

## GAIN NE VOUCHER RECIPIENTS FY 2016 – FY 2022

Click on the ✓ for a copy of the completed summary	GAIN NE Voucher Recipient	Proposal	Partner Facility
	<b>FY2022 Round 1</b>		
	<b>Framatome Inc. Lynchburg, VA</b>	<a href="#">Modeling of Two-Phase Boiling Flow and Critical Heat Flux with the Star-CCM+® and NEK-2P CFD Codes</a>	Argonne National Laboratory
	<b>Ultra Safe Nuclear Corp. Seattle, WA</b>	<a href="#">Deployment and Characterization Support for USNC Pilot Fuel Manufacturing Facility</a>	Oak Ridge National Laboratory
	<b>FY2021 Round 4</b>		
	<b>Kinectrics AES, Inc. Naperville, IL</b>	<a href="#">Extension of Cable Electrical Assessment Techniques to Detect and Discriminate Radiation Aging on Cable Insulation Systems</a>	Pacific Northwest National Laboratory
	<b>FY2021 Round 3</b>		
	<b>Engineered Solutions Group LLC Brevard, NC</b>	<a href="#">SMR Containment Cable and EPA System</a>	Oak Ridge National Laboratory
	<b>Vega Wave Systems, Inc. West Chicago, IL</b>	<a href="#">Radiation Testing for High-Resolution, Radiation-Hardened Camera Systems</a>	Argonne National Laboratory
	<b>FY2021 Round 2</b>		
	<b>Lightbridge Corp. Reston, VA</b>	<a href="#">Development of Casting Techniques for <math>\delta</math>-phase Uranium- Zirconium Alloys</a>	Pacific Northwest National Laboratory
	<b>Oklo Inc. Sunnyvale, CA</b>	<a href="#">Experimental and Systems-Level Validation of Thermal-Hydraulic Behavior in SFRs</a>	Argonne National Laboratory
	<b>Radiant El Segundo, CA</b>	<a href="#">Microreactor Control Drum Failure Simulation</a>	Idaho National Laboratory
	<b>FY2021 Round 1</b>		
	<b>Exelon Generation Kennett Square, PA</b>	<a href="#">Advanced Nuclear Fuel Pellet Designs</a>	Oak Ridge National Laboratory
	<b>TerraPower, LLC Bellevue, WA</b>	<a href="#">Density Measurements of Plutonium Bearing Salts via Neutron Beam Dilatometry</a>	Los Alamos National Laboratory

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	Westinghouse Electric Company, LLC Columbia, SC	<a href="#">Multiphysics Design Optimization and Additive Manufacturing of Nuclear Components</a>	Oak Ridge National Laboratory
	<b>FY2020 Round 4</b>		
	Kairos Power Alameda, CA	<a href="#">Pebble Bed Large Eddy Simulations for Lower Order Methods Benchmarking and Uncertainty Quantification Development</a>	Argonne National Laboratory
	Natura Resources, LLC Abilene, TX	<a href="#">RELAP5-3D Development and Assessment for Liquid-fuels Molten Salt Reactor Licensure</a>	Idaho National Laboratory
	TerraPower, LLC Bellevue, WA	<a href="#">Thermophysical Properties Measurements of NaCl-PuCl<sub>3</sub></a>	Argonne National Laboratory
	<b>FY2020 Round 3</b>		
	SMR, LLC Camden, NJ	<a href="#">Coupled Neutronic and Thermal Hydraulic Analysis of a Natural Circulation Based Small Modular Reactor Using VERA-CS</a>	Oak Ridge National Laboratory
	Ultra Safe Nuclear Corporation – Technologies (USNC-Tech) Seattle, WA	<a href="#">Graphite Finite Element Model Verification</a>	Oak Ridge National Laboratory
	<b>FY2020 Round 2</b>		
	Neutroelectric, LLC Williamstown, NJ	<a href="#">Combined Effects Testing of High- Temperature and Neutron Fluence to Support the Qualification of NE- 300, a High-Temperature Neutron Shielding Material</a>	Oak Ridge National Laboratory
	Oklo, Inc. Sunnyvale, CA	<a href="#">Addressing Gaps in Legacy Data on Fuel Steel Interactions</a>	Idaho National Laboratory
	<b>FY2020 Round 1</b>		
	Hydromine, Inc. New York, NY	<a href="#">On-Line Lead/Water heat Exchanger Sensor/System Feasibility</a>	Pacific Northwest National Laboratory
	Lightbridge Corporation Reston, VA	<a href="#">Advanced Test Reactor Experiment Design for Measurement of Lightbridge Fuel™ Thermophysical Properties</a>	Idaho National Laboratory

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	<b>FY2019 Round 4</b>		
✓	<b>Analysis and Measurement Services Corporation (AMS) Knoxville, TN</b>	<a href="#">Testing of Instrumentation and Control Sensors and Cables for Small Modular Reactors</a>	Oak Ridge National Laboratory
	<b>HolosGen, LLC Manassas Park, VA</b>	<a href="#">Advanced Coolant and Moderator Enclosure Solutions for Micro Gas Cooled Reactors with Enhanced Efficiency and Safety</a>	Argonne National Laboratory
	<b>FY2019 Round 3</b>		
	<b>Flibe Energy Inc. Madison, AL</b>	<a href="#">Metal Organic Frameworks for Noble Gas Management in the Liquid Fluoride Thorium Reactor</a>	Pacific Northwest National Laboratory
	<b>TerraPower LLC Bellevue, WA</b>	<a href="#">Improvements to SAS4A Severe Accident Modeling Capabilities to Support Licensing and Commercialization of TerraPower’s Traveling Wave Reactors</a>	Argonne National Laboratory
	<b>Westinghouse Electric Company, Columbia Fuel Fabrication Facility (CFFF) Hopkins, SC</b>	<a href="#">Nuclear Material Holdup Modeling and Measurement Campaign for the Columbia Fuel Fabrication Facility</a>	Oak Ridge National Laboratory
	<b>FY2019 Round 2</b>		
	<b>Flibe Energy Inc. Madison, AL</b>	<a href="#">Liquid Fluoride Thorium Reactor (LFTR) Preliminary Safeguards Assessment</a>	Oak Ridge National Laboratory
	<b>Framatome USA Lynchburg, VA</b>	<a href="#">Advanced Metallic U-Zr Fuel for LWR Applications – FMEA and PIRT Development</a>	Idaho National Laboratory
✓	<b>Kairos Power Alameda, CA</b>	<a href="#">Develop ASME Section III Division 5 Design Rules for Elevated Temperature Cladded Class A Type 316 Stainless Steel Components</a>	Argonne National Laboratory
	<b>FY2019 Round 1</b>		
✓	<b>Framatome USA Lynchburg, VA</b>	<a href="#">Advanced Fuel Stability Analysis Using High-Fidelity Large-Scale Computational Fluid Dynamic Simulations</a>	Argonne National Laboratory














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	<b>GE-Hitachi</b> Wilmington, NC	<a href="#">Enabling System Technologies to Improve the Economics and Performance of Existing LWRs and Advanced BWR Plants: Improving Off-gas System Performance</a>	Idaho National Laboratory Argonne National Laboratory
	<b>Kairos Power</b> Alameda, CA	<a href="#">Chemical Method Development for Quantifying Oxygen in Beryllium Salt</a>	Argonne National Laboratory Oak Ridge National Laboratory
	<b>FY2018 Round 3</b>		
	<b>Eastman</b> Kingsport, TN	<a href="#">Integrated Nuclear Hybrid Energy System</a>	Idaho National Laboratory Oak Ridge National Laboratory
	<b>Elysium Industries USA</b> 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
	<b>Exelon Corporation</b> Kennet Square, PA	<a href="#">Plasma Separation Process Feasibility Study for the Commercial Enrichment of Gadolinium-157</a>	Oak Ridge National Laboratory
	<b>NexDefense Inc.</b> Atlanta, GA	<a href="#">NexDefense - Nuclear Cybersecurity Initiative</a>	Oak Ridge National Laboratory
	<b>Westinghouse Electric Co.</b> Cranberry Township, PA	<a href="#">Development and Testing of Alumina-forming Austenitic Stainless Steels for Lead Fast Reactor Application</a>	Oak Ridge National Laboratory
	<b>FY2018 Round 2</b>		
	<b>ThorCon</b> Stevenson, WA	<a href="#">Quantify Sodium Fluoride/Beryllium Fluoride Salt Properties for Liquid Fueled Fluoride Molten Salt Reactors</a>	Argonne National Laboratory
	<b>*Yellowstone Energy</b> 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>		
	<b>Oklo Inc.</b> Sunnyvale, CA	<a href="#">Accelerate Development of Industry-Relevant Features in Modern Simulation Tools</a>	Argonne National Laboratory Idaho National Laboratory
	<b>*Terrestrial Energy USA</b> New York, NY	<a href="#">Advancement of Instrumentation to Monitor IMSR® Core Temperature and Power Level</a>	Oak Ridge National Laboratory



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	<b>ThorCon</b> Stevenson, WA	<a href="#">Electroanalytical Sensors for Liquid Fueled Fluoride Molten Salt Reactor</a>	Argonne National Laboratory
	<b>Urbix Resources</b> Mesa, AZ	<a href="#">Nuclear Grade Graphite Powder Feedstock Development</a>	Oak Ridge National Laboratory
	<b>Vega Wave Systems, Inc.</b> West Chicago, IL	<a href="#">Radiation Testing for Nuclear Inspection Systems</a>	Argonne National Laboratory
	<b>FY2017</b>		
	<b>AMS Corp.</b> Knoxville, TN	<a href="#">Radiation Aging of Nuclear Power Plant Components</a>	Oak Ridge National Laboratory
	<b>Columbia Basin Consulting Group LLC</b> Kennewick, WA	<a href="#">Methodology for Meeting Containment System Principal Design Criteria for Heavy Metal Fast Reactor Systems</a>	Pacific Northwest National Laboratory
	<b>DYNAC Systems LLC</b> Del Mar, CA	<a href="#">Dynamic Natural Convection System</a>	Idaho National Laboratory
	<b>Elysium Industries</b> Clifton Park, NY	<a href="#">Synthesis of Molten Chloride Salt Fast Reactor Fuel Salt from Spent Nuclear Fuel</a>	Idaho National Laboratory Argonne National Laboratory
	<b>Fauske &amp; Associates LLC</b> Burr Ridge, IL	<a href="#">Development of an Integrated Mechanistic Source Term Assessment Capability for Lead- and Sodium-Cooled Fast Reactors</a>	Argonne National Laboratory
	<b>GSE Systems Inc.</b> Sykesville, MD	<a href="#">Human Factors Engineering for the Move to Digital Control Systems – Improved Strategies for Operations</a>	Idaho National Laboratory
	<b>Kairos Power LLC</b> Oakland, CA	<a href="#">NEAMS [Nuclear Energy Advanced Modeling and Simulation] Thermal-Fluids Test Stand for Fluoride-Salt-Cooled, High- Temperature Reactor Development</a>	Argonne National Laboratory Idaho National Laboratory
	<b>MicroNuclear LLC</b> Franklin, TN	<a href="#">Development of the Microscale Nuclear Battery Reactor System</a>	Idaho National Laboratory
	<b>Muons Inc.</b> Batavia, IL	<a href="#">Conversion of Light Water Reactor Spent Nuclear fuel to Fluoride Salt Fuel</a>	Oak Ridge National Laboratory

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	<b>NuVision Engineering, Inc.</b> Pittsburgh, PA	<a href="#">Evaluation of Power Fluidic Pumping Technology for Molten Salt Reactor Applications</a>	Oak Ridge National Laboratory
	<b>Oklo Inc.</b> Sunnyvale, CA	<a href="#">Risk-Informed Mechanistic Source Term Calculations for a Compact Fast Reactor</a>	Sandia National Laboratories Argonne National Laboratory
	<b>SMR Inventec LLC</b> Camden, NJ	<a href="#">Small Modular Reactor-160 Primary Flow Stability</a>	Oak Ridge National Laboratory
	<b>Terrestrial Energy USA Ltd.</b> New York, NY	<a href="#">IMSR® [Integral Molten Salt Reactor] Fuel Salt Property Confirmation: Thermal Conductivity and Viscosity</a>	Argonne National Laboratory
	<b>Transatomic Power Corporation</b> Cambridge, MA	<a href="#">Fuel Salt Characterization</a>	Argonne National Laboratory
<b>FY2016 (Abstracts not available for this year)</b>			
	<b>BGTL, LLC</b> Laramie, WY	High Efficiency and Low Cost Thermal Energy Storage System	Argonne National Laboratory
	<b>Ceramic Tubular Products</b> 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
	<b>Columbia Basin Consulting Group, LLC</b> Kennewick, WA	Lead-Bismuth Small Modular Reactor (SMR) Licensing Development	Pacific Northwest National Laboratory
	<b>CompRex LLC</b> De Pere, WI	High Efficiency Heat Exchanger for High Temperature and High Pressure Applications	Argonne National Laboratory
	<b>Create LLC</b> Hanover, NH	Investigation of Materials for Continuous Casting of Metallic Nuclear Fuel	Idaho National Laboratory
	<b>Oklo Inc.</b> Sunnyvale, CA	Legacy Metal Fuel Data Exploration for Commercial Scale- Up	Argonne National Laboratory Idaho National Laboratory
	<b>Terrestrial Energy USA Ltd.</b> New York, NY	Verification of Molten-Salt Properties at High Temperatures	Argonne National Laboratory

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	<b>Transatomic Power Corporation Cambridge, MA</b>	Optimization and Assessment of the Neutronics and Fuel Cycle Performance of the Transatomic Power Molten Salt Reactor Design	Oak Ridge National Laboratory
<a href="#">FY2016 Nuclear Energy Voucher Pilot Program Summary Report</a>			

(\*) Indicates voucher recipient withdrawal from awarded voucher