Swissgrid Market Design consultation for the Swiss Energy Strategy 2050

EFET response – 15 February 2016

Q 1: Do stakeholders consider the main market design topics addressed by Swissgrid to be appropriate?

EFET\(^1\) thanks Swissgrid for the opportunity to provide a feedback to this consultation on Market Design. We are pleased to see that within the paper Swissgrid recognizes the merits of the «energy only market» principles as well as the European integration of electricity markets.

In particular, we support measures aimed at sharpening price signals in wholesale markets together with improving the ability of market participants to respond to such signals. Such measures will also encourage better liquidity and greater competition. We therefore agree with recommendations to improve the energy (MWh) market, which will already strongly promote an ongoing match between supply and demand and encourage the efficient use of all assets (generation, demand and storage). Better functioning markets could mitigate or eliminate the need for policy makers to consider capacity remuneration mechanisms or administrative solutions that would interfere with the free functioning of the energy market.

We believe that the priority is to develop well-functioning, liquid energy markets with full access to cross-border capacity. This is as important as enhancing domestic balancing products, imbalance settlement methods and balancing timeframes. Moreover, the refinement of the national balancing market should only be done in close concert with neighbouring TSOs. In the consultation, however, we miss a clear description of the intended way forward, the role and responsibility of Swissgrid, the involvement of the industry as well as an indication of how the consultation results will be used. Furthermore, we would welcome additional studies that evaluate the quantitative impact of market design changes, in particular regarding the proposed change of the balancing mechanism.

We also invite Swissgrid to reflect over the issue of self-generation (and self-storage) where consumers invest in generation and/or storage “behind the metered point”. This is normally an extremely interesting option as the business case is based on avoiding paying the retail tariff that not only consists of a wholesale component, but also of network tariffs,

---

\(^1\) EFET, The European Federation of Energy Traders (EFET) promotes and facilitates European energy trading in open, transparent and liquid wholesale markets, unhindered by national borders or other undue obstacles. EFET currently represents more than 100 energy trading companies, active in over 27 European countries. For more information: www.efet.org
levies and taxes. This means that the business case is positive for the individual consumer, however at the expense of other consumers and resulting in overall inefficiencies of the electricity system. This currently results in generators closing highly efficient plants (like CCGTs) that are fully exposed to a wholesale price in the range of 20-50 Euro/MWh. At the same time, consumers may be investing in low efficient plants because of a retail price that can be 5 to 10 times the wholesale price.

Finally, EFET would like to point out the danger of overzealous application of competition law on the emergence of scarcity prices. It is by definition difficult to distinguish between scarcity prices and mark-ups related to the use of market power. Abuse of market power should always remain forbidden and competition law should therefore apply to the power market. However, market parties may overly restrict their behavior because they fear repercussions from competition authorities even if they feel offering at scarcity prices would be proper. This aspect seems to be relevant for Swissgrid but needs to be addressed by competition authorities instead.

Q 2: Are the stakeholders of the opinion that Swissgrid should address additional market design topics besides the three main topic areas of the consultation?

EFET believes that improving price signals, optimize cross-border trading and moving towards a regional approach on security of supply are key market design areas for Swissgrid as well as for all European TSOs. However, we urge Swissgrid to maximize the allocation of cross-border transmission capacity, especially in the forward timeframe. Moreover, the recent cancellation of monthly auctions for export capacity on Swiss borders for January, February and March 2016, constitutes, in our view, a restriction on trade and has a detrimental impact on forward markets liquidity. The importance to the wholesale traded markets of forward transmission rights issued by TSOs should not be forgotten: the availability of these hedging instruments correspondingly promotes competition in electricity supply across national and control area boundaries at the wholesale level. Also, Swissgrid together with neighboring TSOs should closely coordinate and ensure there is a proper recalculation of available intraday capacity.

In addition to the proposed topics, a clear explanation and discussion of the “Integrated TSO Market” project would be highly desirable. Besides the curious name, we understand that the concept intends to achieve optimal deployment of manually activated ancillary service products. However, we look forward to receiving more details and seek the opportunity to participate in the dedicated working group for industry representatives mentioned in the consultation paper.
Q 3: Do the stakeholder support the Swissgrid proposal to implement a (near) real-time imbalance price?

Yes. In our view, price signals reflecting generation scarcity are a fundamental element of a sound electricity market design. Prices should reflect actual supply and demand of electricity: therefore, market design should allow the free formation of prices, simply where offer meets demand. Increasing the efficiency of the market will improve price signals in wholesale markets during episodes of scarcity. This will ensure that all assets (generation, demand response and storage) can properly be used and valued based on a level-playing field.

The publication of real-time or near real-time imbalance prices is a very important element in this respect. Transparency, together with accurate and timely information about settlement details is essential. Given that imbalance prices are currently published by Swissgrid more than one month after delivery, their earlier publication would benefit market participants by allowing them to react to near real-time prices. Furthermore, the imbalance settlement pricing method should be fully market-based and set correct incentives for BRPs to be balanced in real time. This pricing should reflect the marginal cost of the actions taken by the system operator to balance supply and demand in operational timescale.

Appropriate incentives for BRPs to strive to be balanced should be given by the imbalance price, without penalties. The new imbalance price calculation methodology should be disclosed to enable the assessment of costs and benefits of the new system. Also, the system should move from its punitive and non-proportional procedures for punishing imbalanced BRPs.

Q 4: Do stakeholders see a benefit from formally introducing a new role for an independent aggregator that bundles and markets flexible resources on the wholesale market?

Market price volatility and significant price peaks in hours of scarce supply, together with the introduction of balancing responsibility for renewable energy generators, would create a stronger demand for balancing services: this could be served by commercial parties who have the skills to manage generation portfolios and trade imbalances in the short-term markets. Aggregation of the output of different small generators could fulfill the balancing obligations through acting as a single “virtual power plant” under the same aggregator.

However, the emergence of aggregators, as well as of other commercial categories, should naturally arise as a market opportunity, rather than coming from an external push: TSOs and policymakers should resist the temptation to create special privileges, regulated or otherwise and concentrate their efforts to improve the market functioning. In fact, as the Swissgrid study mentioned in the consultation confirms, one of the main barriers for
demand-side response to develop is the missing price signal. Probably, more volatility and significant scarcity prices will be needed before customers are attracted to true participation in the market. Nonetheless, a level playing field requires also that these aggregators can participate in the balancing market.

In general, we stress that all market participants – generation, demand response and storage – should compete on a level-playing field and costs should be borne where they arise. The proper valuation in the market of flexible capacity is key.

In order to deal with “flexibility” and the role of “independent aggregators”, EFET would like to pinpoint some principles:

- Firstly, it is important to properly define “flexibility”. Swissgrid defines flexibility as follows: “the capability of a system to balance rapid changes in renewable generation and forecasting errors”. This definition is, in our view, not sufficiently precise. Flexibility for example, is not just the capability to respond to rapid changes. The system must, for example, be able to respond to situations with scarcity for several days in a row (e.g. caused by low wind, low reservoirs, high demand etc.). EFET therefore defines “flexibility” as the capability to use capacity with few or insignificant limitations. And capacity is the option to take (consumer) or deliver (generate) electricity.

- Aggregation or bundling of different sources and marketing them on the wholesale market, is not a new role at all. This is business as usual for market participants.

- The wholesale market consists of different segments (forward, day-ahead, intraday and balancing) each of these segments is an integral part of the market. Flexibility (or better put, flexible capacity) can be of specific value in one of these segments, however the actual valuation can only be done by market participants owning this flexibility with a view on the wholesale market as a whole.

- When discussing demand side flexibility, it is important to recollect that all resources (generation, storage and demand side options) must compete on a level playing field. The owner of an individual resource can market its flexibility (or better: flexible capacity) either by becoming an active market participant itself (including taking balance responsibility) or by outsourcing this to a market party. The second option is the default solution for smaller entities and in particular for consumers.

- Marketing demand-side flexibility means that the flexible capacity must be exploited on (all the segments of) the wholesale market. Retail suppliers are by definition aggregators of consumers. If, demand side flexibility has a value, that retail competition will normally ensure that retailers will offer demand side services in order to be more competitive than other retail suppliers. However, more in general, regulatory oversight on retailers’ behavior should be ensured by National Authorities.

- At the same time, a business model, where an independent aggregator is exploiting
flexibility on behalf of a consumer (or generator) and in parallel to a retail supplier supplying electrical energy to that consumer (respectively to an off-taker taking the electrical energy from the generator), does not need to be ruled out. In that case however, it is important that retail suppliers (off-takers) and independent aggregators enter into bilateral arrangements and, in particular, the arrangements on financial compensation need to be the result of free negotiations. A voluntary industry-led standardisation can be envisaged, but a regulated framework should be avoided.

Q 5: Do stakeholders agree with the assessment that a balancing responsibility for renewables would be beneficial? Should Swissgrid implement any other measures to achieve a more efficient integration of renewables?

We support the intention to extend balancing responsibility to renewable energy generators. In the last years, the emergence of renewable power generation (RES-E) has largely developed separately from the operation of the wholesale energy market, hindering the completion of the EU's Internal Electricity Market. EFET believes that no balancing exemptions should be granted to any energy source and both producers and consumers should strive to balance their positions. To this end, TSOs should be required to publish information on the estimated imbalance level of the BRPs close to real-time as well as the physical imbalance shortly afterwards.

If RES-E will be balancing responsible then RES-E will to a certain extent start to contribute to meeting the “flexibility challenges” of the system, by improving the overall market efficiency.

Also, we support the suggestions made by the Swiss Energy Office (SFOE) to phase out the present fixed feed-in-tariff scheme, and replace this possibly with an auction-based, direct marketing premium for new renewable installations. In fact, financial support mechanisms (when needed), must ensure that the renewable output is integrated into the wholesale power markets, and responds to market signals. Also, the support mechanism should incentivise RES-E to avoid fed-in electricity when prices are negative.

In addition, we believe that removing the priority dispatch privilege is a fundamental precondition for the full inclusion of RES generation into the energy market. Current priority dispatch arrangements do not incentivise RES-E producers to moderate their own output efficiently. Dispatch should be based exclusively on economic merit and no priority should be given to any energy source. This approach would discourage RES-E generators from producing when the market price is negative.

Q 6: Do the stakeholders support the proposed measures for an optimization of cross-border trading?
1. Improve cross-border intraday gate closure times

EFET has for many years supported the development and integration of European intraday markets across borders. Therefore, we see Swissgrid's proposal to reduce cross-border intraday lead times with Germany as a step in the right direction to allow close-to-real time participation of Swiss players in the German continuous intraday market and vice-versa.

At the same time, we expect the same improvements will be realized on the other Swiss borders as soon as possible and in coordination with the TERRE project.

2. Introduce intraday cross-border auctions complementing continuous trading

EFET is very sceptical of this proposal. The EU Electricity Target Model clearly defines implicit allocation (first-come-first-served), re-nominations till h−1 of delivery, continuous capacity allocation and bilateral trading using intraday capacities as the pillars for cross-border intraday capacity allocation. First-come-first-served cross-zonal energy trading with a zero cross-zonal capacity price is in our view efficient and allows participants to trade up to real time. This is a key objective of continuous implicit intraday trading required by the EU Electricity Target Model and the CACM Guideline.

Pricing of cross-border capacity in a continuous trading environment is not as straightforward as in an auction-based context. Pricing capacity in a continuous implicit trading context is not possible unless this is made through ex-ante proxies or complementary auctions. We understand that Swissgrid would like to introduce intraday capacity opening and closing auctions, complementing continuous trading. We stress that while the CACM Guideline mentions the option to implement complementary regional intraday auctions within or between bidding zones, it also requires the avoidance of adverse impacts on liquidity or discrimination against market participants. Therefore, we call on Swissgrid to take this requirement into appropriate consideration when performing its investigation and we suggest to release a separate and detailed consultation document dedicated to this proposal: in particular, from the operational side it should be explored how continuous trading and auctions could coexist, without suspending continuous trading. We also wonder which benefits an intraday closing auction would bring to the market. Nevertheless, as already made explicit by Swissgrid, combining implicit continuous trading with implicit auctions in the future would also mean that OTC intraday trading transactions would no longer be possible. This would be, in our view, a significant step-back from the current situation in terms of market participants’ ability to adjust positions according to the negotiation platform that best meets their needs.

As for the Italian border, we support the proposal to introduce three additional explicit cross-border intraday auctions as a first step towards the closer alignment of the two
markets, while waiting for the implementation of an intraday continuous trading market in Italy.

3. Introduce a 15-minute intraday call auction between Germany and Switzerland

The introduction of a joint 15-minute call auction between Switzerland and Germany would be an additional opportunity to fine-tune positions, after the day-ahead auction and before the start of the intraday continuous market session. However, we agree with Swissgrid that in order to provide the required Available Transfer Capacity (ATC) data prior to 3.00 pm of D-1, a balanced solution would have to be found: shortening or eliminating the time period for the correction of mismatching schedules would indeed impose a higher risk on balancing groups and in our view would not be an optimal solution.

Q 7: Do stakeholders propose additional measures that are not mentioned in the consultation document in order to increase the efficiency of cross-border trading?

EFET strongly supports the integration of Switzerland in the EU Internal Electricity Market. Electricity markets should not be held hostage of by the deadlock caused by on-going political negotiations between the European Commission and the Swiss government.

EFET recommends that Swissgrid, together with other TSOs and responsible National Regulatory Authorities take practical steps to align the Swiss market design with the European Electricity Target Model at all timeframes.

Q 8: Do the stakeholders agree with the assumption that adequacy responsibility of balance groups in combination with a strengthened price signal will increase market efficiency?

In principle, we believe that the sole strengthened price signal would be sufficient to both increase market efficiency and to incentivise market participants to be balanced at delivery. EFET takes the chance to object to Swissgrid's previous proposal to sharpen balancing incentives by introducing additional imbalance limits at two hours before delivery, and at the close of intraday trading. We fear that the suggested restrictions to open positions could potentially reduce liquidity in the intraday market: instead, we believe that if imbalance signals are established correctly and if price signals are sufficiently high, market participants will organise themselves to maintain the supply-demand equilibrium.

EFET also has reservations regarding the administrative scarcity pricing function proposed in section 1 of the consultation under which ‘imbalance prices could be raised to the value of lost load, in the unlikely event of adequacy shortcomings and a subsequent
market suspension”. Going beyond the principle of marginal price imbalance settlement could create significant drawbacks: we have concerns that such an adjustment would imply a disconnection between supply-demand fundamentals and the prices in the market, if a significant element of the price becomes administered. This would also create regulatory uncertainty which could affect market liquidity. There need to be clear and well understood rules about how adjustments to prices are calculated, and how these calculations could be made consistent at European level, in view of the integration of national balancing markets across the EU.

At the same EFET welcomes ideas that ensure settlement based on scarcity prices also during extreme scarcity events and scarcity driven brown-outs in particular. It must be avoided that TSOs announce “market suspension” (except in case of Force Majeure) without understanding the consequences if this endangers settlement during scarcity. Clear rules should be in place to clarify the settlement regime in case of market suspension as in such situations the balancing market is no longer able to deliver relevant price signals.

Q 9: Do the stakeholders agree that balancing responsibility should include the prognosis and, if necessary, forward hedging of sufficient resources for end-customer supply?

Swissgrid, as Transmission System Operator, is responsible for capacity adequacy. In our view, linking balancing responsibility with forward hedging products to secure enough resources for end-customer supply is not appropriate. Balancing groups are responsible for a balanced schedule at delivery, but not for mid-term system adequacy.

Physical forward hedging obligations for balance groups would result in over-procurement and create economic inefficiencies. The requirement to hedge through physically-backed option contracts would further give ‘pure’ traders a disadvantage and this would potentially lead to a reduction of market liquidity.

EFET sees no need to develop any regulated market for hedging contracts. As soon as all market parties will take “balancing responsibility” and as soon as the imbalance price will be fully market-based (and scarcity pricing is ensured because of removal of price caps and by ensuring that extreme scarcity events do not result in market suspension), the risks on all market parties for being exposed to high imbalance prices will strongly increased. If furthermore current over-capacity is reduced, price spikes will be expected to emerge and price volatility will increase. In such a situation, there will be an increasing need for market participants (including suppliers and consumers) to hedge their positions. Such hedging is already fully possible. Basic forward contracts can be used for hedging, but also options are already available for bilateral trading. Standard hedging products will emerge and will be developed by Power Exchanges as soon as they see an increased need. Examples are the Cap Futures product of EEX and the Wind Index Futures of Nasdaq that were recently introduced for the German power market. These products are
still very illiquid, but that is simply caused by the lack of volatility in the power market itself. There is overcapacity which also means that flexibility currently has little value.

Q 10: Do the stakeholders consider the proposed hedging products to be appropriate for the hedging of potentially volatile imbalance prices? Are there other proposals?

The described hedging products can certainly be of value in the future. However, the market will decide which contracts are most relevant. TSOs should not be actively involved and any regulation of hedging products/contracts must be avoided.

Any TSO or regulatory involvement is unnecessary and even undesirable as it reduces confidence in a well-functioning energy-only-market with free price formation and would thus be counterproductive.