ULD

1 UNIT MASTER OPERATION AND INDICATION

ULD 1.3 IS HIGH LOAD LIMIT IN EFFECT PER UL 6.11? — YES / NO

ULD 1.4 IS UNIT MASTER IN CONTROL PER ULD 8.3 ? — YES / NO

ULD 2.1 IS ULD TIEBACK IN EFFECT PER ULD 7.2? — NO / YES

ULD 2.2 TRANSFER UNIT LOAD UL 9.5 TO TRACK MEASURED UNIT LOAD MWg
RESET UL 8.6

ULD 2.3 IS UNIT LOAD DEMAND SUBSYSTEM IN THE TRACKING MODE PER ULD 11.6 ? — YES / NO

ULD 2.4 IS TIEBACK INITIATED PER ULD 7.2 ? — YES / NO

ULD 3.1 START 15 SEC. TIMER (62/ULD-1)
REF.: ULD 22.6

ULD 3.2 TRANSFER UNIT LOAD UL 9.5 TO TRACK OUTPUT OF UL 9.10
RESET UL 8.6

ULD 3.3 IS LOW LOAD LIMIT IN EFFECT PER UL 14.16 — YES / NO

ULD 4.1 IS TIMER ULD3.1 TIMED OUT? — NO / YES

ULD 4.5 MAP ALARM "ICS" IN TRACK (86X/T-ULD)

ULD 5.1 IS UNIT LOAD DEMAND IN TRACKING MODE PER ULD 11.6 ? — YES / NO

ULD 6.1 IS HIGH LOAD LIMIT IN EFFECT PER UL 6.11? — YES / NO

ULD 7.1 IS LOW LOAD LIMIT IN EFFECT PER ULD 19.5 — YES / NO

ULD 7.2 ULD TIEBACK UL 8.6 IN EFFECT
RESET UL 8.6

ULD 8.3 TRANSFER UNIT LOAD DEMAND UL 9.5 FOR CONTROL

2 TRACKING MODE INITIATION

ULD 1.7 IS UNIT UNDER CROSS LIMITS PER ICD3.3? — YES / NO

ULD 2.7 IS STM GEN/REACTOR MASTER IC9.15 IN MANUAL? — YES / NO

ULD 3.7 ARE BOTH LOOP A & B F.W. MASTERS IN MANUAL PER FW 13.8 & FW 13.12 — YES / NO

ULD 4.7 IS DIAMOND ROD CONTROL IN MANUAL PER RCD 6.4 — YES / NO

ULD 5.7 IS REACTOR TRIPPED? (DIAMOND FIG. 9-7 SH. 1)
REF.: ICD 11.3 & ULD 30.2 — YES / NO

ULD 6.7 IS REACTOR MASTER IN MANUAL PER RC15.13? — YES / NO

ULD 8.7 ARE BOTH GENERATOR BREAKERS TRIPPED? (DWG. 229--081 & 082) — YES / NO

3 ULD CONTROL STATION TRANSFER TO MANUAL

ULD 10.2 S ULD CONTROL STATION IN AUTOMATIC? — NO / YES

(SEE BAILEY METER DWG. D553854 (13) FOR STAR LOGIC RELATED TO INTEGRATED MASTER)

ULD 11.2 DOES CTP INPUT FROM PPC CONTAIN ALL ZEROS? — YES / NO

ULD 12.2 DOES CTP INPUT FROM PPC EXCEED 102% PER UL 11.2? — YES / NO

ULD 13.2 DOES CTP ERROR EXCEED THE NOMINAL ±0.7% CPT ERROR LIMIT 3 CONSECUTIVE TIMES — YES / NO

ULD 13.3 TRANSFER ULD CONTROL STATION TO MANUAL

(U)

ULD 15.2 IS A NON-VALID CTP INPUT RECEIVED 3 CONSECUTIVE TIMES (90 SECONDS) ? — YES / NO

ULD 16.2 DO 3 CONSECUTIVE CHECK SUMS FAIL? — YES / NO

ULD 17.2 ARE 7 CONSECUTIVE INPUTS IDENTICAL ? — NO / YES

5 RC PUMP FAILURE

ULD 9.4 ARE ALL 4 REACTOR COOLANT PUMPS RUNNING? — YES / NO

ULD 9.5 TRANSFER UL 8.3 TO UL 8.1

ULD 10.4 ARE ANY 3 REACTOR COOLANT PUMPS RUNNING? — YES / NO

ULD 10.5 TRANSFER UL 8.3 TO UL 8.1

ULD 11.4 ARE ANY 2 REACTOR COOLANT PUMPS RUNNING? — YES / NO

ULD 11.5 TRANSFER UL 8.3 TO UL 8.1

ULD 12.4 TRANSFER UL 8.3 TO UL 2.1

ULD 10.6 BLOCK MW CALIBRATING INTRGRAL C 7.9 BLOCK REQUIRED
REF.: ICD 2.5

ULD 10.7 IS TURBINE CONTROL STATION ON MANUAL PER ICD 6.3 ? — YES / NO

ULD 11.6 TRANSFER UNIT TO TRACKING MODE
REF.: ICD 11.6 & 15.6, ULD 2.3,11.6,17.3 & 21.5

ULD 11.7 RELEASE UNIT FROM TRACKING MODE

ULD 12.6 TRANSFER UL9.7 TO MEASURED UNIT LOAD (MWg)

ULD 12.7 TRANSFER UNIT LOAD DEVAND UL 9.7 TO OUTPUT OF UL 9.5

4 LOAD LIMIT OPERATION

ULD 16.4 IS UNIT LOAD DEMAND < LOW LOAD LIMIT PER UL14.16? — NO / YES

ULD 16.5 IS ULD < LOW LOAD LIMIT MEMORIZED PER ULD 18.4? — YES / NO

ULD 16.6 IS HIGH LOAD LIMIT IN EFFECT PER UL6.11? — NO / YES

ULD 16.7 TRANSFER UL9.8 TO UL9.7 OUTPUT

ULD 17.3 IS UNIT LOAD DEMAND SUBSYSTEM IN THE TRACKING MODE PER ULD11.6? — NO / YES

ULD 17.4 IS HIGH LOAD LIMIT IN EFFECT PER UL 6.11 ? — NO / YES

ULD 17.5 IS ULD < LOW LOAD LIMIT PER UL 14.16 ? — NO / YES

ULD 17.6 INDICATE HIGH LOAD LIMIT

ULD 18.4 ULD< LOW LOAD LIMIT
RESET TO UL 11.8 LOW LOAD LIMIT

ULD 18.5 TRANSFER UL 9.8 TO UL 11.8 OUTPUT

ULD 18.6 TRANSFER UL9.8 TO TO UL6.8 OUTPUT

ULD 19.5 LOW LOAD LIMT IN EFFECT
REF.: ULD 7.1 & 21.6

ULD 20.5 INDICATE LOW LOAD LIMIT

REFERENCE DWGS.:

UNIT LOAD DEMAND DEVELOPMENT ANALOG LOGIC DWG, D553729
UNIT LOAD DEMAND DEVELOPMENT DIGITAL LOGIC PART 2

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BAILEY METER COMPANY WICKLIFFE, OHIO

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PLANT: 3 MILE ISLAND NUCLEAR STATION
CONTRACTING ENG.: GILBER ASSOCIATES, INC.
B.M.CO. JOB NO.: 1501 CUST. ORDER NO.: A298627,620-0005

UNIT LOAD DEMAND DEVELOPMENT
DIGITAL LOGIC, PART 1
B&W NUCLEAR STEAM SUPPLY SYSTEM (NSSS)

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