

Various Observations from MELCOR 1.8.6 Applications, Recommendations, and Suggestions

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The NRI widely uses the MELCOR code for plant applications and contributes also to the code validation against experiments. User experience with many various practices gained based on this extensive effort. This contribution is focused on several topics starting with an application of supporting structures for modeling of spacer grids, their application to the modeling of lower plenum structures. Next part is focused on new capabilities, added within subversion release, related to the modeling of core baffle using COR package component shroud (SH). Important part is focused on user experience from simulation of in-vessel retention scenario with melt cooling through lower head wall. It describes code abnormal terminations during simulation of this scenario and their user solutions. Last part is related to other user experience gained during last 4 years of the MELCOR 1.8.6 testing and using like troubles with input reading and processing, fission power absorption, new control and plot variables.