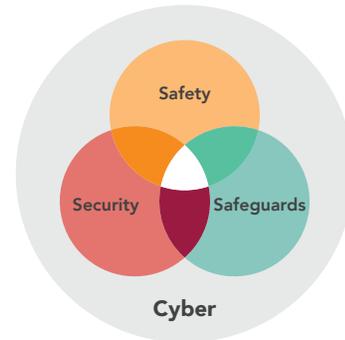


Introducing Cyber for Safeguards, Safety, and Security

Nuclear Energy Safeguards, Safety, and Security and Cyber (3SC)

Due to the complexity and interactions of 3SC, Sandia's comprehensive analysis is devoted to understand and mitigate 3SC risks that will enhance United States national security objectives. This analysis capability includes integrating and leveraging Sandia's diverse modeling and simulation capabilities developed over decades in nuclear safety, physical security, safeguards, and cyber physical systems. Leveraging these tools in an integrated manner allows Sandia to answer many complex questions in 3SC space with fidelity. For example, our tools allow modeling cyber impacts to safety and security systems, the response of those systems as they create consequences, and evaluation of initial and long term consequences of the event.



Integrated Cyber Physical Impact Analysis (ICPIA™)



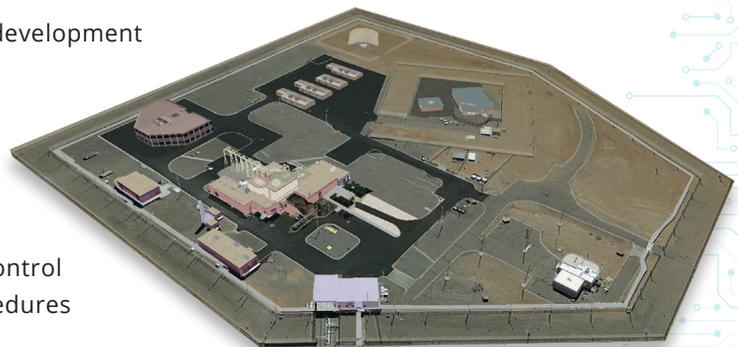
Sandia has developed an array of modeling and simulation capabilities, which can be integrated to deliver a differentiating defense approach. The result can be used to design secure architectures, provide test beds for integrating systems, explore the impact of previously unidentified threats and vulnerabilities, act as a training tool, and perform other valuable lifecycle functions.

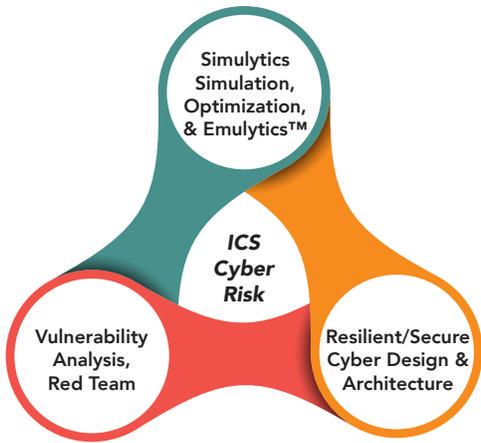
Integrated Security Facility (ISF)

At the ISF, domestic and international partners have opportunities to participate in demonstrations, training, testing, design, and evaluation activities:

Next-generation technologies research and development

- Physical security design and evaluation
- Vulnerability assessment
- State-of-the-art modeling and simulation
- Performance testing and procedures
- Material control and accounting
- Process Monitoring and measurement control
- Entry control access operation and procedures
- Safeguards and Security operations



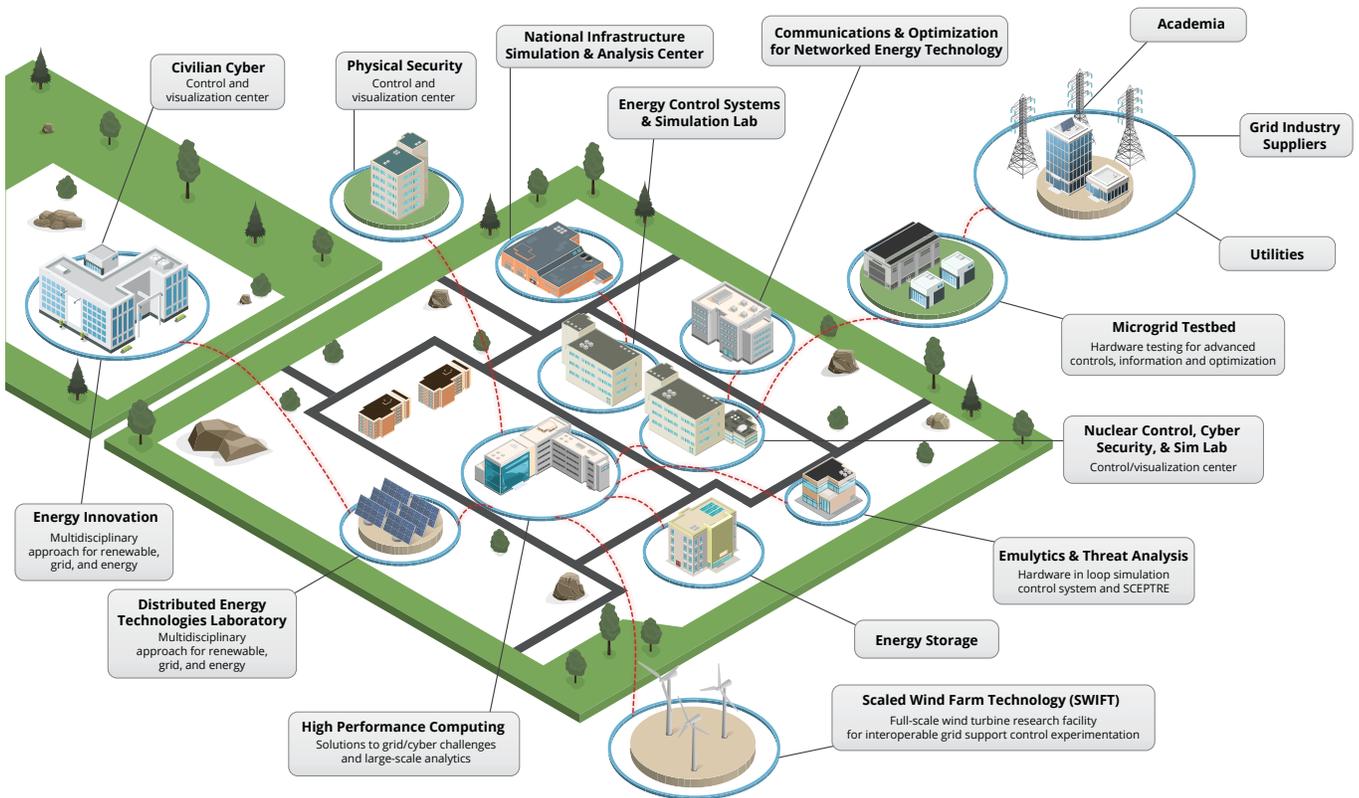


Industrial Control Cyber Capabilities

Sandia capabilities collectively facilitate Cyber Risk Management by providing the science basis to:

- Assess control system cyber vulnerabilities—describe the attack surface and develop metrics/methods for a consistent prioritization of potential threats and controls
- Develop and prioritize defensive measures
- Design and test resilient, secure systems for the future

Sandia's Integrated Cyber Physical System R&D Campus



For more information, please contact

Mitch McCrory
 Manager, Sandia National Laboratories
 Email: fmmccro@sandia.gov
 Phone: (505) 845-3031



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