# Palo Verde 2020-11 Draft Operating Test Comments

<u>NOTE</u>: This summary is being provided in lieu of Form 301-7, "Operating Test Review Worksheet," because the licensee's operating test submittal was reviewed and overall deemed SATISFACTORY.

## Generic Scenario Changes

- Added "There are no personnel to Containment" for all scenarios
- Added operator positions for all events

### Scenario 1:

- Driver Setup Added note to place Protected Equipment placard over AFB-P01 and AFN-P01
- Crew Turnover Added that AFB-P01 and AFN-P01 are protected
- Event 1 No changes
- Event 2 Specify CS Header valve number
   Added valve number
- Event 2 Include Appendix C checklist
  - Included checklist
- Event 2 Added LCO 3.7.11 if Essential Filtration fans are stopped
- Event 3 Not a separate component failure
  - Removed event as a separate component failure. Adjusted 301-5 and 301-6
- Event 3 Specify DNBR limit for TS 3.2.4 entry
  - Added the POL indication that the examinee will be looking at
- Event 5 Specify MSIS and CSAS actuation setpoints
  - Added setpoints
- Event 5 Add critical task for securing RCPs
  - o Added critical task
- Event 5 Terminate after entering ESD procedure
  - Updated termination criteria

### Scenario 2:

- Driver Setup Added taking CEDMCS Mode Selector Switch to Auto Sequential. Added note to place Protected Equipment placard over AFB-P01 and AFN-P01
- Crew Turnover Added that AFB-P01 and AFN-P01 are protected. Added the status of MFPs
- Event 1 Specify affected SG
  - Specified affected SG
- Event 1 Proceed to next event once DFWCS alarms reset
  - o Adjusted the point to move to the next event
- Event 2 Added the specific battery charger breaker to the Driver Cue
- Event 3 Actions to take load off the turbine/borate
  - Added an Examiner Note that says that if the crew is slow to stop the boration that they will need to take load off the Main Turbine to raise pressure
- Event 3 Added breaker noun names to Driver Note
- Event 4 No changes

- Event 5 Add TS call 3.1.5 cond A, 3.2.4 A, 3.2.1 A, 3.2.3 A
  - Added all LCOs. Also added note to the Driver to record POL values. Added Examiner Note to ask the CRS to evaluate Tech Specs post scenario.
- Event 5 Removed boration steps since a boration will not be needed
- Event 6 Added driver note for the Attachment 58A performance

# Scenario 3:

- Driver Setup Added note to place Protected Equipment placard over AFB-P01 and AFN-P01
- Crew Turnover Added that AFB-P01 and AFN-P01 are protected
- Event 1 No changes
- Event 2 Specify unaffected channel
  - Specified 100Y
- Event 3 Add applicable RM alarms
  - Added all applicable RM alarms
- Event 3 Specify steps to isolate letdown
  - o Included valves that will isolate letdown
- Event 4 Removed move changing blowdown constants from move on point
- Event 5 Specify procedural source for guidance provided
   Added procedural source for guidance
- Event 6 Add RM alarms expected
  - Added expected RM
    - alarm
  - Event 6 Containment sump, humidity info, sump, temp info
    - Added Containment parameters to expected indications
- Event 6 Determine leak rate steps and add
  - Added appendix for leak rate determination
- Event 6 **TS expand 3.4.14 A** 
  - Expanded TS information
- Event 7 Add note that operator will have to manually start HPSIA
   Added Examiner note
- Event 7 Add SIAS setpoint and time 30 minute clock starts
  - Added setpoint and when time starts
- Event 7 Add when LOCA starts for 30 minute clock on H2 Analyzers
  - $\circ \quad \text{Added start time} \\$
- Event 7 Add additional leak rate from Event 6
  - o Added leak rate

# <u>Scenario 4</u>:

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- Driver setup Added SG feed rate and RCS temperature
- Crew turnover Added detail to the turnover
- Event 1 Added wait time for Driver Cue
- Event 2 Add RCP AOP steps
  - $\circ \quad \text{Added steps} \quad$

- Event 3 Add AFW valve numbers and note that they will close the valves

   Added valve numbers and that the valves will be closed
- Event 3 LCO 3.3.6 need I&C cue fuses blown
  - Added cue
- Event 3 Add table C2 from Appendix C
  - Added appendix
- Event 3 TS 3.6.3 applies
  - Verified with Operations 3.6.3 does not apply and removed from the scenario
- Event 4 Add note to what unaffected channel is expected to be switched to (Tave 2) and volts (4.3v)
  - Added the expected channel and voltage
- Event 4 Add note to specify CEDMCS desired mode of operation (manual sequential)
  - Added note
- Event 4 Auto trigger Event 5 when report made
  - Changed Event 5 initiation to when report to CRS is made
- Event 7 Specify to feed using AFA-P01
- Added

# <u>JPM S1</u>:

- Where does 11 minute time limit come from?
  - The site has an agreement with NERC that says the site will lower Main Turbine load up to 600 MW within 15 minutes of the request. It will take 4 minutes from receiving the phone call from the ECC to get to the step when action is actually taken (start time of the JPM), therefore 11 minutes.

# <u>JPM S-2</u>:

- Where does 5 minute time limit come from?
  - 5 minutes is a Time Critical Action from the time a RAS initiates to ensure that HPSI suction has shifted to the Containment sump and to ensure that RWT Outlet isolation valves have closed.

### <u>JPM S-3</u>:

• Changed validation time to 5 minutes

# <u>JPM S-4</u>:

- Possible to somehow time compress Step 4?
  - o Discussed and determined not to time compress

## <u>JPM S-5</u>:

- In task standard, "FVIW" should be "FWIV."
  - $\circ$  Revised
- Changed step 9 to 'one set', step 12 to 'OR', 13 to 'one set', 18 to 'OR'

## <u>JPM S-6</u>:

- JPM has wrong title (remotely start)?
  - This is not the title of the JPM, this is the task used from our Master Task List
- Where does 5 minute time limit come from?
  - 5 minutes was determined from engineering data that would be a conservative estimate of when damage would occur from reverse motoring a diesel.

## <u>JPM S-7</u>:

• Changed validation time to 7 minutes. Added "another operator will complete procedure" at termination

### <u>JPM P-1</u>:

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# JPM P-2:

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# <u>JPM P-3</u>:

- What method should be used to communicate with local operator in step 6?
  - The cue indicates that the operator will be contacted using a radio

# <u>JPM A-1</u>:

- Initiating cue provides student with specific reference needed to arrive at correct answer. Change to "per Palo Verde administrative procedural requirements."
  - o Changed cue to "per Palo Verde administrative procedural requirements."

## <u>JPM A-2</u>:

- Is providing student with what specific reference is required to evaluate answer necessary?
  - Changed cue to "per plant procedural requirements"
- Change validation time from 5 minutes to 10 minutes?
  - Discussed during Prep Week and determined to keep validation time 5
    minutes

## <u>JPM A-3</u>:

- In initiating cue, change "Per LCO 3.4.12, Pressurizer Vents," to "Per Technical Specifications."
  - Changed cue to "per Technical Specifications"
- Corrected task standard to only include critical steps
- Added handout with Pressurizer Vent drawing

## JPM AS-4:

- Removed 'unisolable' from cue.
- Used 'Auxiliary Operator' for position instead of 'AO'

# <u>JPM A-5</u>:

- Run this first on administration day so all operators have same start time
   Scheduled
- Corrected task standard to only include critical steps
- Add time critical requirement in critical step.