

CLINTON POWER STATION

Job Performance Measure

Perform Containment Hydrogen Purge per 4411.06

JPM Number: 4411.0607

Revision Number: 00

Date: 07/30/2003

Developed By: T. Pickley 7/30/03

Instructor Date

Validated By: M. Griffin 10/17/03

SME or Instructor Date

Review By: <u>P. Ryan</u> <u>8/18/03</u>

Operations Representative Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE:	E: All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 through 11 below.		
	1.	Task description and number, JPM description identified.	on and number are
	2.	Knowledge and Abilities (K/A) references are	included.
	3.	Performance location specified. (in-plant, corsimulator)	trol room, or
·	4.	Initial setup conditions are identified.	
	5.	Initiating and terminating cues are properly identified.	
6. Task standards identified and verified by SME review.			E review.
	7.	Critical steps meet the criteria for critical step with an asterisk (*).	s and are identified
	8.	Verify the procedure referenced by this JPM current revision of that procedure: Procedure Rev Date	matches the most
	9.	Pilot test the JPM: a. verify cues both verbal and visual are free b. ensure performance time is accurate.	of conflict, and
	10	If the JPM cannot be performed as written wiresponses, then revise the JPM.	th proper
	11	. When JPM is revalidated, SME or Instructor scover page.	sign and date JPM
	SM	E/Instructor	Date
	SM	E/Instructor	Date
	SM	E/Instructor	Date

<u>JPM NUMBER: 4411.0607</u> <u>REVISION: 00</u>

Revision Record (Summary)

1. **Revision 00** New JPM

JPM NUMBER: 4411.0607	REVISION: 00
Operator's Name:	
Job Title: NLO RO SRO	STA 📮
JPM Title: Perform Containment Hydrogen Purge pe	er 4411.06
JPM Number: <u>4411.0607</u> Revision Number: <u>00</u> Task Number and Title: <u>441106.07</u> , Complete Control Room actions <u>HYDROGEN PURGE</u>	to perform CNMT
Suggested Testing Environment: Plant	
Actual Testing Environment: ■ Simulator □ Control Room	Plant 🖵
Testing Method: □ Simulate Faulted: □ No Alternate Path: □ Yes	
Time Critical: ☐ No	
Estimated Time to Complete: <u>10</u> minutes Actual Time Used:	minutes
References: CPS No. 4411.06	
EVALUATION SUMMARY: Were all the Critical Elements performed satisfactorily? Y	es 🗆 No
The operator's performance was evaluated against the standards contained has been determined to be: Satisfactory Unsat	
Comments:	
	_
Evaluator's Name:	
Evaluator's Signature:	Date:

<u>JPM NUMBER: 4411.0607</u> <u>REVISION: 00</u>

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

- 1. Initialize to any IC that will allow operation of the Standby Gas Treatment System.
- 2. Start both Hydrogen Mixing Compressors.
- 3. Verify that Containment pressure is less than 2.6 psig.
- 4. Remove tags from valves 1VR002A, 1VR002B, 1VQ006A, and 1VQ006B.
- 5. Override the control switch for 1VG01YA to prevent the damper from opening.
- 6. Shutdown CCP.
- 7. Start the Hydrogen Igniters.

TASK STANDARDS:

Containment Hydrogen Purge is initiated in accordance with CPS No. 4411.06, EMERGENCY CONTAINMENT VENTING, PURGING, AND VACUUM RELIEF.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL REFERENCES:

CPS No. 4411.06, EMERGENCY CONTAINMENT VENTING, PURGING, AND VACUUM RELIEF

JPM NUMBER: 4411.0607 REVISION: 00

EVALUATOR INSTRUCTIONS:

Amplifying cues may be provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

An emergency condition exists. Primary Containment hydrogen concentration is 1%. You are directed to vent and purge the Primary Containment using CPS No. 4411.06, EMERGENCY CONTAINMENT VENTING, PURGING, AND VACUUM RELIEF, Section 2.8, Containment Hydrogen Purge. No other sections of CPS No. 4411.06 have been performed. The necessary clearance tags have been emergency released. Transient annunciators are in effect.

VG Train A is the prefered train		
START TIME:		

<u>JPM NUMBER: 4411.0607</u> <u>REVISION: 00</u>

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLD** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of this JPM.

1 1

	PERFORMANCE STEPS		
2.8.1	VERIFY CNMT PRESSURE < 2.6 PSIG BY HI CNMT PRESS WHITE INDICATING LIGHT (ABOVE 1VG01YA/B P801 SWITCH) BEING OFF.		
STANDARD:	HI CNMT PRESS white light OFF		
COMMENTS:	 Examinee should also verify that Containment and Drywell temperatures are less than 212°F per the CAUTION at beginning of section. Hydrogen concentration is 1% as stated in Initiating Cue. 		
	SATUNSATComments Number		
2.8.2	IF Section 2.2, Vent Using Hydrogen Purge Supply Path was performed,		
	THEN Reinstall relays.		
STANDARD:	Recall from initiating cue that section 2.2 was not performed.		
COMMENTS:			
	SATUNSATComments Number		

<u>JPM NUMBER: 4411.0607</u> <u>REVISION: 00</u>

*2.8.3			ES FOR BOTH 1VG02YA & B, SGTS DMPRS TO THE CLOSE POSITION.
STANDARD:	Key lock switches placed/verified in CLOSE position and Green Lights ON		
COMMENTS:		YA(B) will indicate shut on to CLOSE to satisfy con	with control switch in AUTO, switch must ditions for the Flowpath.
	SAT	UNSAT	Comments Number
2.8.4	Verify f a) b) c) d)	1VG04YA & B, SGT 1VG05YA & B, SGT	S Trn A(B) Fuel Bldg Isol Dmprs. S Trn A(B) Pmp Rms Suct Dmprs. S Trn A(B) Fuel Bldg Suct Dmprs. S Trn A(B) ECCS Rms Suct Dmprs.
STANDARD:		ghts ON for 1VG02YA & YA & B.	& B, 1VG04YA & B, 1VG05YA & B, and
COMMENTS:			
	SAT	UNSAT	Comments Number

JPM NUMBER: 4411.0607 **REVISION: 00** *2.8.5 OPEN BOTH 1VQ006A AND B, CNMT BLDG EXH OUTBD (INBD) ISOL BYP VLVS STANDARD: Red lights ON for 1VQ006A and 1VQ006B COMMENTS: SAT UNSAT Comments Number 2.8.6 START SGTS TRN A EXH FAN, 0VG02CA. Red light ON for 0VG02CA. STANDARD: OVG02CA will not have a flowpath until the next step is performed. COMMENTS: SAT UNSAT Comments Number 2.8.7 PLACE CONTROL SWITCH FOR 1VG01YA, SGTS TRN A DW PRG ISOL DMPR TO PURGE. STANDARD: Determines that 1VG01YA did not open COMMENTS: If asked as CRS for directions, give direction to take the actions that would be performed.

SAT _____ UNSAT ____ Comments Number

JPM NUMBER:	4411.0607 <u>REVISION: 00</u>		
	STOP SGTS TRN A EXH FAN, 0VG02CA.		
STANDARD:	Green light ON for 0VG02CA.		
COMMENTS:			
	SAT UNSAT Comments Number		
*2.8.6	START SGTS TRN B EXH FAN, 0VG02CB.		
STANDARD:	Red light ON for 0VG02CB.		
COMMENTS:	OVG02CB will not have a flowpath until the next step is performed.		
	SATUNSATComments Number		
*2.8.7	PLACE CONTROL SWITCH FOR 1VG01YB, SGTS TRN B DW PRO ISOL DMPR TO PURGE.		
STANDARD:	Red light ON for 1VG01YB		
COMMENTS:			
	SATUNSATComments Number		

REVISION: 00

2.8.8 Start both Hydrogen Mixing Units per CPS No. 3316.01, CONTAINMENT COMBUSTIBLE GAS CONTROL (HG). STANDARD: Verifies that both Hydrogen Mixing Units are running. COMMENTS: Mixing compressors were started as part of initial setup. CPS 3316.01 refers operation of mixing compressors to CPS No. 4411.11, EOP HYDROGEN CONTROL SUPPORT ACTIONS. SAT _____ UNSAT ____ Comments Number_ * 2.8.9 WHEN CNMT PRESSURE IS APPROXIMATELY 0 PSIG THEN OPEN BOTH 1VR002A AND B, CNMT BLDG SPLY **OUTBD (INBD) ISOL BYP VLVS**

STANDARD: Red lights ON for 1VR002A and 1VR002B

JPM NUMBER: 4411.0607

COMMENTS: CUE: If containment pressure is > 0 psig then inform the examinee that

pressure is approximately 0 psig.

SAT UNSAT Comments Number

<u>JPM NUMBER: 4411.0607</u> <u>REVISION: 00</u>

TERMINATING CUES:

Containment Hydrogen Purge has been initiated.

K/A REFERENCE NUMBERS

		IMPORTAN	IMPORTANCE RATING	
K/A SYSTEM NUMBER	K/A NUMBER	RO	SRO	
223001	A 2.04	3.7	3.8	

<u>JPM NUMBER: 4411.0607</u> <u>REVISION: 00</u>

INITIAL CONDITIONS AND INITIATING CUE:

An emergency condition exists. Primary Containment hydrogen concentration is 1%. You are directed to vent and purge the Primary Containment using CPS No. 4411.06, EMERGENCY CONTAINMENT VENTING, PURGING, AND VACUUM RELIEF, Section 2.8, Containment Hydrogen Purge. No other sections of CPS No. 4411.06 have been performed.

Use VG Train A