

Probabilistic Risk Assessment (PRA)

Fauske & Associates, LLC (FAI) has developed extensive capabilities and experience in performance of Level II risk analysis. In addition to the initial IPE activity, FAI has supported IPE updates, including improvements to success criteria, the expansion of IPEs to plant specific PRAs, the assessment of Large Early Release Frequencies (LERF) and the review and modification of PRAs due to power uprates and/or plant modifications.

The extensive Level II work performed by FAI is indicative of both a strong knowledge base and a high-quality organization. Both in-house experiments and a knowledge of experiments performed elsewhere have provided the FAI staff with an in-depth understanding of the broad technical basis developed for accident analyses including those focused on severe accident phenomena. This understanding is communicated through phenomenological position papers and these become part of the living documentation. These coupled with a staff of experienced scientists and engineers with hands-on nuclear power plant experience identifies FAI as the ideal choice for performing or assisting in Level II risk analysis.

FAI has performed a number of key experiments to expand the understanding of severe accidents:

- ✦ Direct Containment Heating
- ✦ Drywell Shell Core Debris Interaction (Liner Melt-through)
- ✦ External Cooling of the RPV
- ✦ Lower Plenum Penetration Response
- ✦ Concentric Tube Cooling
- ✦ Jet Attack on Adjacent Tube Paired
- ✦ In-Vessel Cooling



WORLD LEADER IN NUCLEAR AND CHEMICAL PROCESS SAFETY

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