

NUCLEAR PLANT MAINTENANCE WORK ORDER

**NORMS**

(1 OF 3)

1. CONTROL NO. 29001021 01 2. DATE 04/06/90 3. **DOCKETED** 4. SYSTEM LIST  
 5. MPL/TAG NO. LIST USNRC 5A. REPAIR TAG  
 6. PROB/ WORK PERFORM FOLLOWING P M  
 REQ. PM

95 SEP -8 P4:04

CONT.

OFFICE OF SECRETARY  
DOCKETING & SERVICE

RT # P100413 ESD 04/06/90 DD 04/13/90 LED 04/20/90  
 7. INITIATOR SYS 626 8. SUPRV SYS LOC LIST  
 9. MWO CLASS N EQP CLASS LIST 10. UNIT STAT N 11. FIRE PROTECT N  
 12. DCR N 13. NCR/DR N 14. TYPE MAINT P 15. DURATION 4.0  
 16. CRAFT MECH (EST/ACT) ELFC (EST/ACT) I&C (EST/ACT) CONT (EST/ACT) HP/OT (EST/ACT)  
 CREW 0 0 2 1.0 0 0  
 HRS. 8.0 70/12  
 EXP. 0 0 0 0  
 SCHED BEG                                
 SCHED END                                
 RESP FOREMAN                                
 17. CLR N 18. WELD PERM NA RWP PERM N  
 19. QC HOLD PTS 20. PROC NA  
 QC REVIEWED BY NA 754 4-6-90 21. PRI 0 22. LCO N106  
 23. WORK SEE ATTACHED CHECKLIST(S).  
 INST. Maintain zone IV cleanliness. 754 4-6-90

CONT.

Check Dewpoint with E696 DewAlls & record data

24. INITIATE REVIEW  
 OPS DATE 4/6/90 MNT MHG DATE 4/6/90 25. SPEC REV REQ N  
 HP DATE 4/6/90 ENG RM DATE 4/6/90 SIG      26. MWO RELEASE FOR WORK  
 27. ACT DATE 4/6/90 DATE 9/6/90  
 WORK R. Owen White 4-6-90  
 PERFORMED Checked the Condensing unit on 2240364002 coil and  
2240364002 coil as per PM checklist 5660166 The dew  
point readings were not taken at this time.  
Maintained zone IV cleanliness 4-6-90 Ruby 27 Aug 4612 4/6/90

CONT.

See continuation sheet

HIST SUM  
 28. MTRL REQD NA  
 29. PERSON PERFORMING WORK (NAME) DATE 30. MAINTENANCE FOREMAN DATE  
Paul Sallard 4/12/90 Philip Verbaag 4/13/90  
 31. INSPECTION PERFORMED BY 4/12/90 DATE  
 32. METHOD OF P.T. Now Required Due to Type of work performed  
 33. PROCEDURE # NA 34. PERFORMED BY WT 35. DATE 4/13/90  
 36. PROVES OPERABILITY NA 37. METHOD USED TO PROVE OPERABILITY NA  
 38. SATISFY/UNSATISFY NA 39. IF UNSAT. CORR. ACTION NA  
 40. UNIT STATUS AT TIME OF FAILURE N 41. TYPE FAIL NA 42. MODE OF FAIL NA  
 43. CAUSE OF FAILURE N 44. DETECT BY AT 45. EFFECT ON SYS NA  
 46. EFF ON PLANT N 47. MWO STAT D NA 48. CAUSE NA 49. CORR ACT. NA  
 50. NEW MWO NA 51. OPER. ACCEPT BY R. Owen White DATE 4/13/90  
 52. OSOS APPROVAL NA  
 53. SPEC REV COMP NA DATE      54. MEET. # NA DATE       
 55. CLOSE OUT APPROVAL BY QC      DATE 4/13/90

B 4/13/90

NUCLEAR REGULATORY COMMISSION

Docket No. 50-424 & 425-01-3 EXHIBIT NO. 1-57 **APC**

In the matter of De Tovar / Votie

- Staff  Applicant  Intervenor  Other  
 Identified  Received  Rejected Reporter W L W  
Date 8-22-95 Witness BRINCY

NUCLEAR PLANT MAINTENANCE WORK ORDER (CONTINUED)

(2 OF 3)

CONTROL NO. 29001021 01

MPL/TAG NO.	SYSTEM	EQP	CLS	DESCRIPTION	LOCATION
22403G4002K01	2403	626		D G AIR START AIR DRYER	2DB1-
22403G4002K02	2403	626		D G AIR START AIR DRYER	2DB1-

NUCLEAR PLANT MAINTENANCE WORK ORDER (CONTINUED)

(3 OF 3)

CONTROL NO. 29001021 01

MPL/TAG NO.	SCL NO.	CLS	FREQ	LAST DATE PERFORMED	NEXT DUE DATE
22403G4002K01	SCL00166	C	1-MO	04/02/90	05/02/90
22403G4002K02	SCL00166	C	1-MO	04/02/90	05/02/90

Nuclear Plant Maintenance Work Order Continuation Sheet

①

MPL No. \_\_\_\_\_

MWO No. 29001021

Work Description Block 27:

Checked dewpoints with 3 different units;

B tra. K01: ① .61 @ 75° = +5°F = 75°F DP with Alnor 7200

VP2466 cal due 4.7.90

② .37 @ 77° = -55°F = -10°F DP with Alnor 7000

GE rental ser# 24901

③ 16.1 = 25°F DP with EG&G VP1114 cal due 8.3.90

K02: ① .61 @ 74°F = 10°F = 80°F DP with Alnor 7200

VP2466 cal due 4.7.90.

② .41 @ 75° = -45°F = 10°F DP with Alnor 7000

GE rental ser# 24901

③ 14.8 = 20°F DP with EG&G VP1114 cal due 8.3.90

Maintained zone 4 cleanliness. 2900 4.7.90.

Checked dewpoints again with 2 different EG&G 911 DewAlls

Diesel Gen 2B with FS3529 & VP1114

K01 39.5°F 33.7°F

K02 44.6°F 44.4°F

~~Diesel Gen 2A with FS3529 & VP1114~~

~~K01 61.4°F 60.9°F~~

~~K02 <sup>2x4810</sup> 44.39.7°F 43.9°F~~

VP1114 cal due 8.3.90

FS3529 cal due 10.25.90

Maintained zone 4 cleanliness 7/2 4.8.90.

FS3529 IS A PIECE OF BORROWED TEST EQUIPMENT

THAT WAS USED FOR INFORMATION ONLY. IT HAS

NO OFFICIAL SITE CAL. B. J. / M. J. 4.8.90



Nuclear Plant Maintenance Work Order Continuation Sheet

(2)

MPL No.

MWO No. 29001021

Work Description

Block 26) WR Sppt 4/10/90

BLK 27 CONT: CHECKED DEW POINT AT DEVEL GEN 2B

VP1114 DAE 8-3-90 | FS 3539 (NO SITE OIL)

K01 — 39.0°F | 2.4°C (36.3°F)

K02 — 43.2°F | 4.6°C (40.3°F)

TEST EQUIPMENT WAS ALLOWED TO STABILIZE FOR 30 MINS. TEST EQUIP REMOVED; MAINTAINED POWER IV CLEANLINESS. EBS 4-10-90

NOTE: EXH FANS HAVE RUN FOR ENTIRE TEST TIME. EBS 4-10-90

EQUIPMENT MAINTENANCE CHECKLIST

MWO-NUMBER 29001021	CHECKLIST SCLO0166	CLASS C	FREQUENCY 001-MO	PAGE 1 OF 2
TAG NUMBER 22403G4002K02	REFERENCE MATERIAL			

MAINTENANCE REQUIREMENTS AND SPECIAL INSTRUCTIONS	SKILL AND INITIALS
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DIESEL GENERATOR AIR START DRYER MAINTENANCE  
(COMMITMENT 15423, 15068 AND 14831)

CLEAN CONDENSING UNIT (IEN: 87-028)

1. STOP FAN MOTOR.
2. CLEAN CONDENSING UNIT.

NOTE

COMPRESSED AIR OR A VACUUM CLEANER MAY BE USED TO CLEAN THE CONDENSING UNIT.

3. START FAN MOTOR.
4. MEASURE DEW POINT AND RECORD IN BLOCK 27 OF MWO.
  - A. USE ALNOR DEW POINT ANALYZER.
  - B. CONNECT ALNOR THROUGH A PRESSURE REGULATOR, THEN TO THE PRESSURE INDICATOR ON THE RECEIVER.
  - C. ADJUST PRESSURE TO APPROXIMATELY 80 PSIG.
  - D. USE ALNOR INSTRUCTION MANUAL FOR OPERATION OF EQUIPMENT. *R.H. WYRE 1149 SLD 4.6.70*
  - E. CONVERT READING TAKEN FROM THE ALNOR TO OPERATING PRESSURE PER CHART IN ALNOR INSTRUCTION MANUAL.

SKILL AND INITIALS

IJC / BL

IJC / BL

IJC / BL

IJC / BL

EQUIPMENT MAINTENANCE CHECKLIST CONTINUATION

MWO-NUMBER 29001021	CHECKLIST SCL00166	CLASS C	FREQUENCY 001-MO	PAGE 2 OF 2
TAG NUMBER 22403G4002K02	REFERENCE MATERIAL			

MAINTENANCE REQUIREMENTS AND SPECIAL INSTRUCTIONS	SKILL AND INITIALS
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NOTE

ACCEPTABLE READING ARE BETWEEN 32 DEGREES FAHRENHEIT AND 50 DEGREES FAHRENHEIT.

WORKING COPY	
MISSION COMPLETION SIGNATURE	
<i>[Handwritten Signature]</i>	
DATE	
<i>[Handwritten Date]</i>	



EQUIPMENT MAINTENANCE CHECKLIST

MWO-NUMBER 29001021	CHECKLIST SCL00166	CLASS C	FREQUENCY 001-MO	PAGE 1 OF 2
TAG NUMBER 22403G4002K01	REFERENCE MATERIAL			

MAINTENANCE REQUIREMENTS AND SPECIAL INSTRUCTIONS	SKILL AND INITIALS
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DIESEL GENERATOR AIR START DRYER MAINTENANCE  
(COMMITMENT 15423, 15068 AND 14831)

CLEAN CONDENSING UNIT (IEN: 87-028)

1. STOP FAN MOTOR.

JWC / JWC

2. CLEAN CONDENSING UNIT.

JWC / JWC

NOTE

COMPRESSED AIR OR A VACUUM CLEANER MAY BE USED TO CLEAN THE CONDENSING UNIT.

3. START FAN MOTOR.

JWC / JWC

4. MEASURE DEW POINT AND RECORD IN BLOCK 27 OF MWO.

JWC / JWC

A. USE ALNOR DEW POINT ANALYZER.

B. CONNECT ALNOR THROUGH A PRESSURE REGULATOR, THEN TO THE PRESSURE INDICATOR ON THE RECEIVER.

C. ADJUST PRESSURE TO APPROXIMATELY 80 PSIG.

D. USE ALNOR INSTRUCTION MANUAL FOR OPERATION OF EQUIPMENT. *Ref Vol 1117 July 1990*

E. CONVERT READING TAKEN FROM THE ALNOR TO OPERATING PRESSURE PER CHART IN ALNOR INSTRUCTION MANUAL.

MAINTENANCE ENGINEER/SUPV. APPROVAL R H WYRE  
LAST MINOR CHANGE DATE 05/20/89

REV. 00  
08/19/88

EQUIPMENT MAINTENANCE CHECKLIST CONTINUATION

MWO-NUMBER 29001021	CHECKLIST SCL00166	CLASS C	FREQUENCY 001-MO	PAGE 2 OF 2
TAG NUMBER 22403G4002K01		REFERENCE MATERIAL		

MAINTENANCE REQUIREMENTS AND SPECIAL INSTRUCTIONS

SKILL AND INITIALS

NOTE

ACCEPTABLE READING ARE BETWEEN 32 DEGREES FAHRENHEIT AND 50 DEGREES FAHRENHEIT.

*Don't Defog 4.6.00*

VEGP FIRE PROTECTION CHECKLIST

1. MWO NO. 2001021 2. MPL/TAG NO. 224036902001 224036902002  
3. LOCATION 111111 111111 111111

4. WILL THE WORK INSTALL, IMPAIR, MODIFY, ISOLATE, DEFEAT, OR REMOVE ANY OF THE FOLLOWING? IF THE ANSWER IS "YES" CHECK THE BOX, AND INDICATE APPROPRIATE DETAILS.

- ( ) SPRINKLER SYSTEM \_\_\_\_\_
- ( ) INTERIOR HOSE STATION \_\_\_\_\_
- ( ) HALON SYSTEM \_\_\_\_\_
- ( ) DETECTION SYSTEM \_\_\_\_\_
- ( ) EMERGENCY LIGHTING SYSTEM \_\_\_\_\_
- ( ) PERMANENT COMBUSTIBLES (CABLE, WOOD, PLASTIC, ETC.) \_\_\_\_\_
- ( ) STRUCTURAL STEEL, OR RACEWAY FIREPROOFING \_\_\_\_\_
- ( ) FIRE SUPPRESSION SUPPLY SYSTEM (PUMPS, TANKS, ETC.) \_\_\_\_\_
- ( ) CONDUIT SEALS OR EQUIPMENT ENCLOSURE (CABINET HOUSING) \_\_\_\_\_
- ( ) FIRE EXTINGUISHER \_\_\_\_\_
- ( ) COMMUNICATIONS SYSTEM \_\_\_\_\_
- ( ) RCP OIL COLLECTION SYSTEM \_\_\_\_\_
- ( ) SEISMIC STANDPIPE SYSTEM \_\_\_\_\_

5. WILL THE WORK DEFEAT, MODIFY OR IMPAIR ANY OF THE FOLLOWING FIRE SEPARATION FEATURES? IF THE ANSWER IS "YES" CHECK THE BOX, AND INDICATE APPROPRIATE DETAILS.

- ( ) A. FIRE AREA BOUNDARY (WALL, ETC.) \_\_\_\_\_
- ( ) B. PASSIVE AREA BOUNDARY PENETRATION SEAL ASSEMBLY.
  - PENETRATION SEAL \_\_\_\_\_
  - WALL BLOCKOUT \_\_\_\_\_
  - FLOOR PLUG OR HATCH \_\_\_\_\_
  - CABLE TRAY OR CONDUIT TRAP \_\_\_\_\_
  - RADIANT ENERGY SHIELD \_\_\_\_\_
- ( ) C. ACTIVE FIRE AREA BOUNDARY PENETRATION SEAL.
  - FIRE DOOR \_\_\_\_\_
  - FIRE DAMPER \_\_\_\_\_

6. IF ALL THE ANSWERS IN BLOCKS 4 and 5 ARE "NO", STOP THE EVALUATION HERE, AND ENTER "NO" IN BLOCK 11 OF THE MWO FORM. IF ANY QUESTIONS WERE ANSWERED "YES", ENTER "YES" IN BLOCK 11 OF THE MWO FORM.

EVALUATOR [Signature] DATE 4-1-80

POST WORK REVIEW (COMPLETE "A", "B", OR "C" BELOW)

- (A) THE CONDITION IMPACTING THE FIRE PROTECTION COMPONENTS LISTED ABOVE HAS BEEN REMOVED. FPE \_\_\_\_\_ DATE \_\_\_\_\_
- (B) THE FIRE PROTECTION COMPONENT IS STILL IMPAIRED. FPE \_\_\_\_\_ DATE \_\_\_\_\_
- (C) RESTORATION OF THE IMPAIRMENT HAS BEEN TRANSFERRED (Ref: \_\_\_\_\_) AND THE FIRE PROTECTION LCO LOG HAS BEEN CHANGED TO REFERENCE THE NEW MWO FOR THIS IMPAIRMENT. FPE \_\_\_\_\_ DATE \_\_\_\_\_

FIGURE 1