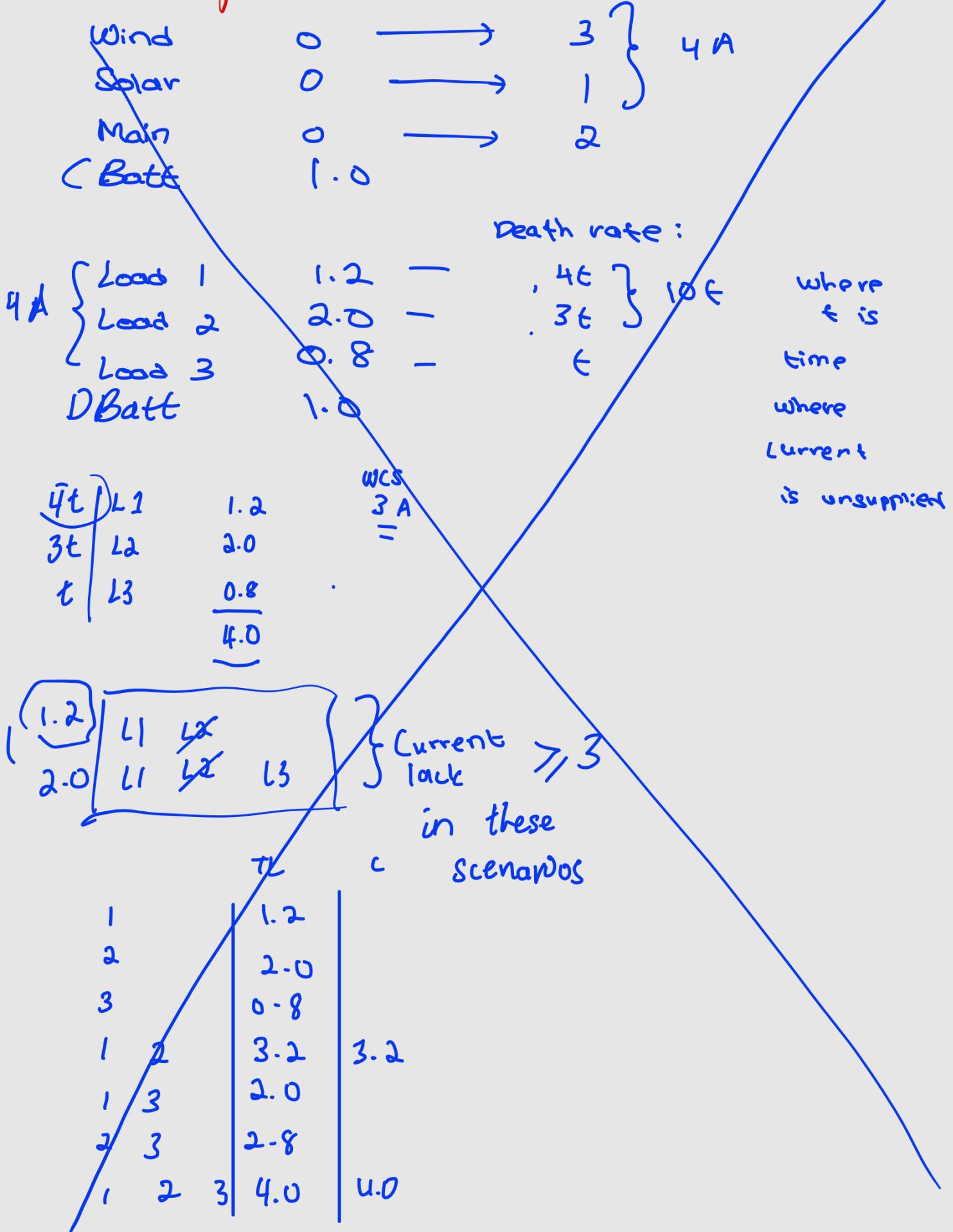
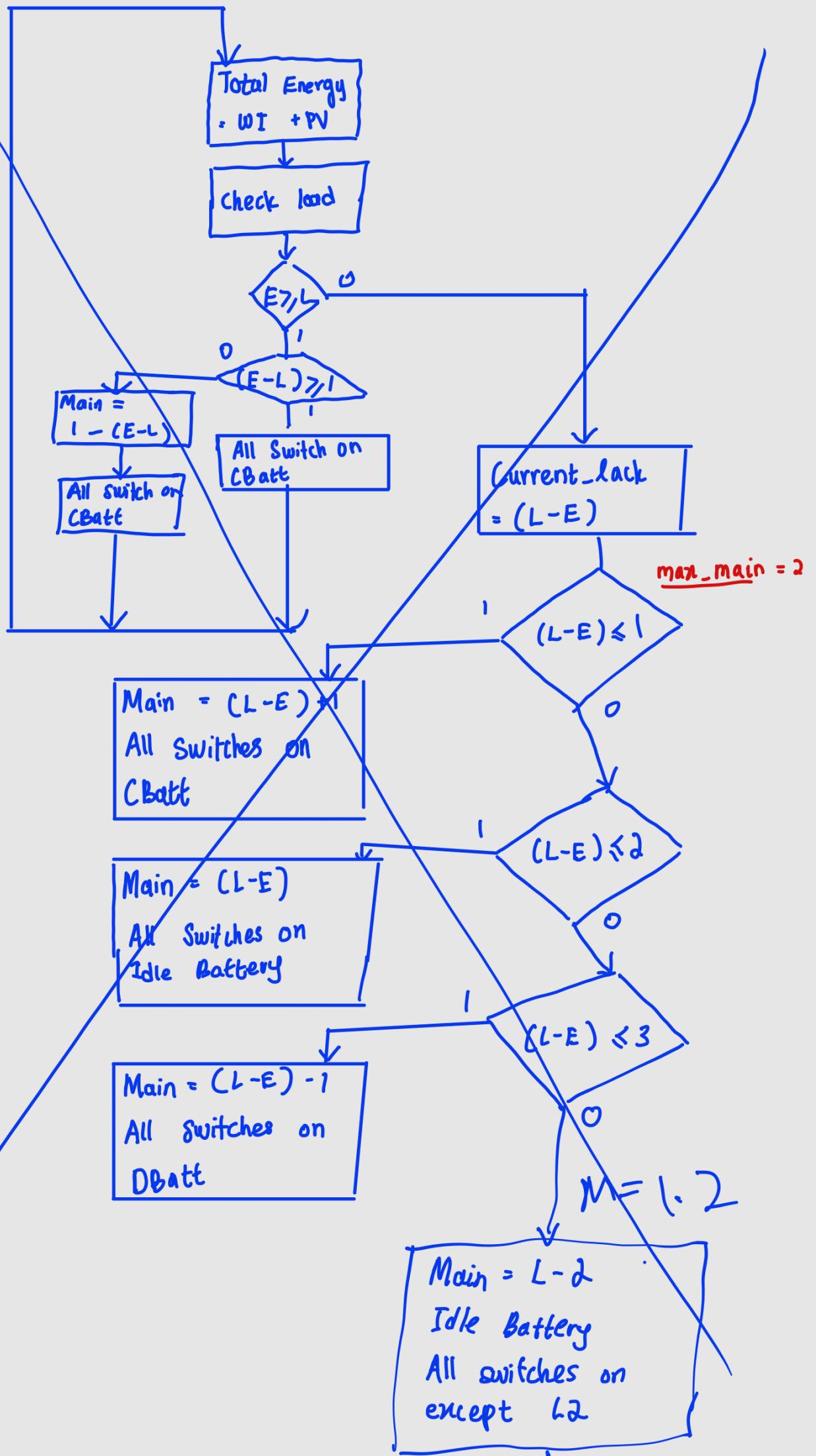
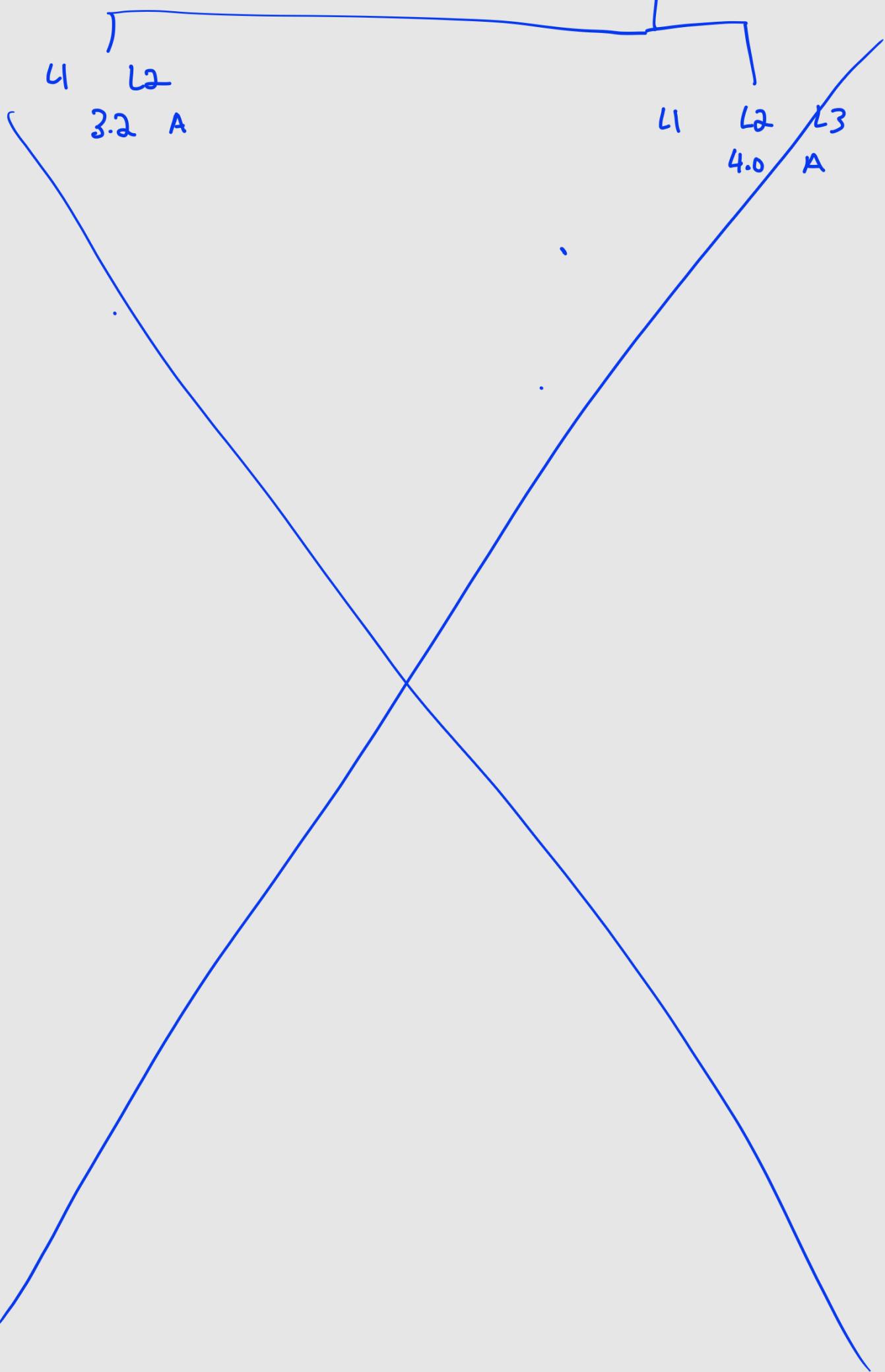


Old algorithm







		DR	
Load1	1.2 A	4t	Low batt = battery-lvl \leq 50 %
Load2	2.0 A	3t	High batt = battery-lvl \geq 50 %
Load3	0.8 A	t	Low busbar = main is failing.
C Batt	1.0 A		

Notes: ① operates with old algorithm if batt \leq 50 %

- ② Low batt = Prioritize charging batt. (use main if needed)
- ③ High batt = Only charge batt with renewables.
- ④ Don't charge if batt-lvl 100%
- ⑤ Don't discharge batt if batt-lvl 0%
- ⑥ Discharge batt if busbarV drops (main fails).
 - ↳ If busbarV does not increase after discharge, start turning off loads.

- ⑦ Always check the stability of busbarV and busbar I
- ⑧ At all times, at least one of L1 or L2 must turn on when called.

Load combinations:

$$L1 = 1.2$$

$$L2 = 2.0$$

$$L3 = 0.8$$

$$L1, L2 = 3.2$$

$$L1, L3 = 2.0$$

$$L2, L3 = 2.8$$

$$L1, L2, L3 = 4.0$$

Logic:

t_{lc} = total load current

