LICENSEE/NRC COMMENTS TO THE PROPOSED OPERATING TEST FOR THE QUAD CITIES NUCLEAR POWER STATION INITIAL EXAM - JUNE 2007

Operating Test Comments

Changes to JPMs as a result of Licensee and/or NRC comments after JPM development:

Admin JPM, Conduct of Operations, Recognize Degraded Voltage Conditions, for both RO and SRO: Deleted this JPM since there was no way to limit the candidates Technical Specification review. (Condition chosen resulted in cascading Technical Specifications). Additionally, there was no reviewing or completion of paperwork associated with this JPM. Replaced this JPM with an SRO review of Electrical Distribution Surveillance Test. SRO applicants had to identify abnormal conditions in the completed ST.

Control Room JPM d, Start RCIC and Control Reactor Water Level JPM was replaced since it had the same Safety Function as JPM b, Roll the Main Turbine. Replaced the RCIC JPM with Quarterly Testing of Turbine Stop Valves.

Control Room JPM e, Bypass the Rod Worth Minimizer was replaced since this function was duplicated as subsequent actions during scenario instrument malfunctions. Replaced this JPM with Installation of Jumpers to Bypass Group 1 MSIV Isolation Signal.

In-Plant JPM i, Locally Start-up HPCI System to Control RPV Level was replaced since this task was on the candidates audit exam. Replaced this JPM with JPM to Perform 10-minute to de-energize safety-related bus. (Actions for QCARP's - Fire procedures).

On ALL JPMs:

- Deleted the JPM Validation Checklist page since not used for NRC-generated exam.

On ALL Simulator JPMs:

- Inserted simulator Malfunction codes and IC Setup instructions for all Simulator JPMs.
- Modified cue sheet given to operators since this cue sheet did not match the cue sheet read by the examiners to the candidates.

Control Room Simulator JPM a: Added cue for examiner to time MSIV stroking 'light-to-light' time since surveillance procedure was changed to add this additional timing requirement.

Control Room Simulator JPM b: Roll the Main Turbine. Eliminated cues provided to the candidate regarding turbine vibration since turbine vibration is now displayed on control panels.

Control Room Simulator JPM c: Perform SBGT Surveillance Test with Failure of Heater to De-energize. Reduced the scope of this JPM to shutdown SBGT system with failure of heater to de-energize to reduce run time of this JPM.

Control Room Simulator JPM f: Shutdown the U1 EDG with early trip. Reduced scope of initial conditions to eliminate confusion.

In-Plant JPM k, Shift RBCCW Heat Exchangers: Modified cues to more accurately describe valve position (via rising stem valves), and venting via a sight glass (not a vent line).

Admin JPM 1 (RO), Review Thermal Limits: Changed steps in JPM due to deletion of FDLRX thermal limit and resultant licensee procedure change.

Admin JPM 2 (RO & SRO), Review Overtime Schedule: Added 'Jared' as a individual that would exceed 72 hour requirement.

Admin JPM 3 (RO & SRO), Isolate Safe Shutdown Makeup Pump: Added a critical step for mechanical isolation of system since when working on pump/motor mechanical coupling, if mechanical system was not isolated and d/p was sufficient, pump could spin motor.

Admin JPM 5 (SRO), OPRM Trip, Classify Event: Added completion of a NARS form to ensure candidates was credited for creating 'paper work' for this JPM.

Changes to Scenarios as a result of Licensee and/or NRC comments after development:

SCENARIO 1
Event 3, Fail LPRM Downscale. Changed setup conditions (to increase the number of inoperable LPRMs) to ensure that this was a Tech Spec entry. As written originally, there would be a review of TS but no entry into TS.

Event 4, Fail EHC Pressure Regulator Down Scale. Eliminated this I/C failure for the BOP since crew adjusted turbine pressure regulator set away from limit. When the failure was put in, the resulting condition would not result in an annunciator and the plant would quickly recover without the operators noticing the high pressure transitory condition.

Event 5, RWCU Area Hi Temperature. This event was eliminated since it was not needed to meet crew composition and we could still meet the 'bean count.'

Event 8, Drywell Spray Failure. Eliminated this event as an I/C for all since there were no actions for recovery. Instead, included this as part of the major.

Net effect of incorporating comments for Events 4 and 8 above was to eliminate 1 I/C for the BOP operator (event 5). This should not be a problem due to crew composition, the three crews will see 3 scenarios. So the BOP position will see at least 3 I/C events.

SCENARIO 2
Added items to the initial conditions to make the scenario more realistic. Changed inoperable system from RHRSW to Core Spray system to set up a cascading Tech Spec later in the scenario.

Event 1, Transfer Aux Power. This Normal event was not needed due to crew composition. We still met the minimum number of competencies for each candidate.

Event 4, Feedwater Regulator Lockup. Removed event since it could not be modeled on the simulator. Additionally, this was similar to a JPM.

Event 4 (Rev'd), Unit 1 EDG Lube Oil Leak. This event resulted in entry into different Tech Specs than originally intended due to change in Core Spray system being inoperable.

Event 5, Rod Drift. Removed event and placed in Scenario 3.

Event 6, Recirculation Suction Line Break. Added this event since the previous 'major' (Station Blackout) did not result in getting into emergency operating procedures.

SCENARIO 3

Event 1, Replaced events. Eliminated Swap 3-Element FW control for Start SBGT system since changing 3 element control for FW using a digital system did not produce any change in water level. No challenge to operators.

Event 2, RHRSWP Inoperable. Changed return to service event since this was not realistic. The scenario was not a reasonable place to address return to system operability due to time restraints.

Event 4, Rod Drift. Added to scenario to increase I/C for ATC operator.

Event 5, Loss of Power to Bus 18, Failure of EDG to Start. Added additional items that the BOP operator needs to do to get credit for this event as I/C.

Event 6, Loss of Stator Water Cooling to Main Generator. Added cue of 0.1 umho/cm to prevent crew from tripping unit. This will ensure that the ATC operator will insert control rods. This event takes credit for reactivity event.

Event 7, Main Steam Line Break with Failure of Group 1 to actuate. Changed the steps on the D-2 sheets to reflect actual operator actions taken as observed during onsite validation week.

SCENARIO 4

Event 1, Start 1B Recirc pump. This event was changed to a Normal for the BOP and we added lowering the 1A recirc pump to match 1B speed as the reactivity change.

Event 2, EDG Monthly Test. Changed normal events from EDG Test to Service Water Pump swap since EDG has already been included in previous scenarios. Also, trying to reduce run time for this scenario. Later eliminated SWP swap as a normal and replaced it with starting the recirc pump.

Event 3, OPRM inoperability. Changed this event to effect all OPRMs not just one, so it drives SRO into Tech Specs. Previous loss of EDG Test reduced Tech Spec reviews to one. Also, this event was labeled as I/C for ATC operator. This is no longer applicable for the operator.

Event 4, Rod Drift. This event was slightly modified since the candidates had a rod drift on their audit exam.

Event 6, Trip of B RFP with Failure of Standby RFP to Start. This event was added as an I/C for the ATC operator since a change in Event 3 eliminated actions for ATC operator.

Event 7, Major event. Reduced number of equipment failures during major since it was not a probable event. This event was generated from licensee's exam bank. NRC exams have different requirements for multiple equipment failures. Entries on D-2 sheets for this event were taken from actions observed during crew validation week.