

### APPENDIX A – Lithium Electrode Based Cell Goals

End of Life Characteristics at 30°C	Units	Goal
Peak Discharge Power Density, 30s Pulse	W/L	1600
Peak Specific Discharge Power , 30s Pulse	W/kg	800
Peak Specific Regen Power , 10 s Pulse	W/kg	300
Useable Energy Density @ C/3 Discharge	Wh/L	850
Useable Specific Energy @ C/3 Dis.	Wh/kg	450
Calendar Life	Years	10
DST Cycle Life*	Cycles	750
Cost @ 250K Vehicle units	\$/kWh	50
Operating Environment	°C	-30 to +52
Normal Recharge Time	Hours	< 7h
High Rate Charge	Min	15 (80% Δ SOC)
Unassisted Operating at Low Temperature	%	>70% Use Energy @ C/3 Dis @ -20 °C
Survival Temperature Range, 24 Hr	°C	-40 to+ 66
Maximum Self-discharge	%/month	< 1

\*At 80% DOD and DST<sub>800</sub> Power

## APPENDIX B – Lithium Electrode Manufacturing Goals\*

Value	Units	Goal
Thickness	um	$\leq 60$
Cost	\$/kg	33
Purity	%	99.9
Annual Production	m <sup>2</sup>	$6.8 \times 10^8$
Porosity	%	$< 2$

\*Goals exclude current collector