

Crediting Mitigating Strategies in Regulatory Decision Making

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OBJECTIVE

- Brief Project History
- Completed Tasks
- Ongoing Tasks
- Communications
- Challenges

Project History

- NRC Risk-Informed Steering Committee (RISC) directed effort to evaluate and provide appropriate credit for uses of FLEX in key risk-informed decision making (RIDM) programs (2015).
- FLEX can provide added safety enhancements
 - The NRC wants to encourage safety enhancements
 - Need to provide proper regulatory footprint
- Overall Approaches
 - Industry - Developed tiered approach to crediting portable equipment
 - NRC - Identified areas of application and began refining reg. framework.

Areas of Potential Credit

- Incident Response (Management Directive 8.3)
- Significance Determination Process (SDP)
- Accident Sequence Precursor (ASP) Program
- Maintenance Rule 10 CFR 50.65
- Notices of Enforcement Discretion (NOEDs)
- License Amendment Requests
 - Qualitative/Quantitative Credit
- Mitigating Systems Performance Indicator (MSPI)
- Security
 - Target Sets / Force on Force / EALs
- Regulatory Analysis - Rulemaking
- Issue Resolution
- Generic Issue Resolution

Some Completed Tasks

- Review of Tier 1 and Tier 2 of NEI 16-06
 - Tier 1 and Tier 2 - NRR Office Director (ML16167A034) (August, 2016)
- Review of Tier 3 of NEI 16-06
 - Tier 3 - publicly available memo (ML17031A269) (June 2017)
- Update to section 6 of Volume 1 of the RASP Handbook
 - Guidance on modeling FLEX in risk assessments
- Pilot SPAR model update
 - Updating the Vogtle SPAR-AHZ model
 - Total plant CDF reduced by ~25%(Plant specific)
 - SDPs and NOEDs could see substantial reductions
- SPAR model makers guide

Ongoing Tasks

- **Crediting FLEX in Deterministic LARs**
- Support from Office of Nuclear Regulatory Research
 - **HRA guidance and data**
 - Updating the SPAR models
- Revision to NUMARC 93-01 (Maintenance Rule scoping criteria)
- Continuous Engagement of Regional Staff
 - SDPs, NOEDs, and MD8.3
- FLEX Data Collection
 - Data is collected through EPRI
 - Different from standard INPO process that we use
- Continue to Monitor Ongoing RIDM areas

Communications



- PSA 2017 – September 2017
- NEI Licensing Forum – August 2017
- NEI Risk and Fire Forum – June 2017
- SRA Counterpart meeting – October 2016 and May 2017
- Inspector Newsletter article – October 2016 and April 2017
- Deputy EDO and RA briefing – April 2017
- NRC Reporter article – April 2017
- RIC Session – March 2016 and March 2017
- Internal RISC update – February 2017
- Public RISC – February 2017
- Division Director counterpart meeting – November 2016
- JNRA Bilateral meeting – November 2016
- ET Significant Topic briefing – November 2016
- IAEA Technical meeting – November 2016
- ACRS- Reliability and PRA Subcommittee – September 2016

Challenges

- Collecting FLEX related operating experience to develop equipment failure probabilities.
 - EPRI/NPO assistance
- Enhancing HRA and developing basis for HEPs.
 - Volunteer plants to collect data