Simulator Afternoon Breakout Session

2005 MANTG Conference

MANTG / TTC Deltas

- TTC demo lists unexpected alarms / MANTG just cues evaluator to look for any unexpected alarms

- TTC demo lists more key parameters than MANTG

- TTC demo lists more plot points than MANTG

MANTG / TTC Deltas

- TTC demo includes SBT on manual trip / MANTG assumes manual trip tested elsewhere

- TTC demo checks alarm setpoints / MANTG does not

SBT Q's and General Q's

1. If there are no SBTs for scenarios used in training, is it acceptable to rely on Yearly Steady State Tests and Transient Tests AND SBT for initial and requal annual operating tests in order to limit and define the scope of testing?

SBT Q's and General Q's

2. What needs to be done with Malfunction Cause and Effect (MC&E) Documentation to ensure that the scenario produced for any use is properly tested and validated, i.e., best estimate data?

SBT Q's and General Q's

3. In the demonstration, did you see evidence that the facility: 1) determined best estimate data in advance of the SBT; 2) determined initial plant parameter trends prior to running the SBT; and 3) has the ability to independently evaluate accumulated data against acceptance criteria?

SBT Q's and General Q's

4. To what extent (conditions for acceptance especially for tests done in 1980s) can past Verification and Validation testing be relied on for the development of the MC&E?

SBT Q's and General Q's

5. What is the basis for acceptance of first vs second or third order responses predicted and seen in the test and how tight does the rate of change need to be on parameter changes?

SBT Q's and General Q's

6. Is there a difference between scenario validation and scenario based testing; and on either initial or requal exams based on review comments, when does an SBT need to be redone?

SBT Q's and General Q's

7. When does a plant reference simulator not meet the definition in the rule?

SBT Q's and General Q's

8. Will the NRC accept the core performance tests done on the plant also done on the simulator for BWRs (PWRs are covered by ANS standard)?

SBT Q's and General Q's

9. Does best estimate need further definition by way of examples in addition to the existing guidance of plant data or engineering evaluation? To what extent must engineering evaluations be done? Can approved P&IDs and procedures constitute an engineering evaluation based on their respective review processes?

SBT Q's and General Q's

10. What are the best practices for handling major plant modifications, such as digital feedwater, in terms of timing the modification to the plant, to the simulator, to the training program for both licensed (requal) and initial trainees?

Open Forum for Questions