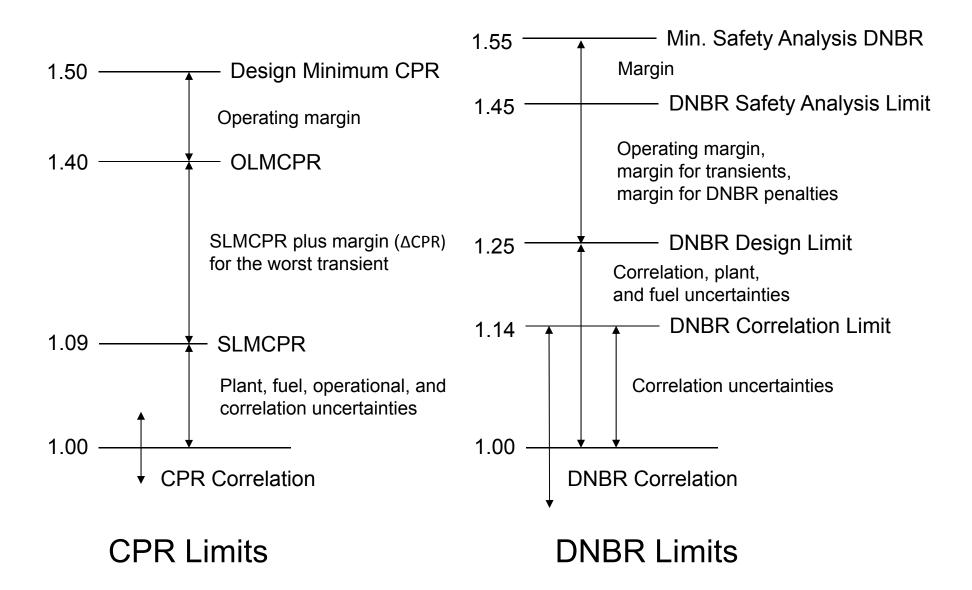
Alternative MCPR Safety Limits

Reed Anzalone Nuclear Performance and Code Review Division of Safety Systems



CPR Limits / DNBR Limits





Why a new limit?



- Current limit is core design-dependent
 - May need to lower limit to recapture margin or raise limit to operate with design
- Limit is in TS and needs LAR to change
 LAR usually late in reload design process
- LARs are very routine but add:
 - Unnecessary regulatory burden
 - Regulatory uncertainty

Recent History



- Early industry proposals
 - Requested to remove MCPR SL
 - NRC: define a cycle-independent limit
- Proposal at 2015 GE fuels meeting*
- NRC research \rightarrow MCPR Correlation Limit
 - Reviewed SL history (documented and oral)
 - NRC internal alignment
 - Limited vendor feedback
- Presentations to vendors

Criteria for MCPR Correlation Limit



- Represent fuel critical power performance (i.e., specify correlation and capture associated uncertainties)
- Be supported by NRC-approved method specifying how other limits are calculated (e.g., MCPR SL, OLMCPR)
- Reference existing MCPR SL, which should be retained in COLR

Path Forward



- Engagement with BWR Owner's Group, fuel vendors, Tech Spec Task Force
- Technical specifications changes

Questions and Comments?