Teaching Notes

Operational Reactor Safety Course

Lecture: 17 – Seabrook Station Simulator Exercises

Objective:

The visit to the Seabrook simulator is for the students to gain a deep appreciation of what nuclear operators do in normal and transient and accident situations. This exercise is to get the students to apply their knowledge to actual operating events for analysis of the off-normal event and what appropriate responses need to be taken. The 4 plus hours spent in the simulator should have students rotate key operator positions to see what the roles are and the timing of automatic and operator initiated actions according to emergency response procedures.

Key Points to Bring Out:

Slide number Points

The key points in this exercise are to have students keep in mind the fundamental mission of core cooling and prevention of the release of radioactive materials from containment. Working closely with the training staff, students should be allowed to think through what needs to be done, why and when during the course of the transients and accidents simulated. At the end of each simulation discuss what happened and why and review the challenges faced by operators. Make it as real as possible in the role play to get the students to believe that they are actually in the control room.

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