45kVA Hybrid Case Study

Replacement of 45kVA by QAS 45 + ZBP 30-75

Energy Storage Systems used alongside generators have proven their sustainability with rapid Return on Investment (ROI), and low Total Cost of Ownership (TCO), typically paying back initial costs within two years. Using an Energy Storage System with a generator in hybrid mode extends the generators lifespan, optimizes performance levels avoiding low loads on the generators, reduces fuel consumption, and enhances on-site sustainability and resiliency. Additional benefits include reduced emissions, fewer service intervals, and lower logistics costs for service, maintenance, and refueling.

APPLICATIONS

- TELECOM
- EVENTS
- CONSTRUCTION
- CRANES

REPLACE BY

Series Mode With Pass Through → LOAD

END USER BENEFITS

- **8X** Longer Life
- **-88%** Noise & Runtime
- **-67%** Fuel & CO_2

Load Conditions:
Voltage 208V 3ph
Average Load 8.6%
Max Power 36kW

8 HOURS

Unit	Genset	Hybrid	Savings
Hours	8	1	7
Gallon	7	2	5
Dollar*	49	14	35
lbs CO_2	150	51	99

1 DAY

Unit	Genset	Hybrid	Savings
Hours	24	3	21
Gallon	20	7	13
Dollar*	140	49	91
lbs CO_2	445	151	294

28 DAYS

Unit	Genset	Hybrid	Savings
Hours	672	92	580
Gallon	555	190	365
Dollar*	3,885	1,330	2,555
lbs CO_2	12,457	4,252	8,205

1 YEAR (365 DAYS)

Unit	Genset	Hybrid	Savings
Hours	8,760	1,195	7,565
Gallon	7,237	2,470	4,767
Dollar*	50,659	17,290	33,369
lbs CO_2	162,390	55,435	106,955

**7$/Gallon delivered to site. Price subject to change.*
DEF and generator maintenance savings will bring additional operational cost savings.