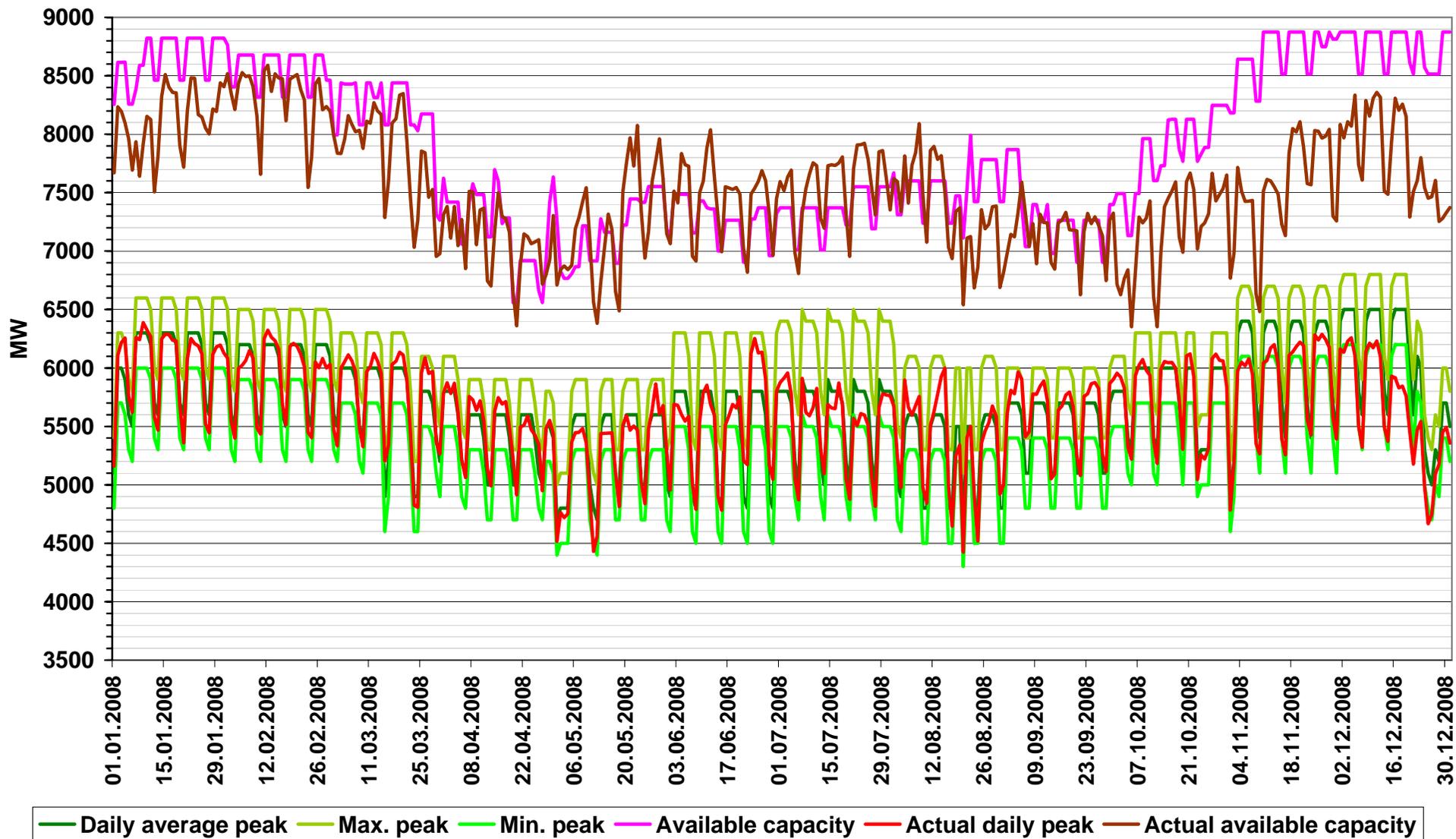
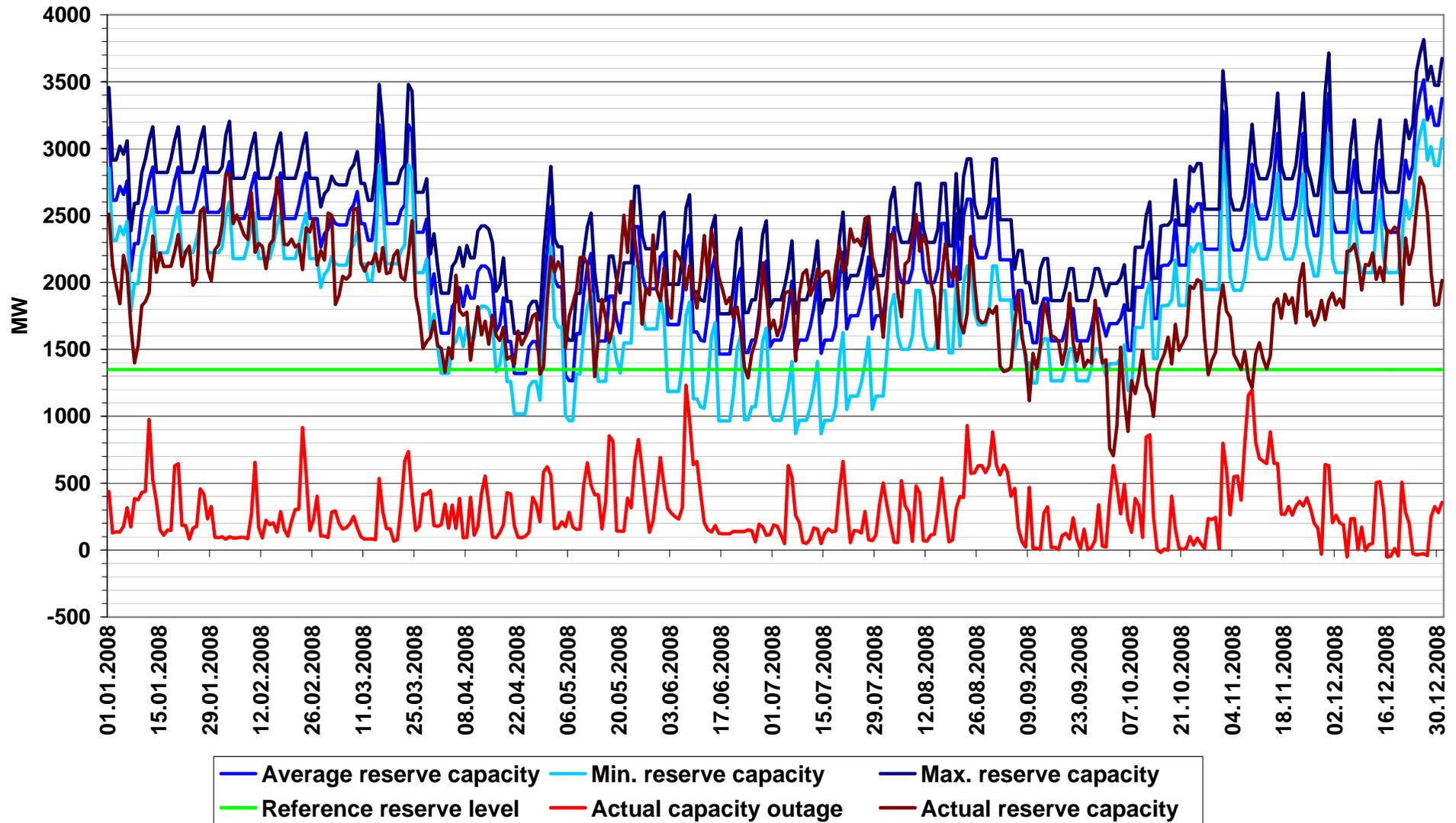


1. Expected or Actual Demand and Available Capacity - 2008

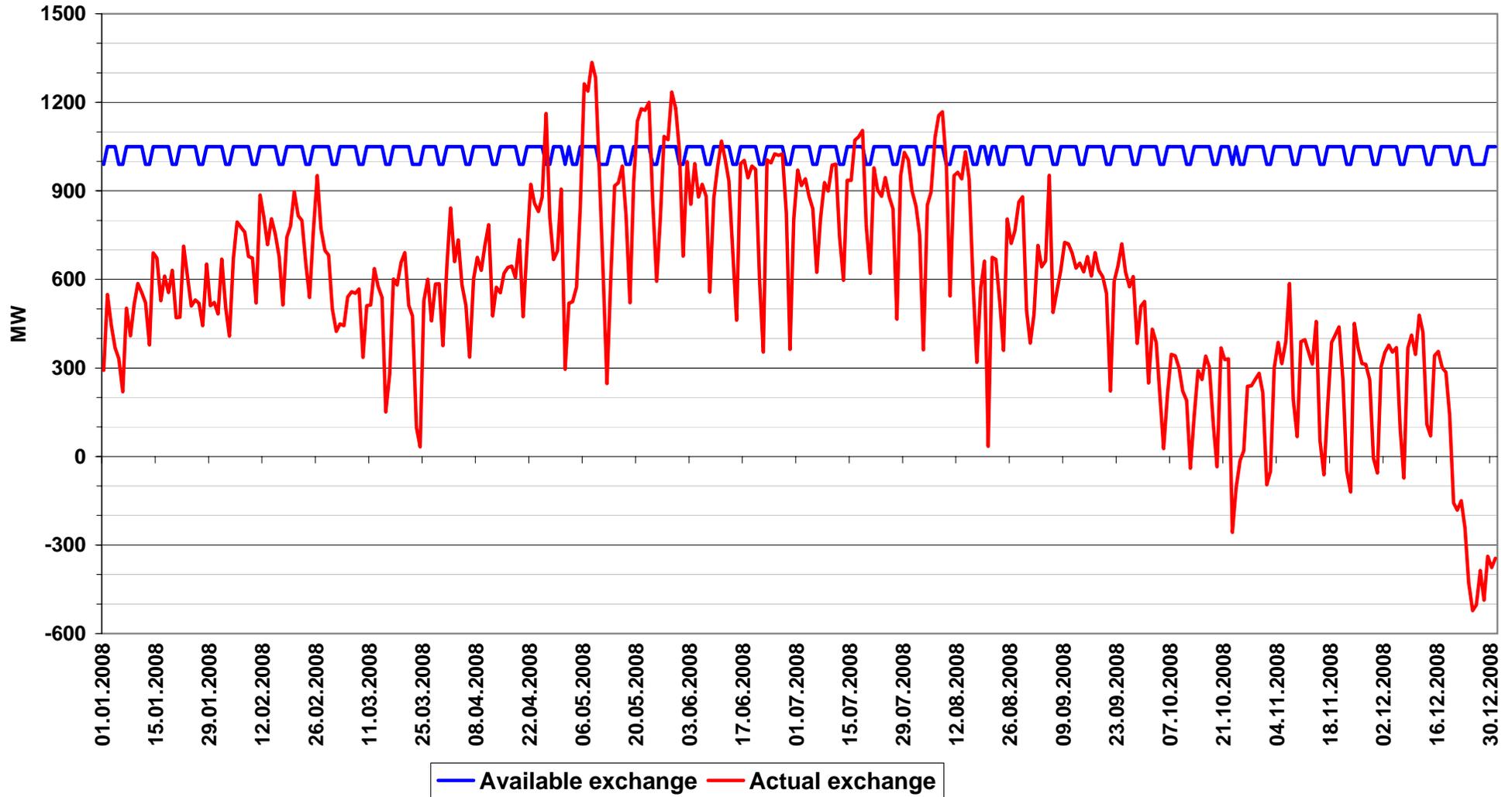




2. Planned and Actual Reserve, as well as Capacity Outage Compared to Reference Reserve Level - 2008

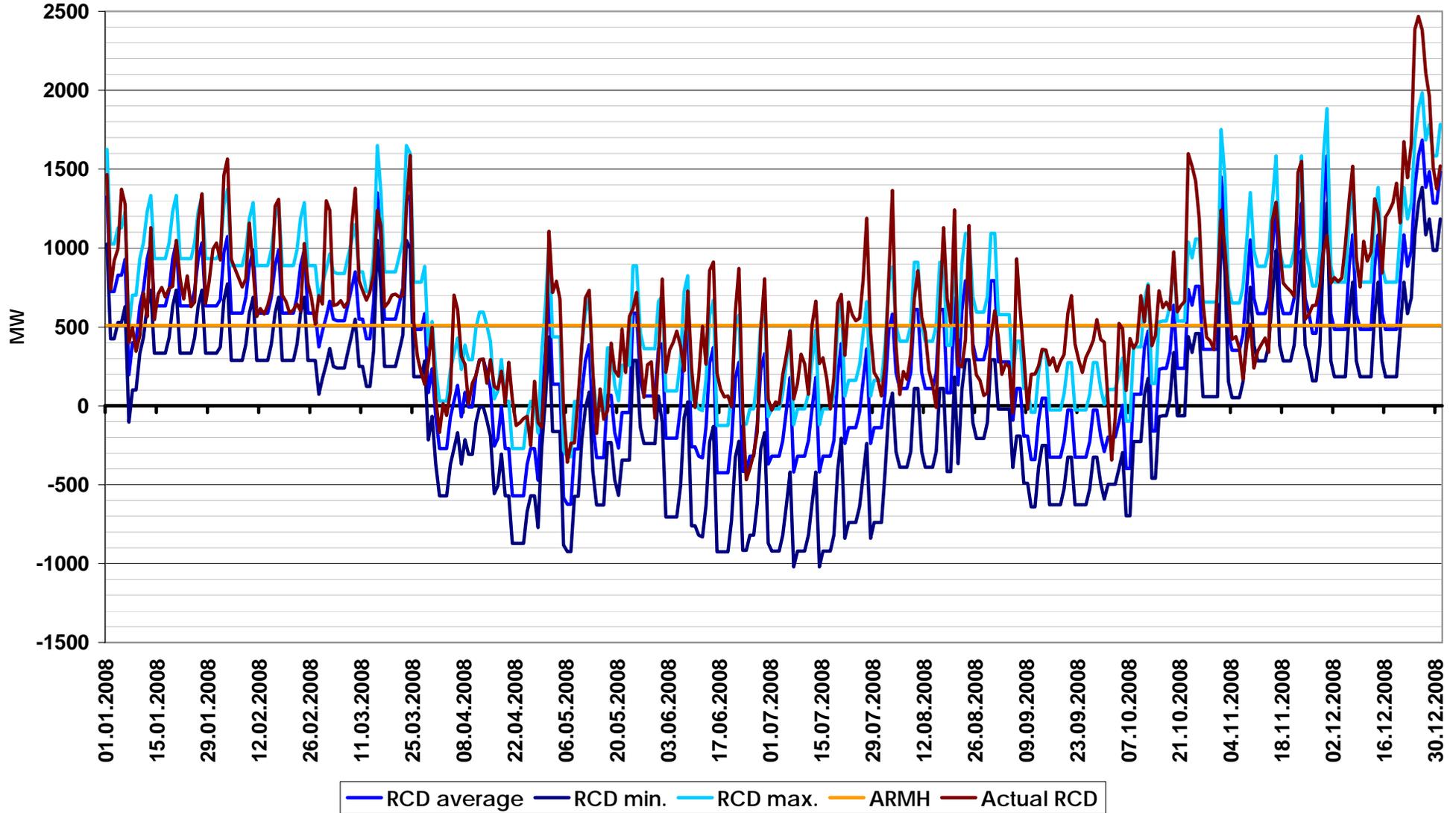


3. Available and Actual Daily Exchange at Daily Demand Peak - 2008



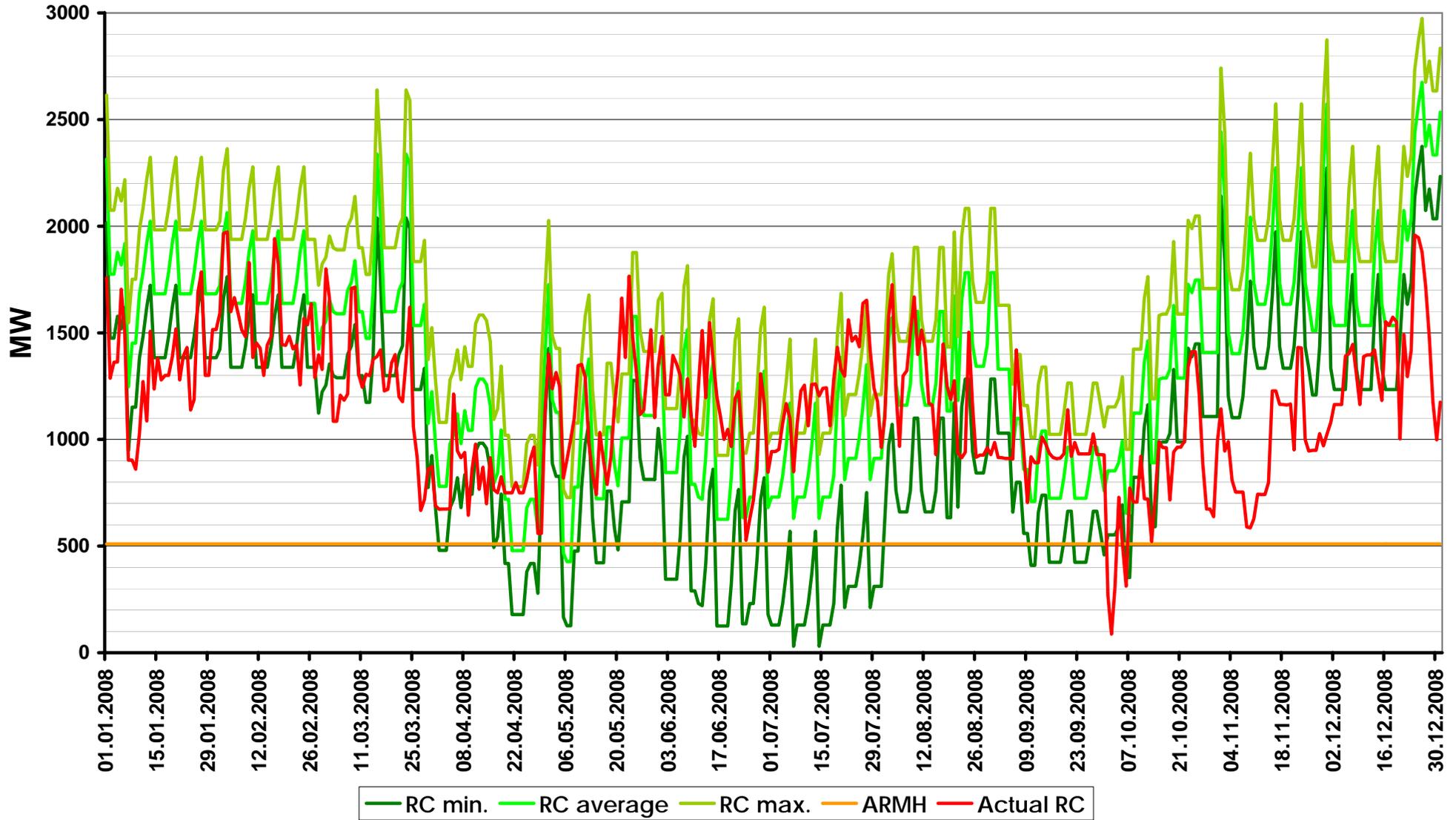


4. Planned and Actual Remaining Domestic Capacity Compared to Requirement - 2008





5. Planned and Actual Remaining Capacity with Import, Compared to Requirement - 2008



Clarification to the Diagrams

We added a +/- 300 MW, during the summer months, due to higher consumption of air-conditioning a +5-600/-300 MW band to the forecasted daily peak gross demand in order to cover the uncertainties of the actual load, caused by changes of the weather, operation of ripple control on demand side, or unexpected events affecting major part of the society (e.g. strikes in public transportation).

We decreased the available generation capacity of the Hungarian power plants – calculated in accordance with their maintenance plans and seasonal behaviour - by 200 MW on working days, and by 400-500 MW on week-ends/holidays, i.e. average capacity outage, based on statistics. We added to this the available capacity from import, to come up with the reliably available capacity of the Hungarian Electric Power System. (Figure 1)

As available capacity from import we took into consideration the reserves contracted by the system operator, as well as the capacities guaranteed by long-term contracts, known by MAVIR. We calculated at peak-time on working days with 1050 MW, while at week-ends and on holidays with 990 MW. Since market liberalization has started, the actual electricity exchange depends on the decision of market participants, on market liquidity, and on the capacity of cross-border interconnections - in a word it is uncertain. In 2007, the Hungarian power system sometimes turned to be net exporter. (Figure 3)

As a result of the peak demand forecast method, the same band is valid for the planned reserves, too. (Figure 2)

Reference reserve level was set to gross 1350 MW. (Net 40 MW primary, 270 MW secondary, 500 MW minute and emergency, 500 MW hourly reserve, plus 40 MW auxiliary consumption, on a yearly average.) Due to the new conditions for promotion of renewables and high efficiency co-generation, i.e. "eco balance group" run by MAVIR, there is a certain risk, whether additional amount of reserves will be required. Based on experience gained, re-evaluation may be necessary during the year.

UCTE uses the so-called remaining capacity for quantifying the reliability of the electric power systems. The remaining capacity equals the reliably available generation capacity, decreased by the peak demand, and the reserves required by the TSO (i.e. primary, secondary, tertiary reserves - for Hungary in 2008: gross 840 MW). The adequacy reserve margin (ARM) is different from country to country, it is usually between 5-10 % of the national built-in generating capacity (BC). For Hungary, based on the capacity of the largest generating units, we consider gross 510 MW, which is 5.7 % of BC.

When calculating the remaining capacity, it is usually only the national generating capacity, that is considered. With this method, in most part of the year the Hungarian remaining capacity (RCD) does not only remain under ARM level, but it is negative even. In summer, during extra high demand periods, missing capacity is around 1000 MW. (Figure 4)

Increasing the remaining capacity (RC) by the available import, it grows to be sufficient. But during extraordinarily high demand periods between May and October it remains below ARM level. (Figure 5)

The daily actual available capacities and reserves deviate from the planned values depending on the unexpected outages, the cross-border activities of the market participants, and on the actual demand. We update the published plan monthly, with the actual data.

We can draw the conclusion, that the capacity balance of the Hungarian electric power system, serving for covering the consumers' demand, will be acceptable in 2008 only in that case, if the ratio of the cross-border exchange remains high. In 2008 we do not expect construction of so much wind generation capacity, that would require higher reserve level than otherwise. The risk of less reliably predictable import due to changes of the neighbouring markets is added to higher uncertainties resulting from full market opening in Hungary. The largest problem is caused by the inadequate amount and technical parameters of the reserves, required for system operation. In order to counterbalance this in 2008, MAVIR has contracted capable "market makers" for supplying ancillary services, reserving partly import capacities, too.