NuGen’s Mission: Develop an Innovative Fully Integrated Modular Nuclear Engine

GAIN Micro-Reactor Workshop
Idaho National Laboratory

Innovating Nuclear Power Generation

June 18, 2019
The NuGen Engine™

- Compact Single-Module Direct-Cycle Gas-Cooled Micro-Reactor
- Patented Helical Fuel Core Fully Integrated with Other Components
- Safe, Simpler and Integrated Design
- Scalable, Adaptable and Highly Manufacturable (particularly suitable for 3D printing)
- Output: 1-50 MWe, with Process Heat and Direct Mechanical Capabilities
- Initial Focus: Autonomous Transportable Unit for Civilian Applications, Military Bases, Other Security Needs and Remote Locations
- Adaptable for Space Applications, including Lunar and Mars Missions
Areas for Potential National Lab Assistance

Programmatic Needs:

- Fuel Qualification Program
- Licensing Evaluations
- Instrumentation and Control R&D
- Structural Materials Testing Program
- Design Evaluations and Demonstrations
- Additive Manufacturing (3D Printing) Program

Illustrative Examples:

- Idaho National Lab
  - Advanced Fuels
  - Advanced Reactor Technologies
  - Gas Reactors

- Sandia National Lab
  - Energy Conversion

- Oak Ridge National Lab
  - Additive Manufacturing
  - 3D Printing
Thank You

Information about NuGen, its team and technology are at

www.nucdev.com

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