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PFHA Workshop: A Personal Viewpoint

Many Commonalities

- Framing (safety, decision support, constrained resources, RIDM)
- Language (probability, aleatory/epistemic)
- Concerns, e.g.,
  - All scenarios, all effects, beginning-to-end
  - Required resources (computational, expertise)
  - Uncertainties (data, parameters, models, experts)
  - Communication (internal, external)
  - Dependencies
  - Standards vs. "Imagination"

=> Opportunities for efficient sharing

"Searching"

Imagine a picture…

- More active, directed than "imagining"?
- Need help (technical basis) to avoid
  - Intractable or even non-physical models
  - Distractions
    - Analysis resources
    - Risk masking
  - Failure to "make case"
- Domain-specific tools to help identify and screen
- Operational experience invaluable (context)

Context and Human Error

- Key concept in modern human reliability analysis:
  - Not useful to view operators as random error generators
- Context

  => potential causes of sustained/unrecovered errors

  => dependencies between DiD barriers
- If operational errors (or even decisions) can be important to risk, need to include context

A?

"…the thought of a tsunami never crossed my mind."

- Tsuneo Futami (<March 26, 2011: D+15)

http://www.nytimes.com/2011/03/27/world/asia/27nuke.html?hp&_r=0

Or B?

"I could not imagine such a huge tsunami as occurred on 11 March."

- Tsuneo Futami (May 17, 2011: M+2)

http://spectrum.ieee.org/tech-talk/energy/nuclear/the-scale-of-the-accident-was-beyond-my-imagination/?utm_source=techalert&utm_medium=email&utm_campaign=051911