

Facility: Cooper Nuclear Station		Week of Examination: 12/4/00
Examination Level: SRO		Operating Test Number: _____
Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1 Conduct of Operations	Regular Reactor Plant Review	JPM: Generate and review the Official Case following a power increase to 100%. (Will be used in system JPM B1-d (APRM gain adjustment).
	Plant Parameter Verification	JPM: Perform Jet Pump and Recirc Pump Flow Check
A.2 Equipment Control	Tagging and Clearances	JPM: Review a completed surveillance and approve or disapprove K/A: 294001A113 Importance: 4.5/4.3
A.3 Radiation Control	Knowledge of Significant Radiation Hazards	JPM: Identify, located and explain Special Work Permit conditions and limitations
A.4 Emergency Plan	Classify and Determine PAR	JPM: Classify emergency and determine Protective Action Recommendations from initial conditions K/A: 294001A116 Importance: 2.9/4.7

Examiner: _____ **Chief Examiner:** _____

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: GENERATE AND REVIEW THE OFFICIAL CASE FOLLOWING POWER INCREASE

Candidate: _____ Examiner: _____

Pass: _____ Fail: _____ Examiner Signature: _____ Date: _____

Additional Program Information:

****Ensure that two of the three AGAFs are out of Spec. (APRM B, and APRM F)****

1. Appropriate Performance Locations: CR/SIM
2. Appropriate Trainee level: RO/SRO
3. Evaluation Method: __ Simulate __ Perform
4. Performance Time: 15 minutes
5. Importance Rating:
6. NRC K/A:

Directions to Examiner:

1. This JPM evaluates the trainee's ability to generate and review an Official Case (AGAF)
2. If this JPM is performed on the Simulator, only the cues preceded by "#" should be given.
3. Observe the trainee during performance of the JPM for proper use of self-checking methods.
4. All blanks must be filled out with either initials or an "NP" for "not performed"; an explanation may also be written in the space if desired by the examiner.
5. Brief the trainee, place the simulator in run, and tell the trainee to begin.

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General Conditions:

1. Reactor power just increased from 90% to 100%.

General References:

General Tools and Equipment:

1. None

Special Conditions, References, Tools, Equipment:

1. Simulator Setup: See Attachment 1.
2. Critical checks denoted by "*".
3. Simulator cues denoted by "#".

Task Standards:

1. Accurately locate, identify, operate and/or manipulate all component controls required to be utilized to generate and review an Official Case.
2. Accurately locate and identify all instrumentation required to be monitored to generate and review an Official Case.

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: GENERATE AND REVIEW THE OFFICIAL CASE FOLLOWING POWER INCREASE

3. Correctly interpret instrument and system responses and their interrelationships when generating and reviewing an Official Case.

Initiating Cue(s):

The Control Room Supervisor has directed you to generate an Official Case (OD-3) following a 10% power increase to the new reactor power of 100%. Report on any discrepancies.

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: GENERATE AND REVIEW THE OFFICIAL CASE FOLLOWING POWER INCREASE

ATTACHMENT 1

SIMULATOR SET-UP

A. Materials Required

None

B. Initialize the Simulator in IC_____

Ensure that two of the three AGAFs are out of Spec. (APRM B, and APRM F)

C. Change the simulator conditions as follows:

1. Triggers

None

2. Malfunctions

None

3. Remotes

None

4. Overrides

None

5. Panel Setup

Note: If this JPM is to be performed more than once, snap the simulator into IC-0 after the panel setup is complete.

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: GENERATE AND REVIEW THE OFFICIAL CASE FOLLOWING POWER INCREASE

ATTACHMENT 2

Directions to Candidate:

When I tell you to begin, you are to generate and review an Official Case. Before you start, I will state the general plant conditions, the Initiating Cues and answer any questions you may have.

When simulating, physically point to any meters, gauges, recorders and controls you would be using. State the position of controls as you would have manipulated them to generate and review an Official Case.. During performance, state the actions you are taking, e.g.: repositioning controls and observing instrumentation.

General Conditions:

1. Reactor power just increased from 90% to 100%.

Initiating Cues:

The Control Room Supervisor has directed you to generate an Official Case (OD-3) following a 10% power increase to the new reactor power of 100%. Report on any discrepancies.

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: GENERATE AND REVIEW THE OFFICIAL CASE FOLLOWING POWER INCREASE

ATTACHMENT 3

This Page May Be Given To The Candidate

Directions to Candidate:

When I tell you to begin, you are to generate and review an Official Case. Before you start, I will state the general plant conditions, the Initiating Cues and answer any questions you may have.

When simulating, physically point to any meters, gauges, recorders and controls you would be using. State the position of controls as you would have manipulated them to generate and review an Official Case. During performance, state the actions you are taking, e.g.: repositioning controls and observing instrumentation.

General Conditions:

1. Reactor power just increased from 90% to 100%.

Initiating Cues:

The Control Room Supervisor has directed you to generate an Official Case (OD-3) following a 10% power increase to the new reactor power of 100%. Report on any discrepancies.

JOB PERFORMANCE MEASURE FOR OPERATIONS

Task Title: PERFORM JET PUMP OPERABILITY CHECK

Candidate: _____ Examiner: _____

Pass: _____ Fail: _____ Examiner Signature: _____ Date: _____

Additional Program Information:

****Performed NOT Faulted****

1. Appropriate Performance Locations: CR/SIM
2. Appropriate Trainee Level: RO/SRO
3. Evaluation Method: _____ Simulate _____ Perform
4. Performance Time: 18 minutes
5. Importance Rating: 3.25
6. NRC K/A 202001 K1.06 3.6/3.6

Directions to Examiner:

1. This JPM evaluates the trainee's ability to perform the daily Jet Pump and Recirc Pump Flow Check of the Daily Tech Specs Surveillance Log.
2. If this JPM is performed on the Simulator, only cues preceded by "#" should be given.
3. Observe the trainee during performance of the JPM for proper use of self-checking methods.
4. All blanks must be filled out with either initials or an "NP" for "not performed"; an explanation may also be written in the space if desired by the examiner.
5. Brief the trainee, place the simulator in run, and tell the trainee to begin.

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General Conditions:

1. The plant is operating at rated power with DEH in Mode 4.
2. Both Reactor Recirculation pumps are operating in individual manual control with pump flows balanced.

General References:

1. Procedure 6.LOG.601

General Tools and Equipment:

1. Calculator.
2. Jet pump operability curves.

JOB PERFORMANCE MEASURE FOR OPERATIONS

Task Title: PERFORM JET PUMP OPERABILITY CHECK

Special Conditions, References, Tools, Equipment:

1. Simulator Setup: See Attachment 1.
2. Critical checks denoted by "*".
3. Simulator cues denoted by "#".

Task Standards:

1. Accurately locate, identify, operate and/or manipulate all component controls required to be utilized to perform the daily Jet Pump and Recirc Pump Flow Check.
2. Accurately locate and identify all instrumentation required to be monitored to perform the daily Jet Pump and Recirc Pump Flow Check.
3. Correctly interpret instrument and system responses and their interrelationships when performing the daily Jet Pump and Recirc Pump Flow Check.

Initiating Cue(s):

The Control Room Supervisor directs you to perform the daily Jet Pump and Recirc Pump Flow Check as part of the routine shift activities. Notify the CRS when the task is complete.

NOTE: Place the Simulator in RUN and tell the trainee to begin..

JOB PERFORMANCE MEASURE FOR OPERATIONS

Task Title: PERFORM JET PUMP OPERABILITY CHECK

Performance Checklist		Standards	Initials
1.	Record indicated core flow	Record Core flow from Recorder NBI-DPR/FR-95. CUE: Core Flow = 71.5.	_____*
2.	Record RR pump flow	Record RR pump flow from RR-FR-163 for Pumps A & B. CUE: Pump A = 46.5; Pump B =46.	_____*
3.	Record RRMG Set speed	Record RRMG Set speed from the following: a. RRFC-SIC-16A for RRMG A b. RRFC-SIC-16B for RRMG B CUE: RRMG A = 98; RRMG B = 97.	_____*
4.	Record Jet Pump Flow	Record Jet Pump Flow from the following: a. NBI-FI-92A for LOOP A b. NBI-FI-92B for LOOP B CUE: LOOP A = 36; LOOP B = 35	_____*
5.	Record Jet Pump Differential Pressure	Record differential pressures from individual jet pump instruments NBI-FI-78A through NBI-FI-78Z on Panel 9-38 in control room. CUE: 1 = 44 8 = 43 15 = 49 2 = 44 9 = 44 16 = 48 3 = 43 10 = 46 17 = 42 4 = 41 11 = 43 18 = 43 5 = 48 12 = 44 19 = 45 6 = 47 13 = 42 20 = 44 7 = 43 14 = 43	_____*
6.	Record B and A Average	Add JP #1 through 10 and divide by 10 for LOOP B, then add JP #11 through 20 and divide by 10 for LOOP A. CUE: Average 44.3 for LOOP B and 44.3 for LOOP A.	_____*

Note: Curves are contained in the binder labeled "Cooper Nuclear Station Jet Pump Operability Graphs and Instability Noise Level Data" in the Control Room.

JOB PERFORMANCE MEASURE FOR OPERATIONS

Task Title: PERFORM JET PUMP OPERABILITY CHECK

Performance Checklist	Standards	Initials
7. Verify RR pump flow and RRMG set speed within limits.	Determine that the values recorded in Items B and C are within the limits of the curve for Check 1.	_____*
8. Verify JP flow and RRMG set speed within limits.	Determine that the values recorded in Items C and D are within the limits of the curve for Check 2.	_____*
9. Jet Pump Δp differs by $\leq 20\%$ from established patterns.	Determine that Jet Pump Δp differs by $\leq 20\%$ from established patterns. (Check 3).	_____*
10. Verify check 1 and 2 SAT or check 3 SAT.	Verify check 1 and 2 SAT or check 3 SAT.	_____*
11. Inform the CRS that the task is complete.	Inform Control Room Supervisor that the daily Jet Pump and Recirc Pump Flow Check is Complete. #CUE: The CRS Acknowledges the report. This JPM is complete.	_____

JOB PERFORMANCE MEASURE FOR OPERATIONS

Task Title: PERFORM JET PUMP OPERABILITY CHECK

ATTACHMENT 1

SIMULATOR SET-UP

A. Materials Required

None

B. Initialize the Simulator in IC-18.

Batch File Name - none.

C. Change the simulator conditions as follows:

1. Triggers

None

2. Malfunctions

None

3. Remotes

None

4. Overrides

◆ ZAONBIF192B to 31

5. Panel Setup

None

D. Place the Simulator in RUN to allow conditions to stabilize.

Note: If this JPM is to be performed more than once, snap the simulator into IC-0 after the panel setup is complete.

JOB PERFORMANCE MEASURE FOR OPERATIONS

Task Title: PERFORM JET PUMP OPERABILITY CHECK

ATTACHMENT 2

Directions to Candidate:

When I tell you to begin, you are to perform the daily Jet Pump and Recirc Pump Flow Check. Before you start, I will state the general plant conditions, the initiating cues and answer any questions you may have.

When simulating, physically point to any meters, gauges, recorders and controls you would be using. State the position of controls as you would have manipulated them to perform the daily Jet Pump and Recirc Pump Flow Check. During performance, state the actions you are taking, e.g.: repositioning controls and observing instrumentation.

General Conditions:

1. The plant is operating at rated power with DEH in Mode 4.
2. Both Reactor Recirculation pumps are operating in individual manual control with pump flows balanced.

Initiating Cues:

The Control Room Supervisor directs you to perform the daily Jet Pump and Recirc Pump Flow Check as part of the routine shift activities. Notify the CRS when the task is complete.

JOB PERFORMANCE MEASURE FOR OPERATIONS

Task Title: PERFORM JET PUMP OPERABILITY CHECK

ATTACHMENT 3

This Page May Be Given To The Candidate

Directions to Candidate:

When I tell you to begin, you are to perform the daily Jet Pump and Recirc Pump Flow Check. Before you start, I will state the general plant conditions, the initiating cues and answer any questions you may have.

When simulating, physically point to any meters, gauges, recorders and controls you would be using. State the position of controls as you would have manipulated them to perform the daily Jet Pump and Recirc Pump Flow Check. During performance, state the actions you are taking, e.g.: repositioning controls and observing instrumentation.

General Conditions:

1. The plant is operating at rated power with DEH in Mode 4.
2. Both Reactor Recirculation pumps are operating in individual manual control with pump flows balanced.

Initiating Cues:

The Control Room Supervisor directs you to perform the daily Jet Pump and Recirc Pump Flow Check as part of the routine shift activities. Notify the CRS when the task is complete.

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: REVIEW OF SURVEILLANCE OF LLS REACTOR PRESSURE PERMISSIVE CHANNEL

Candidate: _____ Examiner: _____

Pass: _____ Fail: _____ Examiner Signature: _____ Date: _____

Additional Program Information:

**** Provide candidate with procedure 6.1LLS.301 completed through Attachment #1****

1. Appropriate Performance Locations: CR/SIM
2. Appropriate Trainee Level: RO/SRO
3. Evaluation Method: _____ Simulate _____ Perform
4. Performance Time: 20 minutes
5. Importance Rating:
6. NRC K/A:

Directions to Examiner:

1. This JPM evaluates the trainee's ability to review tagout of sparger pump 1D.
2. If this JPM is performed on the Simulator, only cues preceded by "#" should be given.
3. Observe the trainee during performance of the JPM for proper use of self-checking methods.
4. All blanks must be filled out with either initials or an "NP" for "not performed"; an explanation may also be written in the space if desired by the examiner.
5. Brief the trainee, place the simulator in run, and tell the trainee to begin.

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General Conditions:

1. The plant is operating at 100% power

General References:

1. Surveillance Procedure 6.1LLS.301

General Tools and Equipment:

Special Conditions, References, Tools, Equipment:

Task Standards:

1. Accurately Review and Approve a completed surveillance

Initiating Cue(s):

Please review and approve or disapprove the attached completed surveillance of the LSS reactor pressure permissive channel. .

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: REVIEW OF SURVEILLANCE OF LLS REACTOR PRESSURE PERMISSIVE CHANNEL

Performance Checklist	Standards	Initials
1.	<input type="checkbox"/> Candidate will review the completed document, including recorded data, discrepancy sheets, and sign off and review sheets if the acceptance criteria has be satisfied	_____*
2.	<input type="checkbox"/> Acceptance criteria 4.6 of the procedure has not been met. NBI-PS-51B a left trip setpoint is outside the calibration tolerance of 882 to 892 psig	_____*
3.	<input type="checkbox"/> Candidate will determine that NBI-PS-51B is inoperable	_____*

Comments:

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: REVIEW OF SURVEILLANCE OF LLS REACTOR PRESSURE PERMISSIVE CHANNEL

ATTACHMENT 1

General Conditions:

1. The plant is operating at 100% power

Initiating Cue(s):

Please review and approve or disapprove the attached completed surveillance of the LSS reactor pressure permissive channel.

JOB PERFORMANCE MEASURE FOR OPERATIONS

Task Title: REVIEW TAGOUT OF SPARGER PUMP 1D

ATTACHMENT 2

This Page May Be Given To The Candidate

General Conditions:

1. The plant is operating at 100% power

Initiating Cue(s):

Please review and approve or disapprove the attached completed surveillance of the LSS reactor pressure permissive channel. .

JOB PERFORMANCE MEASURE FOR OPERATIONS

=====
Task Title: Tour of Condenser-Q Sump Check//SWP Areas of Turbine Generator Building
=====

Trainee: _____ Examiner: _____

Pass: _____ Fail: _____ Examiner Signature: _____ Date: _____

Additional Program Information:

1. Appropriate Performance Locations: Plant
2. Appropriate Trainee Levels: SO/RO/SRO
3. Evaluation Method: **Simulate**
4. Performance Time: 15 minutes
5. Importance Factor 3.5
6. NRC K/A

Directions to Candidate:

When I tell you to begin, you are to conduct a tour of the condenser to investigate the Condenser pump-Q HI level alarm. Before you start, I will state the general plant conditions, the Initiating Cues, and answer any questions you may have.

When simulating, physically point to any meters, gauges, recorders, and controls you would be using. State the position of controls as you would have manipulated them to conduct a tour of the condenser to investigate the Condenser pump-Q HI level alarm.

=====
General Conditions:

1. Reactor is at 100% power
2. HI/Hi alarms on the Q-sump in the turbine generator building basement

General References:

1. SWP 2001-1009 Operator rounds in the Turbine Building SWP areas

General Tools and Equipment:

Special Conditions, References, Tools, Equipment:

1. Critical checks denoted by "*".

Task Standards:

1. Accurately locate, identify, operate and/or manipulate all component controls required to conduct alternate rod insertion by venting the scram air header.
2. Accurately locate and identify all instrumentation required to be monitored to conduct alternate rod insertion by venting the scram air header.
3. Correctly interpret instrument and system responses and their interrelationships when conducting alternate rod insertion by venting the scram air header.

JOB PERFORMANCE MEASURE FOR OPERATIONS

=====
Task Title: Tour of Condenser-Q Sump Check//SWP Areas of Turbine Generator Building
=====

Initiating Cues:

You have been assigned to investigate the Q-sump in the turbine generator building basement (Condenser Area) for possible causes for the Hi/Hi alarms.

When simulating, physically point to any meters, gauges, recorders, and controls you would be using. Please verbalize actions, or requirements necessary to conduct the Q-sump investigation.

JOB PERFORMANCE MEASURE FOR OPERATIONS

=====
Task Title: Tour of Condenser-Q Sump Check//SWP Areas of Turbine Generator Building
 =====

Performance Checklist	Standard	Initials
1. Identify that area is a High Rad Area	Identify that the Turbine Generator Building Basement (Condenser Area) is a High Radiation Area and that signing in on a SWP (Special Work Permit) is necessary.	_____*
2.	Obtain SWP 2001-1009 "Operator rounds in the turbine building" and verbally review the Radiation levels and DRD alarm setpoints of 25mR dose and 1200mR Rate	_____*
3.	Review the worker instructions and notice that the area in which the sump resides is in a LOCKED high radiation area	_____*
4.	Should also obtain and review the survey sheets for the area and point out where the Q-sump pump is located	_____

ATTACHMENT 1

General Conditions:

1. Reactor is at 100% power
2. Hi/Hi alarms on the Q-sump in the turbine generator building basement

Initiating Cues:

You have been assigned to investigate the Q-sump in the turbine generator building basement (Condenser Area) for possible causes for the Hi/Hi alarms.

When simulating, physically point to any meters, gauges, recorders, and controls you would be using. Please verbalize actions, or requirements necessary to conduct the Q-sump investigation.

ATTACHMENT 2

General Conditions:

1. Reactor is at 100% power
2. Hi/Hi alarms on the Q-sump in the turbine generator building basement

Initiating Cues:

You have been assigned to investigate the Q-sump in the turbine generator building basement (Condenser Area) for possible causes for the Hi/Hi alarms.

When simulating, physically point to any meters, gauges, recorders, and controls you would be using. Please verbalize actions, or requirements necessary to conduct the Q-sump investigation.

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: EMERGENCY CLASSIFICATION/ PAR

Candidate: _____ Examiner: _____

Score: ____ Pass ____ Fail ____ Examiner Signature: _____ Date: _____

Additional Program Information:

1. Appropriate Performance Locations: Classroom/Simulator
2. Appropriate Trainee Levels: SRO
3. Evaluation Method: __ Simulate __ Perform
4. Performance Time: 10 minutes
5. Importance Factor: 4.13
6. NRC K/A: 295017 AA2.02(3.5), AA2.03(4.6)

Directions to Examiner:

1. This JPM evaluates the trainee's ability to make a PAR Recommendation.
2. The examiner is to obtain the "JPM Comment Form" (Attachment C of ODG 206) prior to administering the JPM.
3. Observe the trainee during performance of the JPM for proper use of self-checking methods.
4. All blanks must be filled out with either initials or an "NP" for "not performed"; an explanation may also be written in the space if desired by the examiner.
5. Brief the trainee, and tell the trainee to begin.

Directions to Candidate:

When I tell you to begin, you are to use the provided Notification Report from procedure 5.7.6 to complete the following task.

General Conditions:

1. The plant is shutdown (all control rods are in) due to a LOCA
2. South SDV ruptured
3. RPV Level is -10" FZ corrected
4. Reactor is in a LOCA condition

General References:

1. Procedure 5.7.1, EAL Matrix
2. Procedure 5.7.6, Attachment 1

General Tools and Equipment:

1. None

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: EMERGENCY CLASSIFICATION/ PAR

Special Conditions, References, Tools, Equipment:

1. Critical checks denoted by "**".
2. Needs control room type of computer for meteorological data

Task Standards:

1. Correctly complete Attachment 1 of procedure 5.7.6 (Notification Report)

Initiating Cue(s):

1. The plant is shutdown (all control rods are in) due to a LOCA
2. South SDV ruptured
3. RPV Level is -10" FZ corrected
4. Reactor is in a LOCA condition

You are to complete Attachment 1 of procedure (Initial report, sections 1-5)

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: EMERGENCY CLASSIFICATION/ PAR

Performance Checklist	Standards	Initials
1. Event Classification	<input type="checkbox"/> Classify event as a general emergency due to the Reactor Vessel Water level below 0" FZ and Loss of SDV (South side)	_____*
2. Obtain Meteorological Conditions	<input type="checkbox"/> Obtain correct met data via the process computer Wind Speed =5mph Dind Direction= 180°	_____*
3. Determine no release	<input type="checkbox"/> Determine that there is no radiological release	_____*
4. PAR	<input type="checkbox"/> 0-2 miles; evacuate all sectors <input type="checkbox"/> 2-5 miles; evacuate sectors R,A,B; Indoors all other sectors <input type="checkbox"/> 5-10 miles; All sectors go inside	_____*

ADMINISTRATIVE JPM FOR OPERATIONS

Task Title: EMERGENCY CLASSIFICATION/ PAR

ATTACHMENT 1

General Conditions:

1. The plant is shutdown (all control rods are in) due to a LOCA
2. South SDV ruptured
3. RPV Level is -10" FZ corrected
4. Reactor is in a LOCA condition

Initiating Cue(s):

You are to complete Attachment 1 of procedure 5.7.6 (Notification Report: Initial report, sections 1-5)

ATTACHMENT 2

This Page May Be Given To The Candidate

General Conditions:

1. The plant is shutdown (all control rods are in) due to a LOCA
2. South SDV ruptured
3. RPV Level is -10" FZ corrected
4. Reactor is in a LOCA condition

Initiating Cue(s):

You are to complete Attachment 1 of procedure 5.7.6 (Notification Report: Initial report, sections 1-5)