HSI PANEL: THE HUMAN CONTRIBUTION TO RESILIENT SYSTEMS

Matthew Risser, Ph.D.
Pacific Science & Engineering Group, Inc.

George Krondraske, Ph.D.
University of Texas at Arlington

Elaine Thorpe
The Boeing Company

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Topics and Panelists

- Engineering resilience – policy and process
  - *Dr. Robert Neches, ASDR&E*
- Human ‘resilience’ - scope and considerations
  - *Dr. Matthew Risser, Pacific Science & Engineering Group*
- State of the art – modeling and simulation
  - *Dr. George Krondraske, University of Texas at Arlington*
- Impacts - processes, methods, and tools
  - *Elaine Thorpe, The Boeing Company*

Purpose, Definition, and Scope

- This panel is intended to provide a better understanding of the human contribution and implications for human performance in the design of resilient systems
- Resilience is not:
  - enabling updates or adding capabilities
  - adaptability
- Resilience is:
  - planning for vs. preventing failure
  - how well a system handles unanticipated variability, outside the design boundaries
  - 2nd and 3rd order effects
  - Anticipating change to maintain system goals
  - Humans exist at both the front end (operators, maintainers) and the back end (administrators, regulators)

Panel Procedures

- Each of the 3 panelists will present for approximately 20 min
- Feel free to ask for clarification during presentations
- Use cards to write questions
- Open discussion after panel presentations
- Please enjoy and engage!