

MNS 2016 NRC Examination Post-Exam Comments

Question 90

After conducting a post-examination review of the 2016 MNS NRC Written Examination and discussion with license applicants, it is the conclusion of the facility that insufficient information was provided in the stem of Question 90. Based on a lack of clarifying information, it is possible to conclude that either B.2 and D.2 OR A.2 and C.2 would be correct.

Since it is not clearly stated in the stem of the question that the "potentially stuck" control rod is misaligned by greater than 12 steps, it is unclear as to whether Tech Spec 3.1.4 (ROD GROUP ALIGNMENT) Condition B applies. If the rod was misaligned by greater than 12 steps, Condition B would apply and Surveillances 3.2.1.1 (FQ(X,Y,Z)) and 3.2.2.1 ($F^N\Delta H(X,Y)$) would have to be performed to ensure that core peaking factors were within limits allowing continued operation. In addition to the surveillance requirements of SR 3.2.1.1 and 3.2.2.1, the requirements of SR 3.1.4.2 (RCCA Movement Test) would also have to be met for continued operation (i.e. that only one inoperable control rod exists).

If the "potentially stuck" control rod is NOT misaligned by greater than 12 steps, then Condition B does NOT apply and Surveillances 3.2.1.1 and 3.2.2.1 would NOT be required. However, continued operation would be allowed provided Shutdown Margin (SDM) requirements were met and the surveillance requirements of SR 3.1.4.2 (RCCA Movement Test) were met for all of the remaining control rods.

If the control rod was misaligned by less than 12 steps and it was due to a blown lift coil fuse, the control rod could be repaired and re-aligned by replacing the blown fuse. However, for continued operation, the operability (trippability) of the repaired control rod would have to be verified. Control rod operability is confirmed by performing Surveillance 3.1.4.2 (RCCA Movement Test).

The facility has therefore concluded that either course of action could potentially occur based on circumstances that are not specified in the stem of the question. The facilities' conclusion is also supported by the fact that 3 of 6 SRO License applicants chose RCCA Movement Test as the correct response.

The facility therefore requests that, for Question 90, both C and D be accepted as a correct answer.