

SAFETY EVALUATION SUPPLEMENT
OFFICE OF NUCLEAR REACTOR REGULATION
OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3

1. The training program addresses how voiding occurs and its consequences.

Responses: The training program addresses how voiding occurs and its consequences. The cause of voiding -- flashing of saturated liquid in the reactor vessel head or the hot leg U-bends under low flow conditions -- is discussed. The need to remove the void in order to enable RCS pressure control and allow further depressurization is covered.

Assessment: We have reviewed your response and find it acceptable.

2. The program discusses signs which indicate that voiding is occurring.

Responses: The training program discusses signs of voiding, i.e., an abrupt halt to depressurization and/or large fluctuations in pressurized level. Guidance is also provided for detecting a void if the presence of one is suspected.

Assessment: We have reviewed your response and find it acceptable.

3. The program covers the procedures that prevent and mitigate voiding.

Responses: The training program discusses continuous venting of the reactor vessel head to prevent voiding during a natural circulation cooldown. Void mitigation by repressurization, venting, and reactor coolant pump restart is addressed.

Assessment: We have reviewed your response and find it acceptable.

4. The program discusses the St. Lucie Unit 1 event of June 11, 1980.

Response: Training on the St. Lucie Unit 1 event was conducted in 1980 and 1981 in response to SOER 81-4. Continuous training on this specific event is not conducted, but the lessons learned are addressed in existing lesson plans which cover head voids and natural circulation.

Assessment: Although your training does not specifically mention the St. Lucie Unit 1 event, it does address the lessons learned to prevent and mitigate reactor vessel voiding during natural circulation cooldown. Therefore, we find your response acceptable.

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5. As a part of the training, there is proper simulator modelling of upper head voiding.

Response: The Oconee simulator does not model upper head voiding at this time. A new RCS model which would reproduce reactor vessel head voiding phenomena is being pursued. The simulator does incorporate a reactor vessel high point vent model which allows proper use of the Emergency Operating Procedure for training in natural circulation cooldown.

Assessment: We request that you send us an update on the status of modeling the simulator for reactor vessel upper head voiding. If the simulator has not been modeled yet, please provide a schedule.

Principal Contributor: Helen N. Pastis, PDII-3/DRP-I/II

Dated: