

TVA Nuclear

- Historical Perspective
 - Nuclear power plant maintenance strategy learning curve
 - Understanding the state of equipment program development and regulatory reviews
 - Understanding the strength of the corrective action program (developed over decades)
- Price of admission to the periods of extended operation
 - Importance of industry and NRC license renewal shared mission (fiscally responsible vs. operational margin)
 - Need to offset potential reduction in design margins with comprehensive monitoring
 - Aging management must be treated as core business



- GALL is not a cookbook
 - Important to understand operating experience when performing aging management reviews
 - Aging management approach should be logical and comprehensive
 - GALL does not have a basis document resulting in aging management reviews being very subjective
 - Additional efficiencies through scope reduction vs. process improvements
 - Maximize use of 10 CFR 54.17(e) incorporate by reference (e.g., Section 2 Scoping & Screening)
 - Reduce level of detail in the GALL AMPs that do not materially enhance aging management
 - Eliminate redundancies between Appendix A & B in applications
 - Rely on applicant's well-established corrective action program for follow up actions when aging degradation is identified versus prescribed actions in the GALL



- Understanding the point of diminishing returns
 - How much validation and docketed information is required
 - Use of judgement based on scientific principles and risk insights
 - Specific codes and standards (e.g., ASME Section XI, BWRVIP) including change management should be adopted outside license renewal; exceptions should be well documented and understood
 - Rely more on the extensive body of industry operating experience rather than seek proof that a hypothetical conditions could not manifest
- Uncommon thought process
 - Difference between preparer and reviewer perspectives; words can be interpreted differently especially without a shared mission
 - Except for Time Limited Aging Analyses, Design Basis issues are generally not related to age
 - Understanding alignment between Technical Review Packages (TRP) and the Standard Review Plan (SRP).



