

Don't Play at the Energy Suppliers' Casinos

Informed energy-procurement decisions are vital to controlling your facility's costs

Do you enjoy gambling? That's what it is like to buy energy on the open market or flatly accept the cost of energy from suppliers. Toss the dice, or spin the wheel. It's a gamble, and for some firms in today's precarious market, it is no better than entering into a game of roulette.

Of course, in this scenario, the energy supplier is the "house," and it loves you for sitting at its table and accepting its terms. As you can imagine, your customers may pay dearly for that quiet acceptance of a cost not challenged.

How can building professionals control their energy costs by gambling at an energy supplier's casino?

Watching the market and picking the correct supplier is half of the winning equation. The other half deals with the utility. We know utilities are in business to make a profit, yet the most fundamental question that can be asked of a utility by an engineer or facility manager—"What's the best rate for me to be on?"—often goes unasked.

Many businesses, not knowing better, simply permit utilities to hook them up to the grid or pipeline, all the while paying retail rates. Others may make an attempt to choose suppliers based on published, short-term prices. Without years of experience in the energy industry, however, business managers are shooting in the dark, both with the utilities and the suppliers.

Instead of these scenarios, consider the use of an energy consultant. A consultant can ward off many headaches and expenses.

There is no higher-education curriculum for energy procurement. Consultants have the industry knowledge, foresight, and know-how to buy energy at the right time. In addition, experienced energy consultants wield powerful insight in avoiding costs throughout the design, turnover, and ownership processes.

The Design Phase

The design phase should be the starting line for energy procurement, and the point at which an energy consultant should be brought in. Commercial and industrial clients have the option of purchasing their energy directly from an energy supplier and doing so years in advance. With the help of energy specialists, companies can smartly buy

energy one, two, or three years out, securing their price in an otherwise volatile market.

At the design phase, there are two key pieces of information: What kind of energy does the system use, and what is its projected consumption? With this information, and adequate time for analysis, a facility can save an extraordinary amount of money on energy purchases before the meter is even turned on.

When considering a plan, ask, what energy prices are being used to calculate payback and expenses. If temporary construction-meter prices are used, the result will be horribly inaccurate. If the company already has secured its price for two years following occupation of the building, the numbers will be spot-on.

Although energy pricing, purchasing, and strategy development should start during the design phase, there are many other ways a good consultant can be of aid when blueprints are being drawn. It is not uncommon to see businesses altering their mechanical systems in one way or another, all to save funds. Yet, if the correct decisions are made when the project is started, unnecessary retrofits can be avoided.

Depending on the size and type of equipment being installed, there are many factors not immediately apparent to building owners and engineers that go into picking the energy source. For example, just because there is electric or gas service available to the site doesn't mean the utility infrastructure has the volume or capacity to supply all of the energy a manufacturing facility needs. If it does not, the facility owner may pay a

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hefty price for the upgrade.

Several years ago, a manufacturer built a new facility and chose electricity as the energy source for all process power. What wasn't considered was that the supply lines weren't large enough to support the facility's use. The charge to connect the facility to the grid ultimately went from \$20,000 to \$1.2 million.

Cost avoidance comes in smaller doses, too. Often, local incentives exist for one type of energy or another, and issues such as meter placement can make a big difference. When adding new load to an existing building it may be beneficial to hook up to an existing account, as opposed to setting up a new account and new meter. This can have a big impact on which energy rate the owner is eligible for and dramatically decrease equipment pay-back. There are situations in which multiple meters may be the best option.

The Turnover Phase

The transition of a facility from contractor to owner usually is hectic. Changing the business name on the meter and the rate at which the new account (gas or electricity) is billed may take a few months. It's not uncommon, with everything else that is going on, for the meter to get overlooked. Any extra time on the temporary rate would be a waste of money because construction meters generally are billed at retail/homeowner rates.

We've seen extreme examples of this, where companies still are being served on the construction (retail) rate many years after occupation. Most company managers aren't aware that they're eligible for better rates, and utilities are unlikely to bring it to their attention.

The Ownership Process

Each company is different and will have varying energy-usage needs. For instance, a line graph of natural gas consumed by an apartment complex is going to show a spike in the winter months. On the other hand, the graph for certain manufacturers could be relatively constant throughout the year, with any fluctuations simply following the production curve. Knowing a client's specific needs and being able to forecast the market allows consultants to purchase the right amount of energy at the right time.

In an uncertain economy, accurate projections of energy use are needed to get the best possible energy price. The help of an energy consultant is key in not buying too much energy, while expecting consumption to remain constant. This can result in having to sell unused energy back to the supplier at a loss. The opposite also is possible: By not buying enough energy when a contract is written, managers roll the dice, leaving the company open to a big and costly gamble for the extra amount.

Picking the correct energy supplier can be a daunting task. It's a consultant's job to assist clients with choosing

suppliers based not only on price, but contract language, reliability, and financial stability.

Deregulation and Dual-Fuel

There are three types of energy markets: regulated, deregulated, and markets in transition between the two. Each presents a different set of challenges for commercial and industrial energy buyers. The unregulated market is the toughest to navigate, but regulated markets present their own challenges.

The overall trend in the country is moving toward deregulation, for all sources of energy. Nearly the entire northeastern part of the country has deregulated electricity and natural-gas markets. The same is true on the West Coast and in Texas and several other states.

In preparation for and adaptation to deregulated energy markets, some companies are beginning to look at co-generation and renewable systems. They will need to be aware that the power generated from many renewable systems fluctuates, making energy-consumption projections even more complicated.

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