

JPMs

- Control Room JPM 'B' tests a primary heat removal task (SF 4P, not SF 2). Recommend recategorize JPM 'B' as 4P and select a different JPM for JPM 'D'.
- Control Room JPM 'F' – 2nd part of JPM title appears to repeat actions of Scenario #3, Event #5. Ensure JPM and scenario do not test same aspect of evolution.

Scenarios

General

- Recommend same O/S equipment for all scenarios in all 4 scenarios to ensure O/S equipment doesn't cue an event in any of the scenarios.

ESG-1

- delete turnover item, "personnel are in containment investigating elevated RCS leakrate ...". It is unnecessarily leading for a scenario that has a RCS leak, followed by a SBLOCA.

SRO Written

- G 2.1.36 (selected for Tier 1, Group 1) is not in ES-401, Section D.1.b list. Appears to be appropriate test item.
- G 2.4.22 (selected for Tier 1, Group 1) is not in ES-401, Section D.1.b list. Appears to be appropriate test item. Developer checked with Westinghouse point of contact and determined that program default is to select from all generics for SRO Tiers 1 and 2. He plans to deselect or screen generics per guidance in ES-401, Section D.1.b for future exams.
- G 2.4.6 selected twice for the 3 generics in Tier 1, Group 1. Appears to be an appropriate test item since tied to a different system, but should understand if program limits re-use of same generic.
- Some K/As selected for the SRO-only exam have similar or higher importance ratings for ROs and may therefore not lend themselves to development of a suitable SRO-only exam question:
 - 015/017.AA2.10
 - 040.AA2.02

RO Written

- No rejected K/As less than 2.5. Developer explained his PWROG outline generation program is configured to automatically screen out K/As less than 2.5 importance rating.

Changes made to 09-01 Exam based on PREP week NRC comments

ESG-2

Changed from 70% to 85% original power to make runback failure more consequential if manual runback is not initiated. ~4 minutes of inaction before SG NR levels reach manual trip setpoint per CAS. Tied Rod failure to new ET-10 Turbine trip handle and deleted ET-5.

ESG-3

Removed CCW pump trip (TS) at beginning of scenario due to similarity to a JPM. Replaced Component failure and TS call with failure of a containment isolation valve 2VC5 to shut (close PB does not work) when securing from a containment pressure relief. This changes Event 1 on ESD-1 form from a C for CRS/RO to a C for CRS/**PO**. Updated 301-5 Form for SRO-I1,4,5, and RO 1. All total numbers on 301-5 remain above minimum required. Modified verbiage in turnover that 21 CFCU tripped 2 hours ago, not 1 hour ago to prevent any consternation over the start of the pressure relief and the trip of the CFCU at the same time. Added note to CT#2 explaining why there is no time limit for stopping RCPs as there is in AB.RCP, when Phase B and Containment Spray is initiated. Added TS Action times for all TS identified for loss of vital bus.

ESG-4

Added room cooler valve surveillance to lengthen scenario. The out of spec result for 21 RHR pump room cooler requires declaring 21 RHR pump inoperable. Added MS10 failure to give PO additional 301-5 bean. Removed RCS leak (actually a SBLOCA) since similar leak (albeit smaller) is in another scenario. Reordered events, and swapped lo head ECCS and CS failure event numbers. Added Train A SI signal on lo SG d/p to trip Rx and get crew into TRIP-1.

SRO A1-2

Removed redundant "hundred" following "300" in initial conditions.

Changed OP-SA-108-~~114~~-1001 TO 115.

Made key for each of the 3 LCO's.

Modified body of JPM such that acceptable performance is filling out 3 forms, one for each Tech Spec, and identifying the 3 applicable TSAS.

SRO A1-1

Changed cue from "Using the assumption that the Secondary Chemistry conditions do not change, develop a timeline that describes how these conditions will affect Unit 2 operation, starting at 0800 on September 11th."

TO

"Using the assumption that the Secondary Chemistry conditions cannot be corrected, develop a timeline that describes required actions, starting at 0800 on September 11th."

SRO A4-2 (ESG-2)

Changed page 4 reference to "Att. 2" to Att. 3 since its Att. 3 we're using.

SRO A2

Added 5 minutes to JPM→ 2240 vs 2245 start time in cue and in JPM step standards.

Added "Determine if SDM is SAT" to initiating cue to match step in body of JPM.

Modified Note on page 3 to say that all the actual numbers are more conservative than

the errors, and since the procedure has SAT SDM, that because of the conservative numbers SAT SDM can be determined without recalculating SDM, or re-calculation can be performed.

SRO A3

Added 11 and 12 CCHX's are in service to initial conditions. Added in first step to have a blank copy of S1.OP-SO.CW-0001 available if asked for.

Sim a

Removed rod position from initial condition.

Sim b

Changed standard for Step 5.2.4 from "depresses open PB" to "push and hold open PB until open light illuminated." This is a "dog-ear" bezel, and if not held until open it will reclose. Changed termination point to when 21 SI pump is stopped, (5.2.11) instead of 5.2.16 since these steps don't have the operator do anything.

Sim c

No changes

Sim d

No changes

Sim e

Removed rod position from initial condition.

Split out MSLI step in TRIP-1 to separate step to make easier to identify.

Sim f

Placed rod control in manual to keep rods from stepping out due to Tavg change during performance of JPM, (not part of JPM, just have temperature moving in snap). Changed initial conditions to reflect this. Added First Out alarm received when the Group Bus fails to transfer (what gives the indication that a Rx trip is demanded) F-10 and description to page 5.

Sim g

Added step 22.3 to adjust Audio Count Rate Circuit Scale. It was backhandedly already in JPM, as the terminating cue said to terminate the JPM after the Audio Count Rate Circuit Scale was adjusted. Added "from full power" to initial conditions. Added possible cue required and cue to step 19 when candidate is told to adjust steam pressure valve demand to maintain SG pressure at 1005 psig. Actual SG pressures are below 1005 psig. If the candidate got stuck here waiting for SG pressure to rise, the cue will be provided..." **IF** candidate takes additional time to monitor steam pressure (preventing them from continuing to next step) **THEN CUE**: The Crew will continue monitoring steam pressure to ensure it stabilizes at 1005 psig."

Sim h

Modified initial conditions to remove 23 CCW pump C/T to not "clue in" candidate about what is going to happen. Added 23 CCW pump fails to auto start to snap to replace how 23 CCW pump will not run. Added statement in first step block to let Sim operator know that the last CCW pump **MUST** be tripped before the candidate trips the Rx, and

instructs him to remove the time delay remaining if the candidate is going to trip early. Added step that the candidate determines the standby CCW pump did not auto start and attempts to start it manually. Added "cue if required" that if candidate wants to trip the Rx before the remaining CCW pump trips, then they will be cued to dispatch an operator to 23 CCW pump breaker first to see if there is any reason the pump did not start.

IP-i

No changes

IP JPM-J

Changed from Unit 2 to Unit 1.

IP JPM-k

No changes

RO A2

Modified tagging list so that all vents and drains are Seq. #16. Body of JPM states that only one vent or drain is required. Modified tagging sequence so that pump suction valve is tagged after pump discharge valve is tagged. Added note in JPM that states: "The electrical power to a component must be cleared and tagged before that components manual operator is tagged, but may be sequenced within the tagout after other manual valves have been tagged."