

Risk Informed Steering Committee Public Meeting

October 10, 2017

Discussion Topics

Fire PRA Realism

MarkHenry Salley
RES - DRA

Improving Realism in Fire PRA Public Workshop October 3 – 5, 2017

MarkHenry Salley
RES - DRA

Background

- May 11, 2017, NRC Commission Meeting
 - discussion including realistic fire PRAs
- October 3 – 5, 2017 Improving realism in fire PRA facilitated public workshop
 - NRC (NRR, RES, NRO)
 - NEI
 - EPRI
 - Licensees
 - Consultants

Objective

- Develop a common understanding of NRC and Industry needs and priorities to improve realism in fire PRAs
- Open discussion about potential improvements and reduction in conservatisms

Results

- Constructive discussions
 - Industry request focus on near term items
 - less than 2 year
 - Identified areas where additional operating experience data is needed
- Identified Tasks, Priorities, Responsibilities
 - Developed Series of Tables:
 - In process work
 - FAQs
 - Long term research - joint RES /EPRI projects
 - Other

Follow-on Activities

- NEI will be working with NRR to discuss Fire PRA FAQ submittals and reviews
- EPRI will be working with RES to discuss areas for collaborative research

Facts and Observations Closure Process

Adrienne Driver
NRC-NRR

Independent Assessment Process for Closure of F&Os

- NEI provided the final version of Appendix X to NEI 05-04/07-12/12-16, *“Close-Out of Facts and Observations (F&Os)”* to NRC staff on February 21, 2017.
- NRC staff accepted final version of Appendix X guidance in May 3, 2017 letter.
- Industry performed three pilot reviews of the process and NRC staff attended as observers.
 - Public meeting held on September 29, 2017 to discuss NRC staff observations.
 - NRC staff and Industry aligned on NRC observations.

Crediting the F&O Closure Process in Licensing Actions

- 8 license amendment requests currently credit the Appendix X process.
 - NRC staff conducted an audit of one license amendment request during the week of September 25, 2017.
 - Audits determined based on information provided in submittal.
- Future use of process planned by Industry and NRC staff plan to observe.
 - Not related to a license amendment request
 - NRC staff plan to observe.
- Future public meeting to discuss lessons learned from the licensing actions that credit the Appendix X process.
- Incorporate final staff position regarding this process in next revision of RG 1.200.
- NRR does not believe further additional oversight of this item is warranted.

50.69 Review Process

Jay Robinson
NRC-NRR

50.69 Status

- NRC received 7 applications for 50.69
 - 3 have been accepted for review
 - 4 will have acceptance reviews completed in October, 2017
 - Other applications are anticipated
- NRC expects to support 10 submittals per year, staggered, concurrent with other risk-informed submittals

50.69 Review Scope

- Scope of review
 - categorization process
 - quality of the PRA models
 - any non-PRA methods for un-modeled hazards (e.g. appendix r safe shutdown list, seismic margins analysis)
- Majority credit F&O Closure Process
- Majority use peer reviewed internal events and fire PRAs
- Public meetings conducted to address potential fire and seismic issues for future submittals

50.69 Licensing

- NRC internal weekly status meetings to inform management of progress
- NRC internal meetings and potential SharePoint site to address consistency among reviewers
- Audits, licensee portal
- Potential dialogue with industry to address common acceptance review issues and generic RAIs

Treatment of Flex in Risk Informed Decision Making

Matthew Humberstone
NRC-NRR

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)
 - Some SDPs and NOEDs could see reductions
- SPAR model makers guide

Ongoing Tasks

- WG Crediting FLEX in Deterministic Reviews
 - NRR(DRA,DE,DSS,DPR,DIRS,DORL), NSIR and NRO
- RES Support
 - Using the IDHEAS HRA method for FLEX
 - Updating the SPAR models
- Revision to NUMARC 93-01 (Maintenance Rule scoping criteria)
 - Endorsement in RG 1.160
- Engaging 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

Industry Support

- Public Meeting November 15th
- Collecting FLEX data
 - EPRI instead of INPO
 - Raw data vs post-processed
- Access to NEI 16-08
 - Guidance for Optimizing the Use of Portable Equipment
- Pilot Plant for field work HRA data
 - Use existing plant data to develop basis for HEPs.