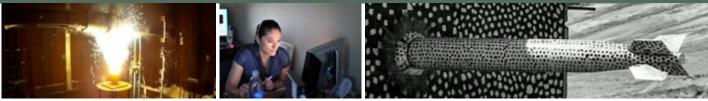


Designing Resilient Communities Project





4th Semi-annual Stakeholder Advisory Group Meeting

PRESENTED BY

Summer Ferreira

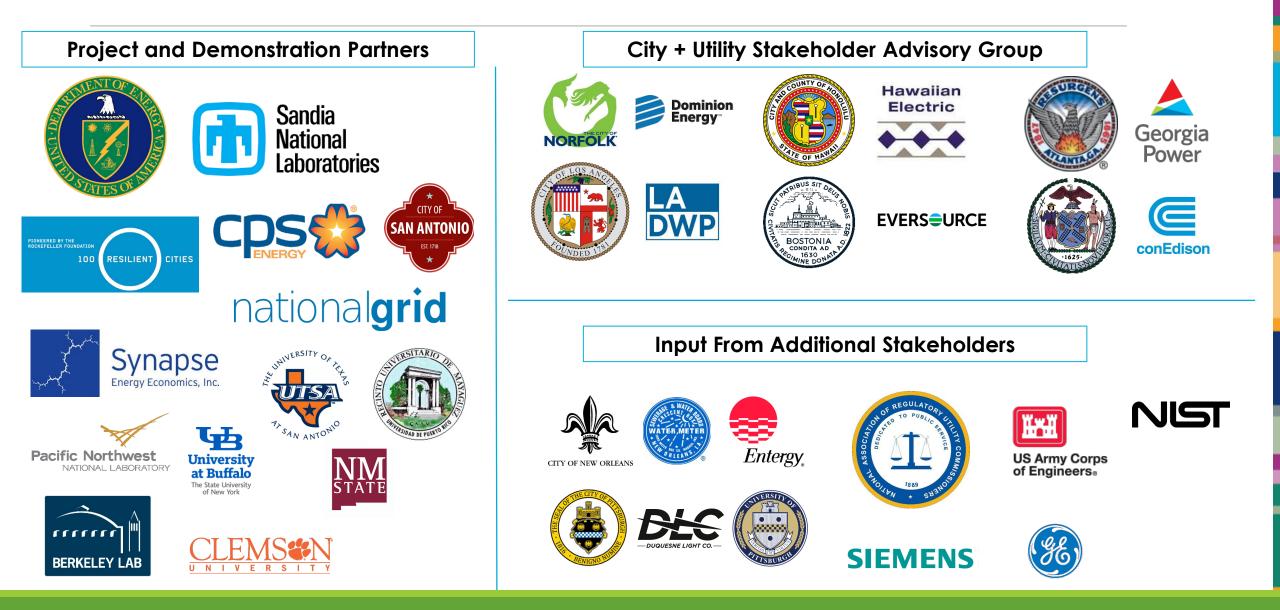
Program Manager Renewable and Distributed Systems Integration 505-844-4864 / <u>srferre@sandia.gov</u> Washington DC January 22, 2020



Sandia National Laboratories is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.

Welcome!



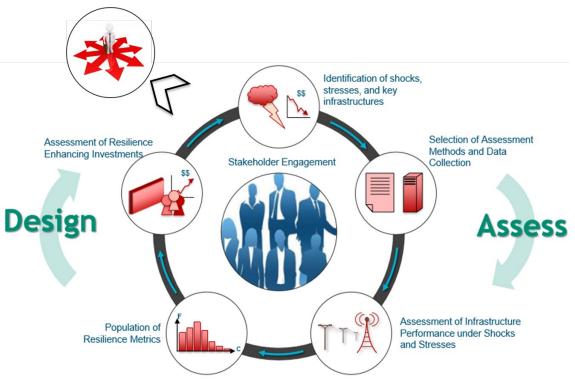


Why are we here?

Objectives:

To enable practical, rigorous and replicable energy infrastructure planning that serves communities

- Energy as an enabler of all critical services
- Release a framework for alignment of community resilience planning and grid investment planning
 - Consequence-based approaches to grid planning and investment
- Demonstrate with city/utility pairs how to overcome the most critical technical challenges through field validation
- Analyze alternative regulatory frameworks and utility business models that may better internalize resilience benefits
- **Build** one or more community resilience nodes enabled by distributed energy resources



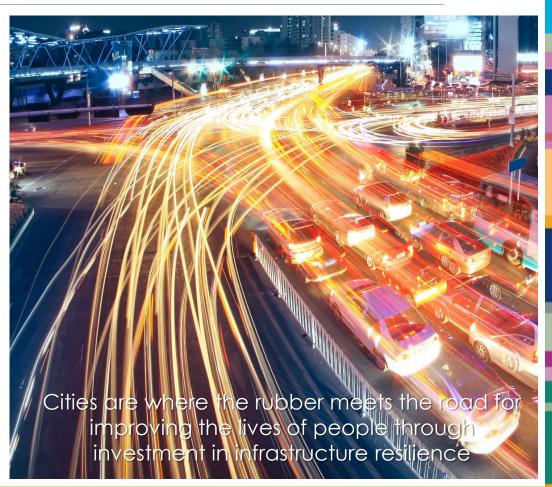
Designing Resilient Communities Project

Goals:

- Demonstrate a <u>practical</u> consequence-based approach to resilient grid infrastructure planning and investment
- Enable alignment of city and utility and investment planning
- Resilient Community Design Framework
- Stakeholder engagement
- Technology demonstration

Key partners:

- City of San Antonio, CPS Energy, National Grid
- UTSA, NMSU, Synapse Energy Economics
- RF 100RC and multiple cities through the SAG



Sandia and Energy Resilience

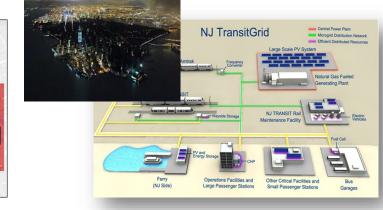
Sandia National Laboratories is a national leader in the development of resilience solutions for Government and Civilian sectors

Broad applications and partnerships

- DOE, DHS and DOD
- Municipal and State agencies
- Research collaborations
- International interactions

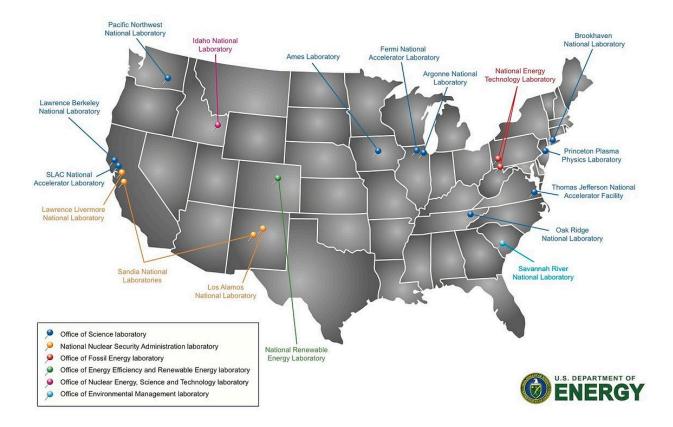
New efforts in defense energy will leverage and inform the DRC project.

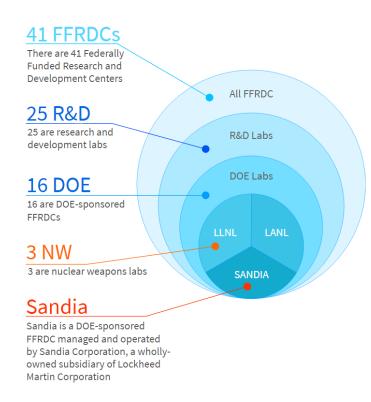




Resilience – Broad and critical topic

Many DOE National Laboratories are actively working on infrastructure resilience topics





Agenda

Wednesday January 22, 8:30 – 7:30 PM

- (9:00-9:45) Welcome & Introductions
- (9:45-10:00) Objectives and Agenda
- (10-11:30) Project Partner Updates
- Break
- (11:45-12:30) Framework Updates
- (12:30-1:30) LUNCH
- (1:30-3:00) Demonstration Project Updates
- Break
- (3:15-4:45) City & Utility Resilience Updates
- (4:45-5:30) Day 1 Discussion
- (5:30-7:30) Optional Social Gathering

Thursday January 23, 9:00 – 12:30 PM

- (9:00-9:30) Introductions
- Review Day 2 Objectives and Agenda
- (9:45-10:15) Breakout Topics Overview
- Break and Assemble for Breakouts
- (10:30-11:30) Concurrent Breakouts
- Break and Reconvene
- (11:45-12:30) Day 2 Discussion and Next Steps

Thank you for your time and participation!

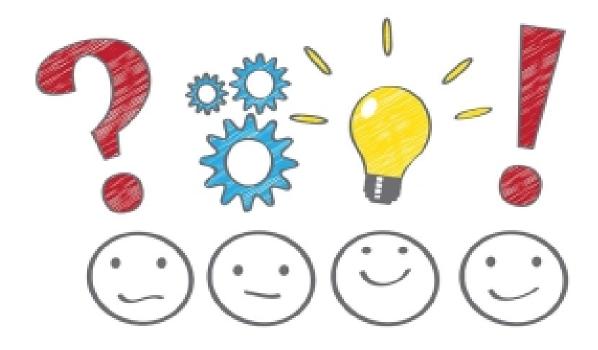
Core Sandia Project Team

• Robert Jeffers, PI

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- Robert Broderick, Co-PI
- Katherine Jones
- Vanessa Vargas
- Sara Peterson
- Mercy DeMenno

Questions? Comments?



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