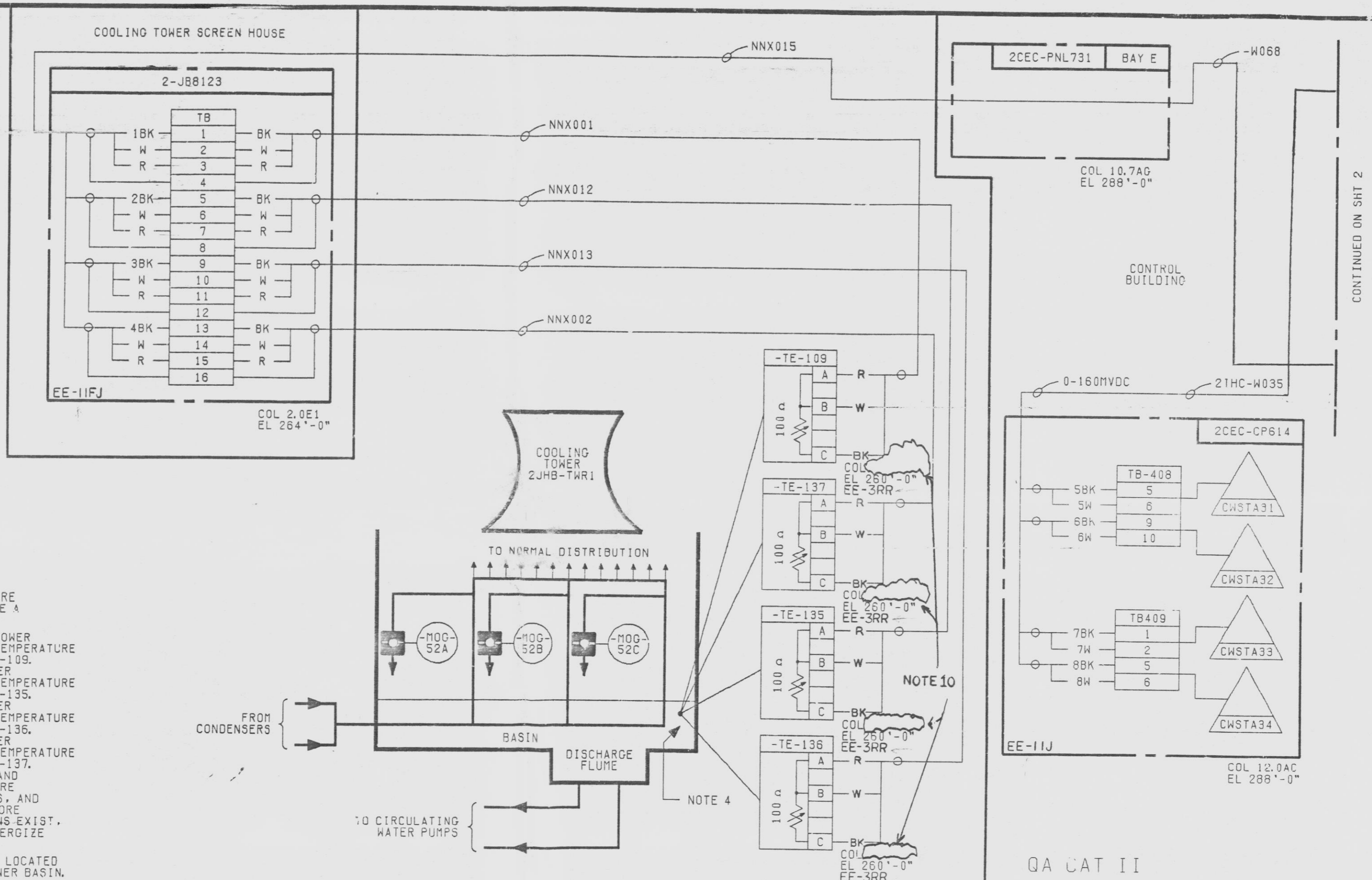


REFERENCES:

- EE-11FJ
- EE-3N
- EE-4BA
- EE-4BH
- 2CWS-109
- 2CWS-135
- 2CWS-136
- 2CWS-137
- ESK-2-10
- ESK-7CWS01
- ESK-6CWS09
- ESK-6CWS10
- ESK-101HA403
- LSK-2-11E
- 0007.159-451-410
- 0007.159-451-411
- 0007.159-451-412
- 0007.159-451-413
- EE-3RR
- 0007.159-451-409

NOTES:

1. FOR TEST PURPOSES ONLY-NOT TO BE USED FOR CONSTRUCTION.
2. ALL INSTRUMENT AND EQUIPMENT NUMBERS ARE TO BE PREFIXED WITH "2CWS" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN.
3. LOOP ACTION: TE-109 MONITORS COOLING TOWER BASIN WATER TEMPERATURE AND PROVIDES TEMPERATURE SIGNALS TO TSL-109 AND COMPUTER VIA TT-109. TE-135 MONITORS COOLING TOWER BASIN WATER TEMPERATURE AND PROVIDES TEMPERATURE SIGNALS TO TSL-135 AND COMPUTER VIA TT-135. TE-136 MONITORS COOLING TOWER BASIN WATER TEMPERATURE AND PROVIDES TEMPERATURE SIGNALS TO TSL-136 AND COMPUTER VIA TT-136. TE-137 MONITORS COOLING TOWER BASIN WATER TEMPERATURE AND PROVIDES TEMPERATURE SIGNALS TO TSL-137 AND COMPUTER VIA TT-137. TSL-109, TSL-135, TSL-136, AND TSL-137 ACTUATE ON LOW WATER TEMPERATURE ACTUATING TSLX-109, TSLX-135, TSLX-136, AND TSLX-137 RESPECTIVELY. AND WHEN 2 OR MORE SIMULTANEOUS LOW TEMPERATURE CONDITIONS EXIST, OPEN MOG-52A, MOG-52B, MOG-52C, AND ENERGIZE COMPUTER AND ANNUNCIATOR ALARMS.
4. TE-109, TE-135, TE-136, AND TE-137 ARE LOCATED AT 90° INTERVALS AROUND THE COOLING TOWER BASIN.
5. NORMALLY OPEN (NO) CONTACTS OPEN ON LOW TEMPERATURE. NORMALLY CLOSED (NC) CONTACTS CLOSE ON LOW TEMPERATURE.
6. 23X-2CWS02 ENERGIZES WHEN TWO OR MORE SIMULTANEOUS LOW TEMPERATURE CONDITIONS EXIST TO:
 - OPEN CONTACT M1, R1, TO INHIBIT CLOSING MOG-52A (SEE ESK-6CWS09),
 - CLOSE CONTACT M2, T2 TO OPEN MOG-52A (SEE ESK-6CWS09),
 - CLOSE CONTACT M3, T3 TO ENERGIZE COMPUTER AND ANNUNCIATOR ALARMS.
7. 23X-1-2CWS02 ENERGIZES WHEN TWO OR MORE SIMULTANEOUS LOW TEMPERATURE CONDITIONS EXIST TO:
 - OPEN CONTACT M1, R1 TO INHIBIT CLOSING MOG-52B (SEE ESK-6CWS09),
 - CLOSE CONTACT M2, T2 TO OPEN MOG-52B (SEE ESK-6CWS09),
 - OPEN CONTACT M3, R3 TO INHIBIT CLOSING MOG-52C (SEE ESK-6CWS10),
 - CLOSE CONTACT M4, T4 TO OPEN MOG-52C (SEE ESK-6CWS10).
8. 120VAC FROM 25CI-PNLB101, CKT #9.



9. NORMALLY OPEN (NO) CONTACTS CLOSE ON LOW TEMPERATURE. NORMALLY CLOSED (NC) CONTACTS OPEN ON LOW TEMPERATURE.
10. FIELD TO PROVIDE

DATE	DATE	DATE	DATE	DATE	DATE
4 PREPARED	3 PREPARED	2 PREPARED	1 PREPARED	M 31 AUG 84	PREPARED
APPROVED	APPROVED	APPROVED	APPROVED	APPROVED	APPROVED

TEST LOOP DIAGRAM
 COOLING TOWER BASIN WATER TEMPERATURE
 2CWS-TT-109, TT-135, TT-136, TT-137
 NINE MILE POINT NUCLEAR STATION-UNIT 2
 NIAGARA MOHAWK POWER CORPORATION
 STONE & WEBSTER ENGINEERING CORPORATION
 SHEET 1 OF 2
 12177-TL2CWS-078

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CONTINUED ON SHT 2