



# Being a Retail Electric Provider - A Manageable Risk

The De-regulation of electric markets has thrown up attractive opportunities in the energy domain. It was not surprisingly accompanied by many varying risks, specifically in the retail market segment, which the market participants came to learn over time and incorporated some form of risk management policy for their survival.

One other View is that 'Risk mitigation' has limited benefit. Avoiding bankruptcy is essential, but after that, shareholders may prefer that we take risks when the returns justify it.

The term Risk management is often used to comfort organizations into a non-alert state, especially when the policy they have, could erroneously conclude they have correctly identified future risks. Also sudden fluctuations in the amount of risk exposure a company may be faced within a short span of time. This has often resulted in sudden huge losses in the past, in some cases wiping out the entire profit. What is essential is to identify cases where actions at certain times have led to huge dollar savings by following a 'prudent' approach, which has no fixed methods to follow.

To list a contradictory behavior, we can say that executives often declare they don't speculate and they belong to companies with a hedging or trading function like a Retail Electric Provider.

We can discuss the various risk factors faced by Retail Electric providers. There are business risks, where the company can build towards establishing some control and System risk, over which the company has little control

Just going over the identified risks for a retail electric provider, we see the familiar risks as being

## Price risk

In determining the retail price for a customer, a number of factors have to be taken into consideration. Each facility has a unique load profile that will result in a different cost to serve. For instance, a 1000 kW peak load industrial customer who operates at a load factor of 75 percent will have a lower cost to serve than a similar peak load commercial customer who operates at a load factor of 60 percent. Price protection instruments include forward physicals, futures, options, and weather derivatives. A retailer could have a mix of these price protection instruments to mitigate his risks.

## Volume Risk

One extremely significant difference between retail markets and wholesale markets is the volume risk. Wholesale power is traded in blocks of 25 to 50 MW. Each on-peak contract, for instance, is for constant 5x16 power delivery (5 days per week, 16 hours per day), at a 100 percent load factor. The load that retail electric marketers serve, however, is not constant. They fluctuate every minute. Thus the retail electric provider is subject to risks that did not exist for the wholesale trader. Matching retail loads to wholesale blocks creates either long or short positions for the retailer.

## Market Behavior Risk

As with any industry vertical, energy domain has Market risk. Market behavior risk is the actual versus the estimated customer response and customer acquisition costs which when they don't turn out as forecasted, it is a major risk that applies to both the retailer and the default provider. Movement of customers from one group to the other will cause changes in loads that each has to serve and will result in either a long or a short position for the parties.

## Technological Risk

Operational technological risks include billing and customer care systems that don't function as they are supposed to, or load forecasting and settlement systems that don't shadow the system operator very well.

## Regulatory Risk

Regulatory risks include risks caused by rules and regulations that may affect the competitiveness and financial performance of the retail entity. The retail electric industry is in its infancy. Each deregulating state has pursued a different approach based on lessons from states preceding them as well as the unique factors in that state. If open choice does not proceed as envisaged, the regulators and politicians may step in and make changes to the legislation and the rules and regulations.

We can go on identifying and explaining risks but to see the net result at a specific instance, we need to figure out how different factors interoperate with others to get the big picture. In Most situations, an REP can only minimally afford 'extremely valuable' time to understand the whole and respond.

## Putting it all Together

After years of de-regulation, we now have ‘Smarter energy markets’, so this could be negotiated, by being a ‘Smart Retail Electric provider’

Consider the fact that many firms, which are short on personnel relative to their opportunities may decide, keeping everything else equal, their allocation of people to an activity should correspond with the highest profitability per person.



Risk capacity is the same. If the company has a limited capacity to bear risk, then to make traders value this significant resource, management must put a cost on it. Almost all banks now include risk charges for traders Risk charges ensure that traders take risk efficiently. Similarly, if the company is concerned about working capital usage, it can put a cost on it to make traders to buy or sell with less cash. Also the company may also be concerned about counterparty credit-risk capacity. Counter party risk is when the wholesaler cannot deliver power and the company cannot face huge losses due to lack of it. These charges have to be carefully thought out, as a flat counterparty credit charge will cause traders to look for one with higher average risk than the fixed charge would indicate. Many firms have risk limits relevant to their specific risk tolerance levels and choose their counterparty limits according to their credit ratings. This offers the appearance of risk control, but may miss an overall corporate objective. For example, if the corporate objective is to have enough cash to get through the planned capital budgets, then the risk controls should be decided based on that.

Volume risk is significant at the retail level, as demand often moves related to electricity prices. Trying to predict customer acquisition rate and the resulting load is an approximate forecast at best. The approach is to match the supply portfolio and the uncertain load demand portfolio. Otherwise, the purchasing strategy will be same as a speculative bet. That brings us to the ‘gambling’ behavior in competitive power markets. And on this point, industry experts said years before the Enron debacle and the meltdown in California that Speculators will trade electric futures for reasons that have nothing to do with supply and demand. A retail electric Provider should make an effort to identify and monitor such activities.

Industry studies and research results clearly show that it is possible to use combinations of wholesale electricity products to manage price and demand risk while offering consumers short and medium term fixed prices.

The use of forward market hedges permits suppliers to better estimate their cost to offer services by limiting ability to benefit from lower future prices and protecting against higher future prices. In addition, the use of options can provide insurance against both price and demand risk, although this insurance comes at a cost that requires careful consideration of high price or high load migration events. In all cases these various approaches are actively reducing the amount of volatility that suppliers face in the wholesale market. The final outcome should be limited exposure to short term market price spikes.

With careful consideration of risk tolerance levels, wholesale electricity markets can be utilized to meet retail demands. As the market begins to see a greater number of standard service type offerings, there will be a greater emphasis on developing hedging strategies that draw on portfolios of supplies to serve these varying loads and avoid paying penalty for the price spikes.



A Retail electric Provider should always give high priority for its basics like operations, and then focus on risk management strategies. When business basics like ‘operations processes’ are stream lined and the REP develops a firm understanding of its activities , the above mentioned risk management strategies could be thought out and applied for specific needs.

A strong technical service capability is needed for a company’s growth, by giving people needed data. Every service outage needs to be documented, even if the cause may be external to the responsibility of an REP, the underlying causes need to be discussed and fixed. Online response time is normally straightforward to manage, which unfortunately often means balancing this key area of internal service quality with regular investments. Outputs like financial reports, service orders, collection notices, updated online files, or bills and statements, should, be measured continually by its receiver for timing and quality.

The REP of the future will rely more and more on technology to monitor the best available information, in order to manage risk and compete in this very competitive marketplace.

## Author Bio

S. Balakrishnan has over 20 years experience with retail power markets, including strategy, economic analysis, procurement, pricing, supply and retail risks.