

APAL: Training offer from FRA-G

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| Name of the training course: PTS benchmark | Description: The main topic of the training course will be PTS analysis based on deterministic and/or probabilistic approach. The trainee will get background on PTS analysis in general, including all aspects from TH analysis to structural mechanics and finally to fracture mechanics analysis. Moreover, the basics for probabilistic approach in the scope of PTS analysis will be explained. In order to strengthen the trainees skills a small practical work dealing with fracture mechanics assessment in the scope of the APAL benchmark (either deterministic or probabilistic) will be performed and documented. |
| Offered by: Framatome GmbH | Responsible Person: Ralf, Tiete |
| Duration: 2-10 days (depending on the foreseen period and the planned work at that time) | Topics covered: Within the training course, the following topics will be covered (at least partly): <ul style="list-style-type: none">• Pressurized thermal shock background• Conservatism of the current PTS• Probabilistic risk assessment• Temperature and stress analysis in RPVs• Codes and standards relevant for PTS assessment• Uncertainty treatment in PTS• Basics of fracture mechanics• Postulated flaws - Flaw models• Crack initiation model• Through wall cracking model• Temperature and stress analysis – FEM software• Crack tip stress intensity factor• Crack propagation and arrest• Application of the Master curve: approach to reactor pressure vessel integrity• Weld residual stresses Warm pre-stress effect |
| Dates: 01.07.2022 to 31.12.2023 | Contact: ralf.tiete@framatome.com +49 9131 900 95228 |
| Other relevant information: The Training visit will take place at Framatome GmbH side in Erlangen, Germany. Information needed: tbd | |