Location :	In the Cavern (near the detector)				Cables		In the Counting house			
	Analog front-end (PS in the counting)	L0 front end included in the Analog... (PS in the counting)	ECS	Regulators (PS in the counting)	Lost in the Cables		L1 front-end	PS for the L1 FE	HV	PS for the FE in cavern
Outer Tracker	Analog front-end	L0 front end					L1 front-end			
Power consumption of chip [W]	0.5	0.5						75% efficiency		75% efficiency
Number of chips per board	2	4 OTIS 1 GOL								
Power consumption of board [W]	1	3					100	2.7		19.4
Number of boards	3456	426					27	25%		25%
Total power consumption of boards [kW]	3.5	1.3	0.4	4.8		9.4	2.7	0.7	1.5	4.9
Cooled ?	yes	yes	yes	yes	no		yes	yes	yes	yes
Inefficiency %	15%	15%	5%	15%		100%	5%	5%	5%	5%
cavern (detector) / counting house part %					90%	10%				
heat dissipated to air [kW]	0.525	0.195	0.02	0.72	8.46	0.94	0.135	0.035	0.075	0.245
heat removed by the cooling system [kW]	2.975	1.105	0.38	4.08	0	0	2.565	0.665	1.425	4.655
Total power dissipated to air [kW]	9.92						1.43			
Total power to be cooled with water [kW]	8.54						9.31			
Total power consumption [kW]	0						29.2			

	needed in the counting house	needed in the cavern but supplied from the counting house
Not sure, to be confirmed		
Big dissipation to the air !		
Total:	29.2 kW	0 kW
Total power needs:	**30 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).