



System Integration & Analysis (SIA) Technical Area

DOE Microreactor Program

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M. Scott Greenwood | SIA Technical Area Lead

System Integration & Analysis (SIA) Program Scope

- Focused on microreactor technology and applications to:
 - Identify the needs, applications, and functional requirements through market analysis
 - Focus on improving economics and/or viability of microreactors
- Understand microreactor design space and technology in order to:
 - Perform regulatory research to help develop the regulatory basis

Source: [“A Microreactor Program Plan for The Department of Energy,” INL/EXT-20-58919 Rev. 2, March 2021.](#)



SIA Technical Area Topics

- Economics & Market Analysis (Lead – David Shropshire)
 - Understand the market and economic potential for microreactors in the U.S. and internationally.
 - Techno-economic basis for support to industrial micro-reactor deployment and operation
- Regulatory Requirements (Lead – Jason Christensen)
 - Address and resolve key regulatory framework and licensing technical issues
 - Provide recommendations and solutions to regulatory issues (critical path)
 - Develop licensing and regulatory strategies to enable future microreactor activities

Source: [“A Microreactor Program Plan for The Department of Energy,” INL/EXT-20-58919 Rev. 2, March 2021.](#)



SIA Workshop Panel Introductions

- Microreactor Market Opportunities
 - David Shropshire, Idaho National Laboratory
- Microreactors at Federal Installations
 - Paul Wilson, University of Wisconsin
- Microreactor Regulatory and Licensing Challenges
 - Jason Christensen, Idaho National Laboratory
- Industry Feedback and Q&A





MRP Microreactor
Program