

Follow up to ESBWR DCD RAI 15.0-16 (SLMCPR) Response in MFN 07-071

The staff reviewed the RAI 15.0-16 response and found the response unacceptable. It is our position that the SLMCPR numerical value should be kept as a safety limit in the TS as in the BWR STS. Our position is based on the following:

(1) Allowing the removal of the SLMCPR eliminates regulatory control of core analysis issues and eliminates a mechanism for the staff to apply conditions that might be needed in some situations to ensure safety. The NRC previously considered and rejected the same request (i.e., removal of the SLMCPR from the TS) from BWROG and Exelon (ML043140475 and ML030520480).

(2) Use of TRACG for calculating the OLMCPR is not an appropriate basis for removing the SLMCPR from the TS. In its response, GE referred to the ESBWR TRACG methodology used for the ESBWR OLMCPR calculation. GE states that this process allows for the direct calculation of the Number of Rods Subject to Boiling Transition (NRSBT) for a transient. Since the SLMCPR is not used to calculate the OLMCPR, it is appropriate not to include the SLMCPR as assurance that the SAFDLs are met in TS. The staff disagrees.

The staff does not find use of the TRACG methodology to calculate OLMCPR to be appropriate basis for excluding the SLMCPR from the TS. The NRC has approved the TRACG methodology for calculating OLMCPR in the past for BWR/2-6s, and licensees who currently use the TRACG methodology for calculating OLMCPR are still required to have a SLMCPR TS.

(3) 10 CFR 50.36 c (1) (I) A specifically states, "Safety limits for nuclear reactors are limits upon important process variables that are found to be necessary to reasonably protect the integrity of certain of the physical barriers that guard against the uncontrolled release of radioactivity." The staff has interpreted this section as requiring that the values of the safety limits must remain in a licensee's technical specifications. The revised TS section 2.1.1.2 (Rev.3) proposes to replace the M CPR safety limit values with a description of what the safety limit protects against, i. e. ; " Greater than 99.9% of the fuel rods in the core would be expected avoid boiling transition." The proposed description is a fuel condition and is not an acceptance criterion. The staff does not believe that the proposed change is consistent with the staff's interpretation of section 50.36 c (1) (I) A since it is not a safety limit, but a criterion.