

**European Commission
Directorate- Energy
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The importance of a vertical separation in the electricity market:

Distinction between trade/ retail and generation of electricity

Summary

Work in the EU has in recent years focused on network-owning separate from electricity generation in the electricity market. This is an important development to improve competition in the electricity market. What you have not discussed as frequently in the EU, the issue of a vertical separation of generation from trading in electricity. It is a very important issue to create a better competitive electricity market and open it to new producers of renewable energy.

In Sweden, the Swedish Competition Authority repeatedly analyzed the shortcomings of competition in the Nordic electricity market. They have a study in 2007 analyzed the competition, pricing and the possible existence of predatory pricing in the vertically integrated companies. The report notes that despite the predation occurs, none of the companies a sufficiently dominant position for it to violate applicable competition laws.

Independent Retailers (OE) is a trade association for suppliers in Sweden was established in 2001 to improve competition. OE believes that the Competition Authority's investigation clearly shows the competition concerns and OE considers a vertical separation between generation and trading is a necessary and effective way to improve competition in the electricity market and prevent the customers harmful oligopoly strengthened.

Vertically integrated companies, both in the trade and generation of electricity, can with good profitability negotiate between their production and sales. This leads to the sales company can design contracts and prices in a way that is impossible for a trading company, which is referred to buy their electricity on Nord Pool Spot (NPS) / NASDAQ OMX Commodities (NOC), to compete with. It allows these vertically integrated electric utility in the long run outcompete all electricity companies are obliged to buy their electricity at a power exchange at the price the market determines.

In the Nordic electricity market, the importance of trade electricity futures and other hedging contracts increased radically since Sweden was divided into four different price areas 2011th. This has created a greater need to trade CFD contracts to sell electricity in Sweden. The CFD market is a very small part of the trade of the NOC, but is instead a bilateral basis between producers and traders. It thus increases the competitive advantage of the vertically integrated companies further.

It is important to create good conditions for new producers of electricity, especially as it often refers to the generation of renewable energy. Many of these generators are usually not any old generation with high profitability, but are fully disclosed to manage electricity price risk of their new investments. The new producers entering the market are totally dependent on functioning financial electricity trading to manage price risks in a multiannual perspective. It is necessary to obtain the bank financing needed to build new electricity generation.

The investment in smart grid and smart home requires customers who have electricity contract that allows them to be directly exposed to the hourly electricity prices in NPS. From autumn 2012, all private customers in Sweden have the opportunity to get their electricity consumption measured per hour and thus get hourly rates set on the NPS a direct impact on retail customers' electricity bills. Hourly electricity prices is a necessity to create demand flexibility and reduce the need for fossil fuels and a prerequisite is that retail customers have great confidence in the hourly pricing for them to choose to take that kind of electricity contracts. Therefore, a vertical separation between electricity and power generation that ensures that all production is sold on the exchange is important to increase confidence that the pricing is in full competition.

A vertically integrated electricity market leads to:

- Uncertainty about the pricing of the NPS in the long term, as the current high spot trading on Nord Pool is based on a voluntary agreement between the major electricity producers in Sweden and NPS, called Gross Bidding.
- The fact that a large part of the financial electricity trading takes place outside the NOC, ie without transparency and review.
- The pricing of the financial electricity market is not optimal, since a large proportion of trade takes place outside the NOC.
- Risk of higher electricity prices for final consumers as competition deteriorates
- Loss of supply contracts for industrial customers to manage long-term electricity price risk and thus a higher cost of electricity price risk.
- Loss of opportunities for new producers to manage long-term price risk and thus may be less favorable terms for its financing.

OE is therefore keen to work for a vertical separation of generation from electricity to ensure financial electricity futures, CFD contracts and other risk instruments traded on the NOC. It is also important that the large trade on the NPS, which today is based on a voluntary Cross Bidding replaced by a legal requirement.

A vertical separation of power generation and trading of electricity means that transaction costs are minimized and increases the supply of risk instruments which enhances both the large industrial customer's competitiveness and promotes private customers and facilitates the new generators.

We want to stress that active enforcement of national and EU level will be facilitated when trade in electricity will be moved out to a transparent marketplace in the Nordic countries is NPS / NOC. In parallel, it is essential that it also ensures that the major producers, such as in nuclear power, information advantage reduced to trading on power exchanges can be on equal terms.

Market Structure

Three major groups dominate the electricity market in Sweden. Vattenfall, E.ON and Fortum together control about 70 percent of retail sales, almost 85 per cent of electricity generation and more than half of the electricity grid. The Inspectorate's report shows investments in electricity generation that planned and timely investments in electricity production will not change this oligopoly. This allows improved competition must be based on electricity suppliers to be competitive without electricity generation. With today advantages of being generators OE means that a separation between electricity and power to get a fully competitive market.

Increased liquidity in the financial electricity trading

Over half of the financial electricity trading today goes not through the NOC. The vertically integrated company manages a large part of its trade finance internally. The Inspectorate Report 2007 on "Separation of power trading and power generation" is a very good analysis of the effects that a separation would entail.

It is estimated that it would have a positive effect on a vertical separation and financial trading would move to a marketplace. A marketplace that is subject to supervision and continuous monitoring of the trade in order to ensure it is not tampered with.

The report estimates the impact as positive. OE sees this aspect as very important. The greater liquidity provides the conditions for an innovative electricity market with an important product development for the customers. This is an important factor to ensure that customers continue to have the opportunity to manage their risks at the lowest possible cost. Our assessment is that confidence in the power market will increase from financial market participants and that the NOC can thereby attract additional liquidity that will improve the price formation.

The report also indicates that a vertical separation can improve the financial market by the conditions of liquidity for long contracts improved. Today, long-term contracts very poor liquidity, making sure the pricing and electricity more expensive for customers who wish to purchase electricity with multi-year contracts tied electricity.

Spot market share of the physical trade

It is very important for the pricing and trust in the electricity market to a very large share of the electricity offered and priced on the spot market. (Similar to the financial power trading) Here, the vertically integrated companies in a voluntary agreement moved its internal trade to the power exchange, NPS. It has an excellent increased confidence in price formation in the spot market. That a large percentage of the electricity sold on the spot market is also an important factor in the Energy Markets Inspectorate report. It should not be based on a voluntary agreement between the large electricity and NPS, but assured by a distinction between generation and trading.

Industrial Customers' status

Large consumers of electricity depends on the financial power trading developed and that pricing works for their electricity purchases to be made at the lowest possible cost. Otherwise, they are referred to buy their electricity from the small number of generators available in the market. Since the electricity market in Sweden and the Nordic region is an oligopoly it means a weak position for the major electricity consumers and thus a threat to their competitiveness in markets outside the EU.

The major industrial groups, which are large power consumers, can best manage their electricity purchases if they can rely on to buy the physical electricity on the spot market while being able to manage the price risk of financial contracts from a well-functioning market with good liquidity. In conjunction with the extensive investments to the heavy process industries is not so rare to have a long-term approach to risk management. Today, the liquidity in the financial market is relatively good for short-term contracts, but worse for long term contracts. A vertical separation of power generation and trading of electricity and that the electricity retailers have to manage their price risk in the financial market would help to improve liquidity in the market and even for long term contracts. It would thereby improve competition in the electricity market significantly in the sense that it will be a better balance between producers and large consumers of electricity.

New producers of renewable electricity

It is important to create good conditions for new producers of electricity, especially as it often refers to the production of renewable energy. Many of these generators do not own any old generation with high profitability, but is fully disclosed to manage electricity price risk of their new investments. The new producers entering the market are totally dependent on functioning financial electricity trading to manage their hedging of its electricity generation.

OE is therefore keen to work for a vertical separation of generation from electricity to ensure that financial contracts and risk instruments traded on the NOC. This would make it easier for new producers to enter the market, which is a concern because it often moves on renewable energy. A vertical separation of power generation and trading of electricity means

that transaction costs are minimized and increases the supply of risk instruments.

Independent retailers believe that it is important to as far as possible create competitive neutrality between new and old generators in terms of opportunities to invest in new power generation. Without a functioning financial electricity market that manages electricity price risk, these new generators of renewable energy will have difficulties to get a good enough funding. This in turn threatens to reduce the deployment of renewable energy and the enhanced competition which means that new producers are entering the highly concentrated generation market.

Economic efficiency

OE believe that efficiency in the electricity market for significantly improved for both electricity producers electricity users can adapt their behavior / consumption to the current market situation. Can energy users limit their electricity consumption, as energy costs rise and / or when approaching the maximum power output, it reduces capacity requirements and the need for a power reserve limited while economic efficiency increases. This is obviously very important in terms of electricity consumers in the form of heavy energy-intensive process industries, but there are also great advantages to even create such opportunities for residential customers. If households could limit their electricity use during times of peak load in the market, where electricity is expensive, so it would bring benefits to both the household economy environment by coal power can be reduced.

In Sweden, introduced in autumn 2012 the ability for consumers to adapt their behavior to the current to have the actual electricity consumption measured an priced hour by hour. It is important to hourly settlement in the long run include all electricity customers so that pricing even on term contracts reflect the actual costs. Only when all customers are covered by hourly pricing and settlement you will get price incentives that create the flexibility that the reform aims.

As the situation is now in Sweden the liquidity too low in the financial market for CFD contracts to be able to hedge themselves in a good way in individual price areas, especially in price area number four. Price volatility in this area is extremely high, which led to the end customers, who find it difficult to understand pricing, additional lost confidence in the market. This has led to more end customers are choosing more expensive fixed-price contracts instead of floating price, which discourages economic efficiency.

It is therefore important that efforts to improve competition and customer's position in the electricity market continues to increase confidence in the electricity market, which is a prerequisite for the more customers will dare to choose a variable rate. It is with a high proportion of variable to be in a better position to obtain greater economic efficiency in energy use in Sweden and in the Nordic electricity market. A vertical separation of power generation and trading of electricity to ensure that pricing in the spot market works long term, and not based on a voluntary agreement means that confidence in the electricity market improves.

Retail market

The profitability of the generation of electricity is determined by the difference between the sales proceeds and the average production cost. This means that even at prices just below marginal cost, and hence the market price on Nord Pool, the production company that has most of its electricity through hydropower and nuclear power to have a good profitability and to generate big profits.

The vertically integrated company, it is quite possible that with good profitability negotiate contracts between production and sales, which makes it possible for such sales to design contracts and prices to customer groups and market segments in a way that is impossible for an electricity company which is referred to buy their electricity on the NPS. This means in the long term that the three large vertically integrated firms can keep a higher price level than in a market with effective competition, which affect all electricity consumers.

A pricing in vertically integrated companies, below the market price on the NPS / NOC may necessarily devastating for electricity suppliers without their own generation who buy their electricity on the power exchange at current rates. The purchase prices of the NPS / NOC will these companies, costs of management and administration.

A common Nordic retail market

In the Nordic countries, work is underway to create a common Nordic retail market by 2015. The aim is to expand the retail markets from national to a larger common Nordic electricity market with a more effective competition, more choice and lower prices for end customers.

There is an obvious risk that production companies in the vertically integrated electricity groups will subsidize electricity companies in groups, thus distorting competition on the final customers in the wider Nordic market. Through a cross-subsidy from electricity generation to be the dominant vertically integrated companies strengthen their position even on a common Nordic retail market. Such a development would cause significant difficulties for suppliers without their own generation and electricity without any hydro or nuclear power. That would make it difficult for non-Nordic electricity companies to establish electricity sales in the Nordic countries. It would thus defeat the purpose of a common Nordic retail market with a large number of electricity producers and suppliers and where raw power prices are determined on the NPS.

If you want to ensure that the broader Nordic market actually leads to improved competition and that the market dominance of the large electricity groups also will be reduced, then the cross-subsidies between generation and trading must be counteracted effectively.

Vertical separation of generation and trading - an EU decision

The Inspectorate's report on Separation of trade in electricity and power comes in its findings concluded that a change cannot be national but must be coordinated within the EU. The goal of the EU is a common electricity market and the regulatory framework needs to be the same throughout the EU. OE would like that the EU Commission is taking this issue in the next electricity market directive.

The Nordic electricity market is in many respects a few years before the rest of the EU. This means that it is natural that the competition problems of generation and trading take place in the same group first appears in the Nordic countries. OE is convinced that the same problem will become apparent throughout the EU when the market structure in the Nordic countries is very similar to other EU countries.

Independent Retailers proposes the following measures:

- Electricity Trading Company separated from the electricity generation company. A law on the unbundling of generation and trading is introduced. Electricity producers sell their entire production on the physical exchange. Electricity trading companies buy their power on the stock exchange and is responsible for the sale of electricity to end customers.
- Price hedging shall be made in financial instruments. Financial contracts are bought and sold on the stock exchange for financial trading. No financial or physical contracts directly between electricity generators and electricity suppliers/customers are allowed.
- The reform followed up with an active supervision at both national and EU level.

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