

DISCUSSION OF THERMAL-HYDRAULIC ANALYSES

Robert Rishel
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Update of Thermo-Hydraulic Analysis

- Purpose
 - ▶ Estimate plant behavior and response to fire events
- Method
 - ▶ Bounding approach to optimize effort using input from loss profile and timing of fire event
- Uses
 - ▶ Input to determining the acceptability of meeting the PSA success criteria
 - ▶ Input to determining acceptability of PSA recovery actions

PRA Acceptance Criteria

- Supports additional success path such as feed and bleed cooling
- Allows RCP Seal LOCA without core damage being assumed
- Uses CDF and LERF as Figures of Merit
- Additional acceptance criteria established in NEI 04-02 and Regulatory Guide 1.205

Current Results

- No new thermal hydraulic analysis has been identified to date.
- Have revised some HVAC analysis to support PSA needs
 - Switchgear Rooms
 - Charging Safety Injection Pump Rooms
- Task is ongoing

Tools

- Analytical Tools
 - ▶ Gothic for HVAC analysis and system response
 - ▶ Modular Accident Analysis Program (MAAP) for Primary and Secondary response