

The Electranet Business Case

Cost of the “avoided kilowatt”

<i>Technology</i>	<i>Category</i>	<i>Cost per kw</i>
Sign lighting optimization	Electranet	\$ 60
Optimization of waste water blowers	Electranet	\$ 130
Vending Machine partial cool	Electranet	\$ 340
Hi-Tech Campus energy mgmt sys	Electranet	\$ 500
Lightning Optimization	Electranet	\$ 650
HVAC Blower Optimization	Electranet	\$ 850
Refrigeration variable speed drive	Electranet	\$ 1,400
Variable Frequency Drive Motor	Electranet	\$ 1,500
Wind	Renewable	\$ 3,132
Natural Gas Peaker	Fossil Fuel	\$ 3,659
Natural Gas Baseload	Fossil Fuel	\$ 4,710
Solar (CSP)	Renewable	\$ 5,789
Conventional Coal	Fossil Fuel	\$ 6,159
Next Gen Nuc	Nuclear	\$ 6,287
Solar (PV-Centralized)	Renewable	\$ 7,800
Solar (PV-Residential)	Renewable	\$ 9,000

Assumptions:

1. Cost at point of consumption; Transmission and Distr assumed to add approx 15% to wholesale cost
2. kw provided by either increase in supply or decrease in demand
3. Cost is sum of capital cost and variable costs discounted at 10%
4. Variable cost subject to change with change in fuel prices; fuel at 2/26/08 prices
5. Did not try to incorporate subsidies; only raw costs

The Trend: Over the past 5 years, Electranet technology cost per kw has dropped by >50% while traditional electric supply cost has nearly doubled