Case Study - Hybrid

Success Story - Crane Operations

The Problem

- Cranes have very high but occasional peaks, with long periods of low load - waste of fuel!
- Generator on 24/7 to power lights on top of crane
- Reverse power tripping breaker of DG

The Solution

ZBC 250-575 + QAS 175

Fuel cost considered ($/gal)	$6
DEF cost considered ($/gal)	$2
Service cost considered ($/service)	$1,500

Operational Cost Efficiency

	Units	DG Only	Hybrid	Savings
Running Time	h	720	26	**694**
Fuel	gal	2,029.3	214.4	**$1,814.9**
Fuel Cost	USD	$10,146.5	$1,072	**$9,074.5**
CO_2	lbs/CO_2	44,800	4,800	**40,000**
Estimated Generator Lifetime	years	1.6	44.3	**42.7**

Key Takeaways

Generator only runs once every two days – **MASSIVE fuel savings!**

No downtime due to wet stacking or tripped breaker from reverse power from regenerative braking! (Free charge!)

Downsize generator since ZBC can cover peaks on its own... user **saves on rental fee** as well!