Teaching Notes

Operational Reactor Safety Course

Lecture: 14 – Simulation Exercises of Accidents and Transients

Objective:

The purpose of this class is to use the PRISM software to observe plant response to transients and accidents. A prior training exercise is to be conducted to be by the teaching assistant so that the class time could be spent running certain transients. The PRISM software is tailored to pressurized water reactors only. Given what the students have learned about nuclear plants, have the students predict what might be expected in each of the transients run.

Key Points to Bring Out:

Slide number	Points
2-3	Run as many of the accidents listed to observe plant behavior. Prior to running each simulation, ask the students what they expect to see in terms of reactor pressure, temperature, containment pressure, trip signals, what systems are actuated, etc.

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22.091 / 22.903 Nuclear Reactor Safety Spring 2008

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