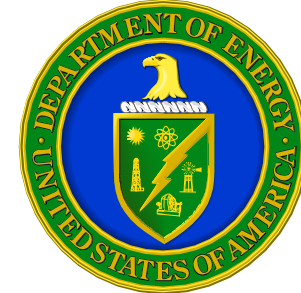




United States Naval Nuclear Propulsion Program



Idaho Facilities Past, Present, Future – The Naval Reactors Perspective

Gil Pratt, Naval Reactors Idaho Branch Office Manager

Craig Blakely, Naval Reactors Facility Site Director

May 3, 2023

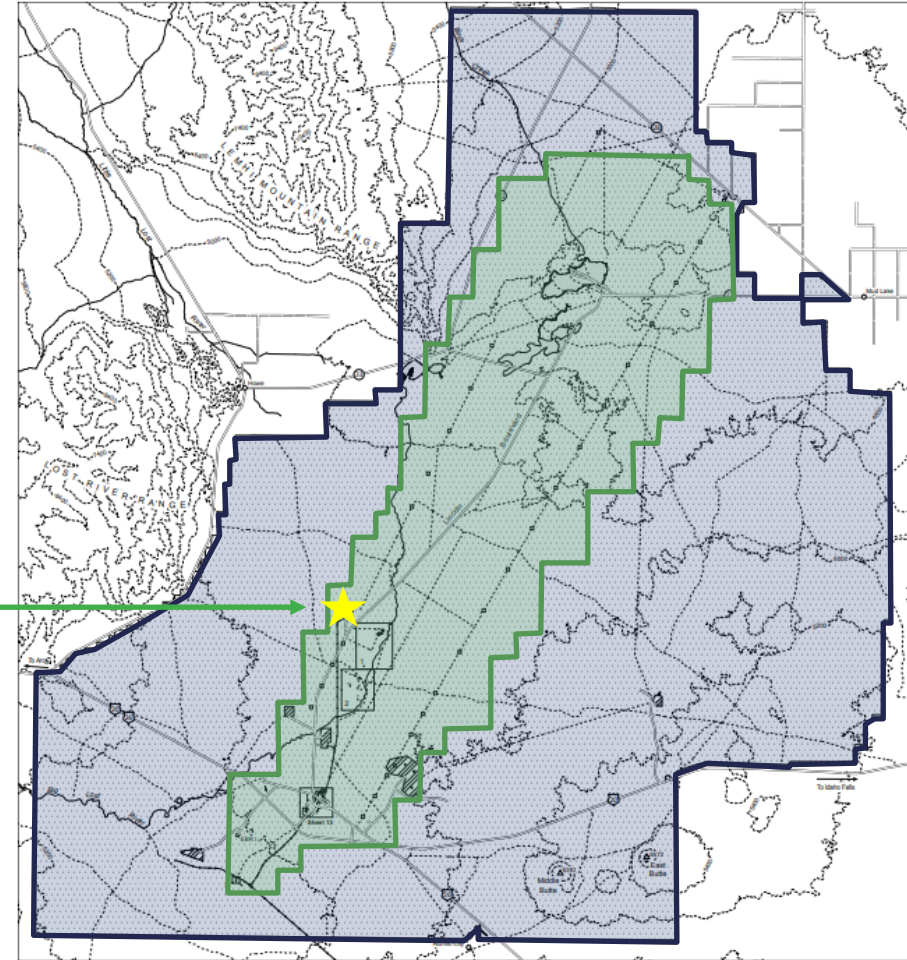
Arco Naval Proving Ground



Naval Nuclear
Propulsion Program

National Reactor Testing Station

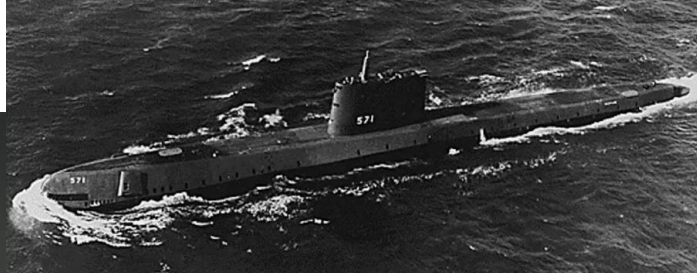
- 1943 Arco Naval Proving Ground
 - ~271 square miles
- 1948 Atomic Energy Commission contracts Westinghouse to design, build, operate, and test the first prototype naval nuclear propulsion plant
- 1949 Atomic Energy Commission selects the Arco NPG and expands it as the National Reactor Testing Station
 - ~890 square miles (current size)
- 1950 Construction of the prototype and training reactor (S1W) begins



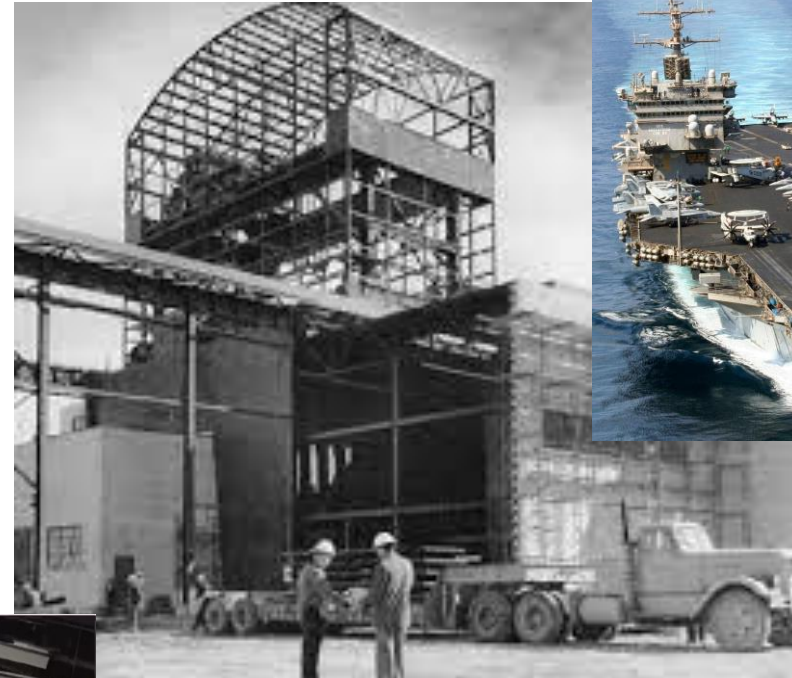
Naval Nuclear
Propulsion Program

NRF Prototype History

S1W Submarine
Prototype Reactor



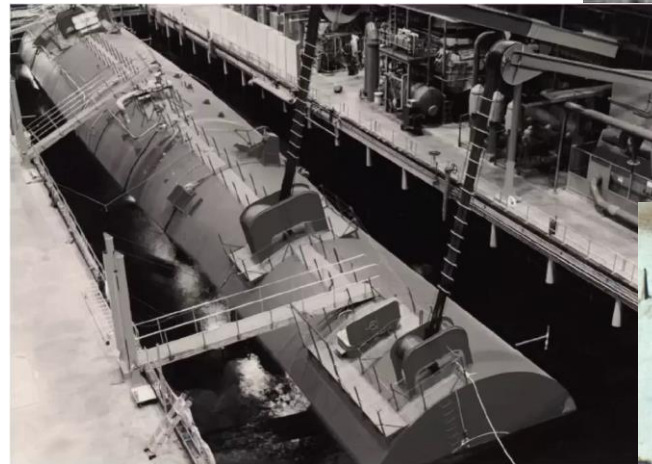
USS NAUTILUS



A1W Aircraft Carrier
Prototype Reactor



USS ENTERPRISE



S5G Submarine
Prototype Reactor

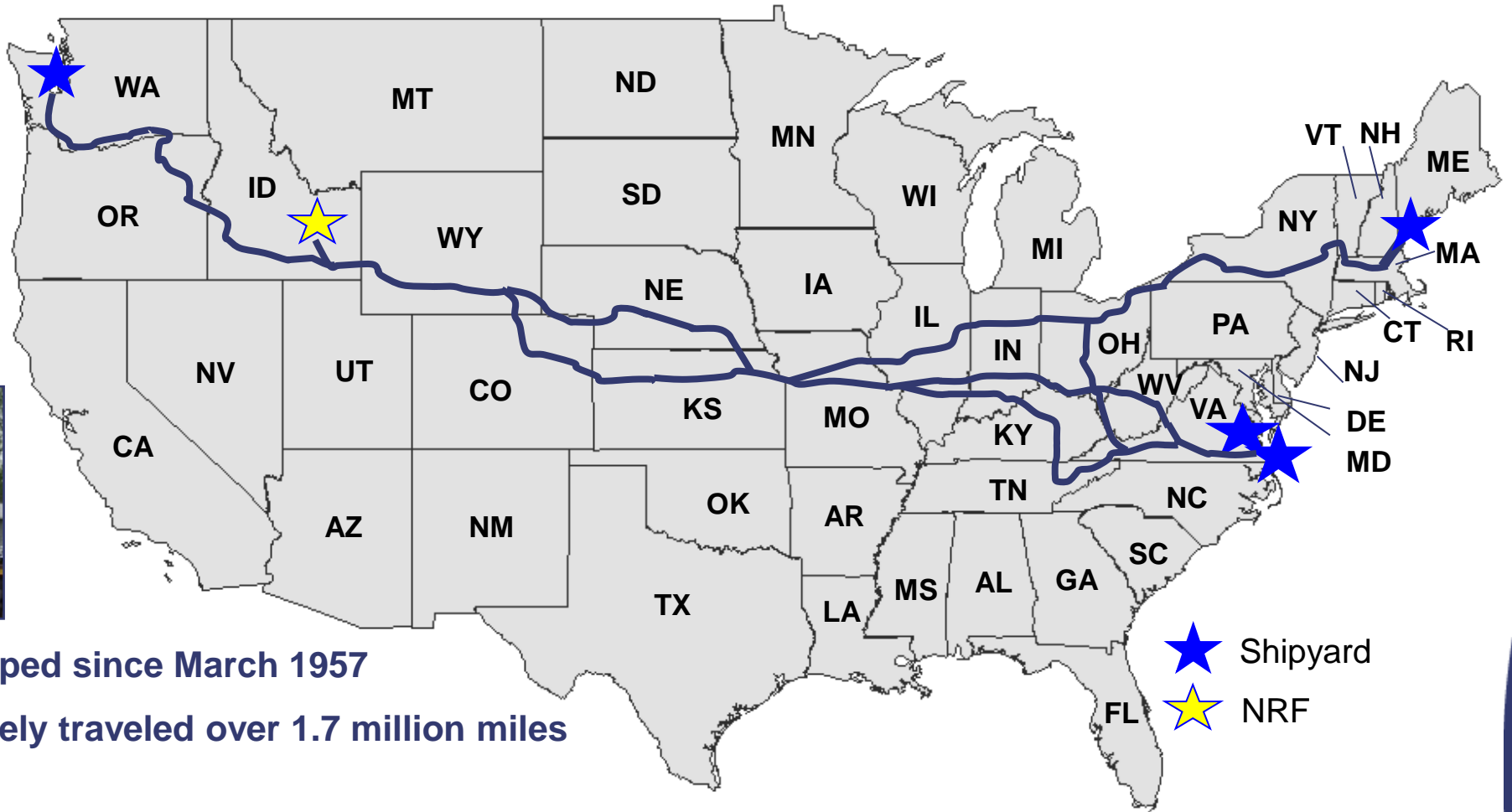


USS NARWHAL



Naval Nuclear
Propulsion Program

NRF Fleet Support History



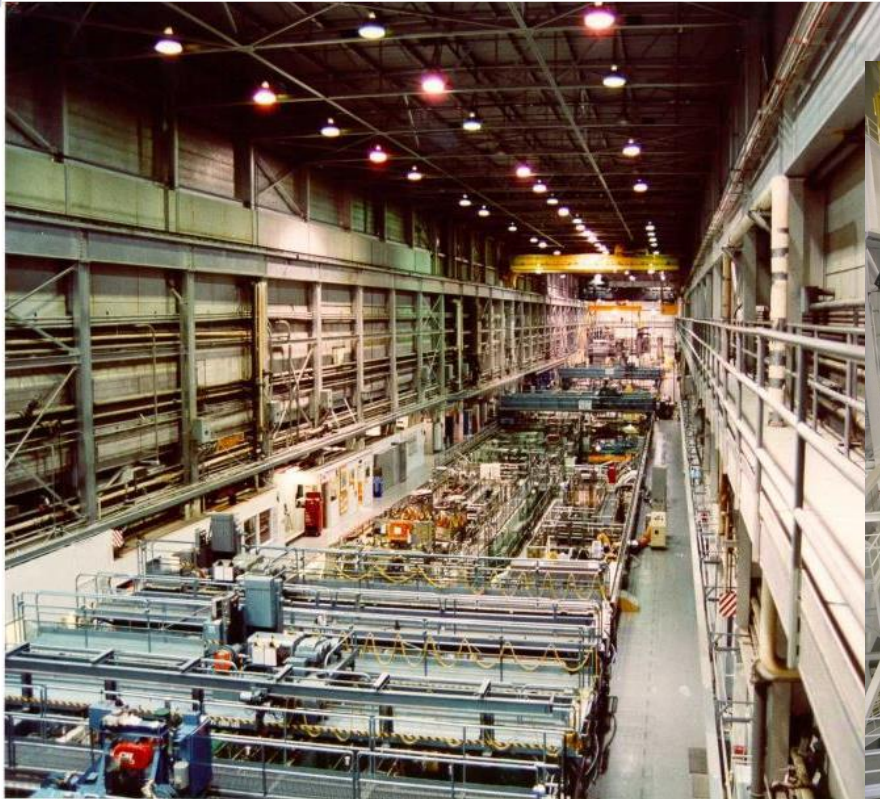
910 Containers shipped since March 1957
Containers have safely traveled over 1.7 million miles



Naval Nuclear
Propulsion Program

NRF Today

Expendable Core Facility



Cask Shipping and Receiving Facility



NRF Interim Dry Storage



Spent Fuel Packaging Facility



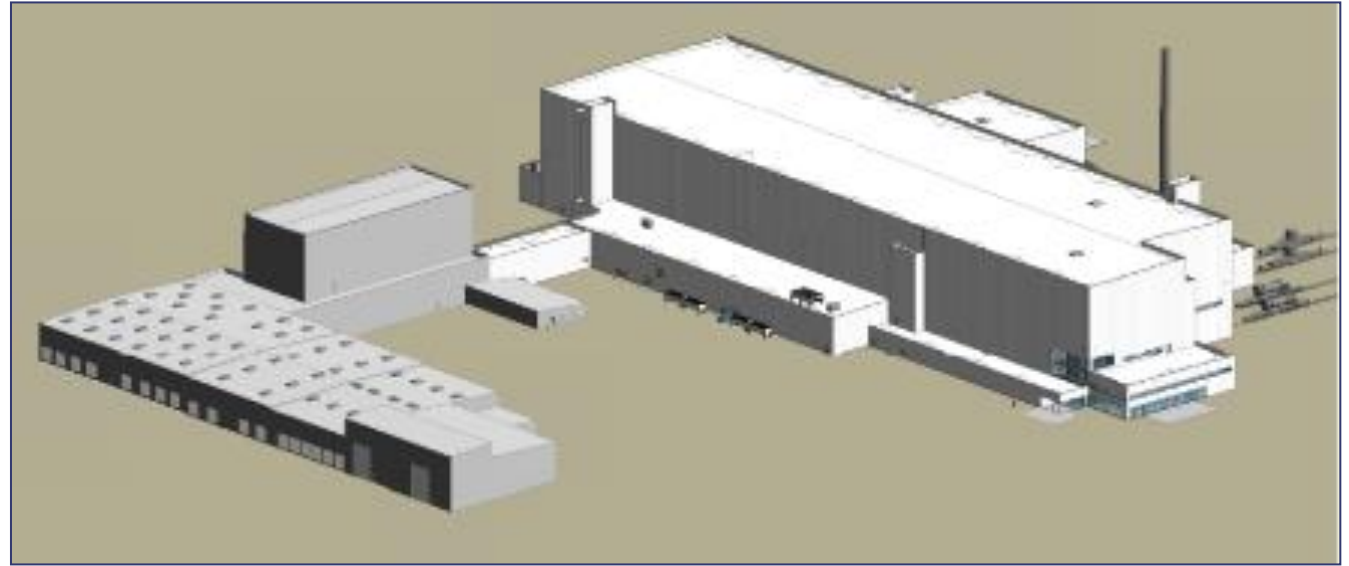
Naval Nuclear
Propulsion Program

NRF Moving Forward

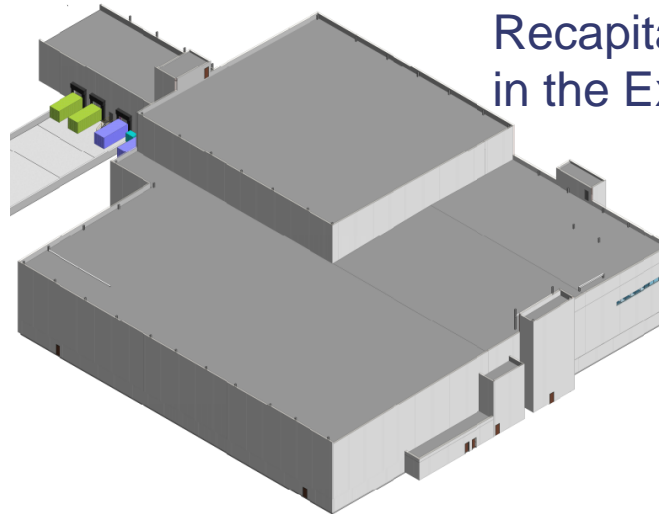
Decontamination and Decommissioning of Reactor Prototypes



Recapitalization of Fuel Processing in the Expanded Core Facility (NSFH)



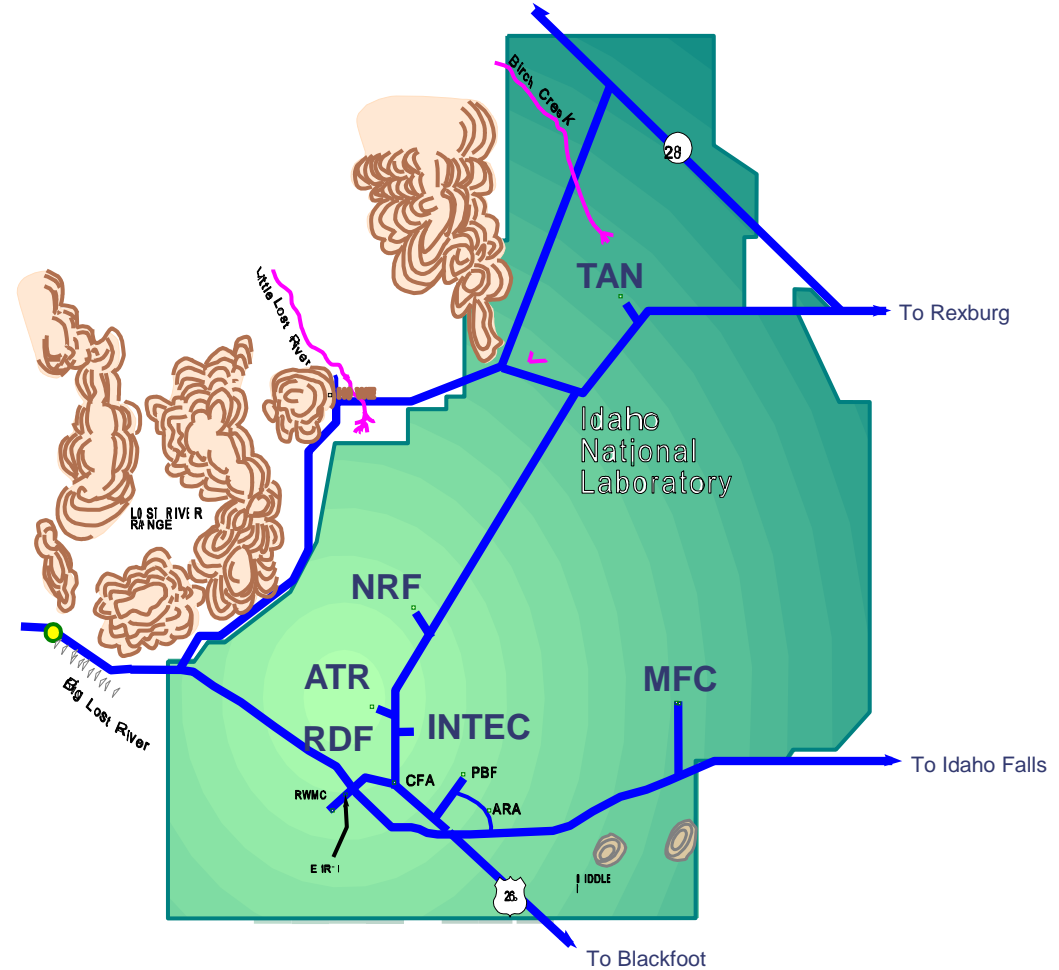
Recapitalization of Examinations in the Expanded Core Facility (NEAP)



Naval Nuclear
Propulsion Program

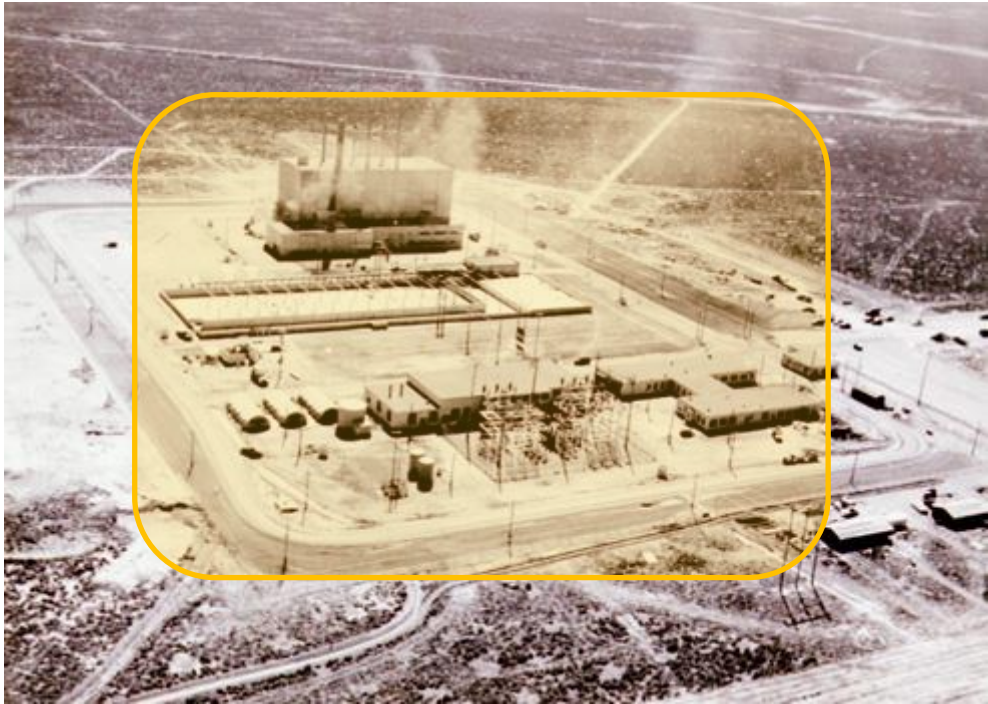
NRF Teaming with INL DOE Facilities

- NRF & NSFH (Navy & DOE)
 - About \$900 million
- INL DOE
 - ATR – Irradiated Materials
 - MFC – Material Testing
 - INTEC – S1W Core Car
 - RDF – Waste
 - About \$150 million
- Onsite D&D
 - IEC – Prototype D&D
 - About \$65 million



Naval Nuclear
Propulsion Program

NRF Then and Now



Naval Nuclear
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