

# Lessons Learned from Requests for Competitive Power Prices

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The market for electricity is gradually opening for competition. This process is slow and currently proceeding on a state-by-state basis. Some states are allowing retail access to competitive power supplies for all customers. Others are limiting participation to selected consumers in so called pilot programs or in phases as direct access is introduced over a period of several years.

At present, competition is restricted to power as a commodity. A few states allow customers and/ or their suppliers to provide metering and billing services at competitive rates. No states allow customers direct access to wholesale power markets. This contrasts with deregulation of natural gas, where large, so called non-core or transportation customers can purchase directly from wholesale markets.

Experience by large, retail customers with natural gas purchasing has lead many to believe that lessons learned in that market are directly transferable to the retail electricity market. That is not necessarily the case, especially for government agencies who typically have retail accounts that vary widely in size, location, and service requirements. This article extracts early lessons learned by government agencies from their efforts to procure power in competitive markets, and can be instructive to purchasers in the private sector. It is hoped that these lessons will not have to be relearned by each agency in each state as deregulation proceeds.

## ON-THE-JOB LEARNING

The lessons presented in this article were developed by monitoring the competitive power procurements of a handful of Federal and other government agencies. This process included collecting and summarizing the initial request for proposals (RFP) followed by interviews with selected procurement staff at each agency. Of greatest interest were remarks about what was expected from the RFP process and what resulted.

In almost all cases, initial RFPs were developed through the use of consultants. In all cases, retail direct access was not yet available. Consequently, these consultants had knowledge of competitive gas markets or wholesale electric markets, but no direct knowledge of competitive retail electricity markets.

In other words, the consultants and their clients were equally ignorant about what to expect. Nevertheless, there is security in numbers and the consultants were uniformly valued for their insights into the motives of power sellers and the workings and jargon of electricity markets. They were especially valued when market reactions to RFPs did not meet expectations.

In general, the objective of government RFPs, in priority order, are:

- Monetary savings, generally due to current or pending budget cuts,
- Responding to requirements that all goods and services must be competed if competition is available,
- Consolidating billing for all electrical accounts with a single supplier,
- Improving the agency's ability to manage energy use through improved metering and data, and
- Integrating energy management options with power procurement.

Similarly, the apparent objectives of marketers responding to government RFPs, again in priority order, include:

- Building a strategic relationship with a key customer,
- Selling value-added services (audits and efficiency services mostly), and
- Providing electricity at bargain prices.





It should be obvious by comparing the two lists that a significant gulf exists between the two sets of objectives. This led to often significant problems clearly communicating between the agency and vendors and generally resulted in numerous amendments to RFPs and a substantial effort clarifying RFPs to vendors, usually on the phone.

Typically, both buyers and vendors used a team approach to the procurement. Vendors often relied on team members that were not all located in one place, requiring complex conference calls to conduct simultaneous conversations. If communications were not simultaneous, teams (on both sides) had to spend time during the calls covering old ground to reestablish where in the negotiation process they were.

These problems are not unique to electricity procurement and generally result from government agencies trying to do “too much” in a single RFP. This may be easier to accomplish once retail competitive environments are better understood (e.g., if RFPs are issued after retail competition starts rather than before) and once the market matures.

The number of lessons that can be learned from this process is almost unlimited due to the variations in how each agency approaches the market and how each State deregulates. However, the following were determined to be the lessons with the greatest impact. It is expected that future versions of this article will expand on this list.

1. You Can't Get It Wholesale
2. Uncertain Loads and Unclear Prices Go Together
3. Load Shape Matters
4. Bigger Isn't Better
5. A “Billing Agent” and a Contractor Aren't the Same
6. Price Discounts and Bill Reductions Aren't Comparable
7. Dollar Savings are Hard to Capture
8. Rate Discounts (Standard Offers) Are Competition
9. It's Called “Best and Finals” for a Reason

## 1. You Can't Get It Wholesale

Wholesale power markets are active across the nation. Typically, power trades in these markets at an average of 1.5 to 2.5 cents per kilowatt-hour (kWh). Prices in these markets are easy to obtain. Unfortunately, this has led some buyers to assume that these prices are available to retail electricity purchasers. This assumption would be reasonable if gas and electricity markets were deregulated the same way.

However, this is not the case. Similarly, retail customers with many small accounts look with envy upon the low prices granted to large customers with single service addresses. This has led to an assumption that sheer quantity of power purchases should result in similar treatment. These assumptions are inaccurate.

There are three primary reasons why these assumptions are not being realized in retail electricity markets.

**First**, gas deregulation is governed by Federal law, administered by the Federal Energy Regulatory Commission (FERC). Although FERC has deregulated wholesale electricity markets on terms comparable to those it followed with natural gas, it does not have authority to extend comparable terms to retail electricity customers.

**Instead**, States have authority over retail electricity transactions, including those for very large customers. No State is proposing to allow retail electricity customers direct access to wholesale markets. One can only assume that States do not believe retail electricity marketers and consumers are sufficiently sophisticated to handle the responsibility associated with direct access to wholesale markets (this would require the ability to instantly interrupt service to individual customers).

As a consequence, State deregulation rules require electricity consumers to continue to purchase bundled delivery service. These services vary by State based on how direct access is implemented (e.g., power pools versus bi-lateral contracts). In essence, power purchases come bundled with required delivery services including reliability requirements that may not be needed or desired by the customer. This adds costs to the wholesale price, complicating direct comparison of wholesale prices and retail price bids.

**Second**, retail delivery costs, even for gas, vary based on size. Size is determined by consumption at a specific meter. This establishes the utility account that is, in turn, used to associate the customer/ account with others of similar size, a customer class.

Utilities allocate their service costs to customers based on these classes. In general, smaller customers require more retail service facilities to serve than larger ones. Consequently, they are charged more per unit of energy delivered. As a result, a simple summation of energy use is not an appropriate metric for determining retail service charges (or savings potential).

**Finally**, deregulation at the State level is not immediate. Instead, it is a transition from a price regulated market for electricity to one where

electricity prices (and some delivery services) are set in competitive markets. Some services will remain regulated by the FERC and States. In order to ease the transition to free markets, States have allowed certain expenses to continue to be included in utility bills. These include surcharges for utility stranded costs (revenues lost to competitive power suppliers), continuation of energy efficiency and renewable generation program funding, and taxes for social service programs for low-income customers and local governments.

The lesson here is that it is unreasonable to expect wholesale electricity prices to translate directly into retail price bids. Instead, retail prices will include additional charges that include delivery of wholesale power to retail markets and surcharges and taxes allowed by State regulation that are not reflected in wholesale markets. Thus, price quotes tied to wholesale prices are unlikely to be so-called index minus prices. Instead, they are likely to be “wholesale price, plus,” bids.

## **2. Uncertain Loads and High Bids Go Together**

A common strategy among government agencies is to aggregate the needs of many meters from agencies and facilities scattered around a region. One of the problems with so-called aggregation is that the responsibility for the bills of the loads that are being aggregated is not also aggregated.

As a result, the agency acting as an aggregator has to negotiate as an agent for the facilities it hopes to buy for without the ability to actually commit the loads they represent. This requires a two stage negotiation process that is fraught with risk for all parties.

First, the aggregator must solicit potential loads to aggregate. In order to maximize participation and thus, the total size of load, they generally allow participants the option to opt out of any resulting deal if it is not in their interest. The second step then, is to negotiate for the best price possible to retain participation.

However, marketers are faced with committing to a specific price without a reciprocal commitment by the aggregator to specific loads (including total energy requirements and overall load shape). Finally, once the price bid is secured, the aggregator (or sometimes the winning vendor) must renegotiate with participants to obtain load commitments.

Ideally, customers approach the market with specific service requests in terms of total load and load shape. This ideal is rarely realized because of normal variations in loads due to changing missions and cli-

mate. So, marketers always expect to take some risk about actual volumes and load shapes.

However the uncertainty presented by uncommitted load aggregations is orders of magnitude riskier. As a result, best price offers rarely result. Another difficulty with this kind of RFP is that marketers are uncomfortable with providing aggregators with a price bid that is widely shared with participants prior to making a formal load commitment.

Their concern is that this provides participants with the opportunity to compare competing offers "on the side." This may expose the RFP vendor to unfair competition as well as making potentially proprietary price information public.

The lesson here is that the RFP process tends to be viewed by agencies acting as aggregators as a license to shop and by vendors as a confidential negotiation.

Participation in RFPs by vendors is expensive. It takes a substantial commitment of resources that could be used to pursue other deals as well as costing considerable amounts of money. Agencies acting as aggregators have an obligation to make explicit exactly what they are offering to buy and what is contingent and structure their solicitations accordingly. They also have an obligation to keep pricing confidential when so requested. This puts aggregators in an unenviable role.

### **3. Load Shape Matters**

Most vendors trade in wholesale power markets. Prices in wholesale markets vary by time-of-day and season. Large vendors trade in multiple markets. This allows them to optimize their purchases to take advantage of price differences between markets. Vendors must be able to match the customers' patterns of use to expected price fluctuations in wholesale markets in order to pass along the best price.

Consequently, they need to make assumptions about the volume and shape of electrical use. Obviously, these assumptions are not perfect and each vendor assumes some risk or else lays that risk in the lap of the buyer.

As a starting point, the buyer is well advised to provide potential vendors with the best available data for making these assumptions. Typically, this includes providing:

- Historic energy use data in the form of monthly utility bills for all accounts,
- Hourly load shape data from time-of-use meters installed on very

large accounts, or similar data provided by time-of-use meters installed by the customer,

- Operating schedules (in the absence of time-of-use data),
- Expected major changes to historic operations (new uses, closure of facilities, energy conservation actions, etc.), and
- Access to electricity production equipment, fuel switching capabilities, load management systems, and energy storage facilities.

It is widely assumed that loads that are flat (do not vary on a daily or seasonal basis) will attract the lowest price bids. Evidence from recent RFPs is mixed on how load shape affects price. Some vendors are better able to serve loads that vary.

However, there is ample evidence that the absence of load shape information results in less attractive price bids. This presents two challenges for buyers. First, some utilities have instituted a practice of charging to provide this data. In general, billing data is the property of the customer, so such charges should be reasonable. However, some utilities are charging as much as \$1,000 per account for this data. These charges are clearly unreasonable and should be protested before local regulators.

The second challenge is how far to go in collecting this data. There are obvious diminishing returns. In general, a few large loads dominate the volume and shape of loads. Accordingly, buyers should concentrate on providing load data for these loads. In terms of quantity of data, time-of-use data is often collected on a 5-or 15-minute basis. Generally, this level of detail is not necessary. Hourly data should be sufficient.

Also, given that history is, at best, only a guide to the future, 12 to 18 months of data should be adequate. Data should be provided in its raw, 5-or 15-minute interval, format if the local utility charges extra for reducing the data to hourly or other frequencies.

The lesson to be learned here is that load shape does matter. Virtually all RFPs include monthly energy use data at a minimum. Larger, more sophisticated RFPs also include load shape data. The challenge to both vendors and buyers is how to provide what is often a complex mass of numbers. One method is to post this information on a public web site. This is a good model to follow for reasons that will be discussed next.

#### **4. Bigger Isn't Better**

Government agencies and many commercial chains prefer to negotiate with a single supplier for all of their energy needs for a variety of

reasons. However governmental energy requirements typically exhibit considerable variation in the size and location of accounts whereas commercial chains have more uniform loads and central locations.

As a result, aggregation may not lead to the discounts expected. A good example is provided by the Postal Service. The United States Postal Service typically operates at least one sorting facility and numerous neighborhood post offices in most urban locations. Sorting facilities are 24-hour-a-day operations and are large electricity customers. Neighborhood post offices are substantially smaller in size and energy demand. They are obviously scattered fairly uniformly across the urban and suburban landscape. Local post offices are also an eight-to-five type of operation that is typically vacant much of the time.

So, although a vendor may be attracted to the load represented by a sorting facility, they are not as interested in local post offices, especially when they may be spread across multiple local utility service areas.

The goal of a single provider presents a trade-off between convenience and lowest price. This cost of this trade-off is not uniform among all suppliers. In other words, some vendors may be more willing and able to act as a single supplier for a low price than others. Therefore, it is reasonable to request quotations to serve all accounts, but vendors should be allowed the flexibility to pick and choose.

The worst case would be that a vendor would propose to "skim the cream" and offer a low price for the large, most profitable loads and leave the remainder to be served by the default supplier (normally the current local utility). Nevertheless, they may still offer an attractive price that makes this worthwhile.

Regardless, such an offer would be superior to the current supplier situation where all accounts are served by different local utilities and no discounts are available. Typically, the vendor will include in their offer an option to consolidate data collection, even from accounts they do not serve. They may also offer to act as a billing agent for these accounts providing the appearance of a single supplier.

The lesson from this example is that RFPs should be clear in the importance of both price and overall bill reduction so that potential vendors can identify their best strategy for consolidating loads to serve directly and which to serve indirectly. One way to do that is to make load shape data for large accounts readily available, such as on the web as suggested above. This will allow potential vendors to mix and match various accounts to evaluate how they can offer the best price, service, or combination of price and service.

## 5. A "Billing Agent" and a Contractor Aren't the Same

Normally, marketers serve loads directly using power they supply. Alternatively, they can act as a billing agent for a customer paying the bills for service from another supplier, usually a default supplier offering an impossible to beat price discount. This situation comes about when the transition to competition allows alternative suppliers but the rules limit the savings available in order to protect incumbent utilities.

It also occurs where publicly owned utilities, such as municipal utilities, are outside state regulation. When an agency requests bids to serve accounts in such an area vendors have to make special arrangements to include accounts in regulated service territories in their bid.

Unfortunately, both deregulation legislation and government procurement regulations treat a billing agent differently than an energy supplier. Some deregulation rules prohibit billing agents. Others limit rate freeze protections and rate discounts to customers who remain with the local utility. Designating a billing agent will jeopardize these deals.

From a procurement perspective, procuring a billing agent requires different processes than buying energy as a commodity. Accordingly, using an energy procurement may not be a valid method for procuring billing agent bids. Further, billing agents are not in a position to offer any discounts off posted utility rates, therefore expected bill savings cannot be realized.

The situation becomes quite complex when the transition to competition allows competitive market savings over the course of the proposed RFP period but not at the outset. In that case, vendors are either forced into one of two awkward situations. The first is to play the role of billing agents in the early years and then switch to energy providers, which may not be allowed in the RFP. The other is to become an energy provider at the outset of competition and sustain a loss in the early years.

Obviously, vendors would expect to make up these losses in the later years of the contract. Equally obvious, this strategy would mean a vendor would be unable to offer significant price discounts when compared to receiving service on a discounted rate until such time as competition results in real price decreases.

In other words, a buyer would be better off to take the utility rate discount and hold off pursuing a competitive purchase until savings were available. Unfortunately, this situation may be the rule rather than the exception in most states, and that is the lesson.

## 6. Price Discounts and Bill Reductions Aren't Comparable

Wholesale power markets are very efficient. In other words, prices are close to marginal production costs and profit margins are very low. As a result it is difficult to make large profits from power sales alone. Accordingly, a number of energy suppliers intend to make their profits from selling value added services that include energy audits, energy efficiency measures, and operations and maintenance (O&M) services. Many governmental agencies and private purchasers are interested in these services as a means to reduce energy costs. Ideally, both goals could be achieved through a process that results in bill reductions that could be compared on a head-to-head basis with pure energy price discounts. Unfortunately, that is currently too difficult to achieve.

**First**, most energy procurements have to use a simple-to-evaluate measure for comparing bids. Typically, that is price. A bill reduction can be made equivalent to a price quote if the buyer (with the agreement and cooperation of the seller) can assume a level of consumption that can be used to compare a pure low price bid to an estimated bill that reduces consumption by an amount at least sufficient to offset the higher costs associated with the efficiency measures necessary to achieve the energy savings.

In order to award a contract on this basis the vendor would have to guarantee the energy savings as the bill savings associated with lower energy prices are guaranteed, *de facto*.

**Second**, energy savings estimates are prospective. Generally, an offer of energy savings in a competitive energy procurement would have to be made in the absence of the necessary data upon which to base them. One way to facilitate this option would be to provide potential vendors with audit data or perhaps typical projects which bidders could use to provide specific energy saving and cost bids. Regardless, a buyer would still need some kind of guarantee in order to realize savings equivalent to those available from a price discount.

**Third**, bidders offering offsetting energy savings would need guarantees from the buyer to ensure that they could implement energy savings projects rapidly enough to produce the necessary energy savings and capture these within the term of the contract. This presents two challenges for governmental aggregators. To start, as an aggregator they are generally in no position to provide guarantees of either access or even specific customers to serve. Also, most facility managers are reluctant to give an aggregator, or their contractor, control over which energy effi-

ciency projects to implement.

**Finally**, even if it was possible to justify an award on this basis, monitoring the contract would present considerable headaches.

Despite the apparent attractiveness of this approach in concept, it is probably unworkable for most government agencies. Nevertheless, energy procurement contracts should include the opportunity to pursue energy savings opportunities with the energy vendor selected. This would allow another avenue to pursue such projects and may provide mechanisms for capturing budget savings from energy price reductions. (See Next Lesson)

## **7. Dollar Savings are Hard to Capture**

Governmental energy charges are paid from line item budgets. Overruns are recovered by cutting programmatic budgets. Unfortunately, savings are generally returned to the government, not the agency. This presents two problems.

**First**, the agency lacks any incentive to take risks that may result in periodic cost overruns but yield overall savings.

**Second**, in volatile commodity markets annual price fluctuations may result in periodic cost overruns as a matter of course. Like challenge for procurement staff and vendors alike is to identify a mechanism that allows the agency to capture monetary savings or for the vendor to carry over savings from good years to cover losses in poor ones.

Returning savings to an agency is tricky because a check to the agency would go directly to a general fund account and not to the agency itself. As a result, bids that are based on discounts against payments to a utility (as with billing agents) or an index or option price (as with a price cap option or so-called index minus price) don't work.

Equally problematic is accounting for retained savings by the vendor, as those wouldn't show up as actual out-of-pocket savings since they would be retained by the vendor. Potential options may include equalized payments over the term of the contract and credits for value-added services. The feasibility of these approaches has yet to be determined.

## **8. Rate Discounts and Standard Offers Are Competition**

Federal agencies are required to compete for goods and services when competition is available. The transition to competitive electricity markets raises questions about when competition is really exists. This is a particular problem when the transition includes rate freezes and stan-

dard offers that offer discounts off past tariffs but may not allow a large enough margin for competitive offers from vendors other than the incumbent utility.

It can be argued that competition exists when an alternative exists to the old, regulated rate, even if it is a state sanctioned rate. Obviously, if there are no competitive suppliers and thus, no effective competition, procurement from the new, lower rate is easy to justify.

However some energy marketers are so eager to make the case for competition that they are making offers that appear to be costing them money. They may present a problem for an agency that solicits price quotes but only receives one bid below the standard offer rate. Normally a quote from a single vendor would be insufficient to justify a contract award.

However, if the offer is legitimate and provides real savings to the government it can be argued that the quote is competing with the standard offer or frozen or discounted utility rate. This line of reasoning has not been tested, but is unlikely to result in a protest.

## **9. It's Called "Best and Finals" for a Reason**

This final lesson is aimed at vendors. Government contracting is highly regulated. In general, the process allows a fair amount of information exchange and negotiation between the government and vendors. However the structure for this exchange is at the discretion of the procurement staff. Some allow individual discussions between vendors and procurement staff. Some require all communication to take place in public forums.

Once bids have been submitted, a short list of vendors can be selected for direct, one-on-one negotiations. These are privileged conversations. None of the conversations at any stage of the process can unilaterally change the nature of the RFP without requiring an amendment to the RFP. Substantial revisions may result in a new RFP altogether.

As a result, if a vendor pushes for specific exceptions that may give them a competitive advantage, they run the risk of the whole process being redone using their suggested approach, but with the participation of other vendors encouraged.

After the government is satisfied that it fully understands the elements of qualified vendor's proposals the process proceeds to best and final offers (BAFOs). Best and finals includes a final offer of terms and

works against the vendor.

Similarly, contingencies may void the offer, disqualifying the vendor. The challenge faced by vendors when a governmental agency acts as an aggregator is that the agency is unable to commit to a specific load or load shape while the vendor has to commit to a specific price. The agency will use this price bid to solicit participation by its client facilities which will ultimately result in load commitment.

Obviously, this interactive process presents some uncertainty for the vendor. However, they have no choice but to bear that risk. If they attempt to withhold final pricing until they have load commitment they will void their offer.

## CONCLUSIONS

Competitive electricity procurements are new to most governmental agencies. Although they have well developed procedures for procuring goods and services from competitive suppliers they are not familiar with electricity markets. Similarly, most electricity vendors are not familiar with government procurement practices. This poses challenges for all parties as competition in electricity markets begins. Mistakes will be made as all parties struggle with this new opportunity. It is expected that sharing of lessons learned along the way will minimize these mistakes and facilitate both the procurement process and the delivery of the benefits of competition to government agencies.

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## ABOUT THE AUTHOR

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