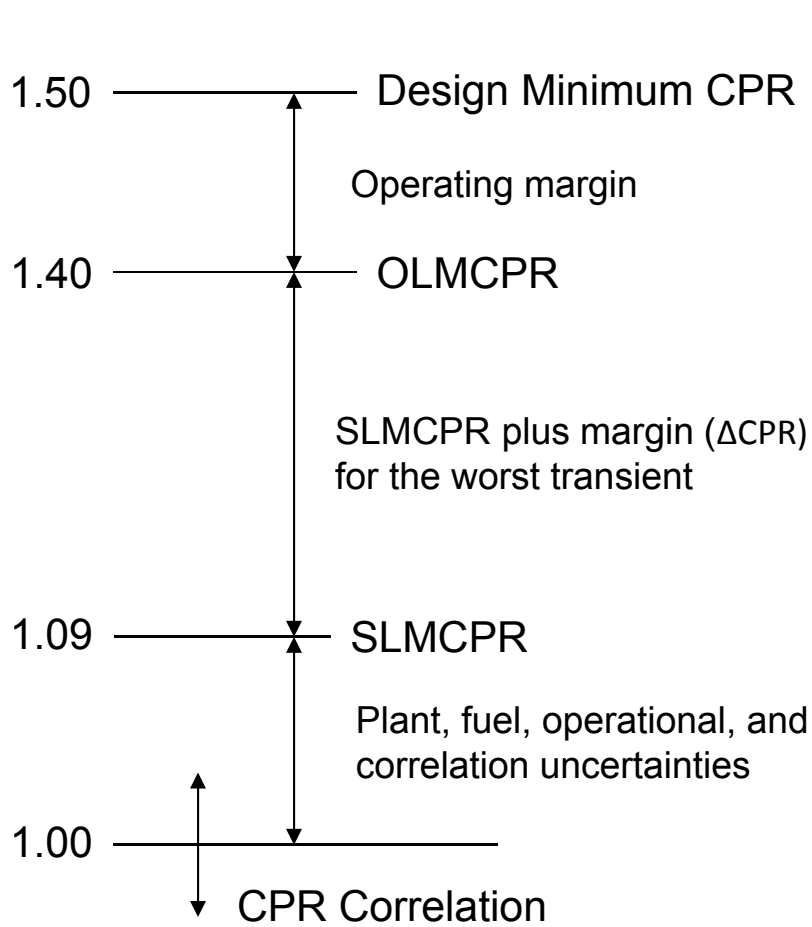


# Alternative MCPR Safety Limits

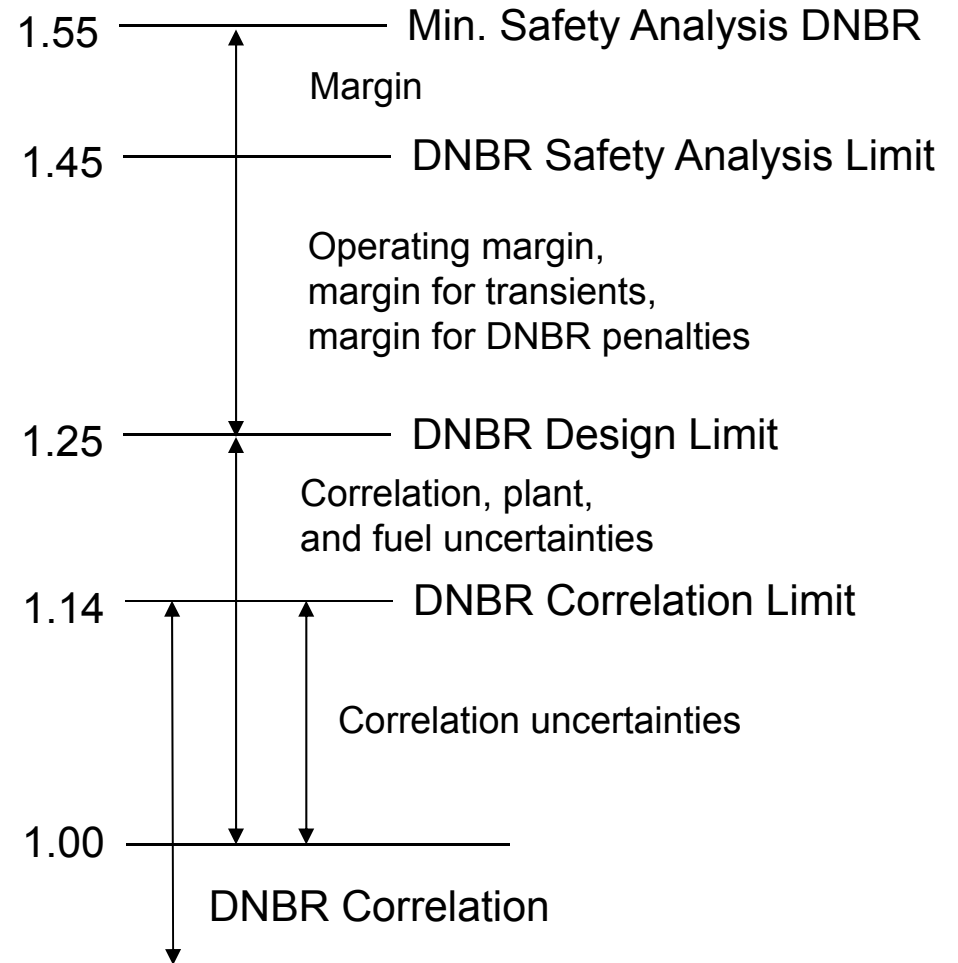
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Nuclear Performance and Code Review  
Division of Safety Systems

# CPR Limits / DNBR Limits



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 → MCPR Correlation Limit
  - Reviewed SL history (documented and oral)
  - NRC internal alignment
  - Limited vendor feedback
- Presentations to vendors

\* See ML15268A469

# 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?