

## GAIN NE VOUCHER RECIPIENTS FY2016 – FY2020

GAIN NE Voucher Recipient	Proposal	Partner Facility
<b>FY2020 Round 3</b>		
SMR, LLC Camden, NJ	<a href="#"><u>Coupled neutronic and thermal hydraulic analysis of a natural circulation based small modular reactor using VERA-CS</u></a>	Oak Ridge National Laboratory
Ultra Safe Nuclear Corporation – Technologies (USNC-Tech) Seattle, WA	<a href="#"><u>Graphite Finite Element Model Verification</u></a>	Oak Ridge National Laboratory
<b>FY2020 Round 2</b>		
Neutroelectric, LLC Williamstown, NJ	<a href="#"><u>Combined Effects Testing of High-Temperature and Neutron Fluence to Support the Qualification of NE-300, a High-Temperature Neutron Shielding Material</u></a>	Oak Ridge National Laboratory
Oklo, Inc. Sunnyvale, CA	<a href="#"><u>Addressing Gaps in Legacy Data on Fuel Steel Interactions</u></a>	Idaho National Laboratory
<b>FY2020 Round 1</b>		
Hydromine, Inc. New York, NY	<a href="#"><u>On-Line Lead/Water heat Exchanger Sensor/System Feasibility</u></a>	Pacific Northwest National Laboratory
Lightbridge Corporation Reston, VA	<a href="#"><u>Advanced Test Reactor Experiment Design for Measurement of Lightbridge Fuel™ Thermophysical Properties</u></a>	Idaho National Laboratory
<b>FY2019 Round 4</b>		
Analysis and Measurement Services Corporation (AMS) Knoxville, TN	<a href="#"><u>Testing of Instrumentation and Control Sensors and Cables for Small Modular Reactors</u></a>	Oak Ridge National Laboratory
HolosGen LLC Manassas Park, PA	<a href="#"><u>Advanced Coolant and Moderator Enclosure Solutions for Micro Gas Cooled Reactors with Enhanced Efficiency and Safety</u></a>	Argonne National Laboratory

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<b>Flibe Energy Inc. Madison, AL</b>	<a href="#"><u>Metal Organic Frameworks for Noble Gas Management in the Liquid Fluoride Thorium Reactor</u></a>	Pacific Northwest National Laboratory
<b>TerraPower LLC Bellevue, WA</b>	<a href="#"><u>Improvements to SAS4A Severe Accident Modeling Capabilities to Support Licensing and Commercialization of TerraPower’s Traveling Wave Reactors</u></a>	Argonne National Laboratory
<b>Westinghouse Electric Company, Columbia Fuel Fabrication Facility (CFFF) Hopkins, SC</b>	<a href="#"><u>Nuclear Material Holdup Modeling and Measurement Campaign for the Columbia Fuel Fabrication Facility</u></a>	Oak Ridge National Laboratory
<b>FY2019 Round 2</b>		
<b>Flibe Energy Inc. Madison, AL</b>	<a href="#"><u>Liquid Fluoride Thorium Reactor (LFTR) Preliminary Safeguards Assessment</u></a>	Oak Ridge National Laboratory
<b>Framatome USA Lynchburg, VA</b>	<a href="#"><u>Advanced Metallic U-Zr Fuel for LWR Applications – FMEA and PIRT Development</u></a>	Idaho National Laboratory
<b>Kairos Power Alameda, CA</b>	<a href="#"><u>Develop ASME Section III Division 5 Design Rules for Elevated Temperature Cladded Class A Type 316 Stainless Steel Components</u></a>	Argonne National Laboratory
<b>FY2019 Round 1</b>		
<b>Framatome USA Lynchburg, VA</b>	<a href="#"><u>Advanced Fuel Stability Analysis Using High-Fidelity Large-Scale Computational Fluid Dynamic Simulations</u></a>	Argonne National Laboratory
<b>GE-Hitachi Wilmington, NC</b>	<a href="#"><u>Enabling System Technologies to Improve the Economics and Performance of Existing LWRs and Advanced BWR Plants: Improving Off-gas System Performance</u></a>	Idaho National Laboratory Argonne National Laboratory
<b>Kairos Power Alameda, CA</b>	<a href="#"><u>Chemical Method Development for Quantifying Oxygen in Beryllium Salt</u></a>	Argonne National Laboratory Oak Ridge National Laboratory

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<b>FY2018 Round 3</b>		
Eastman Kingsport, TN	<a href="#">Integrated Nuclear Hybrid Energy System</a>	Idaho National Laboratory Oak Ridge National Laboratory
Elysium Industries USA Boston, MA	<a href="#">Assessing Fuel Cycle Options for Elysium Molten Chloride Salt Fast Reactor from Spent Nuclear Fuel, Plutonium, and Depleted Uranium</a>	Argonne National Laboratory
Exelon Corporation Kennet Square, PA	<a href="#">Plasma Separation Process Feasibility Study for the Commercial Enrichment of Gadolinium-157</a>	Oak Ridge National Laboratory
NexDefense Inc. Atlanta, GA	<a href="#">NexDefense - Nuclear Cybersecurity Initiative</a>	Oak Ridge National Laboratory
ThorCon Stevenson, WA	<a href="#">Quantify Sodium Fluoride/Beryllium Fluoride Salt Properties for Liquid Fueled Fluoride Molten Salt Reactors</a>	Argonne National Laboratory
<b>FY2018 Round 2</b>		
*Yellowstone Energy Knoxville, TN	<a href="#">Characterization of the Radiation Stability of Molten Nitrate/Nitrite Salts for use as Heat Transfer Fluids in Nuclear Reactor Power Plant</a>	Sandia National Laboratory
<b>FY2018 Round 1</b>		
Oklo Inc. Sunnyvale, CA	<a href="#">Accelerate Development of Industry-Relevant Features in Modern Simulation Tools</a>	Argonne National Laboratory Idaho National Laboratory
*Terrestrial Energy USA New York, NY	<a href="#">Advancement of Instrumentation to Monitor IMSR® Core Temperature and Power Level</a>	Oak Ridge National Laboratory
ThorCon Stevenson, WA	<a href="#">Electroanalytical Sensors for Liquid Fueled Fluoride Molten Salt Reactor</a>	Argonne National Laboratory
Urbix Resources Mesa, AZ	<a href="#">Nuclear Grade Graphite Powder Feedstock Development</a>	Oak Ridge National Laboratory
Vega Wave Systems, Inc. West Chicago, IL	<a href="#">Radiation Testing for Nuclear Inspection Systems</a>	Argonne National Laboratory

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<b>FY2017</b>		
AMS Corp. Knoxville, TN	<a href="#"><u>Radiation Aging of Nuclear Power Plant Components</u></a>	Oak Ridge National Laboratory
Columbia Basin Consulting Group LLC Kennewick, WA	<a href="#"><u>Methodology for Meeting Containment System Principal Design Criteria for Heavy Metal Fast Reactor Systems</u></a>	Pacific Northwest National Laboratory
DYNAC Systems LLC Del Mar, CA	<a href="#"><u>Dynamic Natural Convection System</u></a>	Idaho National Laboratory
Elysium Industries Clifton Park, NY	<a href="#"><u>Synthesis of Molten Chloride Salt Fast Reactor Fuel Salt from Spent Nuclear Fuel</u></a>	Idaho National Laboratory Argonne National Laboratory
Fauske & Associates LLC Burr Ridge, IL	<a href="#"><u>Development of an Integrated Mechanistic Source Term Assessment Capability for Lead- and Sodium-Cooled Fast Reactors</u></a>	Argonne National Laboratory
GSE Systems Inc. Sykesville, MD	<a href="#"><u>Human Factors Engineering for the Move to Digital Control Systems – Improved Strategies for Operations</u></a>	Idaho National Laboratory
Kairos Power LLC Oakland, CA	<a href="#"><u>NEAMS [Nuclear Energy Advanced Modeling and Simulation] Thermal-Fluids Test Stand for Fluoride-Salt-Cooled, High-Temperature Reactor Development</u></a>	Argonne National Laboratory Idaho National Laboratory
MicroNuclear LLC Franklin, TN	<a href="#"><u>Development of the Microscale Nuclear Battery Reactor System</u></a>	Idaho National Laboratory
Muons Inc. Batavia, IL	<a href="#"><u>Conversion of Light Water Reactor Spent Nuclear fuel to Fluoride Salt Fuel</u></a>	Oak Ridge National Laboratory
NuVision Engineering, Inc. Pittsburgh, PA	<a href="#"><u>Evaluation of Power Fluidic Pumping Technology for Molten Salt Reactor Applications</u></a>	Oak Ridge National Laboratory
Oklo Inc. Sunnyvale, CA	<a href="#"><u>Risk-Informed Mechanistic Source Term Calculations for a Compact Fast Reactor</u></a>	Sandia National Laboratories Argonne National Laboratory

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<b>FY2017 (cont.)</b>		
SMR Inventec LLC Camden, NJ	<a href="#">Small Modular Reactor-160 Primary Flow Stability</a>	Oak Ridge National Laboratory
Terrestrial Energy USA Ltd. New York, NY	<a href="#">IMSR® [Integral Molten Salt Reactor] Fuel Salt Property Confirmation: Thermal conductivity and Viscosity</a>	Argonne National Laboratory
Transatomic Power Corporation Cambridge, MA	<a href="#">Fuel Salt Characterization</a>	Argonne National Laboratory
<b>FY2016 (Abstracts not available for this year)</b>		
Creare LLC Hanover, NH	Investigation of Materials for Continuous Casting of Metallic Nuclear Fuel	Idaho National Laboratory
Columbia Basin Consulting Group, LLC Kennewick, WA	Lead-Bismuth Small Modular Reactor (SMR) Licensing Development	Pacific Northwest National Laboratory
Terrestrial Energy USA Ltd. New York, NY	Verification of Molten-Salt Properties at High Temperatures	Argonne National Laboratory
Transatomic Power Corporation Cambridge, MA	Optimization and Assessment of the Neutronics and Fuel Cycle Performance of the Transatomic Power Molten Salt Reactor Design	Oak Ridge National Laboratory
Ceramic Tubular Products Rockville, MD	Robust Silicon Carbide Cladding for LWR Application - Corrosion and Irradiation Proof Test of Low Cost Innovations in MIT Research Reactor	Massachusetts Institute of Technology
Oklo Inc. Sunnyvale, CA	Legacy Metal Fuel Data Exploration for Commercial Scale-Up	Argonne National Laboratory Idaho National Laboratory
CompRex LLC De Pere, WI	High Efficiency Heat Exchanger for High Temperature and High Pressure Applications	Argonne National Laboratory
BgtL LLC Laramie, WY	High Efficiency and Low Cost Thermal Energy Storage System	Argonne National Laboratory
<a href="#">FY2016 Nuclear Energy Voucher Pilot Program Summary Report</a>		

\* - Indicates voucher recipient withdrawal from awarded voucher.