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2018

The wholesale market for electricity

THE EVOLUTION OF PRICES AND POLICIES IN TICINO, SWITZERLAND, AND THE EUROPEAN UNION

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Date of publication: February 2019

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Executive summary

Overview of the contents

The 2018 edition of the O-FPE Report "The wholesale electricity market" discusses the dynamics observed in the wholesale prices for electricity in 2017 and 2018 in Switzerland and some neighbouring countries, namely France, Germany, Austria, and Italy. The analyses aim at shedding light on the trends expected for wholesale electricity prices in 2019, and discussing the possible impacts for electricity companies located in Canton Ticino.

The Report is based on the study of:

- Electricity market fundamentals, such as national and European demand for electricity, as well as price trends for fossil fuels and CO2 emission allowances,
- Energy and environmental policies in Switzerland and in the European Union,
- Geopolitical tensions that have been influencing energy markets in Europe in the last months, and might produce even stronger impacts during 2019.

The Report consists of three chapters.

Chapter 1 – Wholesale electricity prices: trends and drivers

The first chapter presents an analysis of wholesale electricity prices and their determinants in the years 2017-2018.

Electricity prices grew remarkably in Switzerland since the lows hit in 2016. The yearly average of day-ahead prices reached 52.2 EUR/MWh in 2018, corresponding to a 38% increase with respect to the 2016 figure. All neighbouring markets showed a comparable trend; among these, Germany steadily recorded the lowest prices, Italy the highest.

In a scenario of roughly stable electricity demand and constant (Italy) or slightly increasing (Switzerland, Germany, France, Austria) contributions from renewable energy sources, electricity prices were mainly hoisted by the growing production cost of thermal generation. A closer look at the main inputs needed for thermal generation shows that between 2016 and 2018 coal prices increased by 56%, gas prices by 63%, oil prices by 65%, and CO2 emission allowances by a stunning 171%. This trend is mainly connected to the macroeconomic recovery observed on a global scale, and to the surge in energy demand that followed. A focus on the inputs whose markets are mostly determined by continental - rather than global - drivers reveals further interesting details. Indeed, the European market for natural gas showed some signs of thightness after several years in a glut. Gas prices recovered as a consequence of both the decline in internal productions, and the tensions in the LNG segment due to a record increase in Asian demand. On the other hand, CO2 allowance prices within the EU Emissions Trading Scheme received a strong upward push due to the introduction of the "market stability reserve". This mechanism was designed by the European Commission with the purpose of counterbalancing the excess of allowances starting from 2019. CO2 prices, however, started to increase several months in advance, as some fear of market tightness spread among market players.

Chapter 2 – Energy policies and geopolitical tensions in Switzerland and the European Union

The second chapter discusses the main energy and environmental policies, as well as the strongest geopolitical tensions that are impacting European energy markets.

The chapter starts by looking at the Swiss electricity market. The discussion briefly touches the introduction of the Swiss Energy Strategy 2050, and focuses on the ongoing debate concerning the framework agreement on electricity between Switzerland and the European Union. This agreement has been put on hold within the general discussion concerning the political and commercial relationships between Switzerland and the European Union. Nonetheless, it is considered a milestone for the full integration of the Swiss electricity market and the EU Internal Energy Market. Several stakeholders thus claim that this delay is already causing non-negligible economic losses for both the Confederation, and the neighbouring markets.

The following paragraphs focus instead on the energy and environmental policies set up in the European Union, as well as the geopolitical issues impacting its energy market.

The Report first recalls the recent achievements in building a fully functioning Internal Energy Market, by integrating national electricity markets for all time spans. Then, it comments on the new European energy strategy to 2030 that is being discussed within the "Clean Energy for All" package of legislative proposals. Three Directives and one Regulation have already been approved: together with the new 2030 emission reduction targets approved earlier in 2018, these pieces of legislation provide a strong impulse for a further growth of renewable generation and a faster transition towards a cleaner energy system. Finally, the Report focuses on two geopolitical issues that are likely to affect the European energy markets: Brexit and the renewal of transit contracts for Russian gas through Ucraine after 2019.

- Brexit: the agreement for an orderly withdrawal of the United Kingdom from the European Union is still far from being reached after almost two years of discussion. In the absence of a specific agreement for the energy sector, countless individual agreements on specific topics might be needed. This situation might result in a loss of either efficiency and security, or independence of the British energy market. Indeed, UK market players and policy makers could have to face the trade-off between losing full access to the EU Internal Energy Market on the one hand, and adapting to the European legislation without being able to influence its evolution on the other hand. On the contrary, the impact expected from Brexit on the EU Internal Energy Market is only of slight increase of price volatility, especially in the markets most closely connected to the United Kingdom. However, some serious concern exist for the electricity market in the Republic of Ireland. Indeed, all interconnections with continental Europe run through England, and the security and efficiency of the national electricity market might be seriously damaged if no specific agreement is reached.
- Transit contracts for Russian gas through Ukraine: the existing transit contracts for Russian gas through the Brotherhood pipeline are going to expire at the end of 2019. Political tensions between Russia and Ukraine have been cumulating in the last decade, reaching a climax in 2014 with the Russian annexation of Crimea. Throughout the last decade, the European Commission has been working steadily to both mediate between the parties, and protect its own gas supplies. The main measures adopted in the last years within the EU consist in diversification of import routes, infrastructural investments to enable reverse flows along the existing pipelines, and reverse-flow gas supplies from EU Member States to Ukraine at cheaper prices. As a last resort measure, the European Commission has recently submitted a legislative proposal aimed at extending the EU Gas Regulation and Directive to the upstream side of international pipelines bringing gas to any EU Member State, in order to facilitate access to any transport route from extra-European countries. Gazprom, on the other hand, has been working to retain its credit as a reliable supplier to Europe, and has promoted investment in new pipelines bypassing Ukraine, such as the North Stream. Despite this investment, the overall import capacity from Russia to the European Union that will be available during winter 2019/2020 is still not sufficient to ensure the coverage of the European gas demand without resorting to the Ukraininan stretch. Hence, the European Commission is working to ensure a transit agreement is signed, possibly before summer. While the Ukraininan counterpart

insists in asking for a long-term transit agreement covering also the much needed and very expensive grid upgrades, the Russian counterpart is stalling for time.

Chapter 3 – 2019 outlooks for wholesale electricity markets and electricity companies based in Ticino

The third and last chapter discusses the outlook for the Swiss and European electricity market in the rest of 2019, with a focus on the impacts expected from wholesale price trends on the electricity companies based in Canton Ticino.

The first weeks of 2019 suggest a cautious optimism for wholesale prices in the next few months. Despite a slight retrace from the peaks reached in autumn 2018, fossil fuel prices and CO2 allowance prices still linger at relatively high prices as compared to the previous years. The strongest uncertainties for wholesale electricity prices come from the geopolitical tensions described in the second chapter. More specifically, the natural gas market could suffer if the Urkraininan transit agreement should end in a stalemate after summer 2019. Increasing gas prices would then hoist electricity prices, particularly in Italy and, as a consequence, in Switzerland during winter months.

Electricity companies active in Ticino could benefit from a stabilization or modest increase of wholesale electricity prices around or above the levels reached in 2018. The recovery of local producers after the hardships of the years 2014-2016 is anyway ensured by the support measures introduced by the Swiss Energy Strategy 2050 for hydroelectric generation. The cantonal producer AET can moreover benefit from a stable cashflow thanks to the supply contracts signed with several retailers operating in the Canton. These supply contracts can in turn protect the retail suppliers from wholesale price increases or a stronger wholesale price volatility.

Distribution and retailing activities are going to play a key role in the energy transition expected for the next few years. Indeed, the spreading of distributed generation and the introduction of self-consumption communities in the Swiss electricity market might induce a decline in the overall quantities supplied to end consumers. This trend might lead to a contraction of the margins for distribution and retailing activities. The long awaited completion of the retail market liberalization could further exacerbate this trend, due to the increasing competition among suppliers. Grid investment, a prompt exploitation of information and communication technologies, and the promotion of an organizational culture open to technological and contractual innovation will be key ingredients for the retail companies' success in the upcoming months and years.