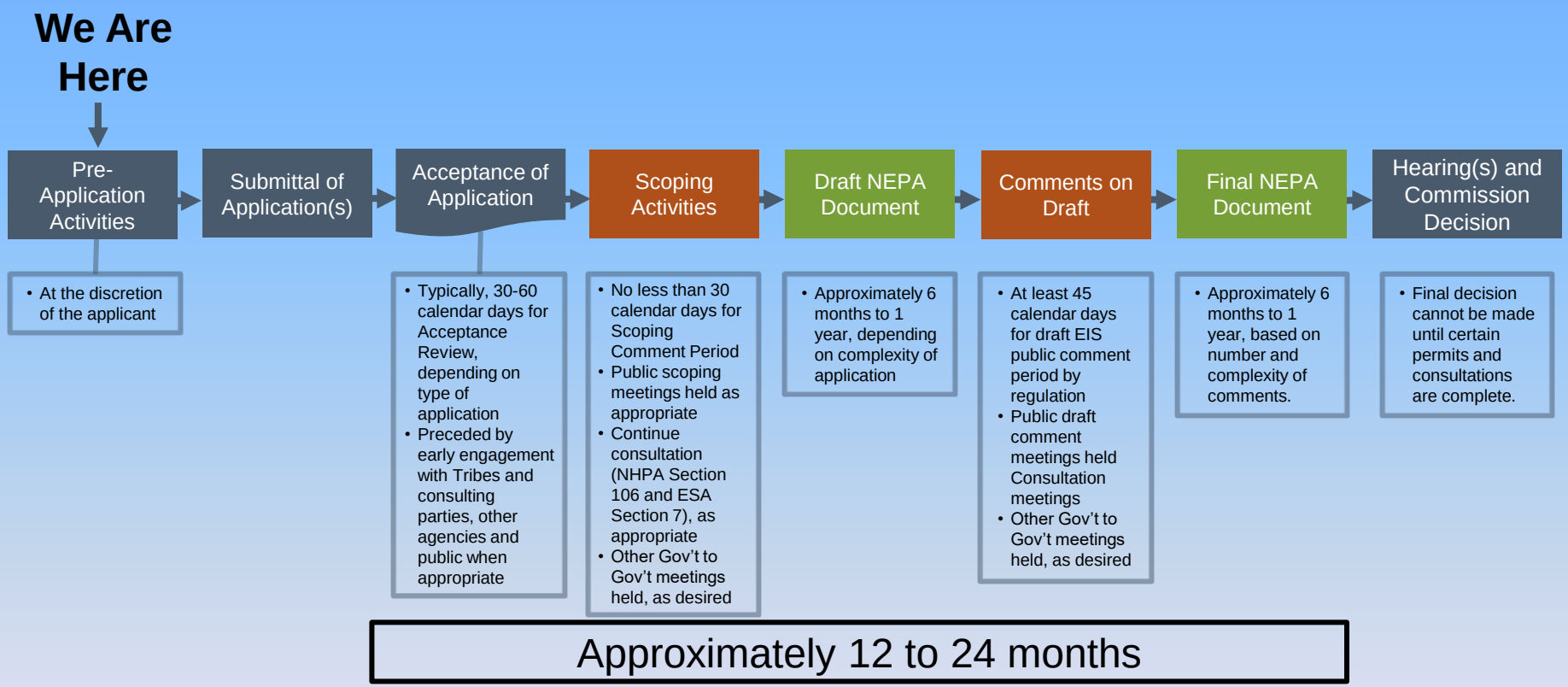
Includes Consultations

Public Participation

NRC Public Meetings and Involvement Website
https://www.nrc.gov/public-involve.html

U.S.NRC
UNITED STATES NUCLEAR REGULATORY COMMISSION
Protecting People and the Environment

NRC's Environmental Review Process



U.S.NRC
UNITED STATES NUCLEAR REGULATORY COMMISSION
Protecting People and the Environment

Memorandum of Understanding

- NRC and the Air Force entered into an Agreement under an Addendum to an existing Memorandum of Understanding (MOU) to facilitate the environmental reviews for the proposed Micro-Reactor at the Eielson Air Force Base
- Does not change any agency's authorization or jurisdiction nor its independence on a permit/authorization decision
- Defines roles and responsibilities related to the Environmental Review
  - NRC serve as lead agency in preparation of documents under the National Environmental Policy Act (NEPA) and DAF is a NEPA Cooperating Agency
  - DAF is lead for consultation under the National Historic Presentation Act Section 106 & Endangered Species Act Section 7

Roundtable Partner Updates: DOE

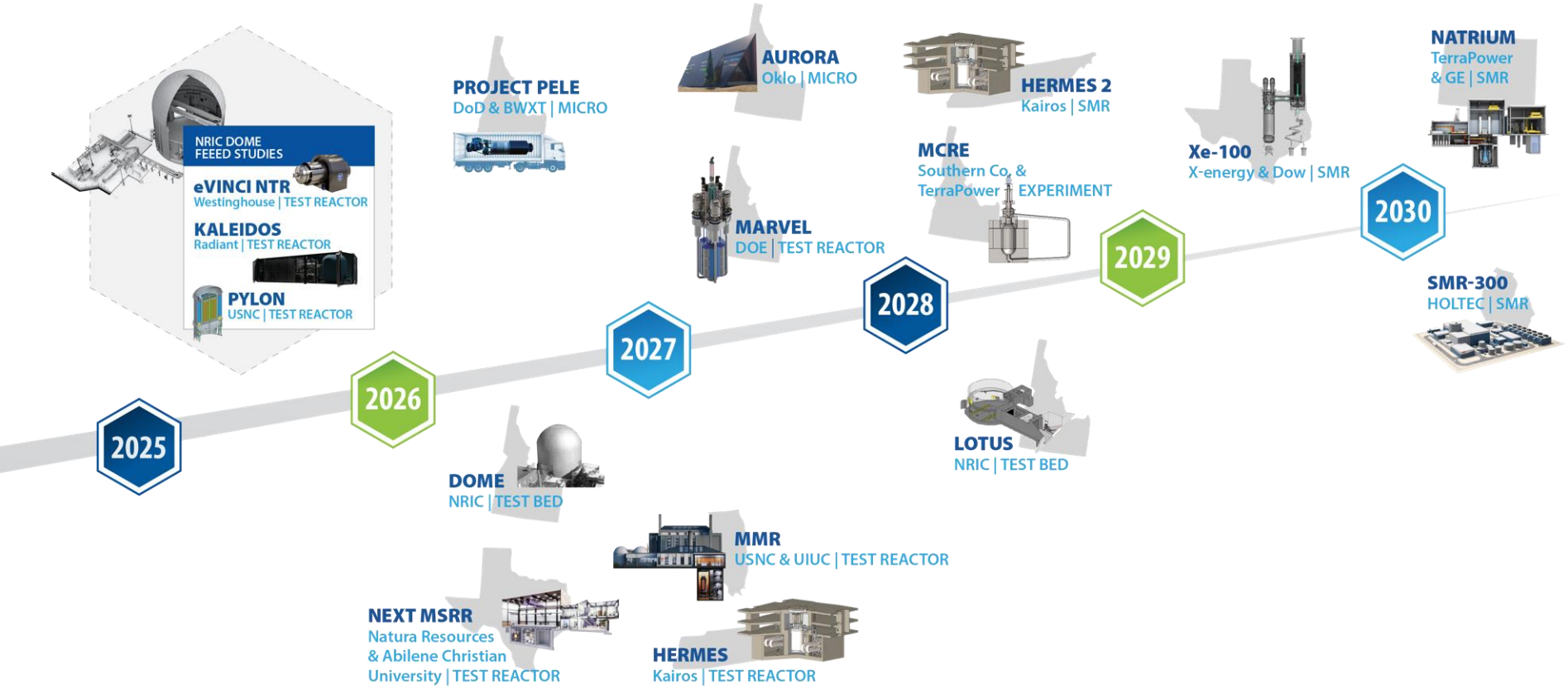
U.S. Department of Energy (DOE) CAMP Update

- Nuclear Energy Tribal Working Group | Department of Energy
  - Chartered working group focused on engaging tribal nations interested in the broad spectrum of Department of Energy nuclear energy activities
  - Department of Energy/National Conference of State Legislatures
- SIGNED: Bipartisan ADVANCE Act to Boost Nuclear Energy Now Law - Minority News - U.S. Senate Committee on Environment and Public Works 7/9/24
  - Facilitate American Nuclear Energy Leadership
  - Support Development and Deployment of New Nuclear Energy Technologies
  - Preserve Existing Nuclear Energy
  - Strengthen America's Nuclear Energy Fuel Cycle and Supply Chain Infrastructure
  - Improve Commission Resources and Efficiency
- DOE Announces $900 Million to Accelerate the Deployment of Next-Generation Light-Water Small Modular Reactors | Department of Energy 6/17/24
  - **Tier 1**: First Mover Team Support, managed by the Office of Clean Energy Demonstrations, plans to provide up to $800M to support up to two first-mover teams of utility, reactor vendor, constructor, and end-users or power off-takers committed to deploying a first plant while at the same time facilitating a multi-reactor, Gen III+ SMR orderbook.
  - **Tier 2**: Fast Follower Deployment Support, managed by the Office of Nuclear Energy plans to provide up to $100M to spur additional Gen III+ SMR deployments by addressing key gaps that have hindered the domestic nuclear industry in areas such as design, licensing, supplier development, and site preparation.
- ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL, 2025 8/1/24

  FY 25 Senate Report Language
  - **Office of Nuclear Energy**: "The Committee directs the Office of Nuclear Energy to work with Arctic Energy Office to help facilitate the Department of Defense to meet Congressional deadlines for deployment of a micro-reactor. Further Committee direction is provided in Departmental Administration."
  - **Arctic Energy Office/Office of Policy**: "Further, the Committee recommends up to $1,000,000 for the Arctic Energy Office to work with the Office of Nuclear Energy to help facilitate the Department of Defense to meet Congressional deadlines for deployment of micro-reactors."

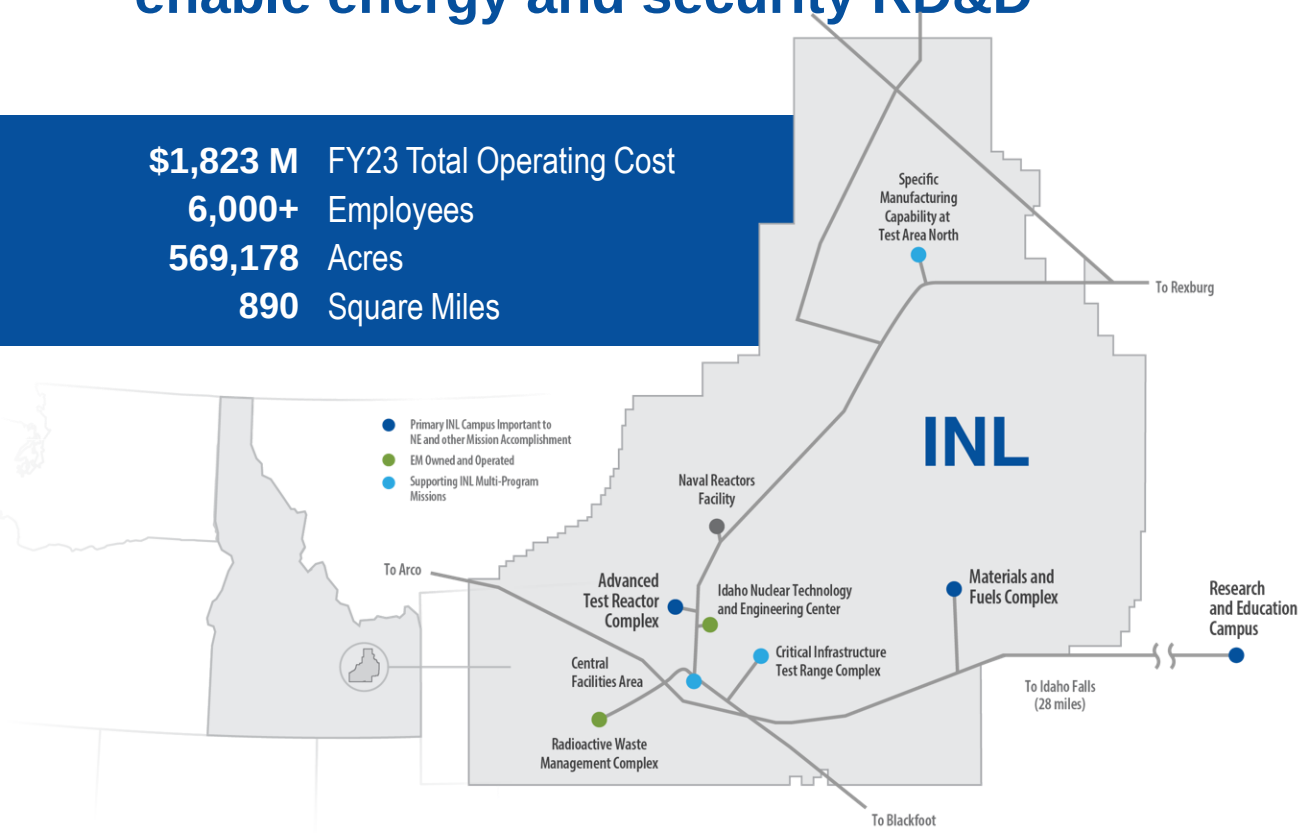
Roundtable Partner Updates: INL

Advanced reactor demonstration and deployment is moving forward…



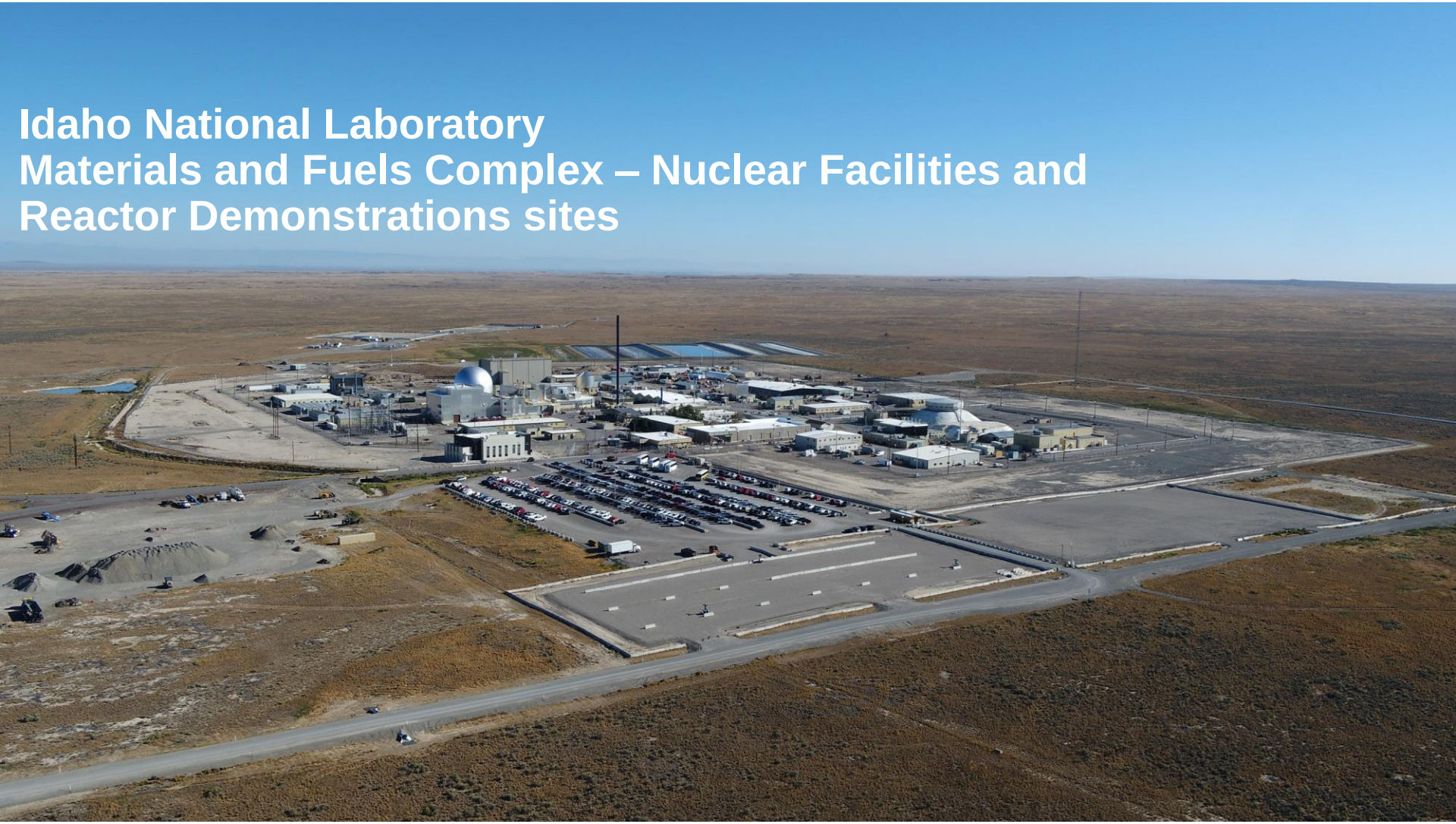
INL is DOE's Nuclear Energy Laboratory with unique, infrastructure, and facilities enable energy and security RD&D

$1,823 M	FY23 Total Operating Cost
6,000+	Employees
569,178	Acres
890	Square Miles



4	Operating reactors
12	Hazard Category II & III non-reactor facilities/ activities
50	Radiological facilities/activities
17.5	Miles railroad for shipping nuclear fuel
44	Miles primary roads (125 miles total)
9	Substations with interfaces to two power providers
126	Miles high-voltage transmission lines
3	Fire Stations

Idaho National Laboratory
Materials and Fuels Complex – Nuclear Facilities and Reactor Demonstrations sites



National Reactor Innovation Center Is Developing a Test Bed for Microreactor Demonstration and Testing

NRIC National Reactor Innovation Center

Demonstration of Operational Microreactor Experiments (DOME)

- Repurposing EBR-II dome
- Test bed for microreactors less than 20 MWt
- Construction underway
- DOE authorization
- FEEED Studies Underway With Westinghouse, Radiant Nuclear, Ultra Safe Nuclear Corp
- Operational as soon as 2026

Unprecedented opportunities to broaden our regional engagement and impact

Roundtable Partner Updates: DEC

Project Stakeholder Updates and Discussion

Local Leadership Update

Tanana Chiefs Conference

Tanana Chiefs Conference

Local Leadership Update

Alaska Governor Dunleavy

Local Leadership Update

Alaska State Legislature

Local Leadership Update

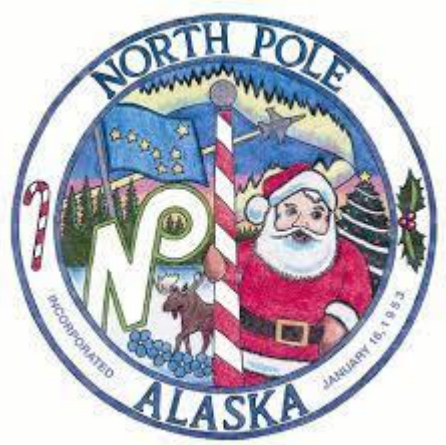
Fairbanks North Star Borough

Local Leadership Update

City of Fairbanks Mayor's Office

Local Leadership Update

City of North Pole Mayor's Office



Open Discussion

- Alaska Department of Law
- Doyon Ltd.
- Doyon Utilities
- Fairbanks Economic Development Corporation
- Golden Valley Electric Association (GVEA)
- Northern Alaska Environmental Center
- University of Alaska
- U.S. Army Garrison Alaska - Fort Wainwright
- Usibelli Coal Mine

CLOSING REMARKS

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Deputy Assistant Secretary of the Air Force
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Thank You!