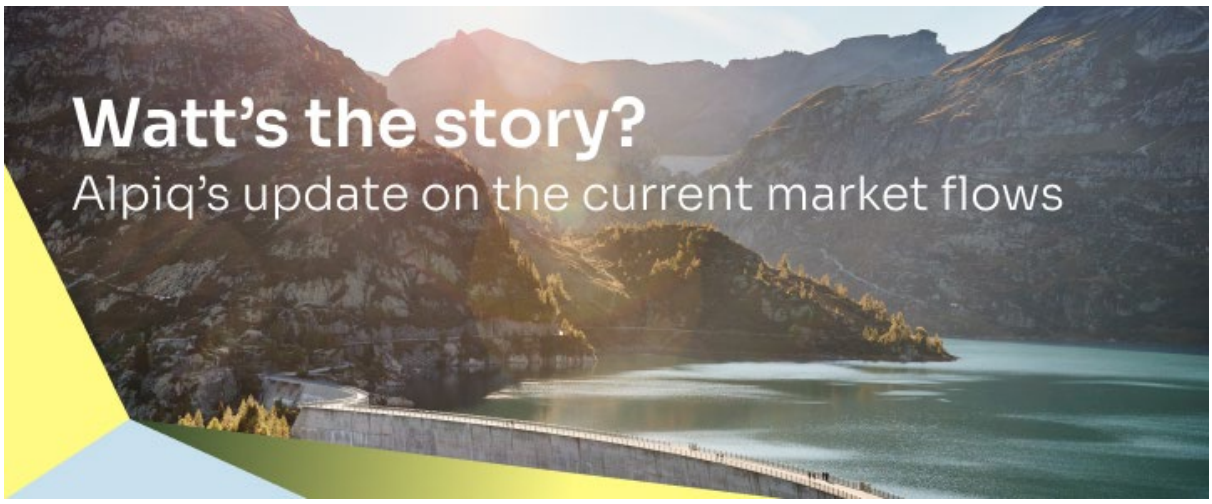
ALPIQ

11 December 2024 – 07:00



Market update | Liquidity status | Deep dive: Solar boom requires even greater grid flexibility

Dear Reader,

Welcome to the winter issue of "Watt's the story?" and our latest analysis of current market flows.

As the first part of the new Swiss Electricity Act comes into force on 1 January 2025, the **expansion** of renewable energies is **taking shape**. In Switzerland, as in many other European countries, the expansion of solar energy in particular continues. Electricity from solar energy is booming. As welcome as this is for a climate-friendly and sustainable electricity supply, the intermittent nature of solar energy also brings challenges. In our **Deep Dive**, we examine why the solar boom requires an even more flexible electricity system – and how we can use clever measures such as storage solutions to reduce the need for complex and costly grid expansions.

Before that, let's take a look **at developments on the energy markets** over the past two months:

Market update

Power prices during October generally moved sideways while November saw a significant move upwards. The bellwether Cal-25 German base load contract increased by 13 EUR/MWh over the course of November and ended close to the 100 EUR/MWh mark. The Swiss Cal-25 baseload contract followed suit, while still trading at a slight discount to Germany.

The rise in power prices was mainly down to increasing gas prices. November was characterised by relatively cold and calm weather conditions over northwestern Europe, which led to high gas demand from the power and household sectors and strong gas storage withdrawals. As Europe was also struggling to attract meaningful volumes of LNG, the market understandably became nervous about the prospect of obtaining enough gas for the coming winter.

November also saw a resurgence in geopolitical and regulatory event risks. For one, OMV, the Austrian oil and gas company, won an arbitration case against Gazprom under the rules of the International Chamber of Commerce. OMV was seeking to recover damages from Gazprom due to missing gas supplies in the past (following the Russian invasion of Ukraine). Rather than waiting for payment, however, OMV planned to settle the account with Gazprom by not paying for the current gas deliveries. The market understood this to mean that a part if not all of the remaining Russian pipeline deliveries to Europe would come to a premature end. Ultimately, this did not materialise, so deliveries are currently expected to continue until the end of 2024.

However, the calming of the gas market did not last long. The prospect of the Russian gas transits coming to an end prompted the European Commission to increase the intermediate EU-wide gas storage filling targets for 1 February 2025 from 45% to 50%. While the EU target is not binding (unlike national targets such as those in Germany), the timing of this announcement was unfortunate. Given that the previous intermediate target had already been considered a stretch, the market responded strongly to this announcement. On top of this, the imposition of US sanctions on Gaszprombank was another price relevant event that added to November's price volatility.

Elsewhere in November, the implosion of Germany's coalition government led to additional energy policy uncertainty. For one, the country's carbon contracts for difference (CCfD) scheme is potentially at risk before properly getting under way. The scheme was established to help industrials transition towards net-zero goals and is seen as Germany's response to the US green subsidy scheme, the US Inflation Reduction Act. In the first round of the scheme last month, 15 firms were awarded EUR 2.8 billion in support guarantees. Currently, it is uncertain if this scheme can move ahead at all as political support has waned and available funding is missing.

Moreover, the commencement of the capacity market support scheme is now also uncertain. This scheme, which is meant to drive investments in hydrogen-ready gas plants by 2030, provides urgently needed capacity to balance the power grid. Lingering policy uncertainty is likely to lead to delays in the decommissioning of existing coal plants, otherwise security of supply will be at risk.

We close the market update with a small piece of anecdotal evidence that weather variations are becoming more extreme. In the official Swiss energy statistics from the Federal Office of Energy, each month from January to June 2024 saw the highest monthly hydro production of any year since 1990. This excess hydro production contributed to the very low spot prices observed during some summer months in Switzerland.

Finally, staying on the topic of weather variations, a white Christmas would be nice, not only in the mountains!

Liquidity status

As we discussed in the previous edition of “Watt’s the story”, we used our high liquidity and strong net cash position at Alpiq to remove the 650 MCHF Hybrid Bond from the market. The transaction was executed in mid-November, resulting in the Group Liquidity standing at around CHF 1.5 billion per end of November 2024.

As a logical next step, we have now just reviewed our credit financing portfolio. Over the past 3 to 5 years, it had become rather heterogenous and was also no longer fit for purpose. The decision was therefore taken to set up a new committed credit structure to replace the existing facilities and lines. To put this into place, we mandated UBS as sole book runner and mandated lead arranger.

Largest credit market transaction in Alpiq’s history
Today, we are very happy to announce that we have successfully set up two new unsecured committed Revolving Credit Facilities with a total volume of CHF 3.6 billion. The commitments were provided by 15 Swiss and 17 international banks, with the market offering more than was needed, making cuts necessary.

Thanks to this very successful transaction, which was just recently closed, Alpiq has doubled its available (and, importantly, unused!) committed credit lines. In addition, we welcomed 10 new banks into our banking pool. The lack of financial covenants and removal of operational restrictions provides us with the utmost flexibility in financing our strategic growth. We look forward to continuing our strong partnership with our banks moving forward.

We also take this opportunity to inform you that the above project was Annet van der Laan's last one at Alpiq. Annet is leaving Alpiq at the end of the year to take over as CFO of Mabanaft Group in Hamburg on 1 January 2025. As such, she will continue to contribute to the energy transition. We shout out a huge “thank you!” to Annet and wish her all the best and every success in Hamburg! Your contact for investor relations at Alpiq is now Jan Pletka, whom many of you already know as he worked closely with Annet.

Deep-dive

Solar boom requires even greater grid flexibility

Solar is booming – across Switzerland, Europe and the world. In the EU alone, installed capacity surpassed 100 gigawatts in 2018 and had reached 269 gigawatts by the end of 2023. In fact, last year alone, capacity increased by 56 gigawatts. The European solar association SolarPower Europe predicts that the boom will continue – albeit at a slightly slower pace. This is encouraging in terms of decarbonising electricity production, but it also brings challenges:

electricity grids are not keeping pace with the growth in solar capacity and power prices during hours with high solar generation have steeply decreased. It is no longer uncommon to see negative power prices.

Efficient integration
The capacities of distribution and high-voltage grids will have to be expanded to cope with the generation peaks on sunny days. Otherwise, there is a risk of expensive blackouts due to electricity surpluses that cannot be absorbed, which would have a big impact on society and the economy. This grid expansion costs billions, often involves lengthy authorisation procedures and meets social resistance – especially in the case of high-voltage lines. But the market signals are clear: when too much electricity is produced without demand for it, the price tips into negative territory. This year, these negative prices have occurred more and more frequently. We therefore have to increase our capability to better integrate intermittent production into our electricity system.

More flexibility, more efficient energy system
Optimisation options are available, such as increasing the flexibility of the energy system and demand-side response driven by tariffs that reflect the hourly price of electricity, creating incentives for producers and consumers to adapt their production or consumption profiles. The key word here is storage. Through the use of storage technologies, the grid expansions needed to handle the peaks can be reduced or at least delayed.

Tried-and-tested storage solution
Thanks to the alpine topology in our home country Switzerland, we can look back on a long track record when it comes to storing water in reservoirs. In our hydropower plants, we can turbine the water when electricity is needed and stop it when there is enough. Pumped storage power plants can even absorb excess electricity by pumping water up into the reservoir and storing it there temporarily, thereby helping to stabilise the electricity system. Pumped storage power plants can be deployed quickly, switch from pump to turbine mode and, unlike other technologies, can absorb large amounts of electricity.

Batteries on the rise
The increased deployment of variable renewable energy from solar and wind generation creates growth potential for battery energy storage systems (BESS). These systems – from utility-scale storage systems to domestic solar batteries in household basements – are characterised by their high deployment speed and can therefore stabilise the grid. Worldwide, BESS capacity grew by more than 100% in 2023, and by 73% in Switzerland. No other energy technology is recording similarly high growth rates. And the market is far from being exhausted. In Switzerland, the new Electricity Act that comes into force in 2025 will promote the use of BESS. Smart electricity meters and dynamic electricity tariffs could provide additional incentives for the market-oriented use of battery storage across Europe and hence contribute to increasing the security of supply.

Optimising energy consumption
Electric cars can also function as mobile battery storage units. To ensure that they can be charged when there is too much electricity on the market, incentives are needed in the form of dynamic tariffs. Dynamic tariffs would make a significant contribution to optimising self-consumption of the solar power produced on domestic, commercial and factory roofs by combining solar and battery systems instead of feeding in all that is produced.

To further limit grid expansion to meet the peak production capacities, measures like peak-shaving could be implemented. Solar systems would then be curtailed to 70% of their output

during peak hours. In Switzerland, the legal basis for dynamic curtailment has been created and will come into force at the beginning of 2025. In Germany, compensation is already provided for curtailed electricity from renewable energies.

Providing flexibility as a strategic pillar
Alpiq recognises the challenges involved in increasing the share of variable renewable energy to enable the energy transition, which is why we are focusing on investment in flexible generation and energy storage. With our highly flexible portfolio of power plants in Switzerland, Spain, Italy and Hungary, we are facilitating the integration of fluctuating electricity generation from renewable energies and thereby contributing to security of supply. In Switzerland, for example, the high-performance Nant de Drance and Hongrin-Léman pumped storage power plants can respond immediately to changes in demand and generation. At Nant de Drance, water from the Emosson reservoir is pumped up to the higher Vieux Emosson reservoir in the event of an oversupply of electricity, while at Hongrin-Léman, water from Lake Geneva is pumped up to the Hongrin reservoir.

Partnerships and synergies
Alpiq is also systematically expanding its flexibility portfolio through the addition of BESS. Assets such as these can contribute to grid stability by providing grid services to transmission system operators such as Swissgrid. In summer 2024, Alpiq acquired one of the largest BESS projects in Finland: a 30-megawatt battery that is currently under construction and will go into operation in mid-2025. We also operate a pooling platform for battery storage in Switzerland, which allows the batteries to participate in the ancillary services markets. We also expect to expand these services internationally.

Alpiq relies on strong partnerships to utilise synergies and bundle expertise. “The energy transition requires flexibility to integrate the increased wind and solar capacities,” says Lukas Gresnigt, Head of Alpiq’s International division and a member of the Alpiq Executive Board. “We can support this integration by combining our expertise in flexible energy generation and storage with additional investments.”

That rounds off this issue of “Watt’s the story”. Next year, we will publish “Watt's the story” at the end of each quarter – so we look forward to providing you with further news and updates at the end of March 2025. Stay tuned!

Please also mark the date 26 February 2025 in your calendars: that’s when we’ll announce our 2024 business results and publish our Annual Report and Sustainability Report.

We wish you a relaxing end to the year and an “energised” start to the New Year!

Best regards,
Your Investor Relations Team @Alpiq

PS: Please feel free to forward this newsletter to other interested parties, who can also sign up to receive it directly HERE. All previous editions, including our deep dives, are also available HERE.

PPS: Please send us your feedback, thoughts, and requests for future deep-dive topics to investors@alpiq.com. Thank you!

www.alpiq.com/about-us/investor-relations