



ENERGY EDGE
strategic energy solutions

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Flexible Energy Procurement Plan Delivers Savings and Cost Stability for Large Petrochemical Producer in Texas



OVERVIEW

In 2012, ENERGY EDGE was hired by a large petrochemical producer located in Houston, Texas. This \$441 billion global industry provides raw materials for the production of a wide array of consumer goods including tires, detergents, fertilizers, plastics and medical devices among others. Electricity costs represent one of the larger expense items for petrochemical companies, and low power costs are key to successfully competing in this industry.

Historically, the client's business planning horizon had limited electricity contracts to a three-year term. This meant that when market prices for time periods beyond the end date of their power contract presented value, the client would need either to extend the existing contract with the incumbent supplier or conduct an RFP. Either way, the client was prevented from acting immediately to capitalize on favorable market conditions.

Prior to engaging ENERGY EDGE, the client recognized that taking a longer-term planning horizon for electricity procurement would help them achieve lower and more stable costs than their current strategy provided. ENERGY EDGE was tasked with helping the client develop a new, comprehensive energy management strategy.

The Client's Need

Develop an energy strategy that balances the need for long-term stable electricity costs with the goal of also securing low prices.

ENERGY EDGE's Potential Solutions

- *Behind the meter generation*
- *Long-term offsite renewable purchase from solar and/or wind*
- *Long-term traditional indexed retail power contract that allowed intra-contract hedging*



APPROACH

ENERGY EDGE began by meeting with the various stakeholders within the client's organization whose job functions were impacted by the company's electricity spend. These included individuals from finance, plant operations and procurement. ENERGY EDGE sought input from these stakeholders on their budget goals, risk tolerance, planning horizons, production processes and internal decision-making.

ENERGY EDGE then conducted a detailed analysis, including economic and probabilistic modeling that compared installing and operating a behind the meter generating asset, a long-term renewable purchase and various strategies associated with procuring traditional energy from the grid. The results of this analysis, along with an explanation of the contractual and administrative requirements to implement each of the options, were presented to all the internal stakeholders.



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While the economics of a behind the meter generating unit had its benefits, the client ultimately decided against this strategy. The client was very interested in a long-term renewable purchase but was not prepared to enter into such a transaction at that time.

The client saw the merits of a long-term retail power contract that enabled them to easily place forward hedges well into the future. However, they were concerned about being tied to one supplier of electricity and wanted to preserve the option to enter into a renewable purchase at a later date.

10-year retail power contract with third-party supply options

Over \$2 million in realized savings



OUTCOME

The client entered into a 10-year retail power contract that fixed the price for all non-commodity costs and allows the client to purchase wholesale power from third parties including other retail suppliers, generators, commodity brokers, and financial institutions. This separation of retail services from wholesale procurement ensures the client has both flexibility and cost competitiveness on power purchases during the 10-year term. Additionally, this contract structure allows for the financial integration of a renewable energy purchase should the client elect to do so in the future.

Since contract execution, ENERGY EDGE has continued to advise the client on when to place hedges based on both probabilistic and fundamental market analysis. Multiple hedges have all been placed through third party market participants and have helped the client realize over \$2 million in cost reduction to date.