



## **PENTALATERAL ENERGY FORUM**

*Directors General meeting – 16 March 2017*

### **Penta Directors General meeting – March 16, 2017**

#### **Introduction**

In June 2015, the Ministers of the Pentalateral Energy Forum (Benelux, Austria, France, Germany, Switzerland) defined new regional milestones towards a well-functioning and secure energy market. Three Penta Support Groups are implementing a work plan on market integration, security of supply and flexibility.

Several milestones are within reach: an analysis on cross-border participation in capacity mechanisms, improvements to our common generation adequacy assessment, some shared principles concerning risk preparedness and the management of simultaneous crisis situations and a best practice guide on demand side response. Bottom-up regional cooperation still delivers.

Other milestones appear to be more challenging, such as the roadmap for more integrated balancing and intra-day markets.

The “Clean Energy for All package” in the meantime required our highest attention and forced us also to look at regional cooperation from a top down perspective. A decade ago, we as Penta were the front-runners in market coupling, regional approaches to security of supply and fostering the bottom up identification and testing of new concepts. Today, we see a move towards institutionalising this regional cooperation in the upcoming legislation. This is an opportunity and a challenge: to keep the definitions aligned of an institutionalised top down regional cooperation and a voluntary bottom up step by step Penta cooperation.

On June 26<sup>th</sup> of this year, Ministers intend to review whether that regional work is on track towards an integrated European electricity market. It will offer the ideal opportunity to assess the possible impact of the “Clean Energy for All” package on our vision of Pentalateral regional cooperation and formulate some recommendations.

#### **Summary of the deliverables**

1. Agreed improvements to flow based market coupling implemented; new improvements identified, such as inclusion of Swiss borders; new investigation topic identified: optimal use of cross-border capacity between different market segments (day ahead, intraday, balancing).

2. A non-paper delivered on security of supply, defining shared political principles concerning the management of coincident crisis situations.
3. A preliminary Penta TSO position delivered regarding cross-border participation in capacity mechanisms.
4. Setup and start of the work on a new (regional) Penta generation adequacy assessment.
5. Country descriptions for all Penta countries on Demand Side Response.
6. Penta TSO papers on interdependencies between intraday and balancing and on possible leading role in the implementation of the Guideline on Electricity Balancing.

### **Outlook to Ministerial June**

1. Delivery of the requested products and endorsement of Penta DG conclusions
2. Memorandum of Understanding on security of supply in simultaneous scarcity situations
3. Updated mission statement and the future agenda of the Pentalateral regional cooperation

### **Detailed follow-up of the Second Political Declaration:**

#### SG 1 – Market integration

##### **Flow Based Market Coupling**

1. The main objective of the SG 1 is to further improve the cross-border exchange of electricity in Day-Ahead and Intraday markets. In the first year after the launch of FBMC in May 2015, price convergence has generally increased and more exchange of electricity across borders has been observed in the Day-Ahead markets in many hours. Last year, some price hikes have been observed that need further examination. Several (technical) aspects of the market coupling have been improved but further improvements are needed.
2. The extension to Austria is completed. Since November 2016, APG the Austrian TSO, is fully integrated in the flow based capacity calculation process of the CWE region.
3. However, the borders with Switzerland are currently not integrated. A further improvement should therefore be considered which is the integration of Switzerland in the flow based capacity calculation process.

##### **Intraday market coupling**

4. As soon as XBID (cross-border intraday project) is up and running, further improvements of the intraday markets in the Penta-region can be set on the agenda.
5. The XBID project is only a first step, not reaping the full benefits yet of a flow based approach. Beside a number of aspects which will be listed for Support Group 3, TSOs have proposed to investigate a possible implementation of flow-based market coupling for intraday markets in the Penta region.

##### **Allocation of cross-zonal capacity**

6. The Guideline Balancing requires all TSOs to develop methodologies for the reservation of cross-zonal capacity for the voluntary exchange of balancing capacity.

7. First, the development of these methodologies can be accompanied and reflected in Support Group 1.
8. In that context, a broader view could be taken on the most efficient allocation of cross-zonal capacities for all short-term market segments, i.e. day-ahead, intraday and balancing. The discussions could cover both an exchange in the Support Group 1 with the support of researchers from the Penta-members as well as a public workshop with a broader participation.
  - The next steps for the work in SG1 will be to monitor the results of flow based market coupling, with also an emphasis on particular cases, to include Switzerland in the flow based capacity calculation process, and to start to work on cross-zonal allocation of capacities.

#### SG 2 – Security of supply

9. The Penta non-paper on security of supply defines shared principles concerning the management of coincident crisis situations.
  - The next step would be the signing of a Memorandum of Understanding - or a letter of intent of signing a Memorandum of Understanding - during the Ministerial meeting in June between the Penta countries on security of supply, including some recommendations for further action such as an early implementation of the risk preparedness regulation.
  - The DGs want to be closely involved in the further preparation and are looking forward to receiving a first deliverable in May and are willing to meet to clear out outstanding issues, if necessary.
10. The Penta region stays ahead in terms of regional work on security of supply, with the ongoing work on an improved methodology for the Penta generation adequacy assessment and an approved set of data for a base case scenario to be analysed for 2018/2019 and for 2023/2024.
11. The methodology for the regional adequacy assessment is currently under further improvement and all data are collected and approved to make an assessment for a base case scenario. Initial results will be delivered in April, when also a worst-case scenario/ combined risk scenario should be defined.
  - The regional assessment continues to be a valuable additional layer of information, including for assessing the impact of a possible combination of risks in different countries for the security of supply in the region. The Penta ministries could give the boundaries within which the Penta TSOs deliver a combined risk scenario/ reasonable worst-case scenario, for example composed of risk factors such as they presented themselves at the end of last year (nuclear outage in FR and BE, low water preventing coal transport, cold temperatures, ...).
  - The Penta generation adequacy assessment should be the basis for further work in individual countries when developing cross border participation in capacity mechanisms

12. Penta TSOs delivered general considerations and first key conclusions from their study on cross-border participation in system adequacy mechanisms:

General considerations

Penta TSOs consider the issue of cross-border participation more as a question of redistribution of the economic value than as an incremental contribution to security of supply.

First key conclusions from Penta TSOs

- a. a *grid reserve* is a very different kind of capacity mechanism, not targeted at generation adequacy, but rather at transmission adequacy problems.
  - b. Penta TSOs recommend favouring *indirect models* for cross-border participation because of the high complexity of direct models and because in their view, the incremental contribution to security of supply provided by direct models is low. Sizing should be done based on a common methodology for adequacy assessments.
  - c. Opening of a mechanism should be a *national responsibility but consistent* approaches should be ensured through cooperation between countries.
13. Penta ministries do not see in the common Penta TSO report a basis for a common Penta ministries position. Further clarifications would be needed to better understand the distinction between the short-term effects (impact on a sudden security of supply problem) and the long-term effects (impact on investment signals and/or export potential in both countries)
- The Penta ministries take note of the common Penta TSO report and recognize the complexity of the issue. This is a valuable input for future work on regional cooperation for security of supply. At this moment in time it cannot be considered as a basis for common political conclusions.

SG 3 – Flexibility

14. Following the June 2015 Penta DG meeting, further work with experts on DSR and intraday/balancing took place. The group focused on measures enhancing flexibility in the Penta region by possible improvements in existing short term markets, intraday and balancing and by enabling new players especially Demand Side Response to participate.
15. With regard to the integration of balancing markets:
- a. An imbalance netting procedure was implemented, through the IGCC (International Grid Control Cooperation) project encompassing all Penta countries.
  - b. Penta TSOs have or intend to have a leading role in the European developments such as the implementation within the framework of the Guideline on Electricity Balancing. This work will cover the harmonisation of balancing products and gate closure times for balancing energy and the introduction of similar pricing mechanisms for balancing energy.
- The leading role of Penta TSOs should be encouraged in the full implementation of the Guideline on Electricity Balancing. Penta's role would be to define a roadmap

for the PENTA countries including coordination of pilot projects and establishing monitoring principles for the implementation timeline. In addition PENTA would provide support to remove possible political or regulatory obstacles where needed.

16. With regard to the integration of intraday and balancing markets:
  - a. Penta TSOs made an inventory of the interdependencies between both markets.
  - b. Penta TSOs have not found a common position for shorter lead times in intraday.
  - c. They will further develop the possibility to exchange 15/30' products on the intraday market
17. With regard to further improvements to intraday:
  - a. Implicit allocation on all Penta borders will be introduced simultaneously with the cross-border intraday project (XBID) in Q3 2017.
  - b. The possibility of a pilot for 15' products for cross-border intraday between AT, DE and CH, and the possibility of a cross-border "intraday auction" is currently under investigation. Decision to be taken in June 2017.

➤ the leading role of Penta TSOs should be encouraged in the implementation of the XBID project and further improvement of the ID market by enhanced product design and auction procedures to facilitate more flexibility.
18. With regard to Demand Side Response:
  - a. A country description with respect to the state of play for DSR participation to all markets and timeframes was made for each of the Penta-countries, as well as an overview of the applied solutions in the different countries. Elements of the description of the current market model and roles, interactions between the roles, balancing responsibility scheme, current developments of implicit and explicit DSR and new developments like e.g. enabling Flexibility Service Providers (FSPs).
  - b. A comparison of the country descriptions will be the basis for a final report for June with possible best practices or suggestions where harmonisation could have an added value.

➤ The PENTA report on DSR will be further developed and completed by June this year. It will be the first report of its kind describing the current market models (roles) and interactions (responsibilities) as well as balancing responsible schemes and current development to enabling flexibility.

## **Regional cooperation**

Regional cooperation is an important component of the "Clean Energy for all Package" and in the governance of the Energy Union. The Package suggests an institutionalization of regional cooperation, mainly between TSOs or between NRAs (balancing, capacity mechanisms and generation adequacy assessments, cooperation between regulators, ...). The proposal for a risk preparedness Regulation also contains regional cooperation between national governmental authorities of a region, whereby it defines a 'region' as a group of Member States sharing the



same regional operational center (the so-called ROCs based on at least one capacity calculation region). However, there might be other topics in the Package where there should be room for governmental regional cooperation in addition to the classical bottom up Pentalateral cooperation.

- Penta DGs welcome the push for regionalization in the “Clean Energy for all” Package although there are still questions on the proposed top down approach. The exact shape of this regional cooperation will be the outcome of the upcoming negotiation process. There is good experience with the existing bottom up Penta cooperation and the DGs decide to make an inventory of the existing cooperation, in the context of the proposals on regional cooperation of the “Clean Energy for all” Package, as a basis for further recommendations on future Penta cooperation. Penta DGs also agree that the role and potential tasks of intergovernmental cooperation in the legislative package shall be discussed by Penta coordinators.