Location :	In the Cavern (near the detector) but Powered from the counting house Detector hybrid + Service boxes		Cables Lost power in the cables		In the Counting house				
					PS for the FE in cavern	L1 front-end	PS for the L1 FE	HV power on detector	HV power supplies
Trigger Tracker	Regulators included					L1 front- end			
Power consumption of chip [W]					75% efficiency		75% efficiency		20% efficiency
Number of chips per board									
Power consumption of board [W]					5.8	100	4.7	3.2	1
Number of boards					75%	47	75%	296	20%
Total power consumption [kW]	4.4		1.4		2	4.7	1.6	1	4
Cooled ?	yes		no		yes	yes	yes	yes	yes
Inefficiency %	15%		100%		5%	5%	5%	15%	5%
cavern (detector) / counting nouse part %			90%	10%					
neat dissipated to air [kW]	0.66		1.26	0.14	0.2	0.235	0	0.15	0.2
heat removed by the cooling system [kW]	3.74		0	0	3.8	4.465	0	0.85	3.8
Total power dissipated to air [kW]	1	1.92					0.93		
Total power to be cooled with water [kW]	3.74			12.92					
Total power consumption [kW]						19.1			

Total:11.3 kW7.8 kWTotal power needs:19.1 kW

What still is missing or has to be confirmed:

Other sub-system that need power....? Pumps, motors, etc...?

To dimension what TS-EL will have to provide to the sub-detectors in terms of electrical power, a 30% safety (or spare) margin should be added (in addition to what is still missing).