

The Science behind an Effective Energy Management Strategy for One Landmark Houston Venue

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Experts at GDF SUEZ Energy Resources team up with Energy Edge Consulting to build a unique approach to delivering a cost-effective, environmentally-driven energy strategy for the Houston Museum of Natural Science.



At the beginning of 2012, the Houston Museum of Natural Science was nearing completion of a massive expansion project that would virtually double the square footage of its primary location in the heart of the Bayou City's Museum District. The added space marked a significant step in the nonprofit's growth plans, but it also put the venue at a crossroads in its energy management strategy.

The Museum needed to reevaluate its procurement approach in light of the upcoming operational changes, but upgrades to the facility's HVAC system were making it difficult to forecast consumption and costs.

Although the Museum's Hermann Park location was built in the 1960s, it was still using the building's original HVAC system to heat and cool the facility. A new central HVAC plant was being constructed as part of the expansion to accommodate the additional square footage, but it wouldn't replace the old boiler system entirely. Instead, the two systems would work together to heat and cool both the original and expanded portions of the facility.

To build an effective long-term plan, the nonprofit turned to Energy Edge Consulting with three specific objectives:

- Accurately forecast consumption and demand, accounting for both the sizable addition and improved efficiency;
- Identify and leverage a product that helps manage energy price risks, protecting against spikes while exploiting decreases; and
- Pursue a retail electricity supplier whose offer goes beyond competitive pricing to include opportunities for cross promotion.

After evaluating forecasts with product options and organizational priorities, the Houston Museum of Natural Science opted for a managed product with GDF SUEZ Energy Resources. When diligently overseen, managed products provide a certain degree of risk protection while giving the consumer the ability to take advantage of market opportunities through nimbly executed transactions.

"We view the efficiency and integrity with which GDF SUEZ Energy Resources executes transactions for managed products as superb," said David Mosley, Director of Energy Procurement and Price Risk Management Services for Energy Edge Consulting. "Their contracts are as solid as their corporate balance sheet, and, in the case of the Museum, it contained numerous additional obligations that went beyond the typical supply responsibilities. They were sincerely interested and dedicated to helping the nonprofit realize a successful energy program."

Since entering into the agreement, GDF SUEZ Energy Resources has provided a series of donations to support various programs and initiatives in addition to delivering electricity. This April, the retail electricity supplier will provide visitors of the landmark venue with a green destination in honor of Earth Day through a gift of Renewable Energy Certificates that will offset the Museum's estimated consumption for the entire month. Read the press release [here](#).

This is the fourth occasion GDF SUEZ Energy Resources has donated RECs in support of the nonprofit's commitment to environmental responsibility. The RECs, which are Green-e® Energy Certified, represent the benefits associated with a specific quantity of energy generated from a renewable source, such as solar or wind.

"It's been an honor to support the Houston Museum of Natural Science in achieving the right energy management strategy for their business," said Sam Henry, President and CEO of GDF SUEZ Energy Resources. "We share a common focus on promoting clean energy and are pleased to continue to help this important venue as they do their part to reduce their carbon footprint."

Joel Bartsch, President of the Houston Museum of Natural Science, added, "The past three years have marked an exciting time of growth for the Museum. GDF SUEZ Energy Resources and Energy Edge Consulting have helped us maintain a strategic focus on how we manage long-term costs and our commitment to environmental stewardship. We couldn't be more pleased to have them as trusted business resources."

The Houston Museum of Natural Science is one of the nation's most heavily attended museums. It houses four floors of permanent exhibit halls as well as the Wortham Giant Screen Theatre, Cockrell Butterfly Center, Burke Baker Planetarium, and George Observatory. For more information on the nonprofit, visit www.hmns.org.