

A background network diagram consisting of numerous white and light blue circles of varying sizes connected by thin white lines, creating a complex web-like structure. The background is a solid teal color.

Winter Outlook 2020-2021

Summer Review 2020

country comments

A white outline map of Europe, showing the continent's borders and major islands. It is positioned in the lower half of the page, partially overlapping the 'entsoe' logo.

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Introduction

This document includes individual country reviews on security of supply situation in their system during last season. The reviews are also accompanied with country comments about the expected adequacy situation or specific operational conditions expected during the coming season.

The aim of the retrospective reviews are to present the most important events that occurred during previous season and to compare them to the previous Seasonal Outlook study results. Important or unusual events or conditions in the power system and the remedial actions taken by the TSOs are also mentioned.

The comments about expected adequacy situation and any additional information is presented to provide more background information about the particular power systems, which might not always be represented in pan-European adequacy models. Hence, giving extra information about the actual expected adequacy situation.

Countries did not comment or review anything if there was no relevant information to be reported.

Albania

Winter Outlook 2020 - 2021

Winter 2020/2021 in Albania, is expected to have a slight decrease compared to historical average load values and main indicative parameters of the power system.

Albania does not foresee any unexpected event or issue that could threat system adequacy. Mainly system adequacy will be fulfilled by hydro generation and the import contracts.

The maintenance schedule is reduced to minimum, providing enough capacity for import, or in case of high hydro levels for export.

Summer Review 2020

During summer season of 2020 it was observed a slight decreased of load due to COVID-19 effect. Demand was mainly supplied by import contract of distribution system operator (DSO) and the production of state owned company KESH sh.a.

Due to the COVID-19 pandemic, the maintenance that was scheduled to be performed in early spring was partly performed during summer season. Nevertheless, the maintenance schedule was managed in order to provide enough capacity for security and supply. The transmission system was able to accommodate flows through interconnector, utilizing the available capacity.

Also, due to low inflows in Hydro Power Plant, no downward regulation problems were identified during the past season.

Austria

Winter Outlook 2020 - 2021

Potential critical periods and foreseen countermeasures

The COVID-19 situation only had a slight impact to the maintenance schedule of gas power plants in Austria. Thus, the availability of gas power in the coming winter is comparable to that of previous years.

A decrease of demand due to COVID 19 for the upcoming winter season is hard to predict.

The residual impact of the first wave on winter 2020/2021 is uncertain. Regarding a potential second wave, we assume a decline of up to 5% (depending on the measures taken). However, in case of another lockdown the reduction could be even higher.

Overall, this decrease in demand would improve the adequacy situation.

Summer Review 2020

This summer period was comparably warm and relatively humid (14th warmest summer since monitoring activities started, precipitation 25% above average). The number of sunshine hours was on average.

Belgium

Winter Outlook 2020 - 2021

The Belgian load is slowly recovering from the impact of the first COVID-19 wave. The impact for the winter is expected to be limited. In case of a second wave, the load might decrease again.

The risk for structural shortage in Belgium is rather low. Knowing the Belgian and French markets are highly coupled, adequacy issues in France can have a spill-over to Belgium. Concretely this means that price peaks on the day-ahead markets are likely and (close-to-) real-time events in Belgium (for example loss of a large power plan or big forecasting errors) could cause stress to remain balanced in Belgium as well. Vigilance remains required.

Summer Review 2020

General comments on past summer conditions

Over the summer, there was still an impact of COVID on the Belgian load, resulting in some periods of very high voltages. Coordination efforts have been made with neighbouring TSOs to keep the voltages below 420kV as much as possible.

Specific events and unexpected situations that occurred during the past summer

On September 15th, Europe experienced a difficult situation of real-time adequacy especially during the evening peak due to unavailability of generation capacity, reduced as a consequence of maintenance scheduling and environmental constraints. Some TSOs changed their real-time status on EAS into « Alert State » for reduction of reserve capacity, while others additionally declared mutual assistance emergency procedures as unavailable.

Bulgaria

Winter Outlook 2020 - 2021

Due to ongoing changes with the purpose of aligning the energy legislation in Bulgaria to the newest requirements of the European regulations, ESO was not able to procure the so called Cold Reserve - a type of non-market strategic reserve for the current regulatory period (August 2020 - July 2021). The usual contracted Cold Reserve size during the winter was around 900 MW. This could potentially introduce adequacy concerns in case of prolonged cold spells combined with high levels of unplanned outages.

Summer Review 2020

No adequacy or downward regulation issues were identified during the past season.

Denmark

Winter Outlook 2020 - 2021

Potential critical periods and foreseen countermeasures

Energinet expects a stable winter. The power situation seems fine and expected power plant outages are at a minimum. The same is true for the restriction on the connections to Germany and Sweden/Norway. The connection to the Netherlands is out of operation due to a cable failure.

The COVID-19 pandemic does not affect the power situation and does not give any restriction on power plants. The staff in the control centre are at a minimum, but still running the system securely.

The power situation in Eastern Denmark (DKE1) is strained in late Autumn. This is primarily due to prolonged maintenance on the Kontek interconnection between DKE1-DE00. However, the maintenance on the Great Belt connection between DKE1 and DKW1 is postponed to 2021, which relieves the situation compared to the simulation results in the Winter Outlook.

Most critical periods for downward regulation and countermeasures

Energinet does not expect any problems with downward regulation. There will be a large amount of downward regulation, especially if there is a lot of wind production.

In periods with high wind production, Energinet expects countertrade on the Danish-German border (TTG-Endk) and on the border between Sweden and Denmark. The amount of countertrade will be down regulated in DK1 and DK2.

Summer Review 2020

September 2020 resulted in a low wind production in Denmark with a decrease in Danish wind production of 19 % compared to September last year. Due to a very low wind production on 15th of September in most of Europe, combined with warmer weather in Southern Europe and increased demand for cooling, together with power plants out for planned maintenance, the spot price increased to around 200 EUR/MWh across Europe also in Denmark. Most flexible generation units were committed in the day-ahead market such that very little capacity was available subsequently for balancing beyond procured reserves. Primarily Danish imbalances resulted in a situation where all reserves were used, and a contingency could have led to a loss of load.

Finland

Winter Outlook 2020 – 2021

As in the previous winters, Finland is a deficit area during peak demand hours. The electricity demand is strongly dependent on temperature. The most critical situation is in January and in February, when coldest temperatures are typically reached.

Compared to the previous winter, the situation has remained quite the same. However, there is slight decrease in expected peak demand. The peak demand estimate under severe cold weather conditions with a likelihood of once in ten winters is approximately 15.1 GW. Kaipola paper mill will be closing mid-December and industrial demand has decreased 10% since April 2020.

Available generation capacity without peak load reserve (Finnish strategic reserve) is expected to be nearly 10.8 GW, which is less than in winter 2019/2020. There has been changes in the amount of strategic reserves including mothballing or decommissioning of some power plants that were previously in the reserve. Wind power capacity has increased.

Import is needed to cover the demand during peak hours. The highest deficit period is expected to take place from week one to week eight. Import capacity on interconnections, 5.1 GW, is sufficient to meet the deficit. However, adequacy risk exists in the event of a major power plant or interconnection unplanned outage coinciding with the cold weather.

The required amount of import is expected to be available from neighboring areas also under severe weather conditions. However, it should be noted that there are uncertainties with Russian import due to the impact of capacity payments on the Russian electricity markets. In the Winter Outlook, Russian import is modelled partially as price dependent generation capacity in Finland.

Summer Outlook 2020

There were no adequacy problems during the summer of 2020.

Several overhauls of both production units and transmission lines were carried out in summer according to schedule. These outages had no impact on system operation.

France

Winter Outlook 2020 - 2021

Demand forecast

Without regards to the current pandemic, RTE has observed over the past several years a stabilization of electricity demand in France, mainly due to energy efficiency measures, in compliance with the ambitions of the French NECP, that partially counterbalance sustained demographic growth, a recovery in economic activity and a development of the electricity uses (transport, heating...) with reduced CO2 emissions.

This year 2020 is marked by the COVID-19 outbreak, which, on top of the health crisis, has significantly impacted the French electricity demand, particularly during the lockdown that occurred between March and June. Starting with a peak of decrease of 15% in the first weeks of the lockdown, this impact has thereafter reduced due to a gradual recovery of economic activity. At the end of the summer, the decrease of demand was assessed below 5% compared with what would be expected without the effects of the outbreak.

Considering the macroeconomic outlook for the next months to come, the assumption collected in September 2020 is a 2% decrease of the demand in comparison with what was expected without the outbreak. Over half of this decrease is due to the foreseen impact on the industrial sector, and a third to the tertiary sector (transport, restaurant, hotel, etc).

Since the end of October, a second lockdown has been introduced and is supposed to last until the beginning of December at least. During this new lockdown:

- the industrial sector is not forced to stop: impact should thus be insignificant on the load;
- the impact on the residential sector is difficult to foresee: on the one hand the attendance rate should be lower since lockdown is less strict than the first one, but on the other hand the residential demand is higher in the winter period. An impact similar to the one during the first lockdown could thus be expected;
- the impact on the tertiary sector can be considered similar the one during the first lockdown, as only vital shops are allowed to be open;
- transports should also be affected, in similar proportions than in the first lockdown.

Based on these assumptions, a slight impact of the new lockdown on demand could be observed in the next weeks, which is the hypothesis provided in early October for the “second wave of pandemic” analysis of this Winter Outlook.

However, these assumptions cannot be deemed to be certain. Indeed, the observed demand in France in the very first days of the new lockdown seems to be close to the demand level expected before.

Resource capacity forecast

In France, the available generating capacity for the next winter has also been impacted by the COVID-19 outbreak, in proportions that are much more important for adequacy than the one on demand.

Indeed, during the first lockdown, many nuclear maintenance operations have been extended, which led to a significant reduction of the available nuclear capacity for the next months, but also in the next two years. Over the last few months, EDF has proceeded to implement many changes in the public maintenance program (published on the European transparency platform), and in particular, the duration of the outages has been adapted to take into account the sanitary measures. In order to optimize the available capacity during winter, some reactors have even been shut down to save some nuclear fuel.

For these reasons, EDF has announced a significant decrease of its production forecast for 2020 (between 325 and 335 TWh, in comparison with a target of between 375 and 390 TWh before the pandemic).

The Winter Outlook report is thus based on the nuclear availability data declared by EDF on the transparency platform at the beginning of September.

Since, some important changes have been conducted:

- on the one hand, the duration of some outages that were supposed to end in November and December has been shortened;
- on the other hand, outages on the two Flamanville reactors, which have been shut down for more than a year now, have been extended (+1 month and +3 months).

Moreover, the numerous extensions of important nuclear outages observed in the past winters in comparison with what is firstly declared on the transparency platform, combined with the successive delays on specific reactors (Flamanville 1 and 2, Paluel 2) raise a climate of uncertainties on the effective level of nuclear availability for the next months, especially as there are numerous stoppages programmed for this winter (about 15 are supposed to be completed before the end of January).

As a consequence, RTE integrates precautionary principles (deterministic extension of outages) in its national winter adequacy forecast, on top of the maintenance information provided by EDF on the transparency platform.

These principles are not taken into account in this WO.

The graph below shows the nuclear availability forecast considered by RTE in its national winter adequacy report.

After the closure of the two Fessenheim nuclear reactors that occurred in mid-2020, the rest of the thermal generating fleet is supposed to be now available for the winter, except one CCGT and one coal unit.

A slight slowdown of the commissioning pace for the RES could also be observed in 2020, due to the first lockdown.

Moreover, in order to strengthen the security of supply for this winter, RTE and the public authorities have made changes in the last months on the support mechanism for demand-side response, allowing to increase the capacities selected by tenders Combined with the effect of the increase of prices on the capacity mechanism (as a result of increased risk on the security of supply in France), the evolution of the support mechanism for demand-side response has led to an increase of the DSR capacity available in France of more than 300 MW for this winter (+300 MW for end 2020 and more than +400 MW for 2021)..

National view on the Generation and System Adequacy forecast for the next winter and its relation to the Winter Outlook results

Like ENTSO-E, RTE produces an annual risk assessment during winter through its national seasonal adequacy report. WO results seem to be partially in line with national elements recently published in November 2020 as both reports indicate a heightened scrutiny due to potential adequacy issues. However the main risks assessed in the WO for France are identified for very specific weeks (W48 and W6), whereas the French report indicates an important risk occurring during the whole winter.

The discrepancy between both analyses mainly result from several elements :

- They do not use the same climate database. While the one used in the French study models 200 potential forecasting climatic years with a full correlation between load, solar and wind conditions, the one used for the different studies at ENTSO-E (Seasonal Outlook, MAF, TYNDP) is based on 35 historical climatic years.
- The nuclear availability in France is also taken into account differently in both resource adequacy assessments. As mentioned in the section "Resource capacity forecast", RTE considers precautionary principles for the duration of outages on top of the maintenance information provided by EDF on the transparency platform, which are not taken into account in the WO.

- The data collection for the French generating fleet do not occur in the same time (November 2020 for the French report, September 2020 for this WO), leading to a discrepancy based on the latest information (especially on the nuclear maintenance program). In particular, the nuclear availability in November has been improved and the risks during this month have thus been reduced (see RTE publication for more information).
- The flow-based approach, which is not taken into account in the WO, is modelled in the French national seasonal study.

As a consequence the result of the Winter Outlook report for France has to be treated cautiously and read jointly with the French national seasonal adequacy study¹ (also called “Passage de l’Hiver”).

Summer Review 2020

General comments on past summer conditions

The COVID crisis had a strong impact on nuclear power plant maintenances, leading to a decrease of nuclear power availability compared to previous summers by 22% on average. Even if the load decreased by around 7% in average due to the crisis, we experienced many stressed days on adequacy through the summer, with many alert messages to the market in day ahead and real time.

France experienced two heat waves this summer early august and mid-September, with temperature 5 to 7°C higher than normal conditions, leading to an increase of load and impacts on production availability.

Specific events and unexpected situations that occurred during the past summer

September 15th, a tight adequacy situation was seen in Europe, with several TSOs on Alert State on EAS, and many Inter-TSO assistance made unavailable due to overall margin issues. Together with the high temperature, there was a very low wind infeed in Europe. BRP were short and balancing prices went high. Regarding RTE, 1500 MW of demand response bids were activated, and all Replacement Reserve was used to cover the peak, leading to an Alert State on EAS.

¹ <https://www.rte-france.com/analyses-tendances-et-prospectives/les-analyses-saisonnieres>

Germany

Winter Outlook 2020 - 2021

General information

The pumped-storage power plants (PSPs) of the “Kraftwerksgruppe Obere Ill-Lünersee” (turbine: 2.1 GW; pumping: 1.4 GW), which are installed in Austria but assigned to the German control block, are again included in the German dataset. For the same reason, the pumped-storage power plant Kühtai and storage power plant Silz (total turbine: 0.8 GW; total pumping: 0.25 GW) are also included in the German dataset.

The non-market resources' for Germany contain:

- Lignite units in stand-by (“Sicherheitsbereitschaft”): Lignite fired power plant blocks with a total capacity of 2.4 GW are currently in backup mode. The lead time in which the power plants are completely available is 240 hours;
- Grid reserve: is used to resolve congestions and contains different types of power plants located in Germany. It currently comprises a total capacity of 6,6 GW;
- Out of the market Demand Side Response: with the Ordinance on Interruptible Load Agreements (AbLaV) interruptible demand can be obliged to take measures to maintain grid and system security. For the purpose of AbLaV, interruptible demand is defined as consumption units, which can reliably reduce their demand for a fixed capacity upon request by the German TSO. Currently, about 1,5 GW of interruptible demand is available (prequalified amount of power).
- Capacity reserve: Since 01.10.20 (until 30.09.22) a total capacity of 1,1 GW of power plants out of the market is available as reserve for unforeseeable events. These power plants have to be available within maximally 12 hours and are activated in case of a lack of market clearance (D-1 and ID). They can also be used as grid reserve.

Particular information

Good things to mention:

- What is residual impact of 1st COVID-19 wave on consumption during winter 2020/2021
 - ➔ The load in Germany is nearly back at the level as in times before COVID-19. Therefore we do not see any need to change the proposed demand data.
- What is best estimate of consumption decrease in case of new COVID-19 pandemic wave (at peak)?
 - ➔ Indeed the load profile changed during the time of the lockdown in Germany but as mentioned before nowadays the load (profile) is nearly as in times before COVID-19. Since the outbreak of COVID-19 experts all over the world have learned a lot about the virus and how to deal with the situation. Therefore we do not expect a similar lockdown as we experienced in the first half of the year and that's why we cannot deliver a reliable demand decrease factor for Germany.
- Any challenges or special circumstances expected for coming winter
 - ➔ In situations of high RES feed-in in the north and high demand in the south of Germany, the necessity of remedial actions to maintain (n-1)-security on internal lines and on interconnectors is expected.
 - ➔ The interconnectors are expected to play an important role for the export of excess generation during demand minimum periods. In cases of high excess generation, specific laws and

regulations allow the German TSOs to reduce the RES feed-in in order to mitigate any negative effects on the network. Therefore, no critical situations are expected.

Summer Review 2020

No adequacy or downward regulation issues were identified during the past season.

Great Britain

Summer Review 2020

General comments on 2020 summer conditions

Margins during the summer were adequate and manageable.

Summer 2020 in GB was slightly cooler, wetter and slightly duller than normal.

Specific events and unexpected situations that occurred during the last summer

There were no generation closure and no new conventional generation commissioning during the summer.

There was a fault outages on the French interconnector: on bipole1, 1000MW (28/9-29/9)

There were no outages on Britned Interconnector.

There was a planned outage on Nemo Link, 1000MW (21/9-23/9) plus a fault outage on 25/9.

There were outages on East West Interconnector, 500MW: (8/7-9/7) and (27/8-31/8).

There were outages on Moyle interconnector pole, 250MW: (30/6-2/7) and (2/7).

Lowest system demand was 13.4GW on Sunday 28 June 2020 at 0530 hours.

Lowest daytime demand was 15.3GW on Saturday 30 May 2020 at 1500 hours.

Highest PV output was 9.4GW on 29 May 2020 at 13:00.

No EMNs (Electricity Margin Notice), one CMNs (Capacity Market Notice) was issued on 15 September 2020.

There was a localised NRAPM (Negative Margin Notice) issued on 27 July 2020. There were no National NRAPM.

Winter Outlook 2020 - 2021

Generation capacity in Italy

In recent years, the Italian Power System has faced a significant reduction of the conventional (thermoelectric) power fleet. The growth of variable (e.g. wind and PV) generation, together with a drop-in demand, is putting commercial pressure onto traditional generators, leading to the decommissioning of the oldest power plants. Between 2012 and 2018, the following phenomena affected the power system operation and adequacy in Italy: about 16 GW installed generation was phased out. The total amount of installed conventional power plants fell from 77,8 GW down to 61,1GW and additional 2,1GW conventional power capacity is not available due to environmental/ legal constraints and mothballing. This trend can be observed on the Figure below. This phenomenon has been seriously affecting the power system adequacy in Italy and some important warning signals in terms of adequacy on the national level scarcity were already registered in last years during the summer 2015 period as well as for winter 2016/2017.



Until 2019 “ Statical Data” on electricity in Italy prepared annually by Terna are used. For 2020 onward provisional data are considered.

Since 2017 (SOR 2017), the decommissioning of conventional capacity has reduced, and the available thermal capacity is similar to the values of the last year.

Grid reinforcements, developed by the Italian TSO in these last years, also helped to smooth out some effects caused by the power plants decommission (especially in the main islands).

COVID effect on upward adequacy assessment

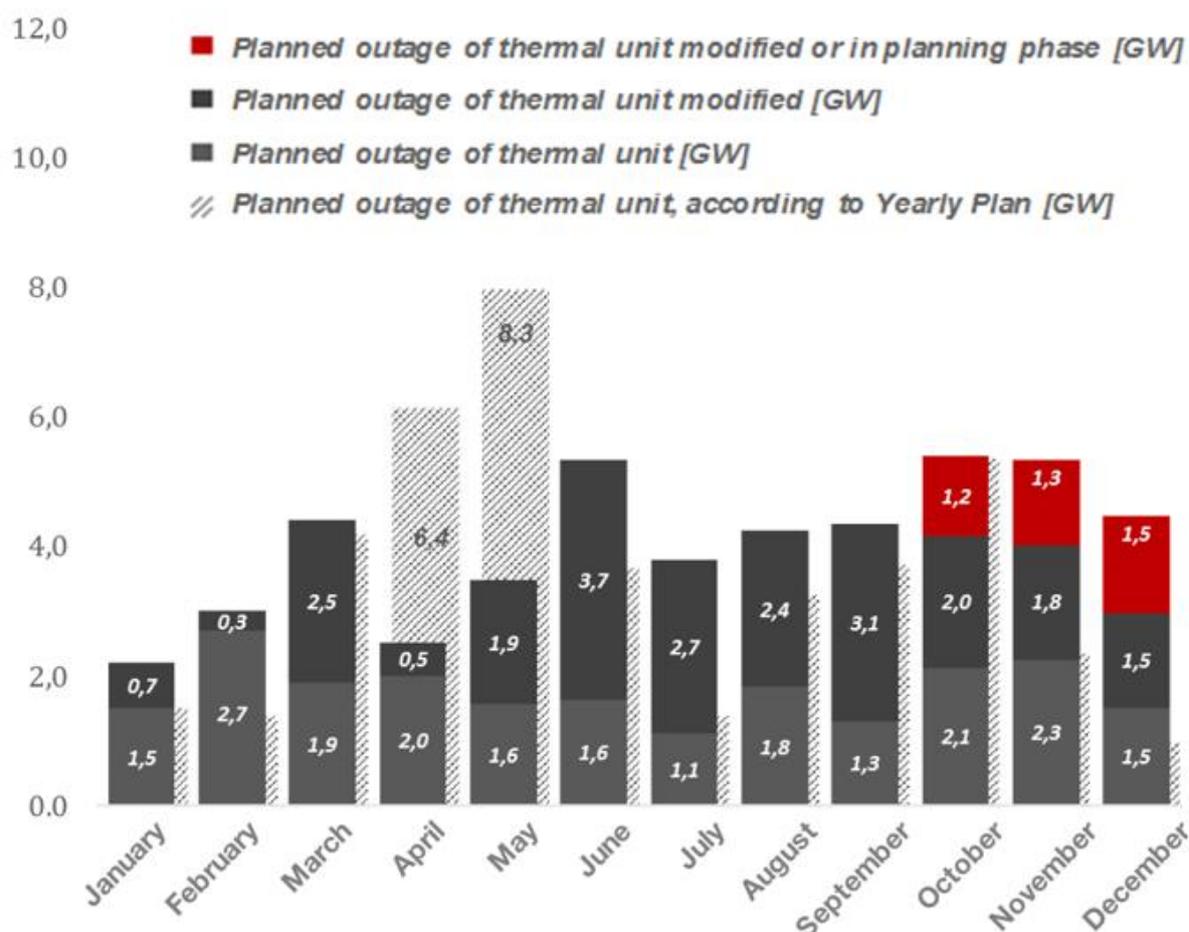
The analyses were performed with data taking into account the COVID-19 pandemic situation started in March. After the fall registered in March, the electrical demand is increased: for instance, in August and in September were registered typical load values. Nowadays, a second wave of Covid-19 is affecting the whole of Europe. As a consequence of government countermeasures, the demand is decreased immediately: the

most likely scenario foresees a full recovery at the end of 2021. In case of a new lockdown, there could be a load reduction similar to the one already observed in March.

So, for the coming winter the load is expected to be lower than past years even in case of cold spell.

The opposite effect of COVID situation is that planned outages were not executed during the spring period and maintenances were postponed to the following months, even in period typically critical for adequacy.

As a consequence of these facts, even if the load is expected to be lower, the high rate of planned outages confirms the necessity of import from neighboring countries.



Regarding the simulation results, adequacy risks are not detected.

In conclusion, adequacy margins are similar to typical winter values, confirming the necessity of import from neighbouring countries. Critical situations could happen in case of low availability of import (values lower than 10° percentile of registered values). Nevertheless, postponement and/or cancellation of maintenances could be used as countermeasures.

Furthermore, improved regional coordination processes (including regional weekly adequacy assessment - STA project) will support the definition of proper and efficient countermeasures in case the risk of incurring in critical situations will be detected at short term horizon.

Most critical periods for downward regulation and countermeasures

The worst weeks for downward regulation are expected to be the last week of December and the first week of January, characterized by many public holidays. In order to cope with this risk, the Italian TSO (Terna) prepared preliminary action and emergency plans and, in case of need, will adopt the appropriate countermeasures. In order to guarantee system security, Terna could adopt enhanced coordination with neighbouring TSOs and special remedial actions, such as the curtailment of inflexible generation. Further special actions, such as NTC reductions, could be planned in cooperation with neighbouring TSOs.

Summer Review 2020

General comments on past summer conditions

Summer of 2020 was characterized by a significant decrease (about -5.6%) in electricity demand compared to the previous year.

This is partly due to temperatures that were on average lower than last summer (- 0.9°C), especially in June (2.6°C lower) and July (1.1°C lower).

The effects of the COVID-19 pandemic significantly determined the decrease in consumption which, corrected by the correlation with temperature, was about -3.8% compared to summer 2019.

Specific events and unexpected situations that occurred during the past summer

On the evening of 15 September there was a power shortage in the western part of Europe.

The day was characterized by high production of photovoltaic energy which, during the early evening hours, fell rapidly coinciding with the increase in the evening demand for electricity. The result was a Power shortages in Western part of Europe.

In Italy, due to the consequent high prices in CWE - higher than Italian ones - at 18:00 the day-ahead scheduling at North-Italian Border switched from import of about 2800 MW to export of 1000 MW. Meanwhile, the Italian load increased reached the evening peak.

Because of low availability of resources, it was difficult to procure on the day ahead ancillary services market the needed generation reserve.

However due to the countermeasures taken in real time, in close coordination with neighbouring TSOs, in the end real-time reserves were adequate.

Lithuania

Winter Outlook 2020 - 2021

Residual impact of 1st COVID-19 wave on consumption during winter 2020/2021 should be minimal. As consumption has been gradually recovering during the summer and in August of 2020 was 1% higher than August 2019.

However, COVID-19 cases in Lithuania are rapidly increasing during preparation of these comment and this could be treated as a second wave. Because it is very hard to predict the dynamic of this new pandemic wave and the impact of a different approach and measures taken to control the spread of COVID-19. We assume that impact on consumption will be prolonged but not as severe as in the case of total lockdown in March of 2020. Our best estimate is a decreased consumption of up to 4% at peak, however it seems likely that second wave might peak in November and the pandemic's impact will be lower.

The maintenance schedule of generating units in winter 2020/2021 is planned to be minimal: the largest unavailability of generation capacities will reach only 6% of total NGC in Lithuania during maintenances of one generating unit of Kruonis Pumped Storage Plant on week 9.

Average adequacy level of Lithuanian power system during upcoming winter is forecasted to be negative therefore import will be necessary to ensure system adequacy. It is expected that cross border interconnection capacity will be sufficient to maintain system adequacy during upcoming winter. However, total import capacity to Lithuanian Power system will be lower compared to the previous winter period. Since 03.11.2020 Belarus nuclear power plant unit No.1 is connected to the grid and the trading capacity of the interconnectors between Belarus and Lithuania is reduced to 0 MW (according to Lithuanian Law on Necessary Measures against Threats Posed by Unsafe Nuclear Power Plants in Third Countries). Moreover, import capacity through NordBalt HVDC interconnection is reduced by 50% for the most of November.

No other challenges or special circumstances expected for coming winter.

Summer Review 2020

In summer 2020, national consumption was 2,5% lower than in summer 2019. Maximum demand (1461 MW) was reached on 19th of June 2020, while the minimum demand (710 MW) was on 12th of July.

In general, the summer balance portfolio consisted of 38% local generation and 62% imports from neighboring countries. Similarly, to summer of 2019 Lithuania imported 3,5GWh and exported 1,3GWh. Lithuania's largest part of imported electricity was from Sweden (36%) and Russia (36%) while 71% of exports were to Poland.

Local generation increased 59% mainly because of thermal power plants generated almost 3 times more electricity than the previous summer (679GWh increase). Also, electricity generation from waste increased 50% up to 28GWh increase due to commissioning of new power plant in May 2020.

Regarding the capacity of Lithuanian power system interconnections, most significant deviations from yearly plans occurred during weeks 24-25, when transmission capacity between Lithuania and Sweden was reduced to zero due to forced outage of NordBalt HVDC interconnection. Moreover, yearly maintenance of NordBalt HVDC interconnection was postponed from week 37 to week 44. Capacities from third countries (allocated in Belarus-Lithuania cross-border interconnection) most of the time were higher comparing with the forecasted values in the previous Summer Outlook.

No adequacy issues happened during summer 2020. Import contributed significantly to adequacy in Lithuania, however local generation continues to increase.

Malta

Winter Outlook 2020 - 2021

Demand is foreseen to remain at an average of 4.4% less than 2019 and shall start to recover after the first few months of 2021. In case of a new wave, whereas no severe lockdown (as 1st wave) is foreseen, the additional decrease shall be of around 2% on the consumption of 2019.

The planned works and inspections of power generation plants and ancillaries, scheduled to be started in March 2020, were affected by the COVID-19 pandemic given that during local lockdown period (March-June 2020) all inbound and outbound flights were banned and, therefore, works planned to be carried out by foreign technical experts and tradesmen on the power generation plants had to be rescheduled to start at the end of August 2020 and shall be continued during winter 2020 – 2021.

Amongst other factors, the winter outlook study also considers the unplanned outages and limited generation from cross border countries; which, in the case of Malta, is Sicily. In practice, since the commissioning of the Malta-Sicily Interconnector in 2015, instances of Interconnector NTC curtailment by the Italian TSO have been very uncommon, so that, essentially, full Interconnector NTC is available for dispatch throughout the year. This is not expected to change during 2021.

Summer Review 2020

General comments on summer 2020 consumption

Following the COVID-19 lockdown period in Malta, the electricity consumption demand started to recover in mid-July 2020. During the summer months, demand varied from 5% less than 2019 in July, to 5% more than 2019 during August, and decreasing again as from September to the current reduction of 4.6%.

The recovery and increase in demand during August and September 2020 is a result of Maltese citizens staying in Malta and not going abroad on holidays during the period as per other years, boosting local electricity consumption, as a result.

Poland

Winter Outlook 2020 - 2021

A lot of coal capacity is planned for decommissioning this winter, what in connection with delays in fully put into operation of new units may cause tight power balance in Poland. Internal PSE analyses proceed in August 2020 showed that high level of import might be a key issue to keep power balance at safe level in Poland, especially at the beginning of the winter and simultaneously with the very low renewables infeed. ENTSO-E simulations, based on the same input data confirm availability of power in Europe, therefore LOLE for Poland is not reported for coming winter.

Summer Review 2020

PSE experienced tight power balance situation on 22 June 2020 as the result of high level of unavailabilities. Significant level of import, especially on synchronous profile with DE, CZ, SK, was required to balance the system during peak hours. Finally total import amounted to over 3.3GW, of which 2.2GW on synchronous profile, while during whole summer 2020 PSE, to keep N-1 criteria, could offer on synchronous profile only 1.1GW on average of import to Poland.

Spain

Winter Outlook 2020 - 2021

No adequacy risk is expected in the Spanish peninsular system for the upcoming winter. Generation availability is enough regardless of import availability from neighboring countries.

A set of coal power plants in Spain are currently in the process of decommissioning. The estimated amount of installed capacity of those plants, excluding the ones already closed, is 2.8 GW. There are no adequacy risks foreseen related to this fact in the Spanish system. Hydro reservoirs levels are currently slightly below the historical average values.

There are no adequacy issues foreseen due to the COVID-19 pandemic.

Although there are no assessed adequacy risks, the factors which could reduce the remaining capacity during the next winter in the Spanish system would be the sensitivity of the demand to temperature in extreme weather conditions, and gas availability to combined cycle thermal plants during situations of low RES. There are no downward regulation issues expected.

Summer Review 2020

No adequacy or downward regulation issues were identified during the past season.

Sweden

Winter Outlook 2020 - 2021

Little to no effect on consumption has been noted in Sweden due to the pandemic. In December, the nuclear reactor Ringhals 1 will be permanently closed. Although this will reduce the plannable production capacity for the winter, no immediate adequacy problem is expected.

Summer Review 2020

Due to low electricity prices and prolonged revisions due to the pandemic, nuclear plant operators extended their planned revisions. This led Swedish TSO to contract system stability services from the nuclear plant Ringhals 1. Additionally, two thermal plants were also contracted to provide active and reactive power, in case the need would arise. Due to the pandemic, some maintenance work was prolonged and transmission capacity was reduced at times compared to a normal summer. In general, the summer passed favorably without any major issues.

Slovenia

Winter Outlook 2020 - 2021

For the upcoming winter expected generation and import capacities are sufficient to cover all energy needs of Slovenia and consequently we do not expect any adequacy issues.

Scheduled maintenance of generation units is similar to previous years. The most important scheduled maintenance relates to thermal power plant Šoštanj (539 MW) in period from 24.12.2020 by 4.1.2021 and for four days in March. Both periods are considered as periods with relatively low loads. During the 27th of March and 2nd of April 2021, the only pumping hydro power plant in Slovenia of nominal power 180 MW will be under revision so in case of low load an export of maximum 100 MW will be required.

During the first wave of covid-19, Slovenia noted a decrease of electricity demand by 5-15 % in March, April and May. During the summer demand was still lower than in the years before, but that was not only the consequence of covid-19 but also of the fact that the summer was very mild with no heat waves. In September and October demand was comparable with the years 2018 and 2019. Slovenia has declared epidemic again, meaning that the bars, gyms and some other facilities are closed. Wherever it is possible work is organized from home, also the school and lectures is mostly taking place from home. Depending on the epidemiological situation the upcoming winter, there might be a need to close some other economic activities that might have an impact on overall demand of electricity.

We predict that in relation to previous years, total consumption as well as weekly peak load might decrease by 5-10 % during the upcoming winter, due to impact of Covid-19.

Summer Review 2020

The last summer passed without any adequacy issues or downward regulation. Summer was mild, without extremely high temperatures, heat waves and with a solid amount of precipitation. Due to that and also as an impact of covid-19 on economy, demand and its peaks were cca 10 % lower than in previous years. Our two biggest thermal power units in Šoštanj experienced some individual and relatively short unplanned outages in May, July and August, however our hydro plants had enough water at their disposal most of the time, which together with our import capacities and other power units was sufficient for covering all our energy needs or potential energy shortages.

Switzerland

Winter Outlook 2020 - 2021

The probabilistic method does not identify any generation adequacy problems in Switzerland. However, the situation could still be critical due to challenges outside the scope of the Seasonal Outlook.

Summer Review 2020

General comments on past summer conditions

The summer of 2020 showed again above average temperatures. The precipitations were also above average mainly due to high precipitations at the end of August. In most regions, the sunshine was slightly above the norm.

Specific events and unexpected situations that occurred during the past summer

In some cases, too high voltages and high loadings of grid elements necessitated national or international reactive power compensation measures and redispatch measures. The TSO-DSO cooperation is becoming increasingly important. The new Nant de Drance power plant is progressively being integrated into the 380 kV grid of South-West Switzerland. Despite the Corona pandemic, several large grid renewal and extension projects are being carried out.