

FSU's Background

Florida State University spends millions of dollars on utilities each year with a steady increase in the yearly electric utility bill for the past 4 years.

Objective

Research, study, evaluate, and propose a project that reduces Florida State University facility electric utility bill by reducing peak demand and/or the overall electric consumption to generate a financial payback to Florida State.

Energy Storage Technology	Efficiency (%)	Useful Life (Years)	Capital Costs (\$/kWh)
Pumped Hydro	80	>25	165
Na-S Batteries	75	14	907
Lead-acid Batteries	72	3	649
Li-ion Batteries	86	10	469
Flywheels	86	>20	11520
Compressed Air	52	25	105
Large CHW TES	93 - 100+	>50	125-300

Results

Expected annual savings = **\$380,000**
Return on investment = **15 Years**
Initial capital investment = **\$5.7M**
Useful life of TES Tank: **>50 Years**

Our team will save Florida State University \$380,000 Dollars each year

