

**Acquiring Competitive Power Supplies
in the New Restructured Electricity Markets**
Aggregation Opportunities, Choosing the Right Supplier, and Negotiating Contracts

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ABSTRACT

While demand-side and energy efficiency measures conventionally bring more substantive cost savings than procuring competitive energy supplies, the new opportunity to create added electricity savings has been gaining momentum as deregulated electricity markets mature from their infancy to adolescence. As these markets evolve, more and more small and medium sized facilities are being approached by new entrants to switch electricity providers. Many of these new providers seem to have come from nowhere, while others don't seem any different than the current utility. Managers struggle to find an easy way to validate the claims and promises that often seem too good to be true; no matter how much assistance the incumbent utility offers. This paper will discuss the impact of "Customer Choice" for electricity as a commodity and will present the key issues that energy decision-makers will contend with when deciding whether or not to switch. It will also address critical elements vital to contract negotiations that will protect a business' financial risk in the new deregulated market.

Deregulation has increased energy managers' need to understand their options and opportunities in order to position their company's competitiveness for the 21st century. This paper will outline the process that one faces when procuring competitive electric supplies. It will present lessons learned and perspectives on the benefits, drawbacks, and current trends resulting from recent procurement efforts in California, including what can be expected as similar endeavors are initiated in the various states undergoing electricity deregulation.

One initial step is to choose whether aggregation of the company's loads is beneficial. The paper will discuss how to determine if joining an aggregation program presented by your trade association, city, or region would be better than going out to bid on your own. While the size of electric usage usually contributes to getting attention, the shape and profile of usage seems to play a larger role in the ultimate price offering. The paper will address the use of load profiles to determine attractiveness to new competitive suppliers – whether a company aggregates or not.

Next, companies are finding it difficult to qualify new entrants. As with any new market, there are no guarantees new providers won't go out of business, or, change marketing strategies that don't include serving your facility anymore. While the regulators have increased oversight of new market participants, these realities continue to plague the new markets, especially in California and New York. This paper will discuss key questions for new vendors, signs to be wary of, and strategies to help limit exposure to market changes.

Finally, the paper will cover proven strategies for successfully negotiating contracts. This includes negotiating points that help minimize risk while optimizing benefits.

Competitive Power Procurement

Under the new restructured electricity markets, electricity customers generally have two options for obtaining electric generation (power supply) services: pursuing direct access by purchasing energy from a competitive energy service supplier (ESP) or relying on the local utility distribution company (UDC) to purchase electricity for them from the Power Exchange (PX). Direct access is also the mechanism that allows the choice to designate a specific power source (i.e., renewable) from competitive ESPs.

There are a growing number of offerings putting forth power generated from renewable¹ or “green” resources. Many offerings are also branded “Green-e Certified.” This certification by the Center for Resource Solutions guarantees that at least 50% of the power is from renewable resources and any non-renewable part of the product has lower air emissions than a traditional mix of electricity. It should be noted that a customer who purchases a green power product may or may not actually receive electrons from renewable resources. That customer is, however, guaranteed that the premium he or she is paying is going to companies that make use of existing renewable resources or are acquiring funds to generate new renewable resource generation. Although the prices of the green power offerings for large customers vary, an additional 10% to 20% on a MWh basis or \$0.005 to \$0.03 per kWh has been seen for these products.

While new legislation presents opportunities for savings and choice, it is important to understand that not all of a customer's electric supply costs are subject to competition. The distribution and transmission functions of the electric utility industry remain regulated and generally under monopoly control. Only the generation function is open to competition and it is that portion that is referred to as direct access. By recognizing that the generation portion accounts for as little as 20% to 25% of the total energy costs a customer sees on the utility bill, it is easy to understand why many new cost saving options initially have limited potential.

Aggregation

To increase the potential benefits resulting from direct access, customers can join together (i.e., aggregate). Aggregation is the combining of loads of multiple end-use customers in facilitating the sale and purchase of electric energy, transmission, and other services on behalf of these customers. The benefits to aggregating loads is to increase buying power and negotiating leverage when procuring competitive electricity supply and other energy services. Additionally, aggregating loads can take advantage of the synergism created when combining dissimilar customer load profiles and delivery requirements, which may further add value. Furthermore, municipal aggregations may be able to take advantage of tax exempt financing arrangements that can increase savings amounts for the group.

In determining whether aggregation will yield benefits, it is important to understand the goals and objectives that aggregation is expected to achieve. Not all organizations

¹ Renewable resources are defined by California law as power generated within the state of California and derived from either biomass, waste, geothermal, small hydroelectric (less than or equal to 30 megawatts), solar and wind technologies.

implement aggregation programs for the same reasons, but there are a few predominate reasons for aggregating loads: (1) Create energy cost savings, (2) promote environmental stewardship, (3) position energy loads for future opportunities, (4) strengthen relationship with and increase value for associated organizations/members, and (5) control energy costs and competition.

Among the organizations that might be involved in aggregation are: Local governments, public agencies, special districts, public and private associations, cooperatives, affinity organizations, national and state franchise organizations, and commercial and industrial firms. Besides organizations that aggregate based on some structured or affinity relationship, energy service providers, marketers, brokers, and other electric industry participants are also considered aggregators, and develop marketing strategies based on target customers that will provide higher margins or some strategic value to the customer portfolio.

Pursuant to California Assembly Bill 1890, aggregation programs may be conducted by cities, counties, special districts or other entities on a basis that is agreeable to all members of the aggregation. All aggregation programs are designed around the presumption that individual organizations or customer loads will only opt to participate if the benefits received from joining the aggregation are better than the benefits that could be achieved acting on their own. This premise is key, because customers whose loads are highly attractive will more than likely opt out of an aggregation program if they can achieve greater savings on their own. However, the process of procuring such benefits is full of complexities and uncertainties and an aggregated effort could help lesson the individual burden of evaluating options and achieving true benefits.

Market Participants

In California, its Public Utilities Commission requires all entities wishing to offer electrical service to residential and small commercial customers in California to register as an ESP. The exception to the requirement is with those municipal utilities and public agencies that intend to continue serving solely customers within their own jurisdiction. Furthermore, it is important to distinguish that all aggregators are not necessarily ESPs; thus may not be held to any registration requirements yet². All ESPs that serve more than one customer, and similarly all local distribution companies, are considered aggregators.

As California prepared to open up to electric competition at the end of 1997 and the beginning of 1998, there were close to 300 registered ESPs. This number has decreased significantly due to recently passed requirements to enter the marketplace along with higher than anticipated capital and time requirements for ESPs to fund their start up period in the deregulating market. Currently there are fewer than 50 "registered" ESPs in California, of which only a handful is looking to serve residential retail markets. Early on, ENRON Corporation spent \$10 million on a high profile marketing campaign and signed up 30,000 customers. This high customer acquisition cost did not parallel the anticipated margins, making it virtually impossible for new competitors to succeed. ENRON later pulled out of the retail market in California. There are many other entrants that encountered the same experience, leaving very few companies in the running for customer choice. Today, most

² Registration of aggregators is required in some states and prevails as an unresolved issue in other states.

competitive vendors are able to survive in California through the renewable market, which is subsidized by the state. The California Energy Commission offers \$0.015 per kWh rebate for qualified renewable energy sales. Vendors are managing to buy renewable power for a premium less than the rebate, therefore can either make more money or provide the customer with a discount for their purchase of renewable power.

Even if a customer signs up with an alternative energy provider, the customer will still receive transmission and distribution service through its regulated UDC. It is possible for a customer to stay with the local UDC and purchase electricity on a rate schedule that more closely reflects that customers' actual usage in real time or time-of-use increments based on the market price. This option is known as virtual direct access, and it will give customers the opportunity to receive power at market-determined prices rather than a pre-determined rate that has been approved by the CPUC. This option will reward the customer when PX prices are low but will also expose the customer to any high hourly prices determined by supply and demand.

Qualifying New Vendors

With any new market, especially a market that has been deregulated, there will be many new entrants vying for the leading competitive position and market share. Not all players that make it out of the gate will survive the endurance race. This has been seen in the telecommunications industry and will be revisited again with electric restructuring. The following are the different players that customers may encounter:

Utility Distribution Company - Often known as the UDC or LDC (Local Distribution Company). This is the entity that has traditionally supplied power resource under its monopoly structure. In most cases, these entities will continue to provide regulated services for the distribution of electricity to customers and serve customers who do not choose direct access.

Unregulated Affiliate - An entity that is affiliated with the monopoly utility but is conducting business that is competitive and unregulated. Same as the ESP, which provides electric service to a retail or end-use customer, but which does not fall within the definition of an electrical corporation under State Public Utilities Code. Unregulated affiliates are obligated to meet state registration requirements, which vary by state.

Power Marketer - Any entity that buys electric energy, transmission, and other services from traditional utilities and other suppliers, and then resells those services at wholesale or to an end-use customer. Marketers engage in buying and selling electricity, but do not own generating or transmission facilities. Power marketers take ownership of electricity and are involved in interstate trade. These entities file with FERC for status as power marketers.

Broker - An agent who establishes a transaction between a seller and a purchaser (introduces participants to a transaction, arranges the transaction, and charges a fee for this service). A broker does not take title to capacity or energy.

Energy Service Provider - Often known as the ESP or in some states ESCO (Energy Service Company). An entity which provides electric service to a retail or end-use customer, but which does not fall within the definition of an electrical corporation under State Public Utilities Code. ESPs are obligated to meet state registration requirements, which vary by state.

Aggregator – Any marketer, broker, public agency, city, county, or special district, that combines the loads of multiple end-use customers in facilitating the sale and purchase of electric energy, transmission, and other services on behalf of these customers. State registration is not always required (varies by state).

Independent Power Producer – A non-utility power generating entity, defined by the Public Utility Regulatory Policies Act that operated a generation facility and sell power on a wholesale level primarily to electric utilities, power exchanges, or energy service providers.)

Just as monopoly utilities were vertically integrated, participants may be any combination of the above. What is most important prior to the qualification a new electric supplier is to understand your own organization's risk profile as well as energy consumption. Once a profile has been framed, an organization can seek out a vendor that will be attracted to serve the new load as well as offer attractive rewards in exchange for the business. Understanding the potential vendor's marketing strategy is critical. Some vendors only target renewable buyers, others target specific sectors (residential only, large industrial only), and some target specific market segments (national chain accounts, hospitals, churches, etc.). If your organization does not fit within the new vendor's ideal customer profile, there is less chance to successfully create a deal that meets expectations. As with any new provider, reference checks and investigation of subcontractors are a must. Since the industry is between its infancy and adolescence in most states, there will be unfamiliar company names that makes it difficult to discern trust, financial stability, and performance. This is not to say that there aren't viable, qualified new entrants, but investigation into appropriate registrations, contractual relationships, subcontractors, and capitalization of the organization should be conducted. Another measure for protection, is to require performance guarantees (such as performance bonds, contract default clauses, etc.) and structure the contract in a way that allows the organization to create a lower risk situation. Easier said than done, a clear understanding of the risks and technical implications of new legislation, changing protocols, and rules is required.

Aggregating Energy Data

In order to determine if aggregation is an option that will yield rewards, the organizations that are considering aggregation need to understand energy consumption behavior and patterns among the members of the group. This step of compiling detailed historical data for multiple organizations often becomes an overwhelming hurdle. Obtaining 12-24 months of historical data on multiple accounts from the local utility and efficiently managing a massive amount of data is not always a smooth process. Relationships with the local utility representatives, clear processes and authority to acquire data, and technical knowledge in how to evaluate energy data are all critical. The data collection and aggregation process can take weeks at best and even months depending on the number of organizations that are considering aggregating.

Guidelines for developing a successful aggregation involve meeting the individual needs of participants while creating the most desirable load characteristics and maximum economic benefits for the group. The most favorable load characteristics that can bring significant value to an aggregated group include:

- High Load Factors
- Significant Differences between Non-Coincident and Coincident Peak Demand

- Low Peak Period Demand and Usage (hourly, daily, seasonal)
- Flexibility for Interruption/Cycling/Control of Usage

While some of these characteristics may not be feasible for individual electric accounts, it is possible for a carefully designed aggregation to achieve a more desirable load profile while also including individual participants that have less desirable load characteristics.

The primary criterion in reviewing the potential aggregations was whether the energy characteristics would improve the likelihood of obtaining lower cost energy services. The key is to create an energy load that enhances buying power and desirable characteristics (i.e. is large but is not comprised of uses only in peak use periods).

Past experience has revealed that the amount of savings competitive suppliers are willing to offer aggregation programs are highly correlated to the size of the aggregation as well as the load shape for the aggregation. A threshold load level in the 20 - 50 MW range is viewed as an appropriate minimum aggregated load to create active competitive interest in the evolving marketplace. The value of an aggregation program from an ESP's point of view would depend on criteria such as load factor and number of participants that would actually commit to the program, and sometimes strategic importance if the group is high profile or would serve as a beachhead for market entrance.

A City led aggregation program seeking green power for the residential customer segment is more likely to garner interest from ESPs than other attempts to seek power for aggregated residential loads based solely on a low price basis. The Cove Communities Services Commission's efforts is one example of a city led effort that included the residential sector in its solicitation for lower cost power supplies (an environmental option was not the focus of that solicitation). The Cove Commission found that it was not able to achieve additional savings through an aggregated solicitation of its residential customers beyond what individual residents could sign up for on their own. The primary reason was that ESPs were not willing to offer additional benefits to that sector due to the uncertainty of the number of customers that would actually sign up.

Market Realities

Due to market constraints, many competitive suppliers are finding it difficult to offer additional savings beyond the state mandated reductions. This is causing ESPs to follow niche-marketing strategies in pursuit of revenues and market share. Some ESPs are targeting commercial chains in hopes of adding locations across the country as soon as is possible. Other ESPs are targeting only large industrial customers because of that segment's relatively large and stable energy usage. Still other ESPs are concentrating on City and municipal aggregation groups. There are few ESPs targeting residential customers due to the difficulties in giving this segment any significant additional savings beyond the state mandated rate cut. Those residential and small commercial customers who have purchased power through direct access have found savings to generally range from under 1% to 2% off of their total utility bill. ESPs are having more success offering green power to the residential segment due to the higher profit margins available with these products and the relatively minor additional costs residential customers incur when choosing this option.

There is hope and optimism that the future will be better and that there will be increased opportunities for multi-state operations as more states open up. Vendors as well as those involved in the restructuring process believe that direct access participants will increase

as consumers become more educated. In the long term, the current political forces will yield to economics and customers should be able to realize the benefits of competition.

Competitive Offers

It is important for any customer considering an offer from an ESP to understand the structure of the proposal. Contracts can be proposed in any number of formats including discounts to the PX price, discount to the PX credit (which is based on the PX price), discount to the total default UDC tariff, shared savings plans, fixed fee and any combination thereof. A customer must compare proposals in the proper context to truly understand the benefits of one offer versus another. To date in the California market offers tend to be few, scarce for guaranteed savings, abundant for renewable supplies, available for a short period of time, better for longer term contracts, complicated, limited by eligibility requirements, confidential, and are subject to political forces which influence the benefits available.

During the negotiation stage, it is key to understand the following:

- Current market conditions and pending changes
- Qualified players and their strategies
- The value points of your aggregation
- What to expect for today's market (Timing is everything)
- Ability to quickly react to market changes
- It's not a done deal until it is confirmed in writing
- What is the next best acceptable offer

Customers can also investigate alternative cost saving measures that provide more significant short-term savings than solely choosing a competitive energy supplier. These options include implementing individual measures to reduce transmission and distribution charges (which may account for 20% to 40% of a customer's total energy bill), making use of efficiency services that will reduce the total amount of energy consumption, and shifting energy usage to more advantageous time periods. These strategies often have larger savings potential than direct access. The ultimate method to gain maximum benefit is to implement a combination of demand side as well as supply side options.

Making energy decisions in the deregulated electricity environment is full of complexities. If companies understand market rules, stay abreast of activities defining the new protocols, and recognize opportunities early on there are more chances for success. Unfortunately, there is no one clear solution for all. As individual each energy profile is for each organization, so are the rewards and benefits that can be achieved. Companies that take a long-term perspective for energy goals, maintain realistic expectations and are able to quickly react to market changes will continue to be the beneficiaries of electric restructuring.