Op Exam Notes Kewaunee 2004

A.1.a ECP calculation

SRO One minor editorial change.

RO Boron concentration in JPM did not match that on status board in the simulator. Updated status board.

- A.1.b QPTR Review
- SRO The values associated with the JPM set up changed slightly with each simulator reset. Adjusted JPM, by removing internal calculations, to take this into account. Changed error in JPM for SRO review from random errors on the document to a transposition error in the upper detector average corrected detector current. This showed the tilt as less than 1.02 when it is actually 1.03. If the SRO fails to detect this error then the error in the tilt will go unidentified and the SRO will be unaware of the TS requirement to reduce power. This added safety significance to the review instead of being a math quiz.
- RO Updated the answer key with the correct numbers for detector current. Removed calculations internal to the JPM. The detector currents may change after reset which would make the calculations wrong. Will use an answer key.
- A.2 Added a line in the initiating cue that the return to service line up needs to be reviewed also. Changed NAC (normal after close) to Off on a breaker control switch tag in the return to service lineup. The licensee was unfamiliar with the term NAC which is a common Exelon term.
- A.3 Licensee stated that RO's would not know radiological area definitions from memory. The JPM was left as is but gave the candidates access to references.
- A.4
- SRO Licensee stated ED would not be expected to verify KI calculations to approve the distribution of KI. Without review of the KI calculation the JPM became only a read and sign. Changed the JPM to be a Classification and fill out the NARS form.
- RO None.
- B.1.a Minor typographical edits.
- B.1.b Changed steps 7 and 8 to a single step that required charging and letdown to be controlled to maintain pzr level vs a requirement that each be set at 80 gpm. This change was based on procedural wording and an interpretation explained by the RO validating the JPM. Dropped the last two steps. Not necessary if the applicant calculates hot shutdown boron calculation.

2/2/2004

- B.1.c Minor editorial change. The caution in the procedure to minimize the time the transformers are in parallel is guidance not a procedural requirement. Therefore the JPM requirement to time the period the transformers were in parallel was removed.
- B.1.d Need to replace JPM. JPM required SW HX isolation. Cues were vague and isolation of HX at the alternate path point or later in the procedure was a judgement call. Poor evaluation tool. Replaced with Pzr pressure control malfunction JPM. Minor edits required.
- B.1.e Clarified that SI will not actuate when depressing pushbuttons. Need note in step 10 that the SI will not reset due to an auto SI initiation that occurs when the PORV is opened. The candidate must wait 90 seconds to reset the SI.
- B.1.f None.
- B.1.g None.
- B.2.a Edit change to "A" S/G Porv. B S/G PORV was not in RCA. This was due to the examiners unfamiliarity of the plant lay out.
- B.2.b Minor wording edits. Asked licensee to provide a digital picture of the inside of the diesel generator output breaker so the candidate can give a better description of how the breaker would be closed locally without having to open the output breaker cubicle. The licensee provided pictures of the inside of the breaker cubicle.
- B.2.c. None.

Scenario 1 Minor edits. Dropped the malfunctioning boron concentration control in event 1 (reactivity change) base on comments by the lead examiner that the event was too busy and nothing was to be gained by this malfunction. Placed an examiner note in event 4 that for plant conditions a turbine trip is required at 5.5" of condenser back pressure. Clarify that charging pump trip should occur when the transition to FRS.1 is made.

Scenario 3 (Will make this scenario 2 since original 2 will be a spare). Event 1 will be kept as a normal for the BOP. Replaced event 2 Loss of Instrument Bus. Too much TS review of Table 3 which was done twice previously. May complicate the identification of the steam leak later on. Replaced with loss of bus 6 with the EDG failing to start. Had to change IC to start at 60 percent power. With a loss of bus 6 the IRPI's go away. At the original higher power level there was a rapid rod change due to transient with no IRPI's the crew was forced to trip the unit. With power at 60 percent this was not a problem. Made this replacement event 4. Moved events 3 and 4 up to 2 and 3. Event 6, S/G tube leak will be left in long enough for the crew to evaluate and quantify the leak and start a rapid power reduction. This will count as the reactivity change. When power has changed significantly then the tube rupture will be entered.