

LICENSED OPERATOR JOB PERFORMANCE MEASURE

Title: Restore from a Loss of Line 5

Revision: 0

Task Number: 2000350501

TIF 3.71

Performer: _____ (RO/SRO)

Observer: _____ (RO/SRO)

Evaluator: _____

Directions to operators:

For the performance of this JPM I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task I will provide you with the initial conditions and answer any questions. During task performance I will identify the steps to be simulated, or discussed and provide cues as necessary.

Evaluation Method: _____ Perform _____ Simulate

Evaluation Location: _____ Plant _____ Simulator _____

Expected Completion Time: _____ Time Critical Task: No

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Sat/Unsat Questions: # Asked _____ # Correct _____

Evaluators Signature: _____ Date: _____

NOTE: A JPM overall rating of unsat shall be given if any critical step is graded as unsat. Any grade of unsat requires a comment.

Comments:

Approvals:

[Signature]
Supervisor Operations Training
MASTER
[Signature]
Supervisor Operations
CONTROLLED

EXAM REQ 2/174

02-REQ-SJE200-2-29 May 1991
DOCUMENT



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Recommended Start Location: (Completion time based on this start location)

Control Room/Simulator

References:

1. N2-OP-70, Rev. 2, 9/90, "Station Electrical Feed and 115 KV", Section H.2-H.5

Tools and Equipment:

None

Task Standard:

Restore 115 KV power to Reserve "A" transformer and close 4160V supplies to emergency SWGR by cross-tying 115 KV power, without operating a 115 KV motor disconnect under load or trip any distribution breakers or otherwise potentially damage plant equipment.

Initial Conditions:

1. Line 5 lost, verified by power control to be a switchyard fault.
2. (Instructor to ask for questions)

Initiating Cues:

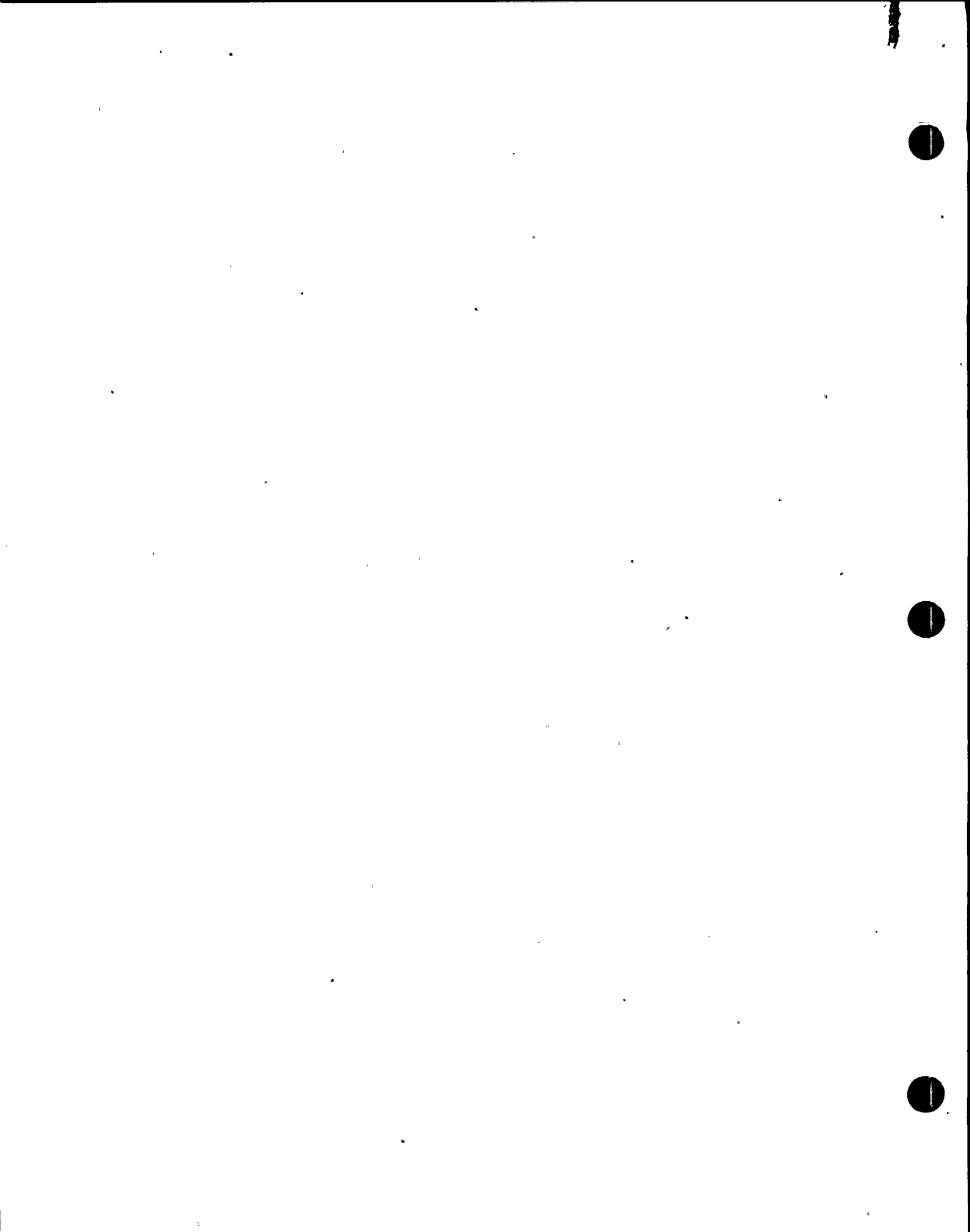
"(Operator's name), cross tie 115 KV power and re-energize reserve A, NNS-SWG 16 and NNS-SWG 18."

NOTE: Critical steps are denoted by a *. All steps are sequence critical unless denoted by a +.

Performance

<u>Steps</u>	<u>Standard</u>	<u>Sat/Unsat</u>
1. Provide repeat back of initiating cue. (Cue: Acknowledge repeat back providing correction if necessary.)	Proper communication used for repeat back.	Sat/Unsat

Record Time Start



Performance Steps	Standard	Sat/Unsat
2. Obtain copy of reference and review.	Reference obtained and reviewed.	Sat/Unsat
+*3. Open MDS 3	At P852 MDS 3 control switch rotated counterclockwise to the open position. (Green light ON, Red light OFF).	Sat/Unsat
+*4. Open MDS 5	At P852 MDS 5 control switch rotated counterclockwise to the open position. (Green light ON, Red light OFF).	Sat/Unsat
*5. Open MDS 1	At P852 MDS 1 control switch rotated clockwise to the open position. (Green light ON, Red light OFF).	Sat/Unsat
*6. Close MDS 20	At P852 MDS 20 control switch rotated counter clockwise to the close position. (Red light ON, Green light OFF).	Sat/Unsat
+*7. Close MDS 3	At P852 MDS 3 control switch rotated clockwise to the close position. (Red light ON, Green light OFF).	Sat/Unsat



Performance Steps	Standard	Sat/Unsat
*8. Reset lockout 16-2	At P852 lockout 16-2 rotated clockwise to the reset position.	Sat/Unsat
*9. Close breaker 16-2	At P852 breaker 16-2 control switch rotated clockwise to the close position. (Red light ON, Green light OFF).	Sat/Unsat
+*10. Close MDS 5	At P852 MDS 5 control switch rotated clockwise to the close position. (Red light ON, Green light OFF).	Sat/Unsat
*11. Reset lockout 18-2	At P852 lockout 18-2 rotated clockwise to the reset position.	Sat/Unsat
*12. Close breaker 18-2	At P852 breaker 18-2 control switch rotated clockwise to the close position. (Red light ON, Green light OFF).	Sat/Unsat

Terminating Cue: 115 KV power cross connected, power restored to Reserve A and Aux. Boiler with 4160 V breakers closed.

RECORD TIME STOP



QUESTION NUMBER: 02-REQ-SJE-200-2-29-J01

TASK NUMBER: 2000350501

K/A RATING: 262001 K4.0

Recual TIF: 3.71

QUESTION:

IF LINE 6 HAD BEEN LOST INSTEAD OF LINE 5, DESCRIBE THE 115KV DISTRIBUTION MANIPULATIONS INCLUDING SEQUENCE NECESSARY TO PLACE BOTH RESERVE'S ON LINE 5.

ANSWER:

1. OPEN MDS 4
2. OPEN MDS 2
3. CLOSE MDS 20
4. CLOSE MDS 4

COMMENTS:

3A7 / UNSAT

REFERENCES:

12-09-70, REV. 2, 9/90, "STATION ELECTRICAL FEED & 115KV", SEC. H.2-H.5
02-REQ-001-262-2-01, "NORMAL AC", EO-3



QUESTION NUMBER: 02-REQ-SJE-200-2-29-J02

TASK NUMBER: 2000350501
K/A RATING: 25200' K4.05 3.6
Reduced TIF: 3.7'

QUESTION:

WITH DISCONNECT SWITCH MDS-10 CLOSED, WHAT IS THE BASES FOR REQUIRING MDS-3 AND MDS-5 BE OPENED PRIOR TO OPENING DISCONNECT SWITCH MDS-17

ANSWER:

115KV DISCONNECT SWITCHES SHOULD NOT BE OPERATED UNDER LOAD.

COMMENTS:

SAT / UNSAT

REFERENCES:

02-OP-70, REV. 2.9/90, "STATION ELECTRIC FEED & 115KV", Sec. F Note 3
02-REQ-001-262-2-01, "NORMAL AC", EO-3



QUESTION NUMBER: 02-REQ-SJE-200-2-29-J03

TASK NUMBER: 2000350501

K/A RATING: 262001 K1.C

Requar TIF: 3.71

QUESTION:

IF A TURBINE TRIP WERE TO IMMEDIATELY FOLLOW A LOSS OF LINE 5, DESCRIBE THE SWG-001 AND SWG-003 SUPPLY BREAKER RESPONSE.

ANSWER:

- 1.ACB 1-3 AND 3-14 WILL OPEN ON TURBINE TRIP.
 - 2.ACB 1-1 IS LOCKED OUT AND WILL NOT CLOSE.(RESERVE A UNDERVOLTAGE)
 - 3.ACB 3-1 WILL AUTO CLOSE WHEN 3-14 OPENS.(FAST TRANSFER)
- (ACB 1-16 AND 3-16 CUBICLE ONLY, RACKED OUT AND IN P-T-L)

(INFO IN PARANTHESIS NOT REQUIRED)

COMMENTS:

SAT / UNSAT

REFERENCES:

- N2-OP-68, REV.1, 9/89, "345KV AND MN. GENERATOR", SECTION 1.9
- N2-OP-70, REV.2, 9/90, "STATION ELEC. FEED & 115KV", SECTION 1.16
- 02-REQ-001-262-2-01. "NORMAL AC", EO-3



QUESTION NUMBER: 02-REQ-SJE-200-2-29-J04

TASK NUMBER: 2000350501

K/A RATING: 262001 K3.C

Request TIF: 3.71

QUESTION:

WHY SHOULD SERVICE WATER FLOW BE ESTABLISHED THROUGH RHR B HX FOLLOWING A LOSS OF LINE 5 ?

ANSWER:

TO PREVENT THE DIVISION TWO SWP'S FROM TRIPPING ON LOW FLOW.

↑
Pumps

COMMENTS:

SAT / UNSAT

REFERENCES:

N2-OP-11, REV. 4, 7/89, "SERVICE WATER", SECTION 4.5-CAUTION
02-REQ-001-276-2-00, "SERVICE WATER", EO-1



QUESTION NUMBER: 02-REQ-SJE-200-2-29-J05

TASK NUMBER: 200035050

K/A RATING: 262001 G.5

Required TIF: 3.71

QUESTION:

(SRO ONLY) CONCURRENT WITH A LOSS OF LINE 5 THE VOLTAGE REGULATOR FOR EDG*1 FAILS. THE ELECTRIC PLANT IS THEN POWERED FROM LINE 6 AND THE MAIN GENERATOR. IF IT IS DETERMINED THAT THE DIESEL GENERATOR'S REPAIRS WILL TAKE AT LEAST 7 DAYS AND LINE 5 WILL BE OUT FOR A MINIMUM OF 48 HOURS, DESCRIBE THE PLANT STATUS CHANGES INCLUDING CONDITIONS AND TIMETABLE, THAT WOULD BE CALLED FOR BASED ON ELECTRIC PLANT OPERABILITIES.

ANSWER:

BE IN AT LEAST HOT SHUTDOWN WITHIN 12 HOURS AND COLD SHUTDOWN WITHIN THE FOLLOWING 24 HOURS.

COMMENTS:

SAT / UNSAT

REFERENCES:

TECHNICAL SPEC.S, 3.2.1.1, "AC SOURCES-OPERATING"
02-REQ-CC-262-2-C, "NORMAL AC", EO-6

