

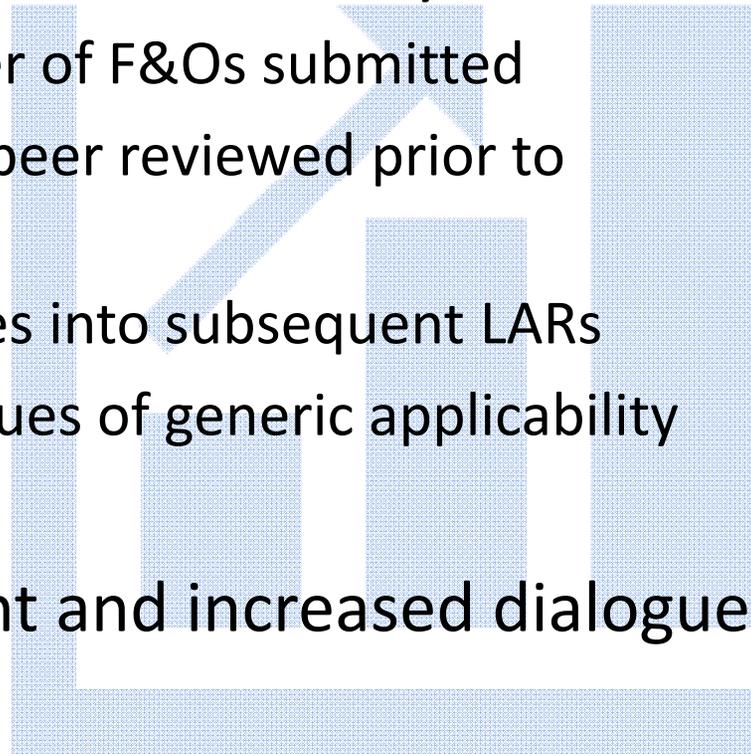
Credit for FLEX in Risk-Informed Licensing Applications

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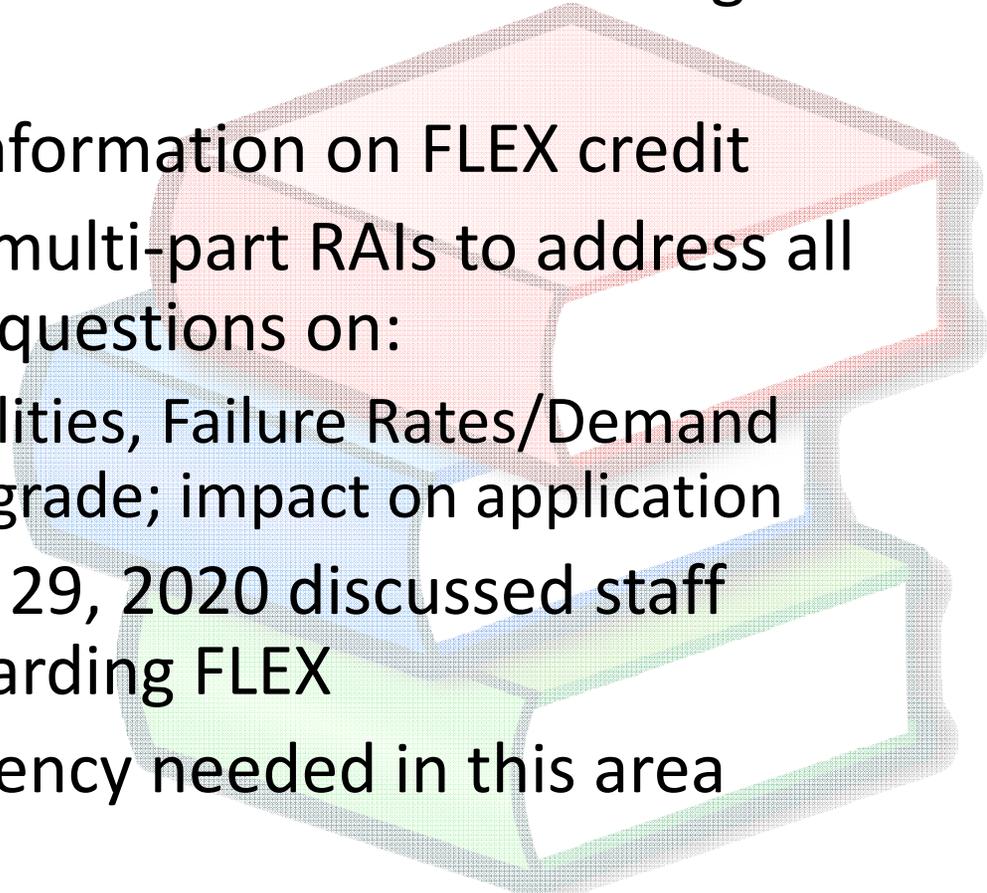
NEI FLEX Summit Webinar
September 2020

Improved Review Efficiency for Risk-Informed LARs

- Industry efforts improved review efficiency
 - F&O closures reduced number of F&Os submitted
 - PRA upgrades identified and peer reviewed prior to submittal
 - Incorporation of RAI responses into subsequent LARs
 - Public meetings to discuss issues of generic applicability
 - Pre-application meetings
- Other areas for improvement and increased dialogue



FLEX Credit in Risk-Informed LARs

- Credit for FLEX in PRA in risk-informed licensing actions is increasing
 - LARs provide limited information on FLEX credit
 - Staff has been issuing multi-part RAIs to address all possibilities, including questions on:
 - Human Error Probabilities, Failure Rates/Demand Probabilities; PRA upgrade; impact on application
 - Public meeting on July 29, 2020 discussed staff information needs regarding FLEX
 - Increased review efficiency needed in this area
- 

Guidance on Key Assumptions and Sources of Uncertainty

RG
1.174

"comparison of the PRA results with the acceptance guidelines must be based on an understanding of the contributors to the PRA results... and the impacts of the uncertainties, both those that are explicitly accounted for in the results and those that are not."

RG
1.200

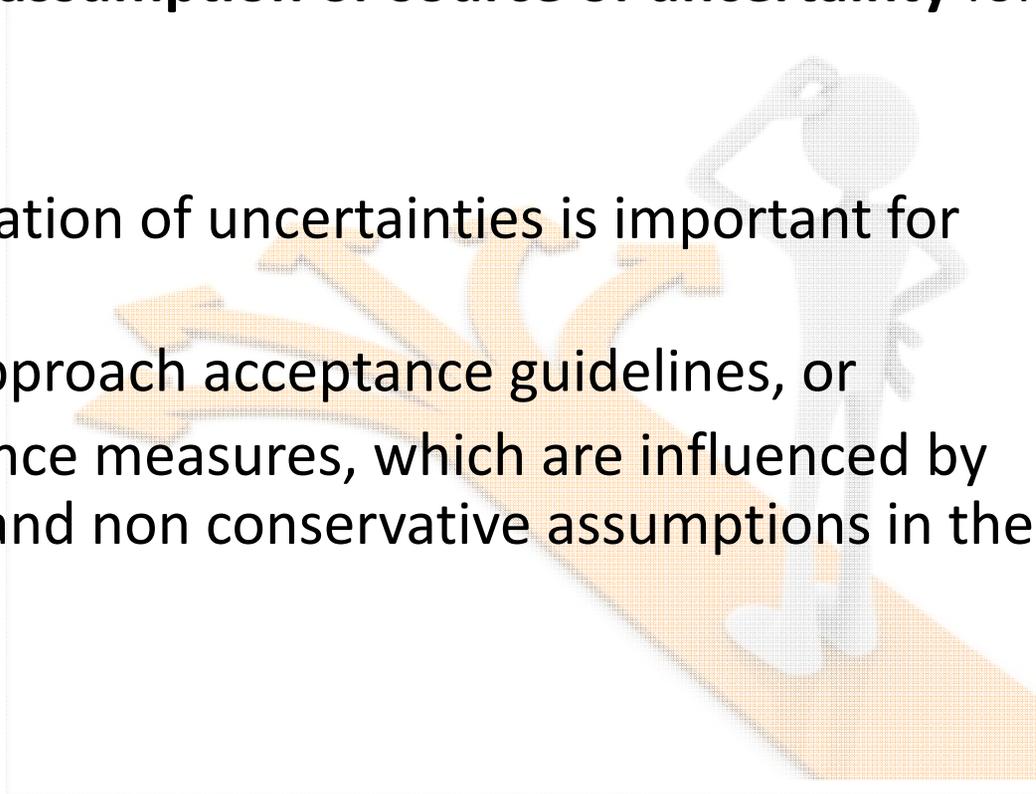
NRC reviewer .. [will] .. focus their review on key assumptions and areas identified by peer reviewer as being of concern [i.e., F&Os]

NUREG
1855

Guidance on Treatment of Uncertainties Associated with PRAs

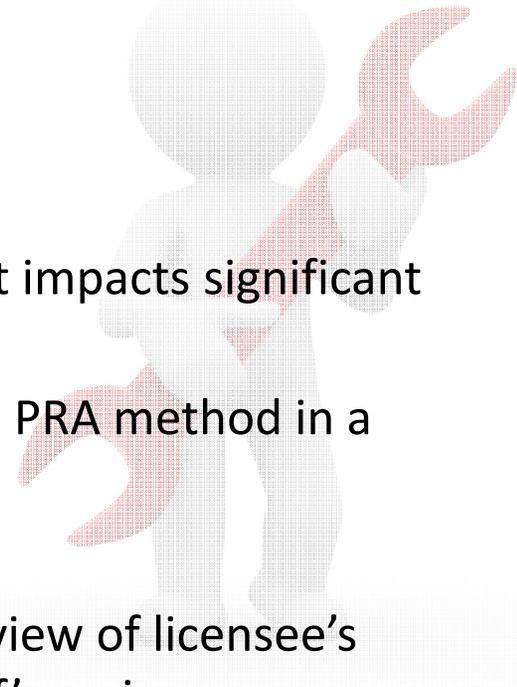
FLEX Credit Review in LARs

- **Credit for FLEX** in PRA may impact the regulatory decision, therefore may be a **key assumption or source of uncertainty** for an application
- Identification and evaluation of uncertainties is important for TSTF-505 and 50.69
 - Allow licensees to approach acceptance guidelines, or
 - Reliance on importance measures, which are influenced by either conservative and non conservative assumptions in the PRA

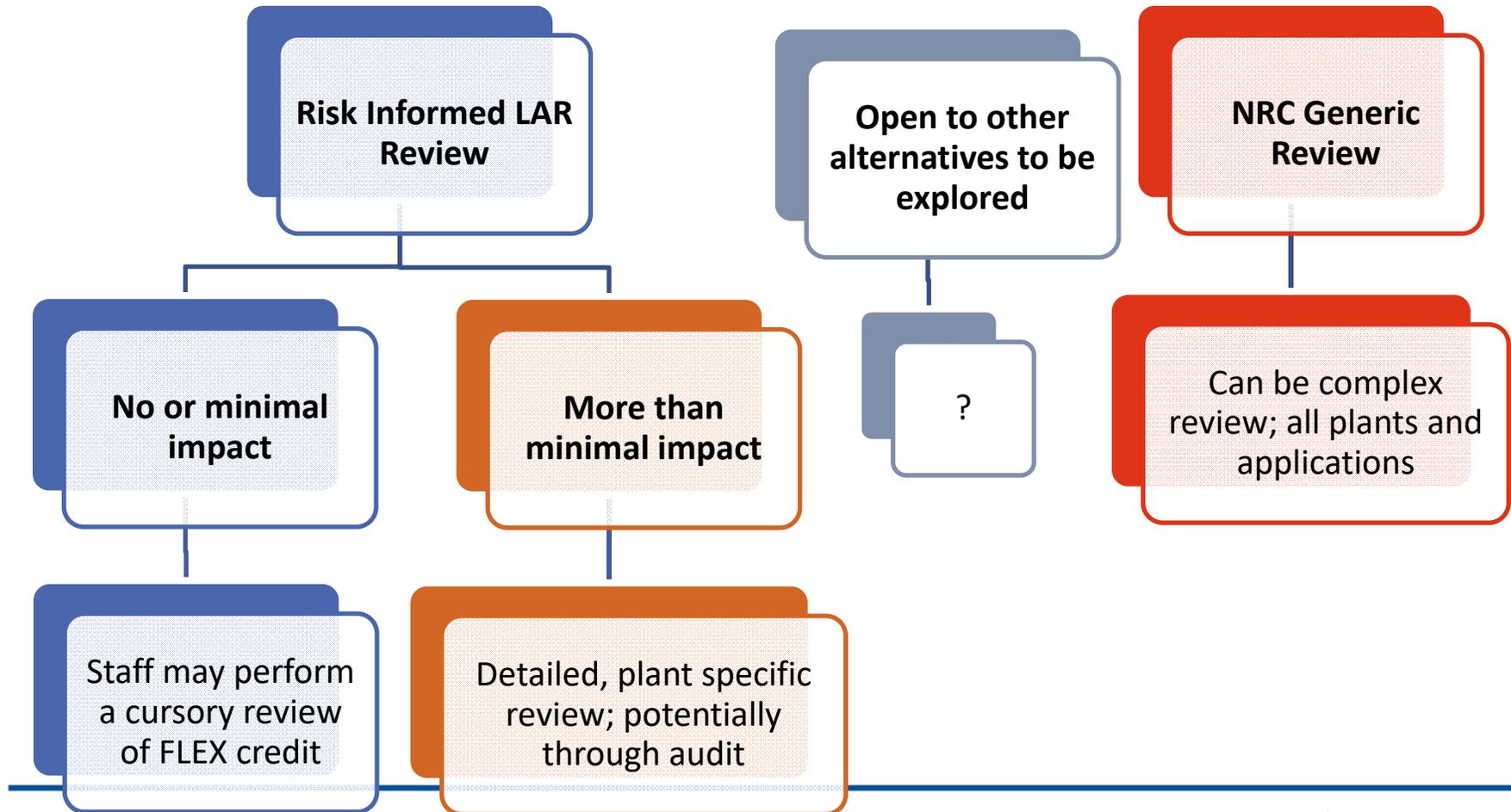


PRA Configuration Control

- RG 1.200 requires PRA Configuration Control process to provide confidence that the PRA adequately represents the as-built, as-operated plant.
 - Incorporation of FLEX in PRA consistent with guidance
- **Is incorporation of FLEX a PRA Upgrade or Update?**
 - Plant specific arguments
 - PRA Upgrade definition
 - RG 1.200 Rev 2: ... a change in capability that impacts significant accident scenarios or results ...
 - draft RG 1.200 Rev 3: ... implementation of a PRA method in a different context ...
 - Upgrades require focused-scope peer reviews
 - Peer reviews provide for independent expert review of licensee's implementation; may be beneficial to assist staff's review



Potential Paths Forward for Risk Informed Licensing



Conclusions

- Staff will continue to review FLEX credit in risk-informed applications
- Upfront LAR discussion of FLEX credit will improve review efficiency
- Generic review of FLEX credit would benefit both NRC and industry