

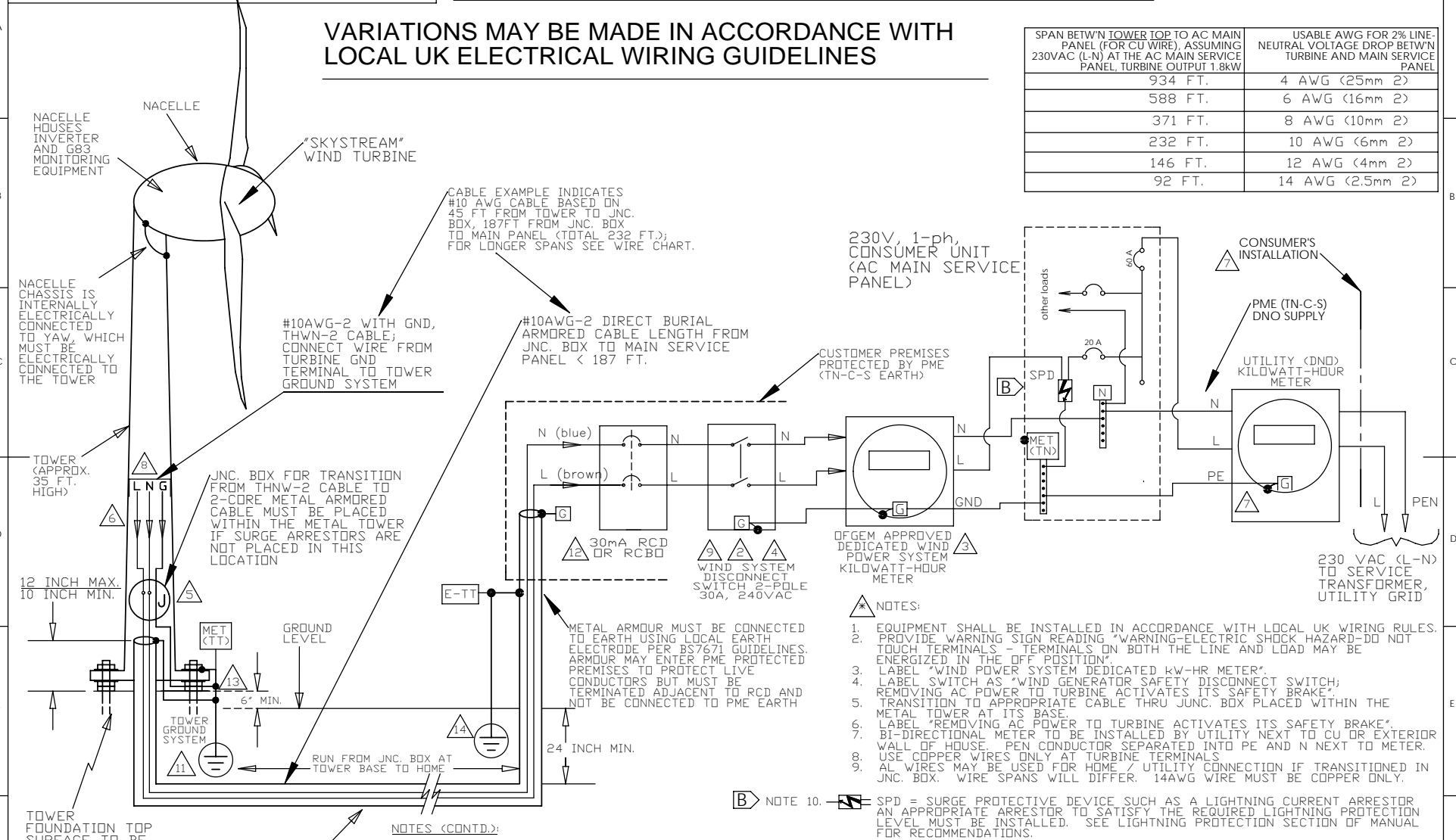
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CONNECTION TO UK PME (TN-C-S) ELECTRICAL SUPPLY

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	Initial release	7/7/09	

VARIATIONS MAY BE MADE IN ACCORDANCE WITH LOCAL UK ELECTRICAL WIRING GUIDELINES

SPAN BETWEEN TOWER TOP TO AC MAIN PANEL (FOR CU WIRE)	USABLE AWG FOR 2% LINE-NEUTRAL VOLTAGE DROP BETWEEN TURBINE AND MAIN SERVICE PANEL
934 FT.	4 AWG (25mm 2)
588 FT.	6 AWG (16mm 2)
371 FT.	8 AWG (10mm 2)
232 FT.	10 AWG (6mm 2)
146 FT.	12 AWG (4mm 2)
92 FT.	14 AWG (2.5mm 2)



- NOTES (CONT'D):
- TOWER GROUND MUST MEET "TT" EARTH SYSTEM SPECS PER BS 7671. TOWER EARTH MUST NOT BE DIRECTLY TIED TO PME NEUTRAL/EARTH.
 - RCD IS TO ISOLATE WIND TURBINE FROM UTILITY FROM EARTH FAULT IN THE WIND TURBINE.
 - CONNECT EQUIPMENT GROUNDING CONDUCTOR (WIRE FROM TURBINE GND TERMINAL) TO TOWER GROUND SYSTEM. DO NOT BOND TO SYSTEM OPERATOR'S PME NEUTRAL / EARTH.
 - LOCAL EARTH ELECTRODE MUST BE INSTALLED PER BS7671 GUIDELINES AND MUST BE MARKED E-TT.

- NOTES:
- EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL UK WIRING RULES.
 - PROVIDE WARNING SIGN READING "WARNING-ELECTRIC SHOCK HAZARD-DO NOT TOUCH TERMINALS - TERMINALS ON BOTH THE LINE AND LOAD MAY BE ENERGIZED IN THE OFF POSITION".
 - LABEL "WIND POWER SYSTEM DEDICATED KW-HR METER".
 - LABEL SWITCH AS "WIND GENERATOR SAFETY DISCONNECT SWITCH; REMOVING AC POWER TO TURBINE ACTIVATES ITS SAFETY BRAKE".
 - TRANSITION TO APPROPRIATE CABLE THRU JUNC. BOX PLACED WITHIN THE METAL TOWER AT ITS BASE.
 - LABEL "REMOVING AC POWER TO TURBINE ACTIVATES ITS SAFETY BRAKE".
 - BI-DIRECTIONAL METER TO BE INSTALLED BY UTILITY NEXT TO CU OR EXTERIOR WALL OF HOUSE. PEN CONDUCTOR SEPARATED INTO PE AND N NEXT TO METER.
 - USE COPPER WIRES ONLY AT TURBINE TERMINALS.
 - AL WIRES MAY BE USED FOR HOME / UTILITY CONNECTION IF TRANSITIONED IN JNC. BOX. WIRE SPANS WILL DIFFER. 14AWG WIRE MUST BE COPPER ONLY.
- NOTE 10: SPD = SURGE PROTECTIVE DEVICE SUCH AS A LIGHTNING CURRENT ARRESTOR AN APPROPRIATE ARRESTOR TO SATISFY THE REQUIRED LIGHTNING PROTECTION LEVEL MUST BE INSTALLED. SEE LIGHTNING PROTECTION SECTION OF MANUAL FOR RECOMMENDATIONS.

TOWER FOUNDATION TOP SURFACE TO BE MIN. 6" ABOVE GROUND LVL. REFER TO SWWP FOUNDATION DWG.

12 INCH MAX. 10 INCH MIN.

6" MIN.

24 INCH MIN.

METAL ARMORED CABLE (DIRECT BURIAL OR IN PVC CONDUIT)

CAD-generated drawing do not manually update

Southwest Windpower
Flagstaff, Arizona U.S.A.

APPROVALS	DATE	230 V 50Hz 1Ph, UK PME SUPPLY: JCT BOX INSIDE TOWER BASE
DRAWN N Agrawal	26 Mar 09	
CHECKED		
RESP ENG		CAD file : 3-CMLT-1369 rev A. 230V 50HZ 1PH UK
MFG ENG		doc. n° 3-CMLT-1369
DUAL ENG		scale: - rev. A size A3 sheet 1 of 1

Skystream NEXT ASSY USED ON APPLICATION DO NOT SCALE DRAWING