Overview of the NRC's HRA Data Program and Recent Activities

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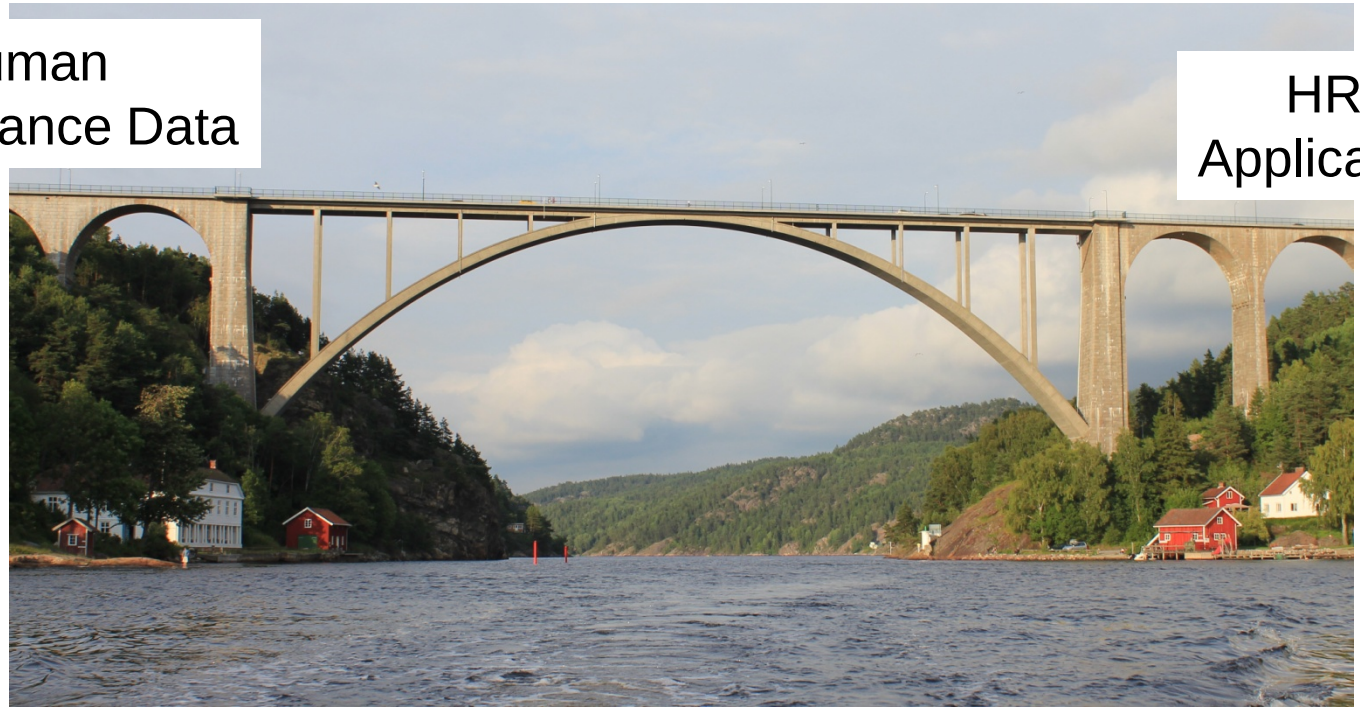
HRA Data Program Goal

Bridging human reliability analysis (HRA) applications in the NRC's risk-informed programs and human performance data

Human Performance Data



HRA Applications

Objectives

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Objective 1: Inform Human Error Probability (HEP) estimates

- Produce data-driven HEPs
- Provide reference HEPs for HRA methods
- Focus on HEPs in the following risk-informed programs
  - Basic probabilistic risk assessment
  - Significance Determination Process (SDP)
  - Accident Sequence Precursor (ASP)

Objective 2: Improve understanding of operators' behavior in responding to plant malfunction(s)

- Learn from past events
- Analyze and document events to address various interests

Current Status

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- Collecting licensed operator simulator training data
  - Signed an agreement with a US nuclear power station
- Explore the method/tool suitability for collecting
  - Experimental simulator data (e.g., Halden)
  - Real event data

Support NRC's Missions

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- Support the Staff Memorandum Requirement (SRM) – M090204B

  "Development of an HRA database"

- Support an NRC program office on enhancing risk-informed methods/tools

Companion Papers

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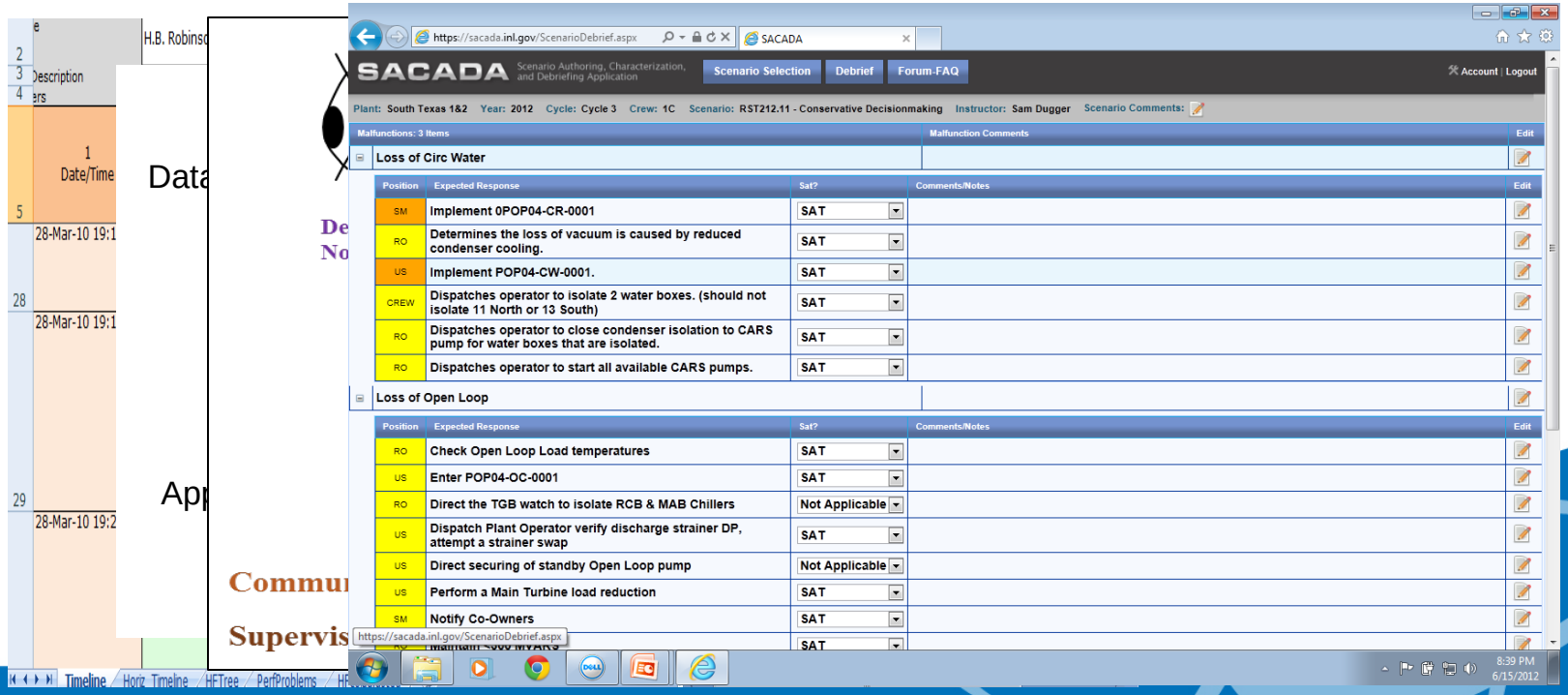
- Enhanced event timeline
- Generate data-driven HEPs
- Human performance model and theoretical basis
- Simulator data fidelity for HRA/PRA



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Questions?