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## ontracting for Competitive Energy Purchases

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Contracting for competitive energy can significantly lower energy costs and minimize price risk when compared with accepting the local utility's business as usual delivery of energy supplies. In general, any facility spending a half million dollars or more on energy can realize sufficient savings to easily justify investing time toward this effort.

While electric deregulation may not be available for several years in many states, other opportunities exist to get you started. If your facility has not yet taken advantage of natural gas deregulation, it's time to implement a purchase strategy for that commodity. Once you've gotten a feel for purchasing on the open market for such "markets," "transportation," or "spot" gas, the deregulated electric market will be less of a mystery to you. Both markets offer similar concerns about suppliers' reliability and financial stability, development of a purchase strategy, contracting methods, supply backup options, and supply fluctuations.

### PREPARATION REQUIRED

Regardless of what type of energy you are buying, preparation is the key to success. Begin by organizing information that describes your operation's current utility costs, rate structures, and plans for future changes. Talk with colleagues at similar facilities who already purchase commodity energy and determine what prices they

are paying.

Trade groups, such as the Building Owners and Management Association (BOMA), International and governmental agencies such as the U.S. Department of Energy publish usage data that can be used for bench marking. Included are typical energy costs per square foot by building, type and region location. Such data can help you compare present usage against offers made by marketers, and to set a target for attainable savings in your area.

Once your current costs and future plans are determined, motivate the finance and operating personnel at your facility to develop a purchasing strategy. Establish personal and business relationships within your company with those involved in purchasing decisions. Your goal is a signed contract which protects the interests of your company.

Successful energy purchasing requires an in-depth knowledge of your operations needs and the qualifications of your potential suppliers. Awareness of these matters is important even if you're planning to use a consultant to handle this task, in order to direct such personnel and verify their performance.

## KNOW YOUR NEEDS

Develop energy consumption data at each location by account. Lacking such data will make negotiations nearly impossible, and lack of information places the enduser at a disadvantage during negotiations. This information will consist of the name of the utility, service classification or tariff, consumption and cost by month for the last three years.

This information can be obtained by past energy bills or the local utility. It is information to understand how you are being charged. Understand what the components of the bill are, including demand, transportation, transmission, energy, fuel charges. For electricity, know what time intervals are being used to calculate the peak demand, the times and days considered by the utility to be on-peak and off-peak, and annual ratchets.

For natural gas, be sure to calculate the consumption of alternate fuels, such as oil or propane, any line losses charged by your

utility, and how weather affects your usage. Line loss information can be obtained from your local utility or the Public Service Commission (PUC.) Weather data is available from several sources, including the National Weather Service.

A regression analysis can then be performed to determine how consumption relates to temperature. This data will demonstrate your purchase requirements and will be used by the supplier to nominate and schedule your energy supply.

For electricity, the next step is to determine your load profile. Load profiles show how electric energy is used over time. If your building/energy management system does not provide this information, ask your local utility if it can do so. Plotting it will show when peaks occur, and how sharp they are, both of which can influence your electric bill. Marketers use this information to develop their price. They also may be able to help you save money by cutting those peaks.

The annual load profile of consumption in a monthly breakdown shows how a facility uses energy and may reveal cost savings opportunities. For instance, a large summer cooling load could be served by natural gas because gas is normally less expensive in the summer than in winter. The cost of electricity varies with time of day as well as the seasons, possibly making a gas-fired chiller less expensive than an electric unit.

Likewise, understanding the components of your base load (which is the load profile with the peaks flattened) and what causes the peaks can help control the total cost of contracted energy. The hourly price of competitive power will, for example, be extremely sensitive to any "spike" in consumption above contracted demand. Further cost savings can be achieved by identifying peak shaving options and curtailing load. Managing your facility's load closely is important to meeting your company's savings goals.

## KNOW YOUR POTENTIAL SUPPLIERS

Begin by obtaining a list of suppliers who have registered with your state PUC to act as vendors. Some may focus on the wholesale market, selling mainly to utilities, independent power producers, or

municipalities, and may not be interested in serving your facility. Others will focus on retail customers, but their experience selling to end users may be limited, especially in regard to electricity because the market is so new.

Supplier experience is essential. Look for firms who have participated in electric retail pilot programs, and those that have supplied natural gas on a retail basis for several years. Who are its customers, how long has it been supplying them, and are references available? How familiar is the supplier with your local utilities, their tariffs, rates, and operating procedures?

Next, review the supplier's financial condition. Do they have access to large amounts of capital that is necessary to supply energy to retail customers? What is the firm's revenue trend? How much debt is it carrying? How is it rated by services such as Dun & Bradstreet?

On the supply end, have the vendor identify as many components of the purchase as possible. These should include but not be limited to his supply and capacity sources and reserves, interstate transportation and transmission, distribution, pricing mechanisms, and balancing and management fees. To achieve the greatest savings, most components should be open to negotiation.

## DEVELOP YOUR PURCHASING STRATEGY

Start by setting realistic goals. Pricing strategies may vary depending on your institution's operating flexibility and alternate fuel capability.

Several questions have to be addressed. Is it important that your institution's annual energy purchases meet or beat a budget target? Or is it more important that energy costs not vary a great deal? Can you index your purchase price against a published, but varying, market price, or is a fixed price more desirable? Will price be for a one-year period, or divided by winter and summer periods? It is unwise to establish a pricing policy covering more than a year, unless your contract can be reopened later.

A purchasing strategy can include negotiated or tariff-based options with local utility or distribution company. As the gas market

matures, end users are discovering that their utilities can provide fairly competitive pricing in certain months. Depending on the pricing transparency offered by a local utility you may benefit from comparing utility prices with marketer gas for several months prior to developing a supply contract.

At the same time, it is important to investigate price components to ensure that similar elements are comparable with one another. Be aware of changes in utility tariffs so that you leave enough room to negotiate future deals and allow for pricing flexibility.

Identify your long-term supply options by considering these questions:

- Is this purchase local, regional or national?
- Do you want to aggregate all of your facilities, or will individual sites purchase their own requirements?
- What degree of reliability is required to keep your operations on track?
- Should you tie the purchase of natural gas and electricity together?
- Would a Btu contract with fuel exchanges fit your facility's needs?
- What, if any, value-added services could be useful to you?

To make the process run smoothly on your end, identify everyone who will be part of the decision making process and form a strategic purchasing team. Establish negotiating roles and relationships before opening contract talks. Have your team determine what purchasing strategies they will pursue within the group. Hire a good attorney, preferably one with an energy background, to carefully review any deal you are considering.

It is valuable to know what others have accomplished. For example, if you are a medium-sized university, and a comparable nearby facility saved 10% off its energy bill, find out how. Companies

often discuss such achievements at trade associations or in energy publications. Talk to your peers within your industry about your general purchasing objectives.

Be prepared to educate your team. Reliability concerns need to be addressed, along with any other of your colleagues' questions. If you are unsure how to answer them, ask several vendors to help clarify the issues. Any vendor unwilling to take the time to educate you does not deserve further consideration.

## DEVELOP YOUR OWN SUPPLY CONTRACT

Purchasing should be on your own terms, not those of the suppliers. Upon reviewing countless energy supply contracts from many vendors, my firm has yet to see one truly advantageous to the end user. Some could place your firm at considerable risk.

Gather as many sample contracts as you can and establish your contract library. Browse the Internet and the libraries of professional and technical colleges, picking out favorable contract terms. All will come in handy as you develop your contract.

## ENERGY PURCHASING CONTRACT TERMS

All contracts should cover the following:

- **Price**—Investigate several options with potential marketers before reaching a final decision. Price can be fixed at a predetermined level, determined by season (i.e., winter and summer), set to a market index, by Btu, or any number of options.
- **Term**—a one-year contract with an option to renew for another year is recommended. Take the time to review all of your options before committing to a long-term supply for your institution's energy requirements.
- **Reliability**—Define "reliability" in real-world terms for your facility by answering the following questions. Do you need the

same level of reliability you currently enjoy from your utility supplier? Is there any reason to doubt your new supplier can provide it? The ability to shed a portion of your load or supply it with an alternate fuel will determine how much flexibility and leverage you have. The more flexibility in the management of your operations, the greater price discounts can be.

- **Responsibility for transport**—Managing transportation on interstate transmission systems and pipelines requires skilled personnel. Few end users have such experience, so your contract should specify that this task is solely the marketer's responsibility.

In addition, the following terms should be delineated for natural gas: primary and secondary interstate pipelines (e.g., Transco, Tenneco, etc.), type of transportation (firm, recallable, or interruptible). If the transport is recallable, identify the recall terms. Similar requirements apply for electrical transmission.

- **Management fee**—Pricing should be negotiated so that it is similar to that of comparable customers. At a minimum, the marketer should share any savings achieved in transport costs equally with your company.
- **Balancing**—Most utilities and interstate pipelines require that your facility's usage matches your supplier's deliveries. If you over-consume or under-consume, you could be subject to balancing charges and/or penalties. Make your marketer responsible for managing supply and for payment of any charges or penalties.

On the other hand, if there is any material change in your operations that would alter your consumption, it is your responsibility to communicate this to the marketer in order to avoid hefty penalty charges. Ensure there is an acceptable process for dispute resolution within the contract.

- **Force Majeure**—Most contracts will have a *Force Majeure* clause to explain conditions under which your supplier claims it is unable to deliver your energy. Review this clause carefully: it

should be severely limited, e.g., supply should not be affected because the marketer can get a better price for it elsewhere, nor should be the freezing of one gas well limit receipt of your supply. Acts of God, in the legal sense, war, or disaster are more typical of *Force Majeure* clauses.

- **Taxes**—In some states, tax savings may be gamed if you take title for your energy purchases out of state. This may vary with the tax-exempt status of your institution and state regulations. Investigate this carefully and structure the purchase according to taxing authorities.
- **Communication**—while the major points of your contract are under negotiation, start thinking ahead to the management of your energy supplies. Communication failures could be very costly in missed savings and penalties. Unless prices are fixed, determine how pricing information will be provided.

Consider upgrading communications equipment to incorporate pagers, fax modems, and cellular phones for the responsible parties. Will your marketer phone you, and follow up with a fax? What is contained in an offer? If your facility has alternate fuel capability or the ability to shed load, how does your marketer notify you when your supply is curtailed? What type of notice will you receive, verbal or written? How much time will you receive prior to interruption of your supply requirements?

- **Regulations**—Your contract should have a general statement stating your supplier must meet all Federal Energy Regulatory Commission, PUC, interstate pipeline, and local distribution company tariffs, and any applicable operational procedures.

## RECOGNIZE THE PACE OF DEREGULATION

The days after your deal is concluded, start looking ahead. Keep abreast of the changing energy landscape by attending seminars and trade shows, reading industry publications, and participating in trade associations. No one knows all the tricks in this business, so you will

learn new and profitable ways to improve your purchasing techniques. For those willing to look, a better deal is always just around the corner.

Although deregulation of the electric industry will provide alternatives for electric supply in the future, these alternatives are not yet fully mature. And once you have had experience with “marketer,” “transportation,” or “spot” natural gas purchases on the open market, the coming deregulated electric market will be less of a mystery.

Regardless, your purchasing program will benefit from forward looking strategies that meet changes as they occur in facility use, facility size, or building function. The contracting and purchasing process will benefit by involving energy managers on all levels, as well as purchasing personnel. Having a consistent, timely flow of information among all of these parties is both an important first step in the contracting process and the key to cost savings in the future.

#### ABOUT THE AUTHOR

**Catherine Luthin** is the principal of Luthin Associates, an energy management consulting firm specializing in deregulated energy markets and consumer education. Some of her clients are Columbia University, Mendik Realty, Chase Manhattan, Mount Sinai Medical Center, Energy Savings Technologies, and the Greater New York Hospital Association.

In addition, Catherine serves as the executive director of the New York Energy Buyers Forum, an enduser and supplier coalition representing pro-competitive energy purchasing interests in the New York metropolitan area.

Previously, Catherine held various financial positions in governmental service, the last as a program manager for the City of New York. As a program manager for the city, she developed, implemented and managed the city’s natural gas purchasing program.