

# ESBWR Thermal Hydraulic Uncertainty

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# MAAP/TRACG comparison

Start with ESBWR PRA success criteria list

- Where possible combine similar scenarios, to develop a reduced set of scenarios from ESBWR PRA success criteria

Using the above scenarios, modify the TRACG LOCA, AOO and ATWS Phenomenon Importance and Ranking Table (PIRT) for MAAP/Severe Accident use. This will involve adding phenomenon where necessary, and increasing focus (no medium & low PIRTs).

- Need to develop a short list of "super-high" phenomenon.



# MAAP/TRACG comparison

Execute TRACG cases for the MAAP success scenarios

For the highly ranked phenomenon, generate TRACG/MAAP comparison plots

Explain/Justify differences w.r.t. MAAP success criteria.



# T-H Uncertainty

Identify PRA success sequences which could be potentially risk significant if the basis for success were doubtful due to T/H uncertainty.

Collect these into groups based on similarities in available hardware

Analyze the behavior of a sufficient number of these sequences using TRACG with consideration of important uncertainties to confirm they are success scenarios.

