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Additional safeguards against seasonal import risks can be established

Risk # Supply security # Import # Europe / EU # Politics (federal government, canton, municipality)

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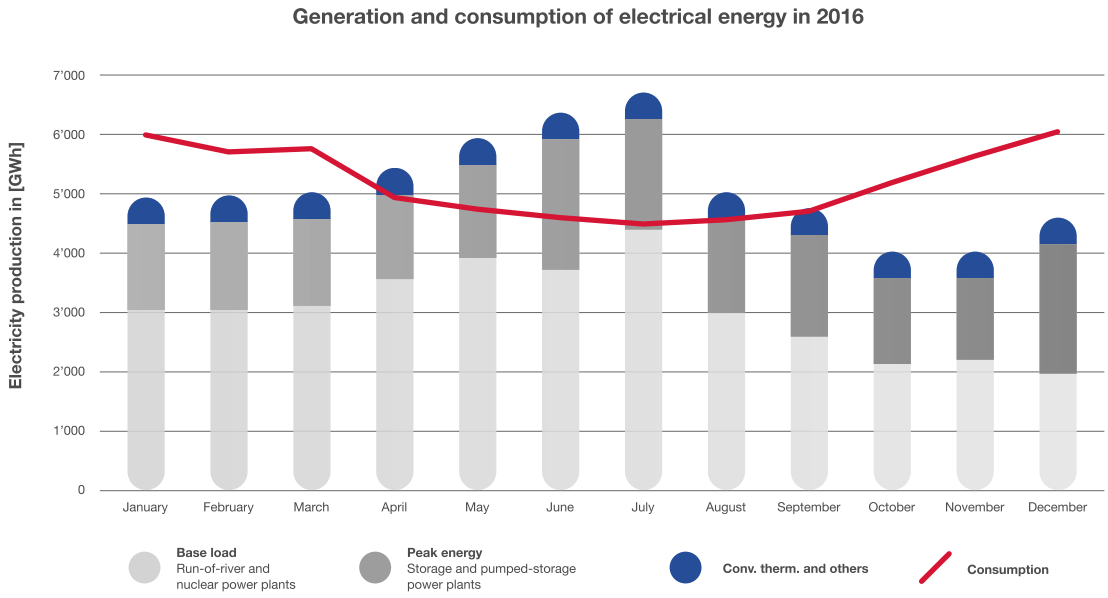

Source: Bundesamt für Energie BFE 2017

Supply security in Switzerland primarily depends on water availability and import options. Storage and pumped-storage power plants ensure short-term flexibility. Differences in seasonal provision during summer and winter represent a particular risk for stable electricity supplies over the entire year.

As the joint project “Assessing future electricity markets”[1] shows, the currently applicable EOM (energy-only market) design will still be suitable for ensuring supply security in a transformed environment. This is on the premise that Switzerland is integrated in the European electricity market and remains able to import electricity from a technical perspective. The EOM design primarily focusses on the provisions of the market players themselves. If they fall short, experience shows that they can be supported with control energy via Swissgrid in the event of outages that do not exceed the usual magnitude. But they pay a high price for this. Extremely large outages cannot be fully covered by the control energy market.

In an expanded concept, policy measures could further reduce import risks, which especially exist in winter. This would be the case, for example, if the risk that a neighbouring country could limit its exports to Switzerland is deemed significant.

Two solutions are available here[2]: a strategic reserve or decentralised performance obligations. A strategic reserve[3], for which a relatively low generation capacity is required, is

typically acquired domestically. As the central authority, responsibility here is usually assumed by the transmission system operators. It is refinanced by consumers.

Via a decentralised performance obligation, electricity suppliers or large consumers undertake to keep available a certain quantity of generated electricity. This would have to be demonstrated in the form of certificates.

Notes and References

1 Project “Assessing future electricity markets”
2 See the report on behalf of the SFOE, Frontier Economics Ltd (2017): Eckpfeiler des Schweizerischen Strommarktdesigns nach 2020, Berne
3 In the consultation draft on the revision of the Federal Electricity Supply Act of 17 October 2018, the Federal Council proposes that a storage reserve be established in the sense of providing “energy insurance” in order to ensure that Switzerland also has a secure electricity supply in the event of unforeseen extreme situations. This should be put out to tender each year by the national grid company Swissgrid and financed via grid usage tariffs.