End User: Savings and Cogen Analysis for Salgenx Salt Water Battery

6,000 kW (6 MW) Battery System - Salgex Salt Battery Technology	12/31/2022

Infinity Turbine LLC

S6000: This system uses multiple tanks for electrolytes. One dry container for electrodes, command, and control.

Battery Efficiency	.91					
Energy Efficiency	10	mA/cm2	100	A/m2	9.29	A/ft2

Power Density (Wh/L)	125.7	x	48000	=	6,034	kW
kW loss per round trip	.91	x	6,034	=	543	kW

End User Grid Utility Power Mining and Savings: System Sale Price $900,000 $149/kW

Kilowatt Price Difference $(kW)	Revenue or Savings Cycle	Day	Month	Year	Payback (year)	Cogen Battery Thermal Savings (year)	Payback (year)
$0.01	1	$55	$1,647	$20,041	44.91	$40,081	22.45
$0.02	1	$110	$3,294	$40,081	22.45	$80,162	11.23
$0.03	1	$165	$4,942	$60,122	14.97	$120,244	7.48
$0.04	1	$220	$6,589	$80,162	11.23	$160,325	5.61
$0.05	1	$275	$8,236	$100,203	8.98	$200,406	4.49
$0.06	1	$329	$9,883	$120,244	7.48	$240,487	3.74
$0.07	1	$384	$11,530	$140,284	6.42	$280,568	3.21
$0.08	1	$439	$13,177	$160,325	5.61	$320,650	2.81
$0.09	1	$494	$14,825	$180,365	4.99	$360,731	2.49
$0.10	1	$549	$16,472	$200,406	4.49	$400,812	2.25
$0.15	1	$824	$24,708	$300,609	2.99	$601,218	1.50
$0.20	1	$1,098	$32,943	$400,812	2.25	$801,624	1.12
$0.30	1	$1,647	$49,415	$601,218	1.50	$1,202,436	0.75
$0.40	1	$2,196	$65,887	$801,624	1.12	$1,603,248	0.56
$0.50	1	$2,745	$82,359	$1,002,030	0.90	$2,004,060	0.45

Thermal Savings: If a optional heat pump input with a COP 3 is used during the evening, the heated water (salt water) can be used during the day, without effecting charge. This can result in large savings since a heat pump can produce significant savings while used off-peak, and storing heated liquid for later use.

For illustration purposes only. Your tax situation or project costs may vary.