



Energiamarkkinavirasto / NordREG
Timo Partanen
virasto@energiamarkkinavirasto.fi

kopio:

Reference: Request for comments 24.9.2011 / Timo Partanen, EMV

Suomen ELFi's comments for the Gaia's report "Examining and proposing measures to activate demand flexibility on the Nordic wholesale electricity market"

We thank for the possibility to provide our comments to the report by Gaia Consulting on demand flexibility. Suomen ELFi states the following:

We wish to thank NordREG for lifting the issue of demand flexibility into discussion and an area of development in the Nordic electricity market. As mentioned in the report, demand side response is an increasingly important element in the electricity market. As reaching for the targets in renewable energy production the power generation capacity is turning more and more volatile. This requires the need for new means for balancing the market. On the other hand the new technologies for utilizing demand flexibility is rapidly emerging, providing the new tools for efficiently balancing the market.

We encourage NordREG and other decision makers to continue the important efforts for enhancing demand flexibility in the Nordic power market. In our opinion this requires that the possibility of flexible demand is taken into account in all market design solutions parallel with generation capacity. Flexible demand often provide both economically and environmentally considerably more efficient solution in system balancing compared to the solutions in power generation where regulating power capacity often relies on fossil fuel based generation with high capital costs and emissions. There is a unique opportunity in the Nordic power market to be a forerunner in developing the market where market equilibrium is based on flexibility on both bid and ask side.

It is stated in the report that "From an environmental point of view demand flexibility reduces the need to run peak power generation capacity, which is typically mostly fossil fuel based. ... Environmental benefits could also be lifted to the forefront in order to increase motivation." We wish to emphasize that the single users that are active in demand response are not able to realize this effect. Flexible demand reduces the overall emissions in the power system and thus the environmental benefits are spread across the whole system. This means that users that are active in flexible demand are not able to benefit directly from their active participation in demand response.

We'd like to raise the question of the possible adverse influence between flexible demand and energy savings. The Finnish industry, trade and service sectors are widely committed to the voluntary energy efficiency agreement system. The processes in the companies are designed to minimize the energy use. In some cases demand flexibility has increasing influence on energy consumption due to for example need for storage. This has negative effect on reaching the targets set in energy efficiency agreements as well as reaching the targets in carbon footprint reduction. This may hinder companies' interest in being active in demand response and thus this dilemma should be taken into account in energy efficiency agreement system. The problem might be solved by integrating flexible demand into energy efficiency agreement system.

In the report it is mentioned that one barrier for enhancing demand flexibility is the lack of incentives for demand flexibility in contracts. We agree with this and encourage retailers to develop contract models that include a possibility for demand flexibility.

It's important to notice that most of the customers prefer predictable and stable electricity costs. We **disagree** that the flexible demand should only be activated as a response to high spot prices. Instead, flexible demand should mainly be activated in connection with day-ahead price calculation and thus **prevent** formation of high prices. This way the benefits from flexible demand would spread across the whole system both from effective price formation and system security point of view. We believe that electricity system operators would also benefit if the activities in flexible demand would be known already in the day-ahead market results. This might, in tight situations, prevent from unnecessary activation of expensive power reserve capacity.

Please find following ElFi's comments to the specific questions raised by EMA.

Do you see the activating of demand flexibility as important?

We see that utilizing demand flexibility is an extremely important target from efficiently functioning power market point of view. Utilization of demand flexibility leads to efficiency also from environmental point of view, compared to utilization of regulating power production based on fossil fuels.

Which actions you would regard as the first priority actions, and which would be secondary?

1. Remove legislative obstacles for flexible demand participation to all areas of electricity system operation and market places. For example, in the Finnish power reserve system (tehoreservilaki), exclusion of flexible demand from the system has led to doubled costs to consumers compared to the previous period. Based on the experiences from Sweden, utilization of flexible demand would reduce the costs significantly.
2. Design of rules for flexible demand participation to the markets in a way that maximizes the benefits for end-users and the electricity system. The primary market for flexible demand participation should be the spot market by utilizing price dependent purchase offers. This way, in our opinion, the economic and environmental benefits would be maximized by the whole system point of view.
3. Introduce new incentives for flexible demand activation, like
 - tax reductions for users that are active in demand response

- inclusion of demand response to the energy efficiency agreement system or introduction of a certain flexible demand agreement, including state support for flexible demand survey/analysis and support for implementation of actions identified in the analysis.
4. Develop the spot market products suitable for flexible demand.
 5. Make a study in order to find out the overall technical potential volume and potential sectors in demand flexibility to be utilized in different markets.

Are there any additional ideas of promoting demand flexibility in the market you would see as desirable?

See the previous answer, point 3.

How would you regard the role of industrial customers vis-a-vis household customers in demand flexibility?

It's important to enhance demand flexibility in both industrial and household sectors. In addition also trade and services sectors have significant potential for demand flexibility. As mentioned in the report, a large potential, which could most easily be realised on a short term, exists within the large scale industry. We believe that in order to activate this potential, information about the practical solutions as well as incentives are needed (ref. proposals in point 3).

The report (see chapter 5.2.5) propose to publish some type of day-ahead indicator to highlight the need for additional demand flexibility. What are your views on this proposal?

In our opinion flexible demand should mainly be activated in connection with day-ahead price calculation and thus prevent formation of high prices. This means that buyers give purchase offers that include price steps according to their/their customers' possibilities for demand flexibility. For smaller consumers it's important that retailers offer contracts that include a possibility for demand flexibility. This doesn't, in our opinion, necessarily require that the contract is based on spot prices, but the benefits from flexibility in demand can be shared by other means as well.

Yours sincerely,

SUOMEN ELFI OY



Päivi Aaltonen
Managing director