

NRC Comments on 2002 Waterford 3 NRC Written Makeup Exam (31 July 2002)

- Question 17 – Answer listed in key does not match choices listed above.
 - **Resolution: Typo. Corrected answer key to show correct answer.**
- Question 34 – Reference supplied does not support answer.
 - **Resolution: Added other reference to make this clearer. OP-901-110, subsection E2, step 3, requires maintaining Pressurizer Level above the Minimum Level of Operation per Attachment 1, Pressurizer Level vs. Tave Curve. Plant Data Book Section 2.2.1, RCS Temperature Control Bands vs. Power, is used to determine Tref for 95% power. Tavg is maintained by the Pressurizer Tavg Program to match Tref. The student would use this temperature (Tref) for Tavg. Using OP-901-110, Attachment 1, the student should determine that the minimum level for operation at 95% power is approximately 41%. Reworded question to remove initial condition of 100% since this was extraneous to the question.**
- Question 51 – Per reference, answer is true if SGFPs are being supplied with Reheat Steam.
 - **Resolution: Added further reference from System Description for SG Feedpumps. Up until 39% power, steam is supplied to the Feedwater Pumps from the Main Steam System. Above 39% power, steam is supplied by the Moisture Separator/Reheater (MSR) B. During startup, both the LP & HP Stop valves are open. As plant load increases and steam pressure from the B MSR increases, the HP governor will slowly close. The HP governor will be fully closed at 39% power. Since the trip is not active unless the HP Governor valves are open, the question is correct as written. (See Attachment 1, Additional References)**
- Question 61 – Per NUREG guidance, this question's stem is negatively worded.
 - **Resolution: Changed question from determining which answer is false to determining which answer is true.**
- Question 67 – Stem should also require Tavg response. Use similar distractors in answers B & D.
 - **Resolution: Changed stem to require Tavg response. Changed all answers to have same format. Also, changed delta-T power to ΔT power which is the normally used designation.**

NRC Comments on 2002 Waterford 3 NRC Written Makeup Exam (31 July 2002)

Question 68 – UNSAT. No credible distractors.

- **Resolution:** Rewrote question to have student determine what ensures adequate NPSH for the Containment Spray pumps following a LOCA. Also, changed lesson plant objective from #1 to #4 which asks for the interrelation between the Containment Spray System and the Containment/SI Sump. And added objective 18 of lesson plan for LOCA. (see Attachment 1, Additional References).
- Question 69 – K/A number listed is different from K/A number in outline.
 - **Resolution:** Oversight. K/A was changed since question #96 already deals with Containment Pressure. Random selection process generated new K/A number. Updated Justification of K/A Changes document.
- Question 77 – Distractor C appears implausible in that auto closure does not happen unless key operated.
 - **Resolution:** Changed distractor C to state BD-303 closes on Blowdown Radiation Monitor Alert Alarm. Similar to Distractor D for Circ Water Radiation Monitor.
- Question 78 – Reword last statement in stem. “Which of the following is a valid starting sequence for these pumps?”
 - **Resolution:** Reworded last statement as stated.
- Question 79 – References do not support a requirement to test CVAS for failure of Door 170.
 - **Resolution:** Added page 40 of OP-100-014, Technical Specification and Technical Requirements Compliance, as a reference which requires this test.
- Question 88 – Reference provided does not justify the answer.
 - **Resolution:** Changed answer B to having the ability to removing equipment from service which only the SM can do (OP-100-001, section 5.1.3.5k) even if the NPO has Control Room Command function in Mode 5 (OP-100-001, section 5.1.6.1.4d & e). Changed answer A to match answer B terminology. (See Attachment 1, Additional References)

NRC Comments on 2002 Waterford 3 NRC Written Makeup Exam (31 July 2002)

- Question 89 – Really valid if TS 3.0.3 is not provided.
 - **Resolution: Student is required to know TS 3.0.3 from memory and any requirements to use it. TS 3.0.3 is not provided as a reference for this question.**
- Question 92 - UNSAT. Distractors C & D invalid because plant is already in hot standby.
 - **Resolution: Changed all distractors to have plant go to Hot Shutdown. Added contacting NRC to all answers.**
- Question 94 – K/A changed to from 2-3-1 to 2-3-10 without justification.
 - **Resolution: Typo. Corrected K/A number to 2-3-1.**
- Question 95 – Specify that entry is being made by HP tech or by personnel accompanied by HP Tech.
 - **Resolution: Changed question to state a NAO and RP tech entering to check piece of equipment. Changed HP tech to RP tech due to new designation of RP personnel.**