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H₂O • By six minutes into the accident, steam voids could have formed in the reactor. Reading out hot leg temperature and reactor pressure and checking these against a curve or table will tell you if the temperature is high enough for boiling at the pressure in question (saturation). The operators were trained to avoid a solid pressurizer and appeared to assume that high pressurizer level meant that the core was covered. They did not appear to worry about saturation but were about pressurizer level. Does training address saturation conditions or only avoidance of a solid pressurizer? } AD
CRD
SRD
?

H₂O • After the steam generators locked dry due to the closed turbine valves (EIV 12 A & B), the operators reestablished flow and brought the SG levels back to low limits (30 in). They did not start feeding the A generator up to operating range until about 112 minutes. During this time, not much heat was transferred from the reactor to the secondary system. Is there some training program element that would tell the operators to keep SG levels in the start-up range during an emergency? }

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What instructor training has been established?

What training aids are used?

Trainer/learner agreement/procedure

function flow chart?

Model of plant component?

Depictions of plant operation?

Simulation - other than live operation?

What extent does regular training address degradation?

What extent does original training " " " "

much understanding? interaction vs classroom?

General throughput - number of failures? (not just NRE/NRE exams)

Training effort allocated to

Systems and components - structure

Plant operation

Failure modes

Relationships among components

Procedures - emergency

Troubleshooting procedures

Maintenance requirements

Alarm failure detection

H. D.

Referring to about 6 minutes into the accident:

What is there in the training program that prepares the CRO to recognize saturation conditions? And, what actions should the CRO take?

Referring to the 26 minute point on the time line:

What are the CRO's trained to do when the pressure is too high and the temperature reaches TRAINING & PROCEDURES say to conduct operations at 30 inches. Could higher temperature promote heat transfer from primary?

Referring to the 80 minute point on the time line:

[EMOV TAIL PIPE TEMPS of 283-285 were NOT RECOGNIZED AS INDICATING GREAT EMOV. ARE THE CRO'S TRAINED TO EXECUTE THIS? 1000 gpf shift leak - did training cover this type experience

Referring to the 101 minute point:

TRAINING & PROCEDURES say to shut off RC PUMPS, LARGELY BASED ON EXPERIENCE. SINCE THE ACCIDENT, HAVE TRAINING & PROCEDURES CHANGED? & IF SO, HOW?

How has the train training program changed, or how does the current program differ from the training received by the operators who were on duty at the time of the accident?

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