



ANALYSIS OF CAPACITY
SUBSCRIPTIONS AND USE OF THE
ENTRY-EXIT POINTS ON GRTGAZ'S
TRANSMISSION SYSTEM

JUNE 1, 2013

With regard to Regulation 715/2009 on the implementation of congestion handling procedures, this document provides an analysis of subscriptions at the entry/exit points on GRTgaz's transmission system, as well as an analysis of the use of those same entry points over the period April 2011 – March 2013. It covers the Dunkerque, Obergailbach, Taisnières H, North-South Link (in both directions), Oltingue and Midi (in both directions) points. Conditions for the implementation of the capacity overbooking-buyback mechanism are proposed for each of the points concerned.

1- General Remarks

Apart from the North-South link in the North-to-South direction, firm capacity is now available for sale on all the points listed below, whether for multiannual, annual, monthly or daily products.

Despite the fact that this firm capacity is available for sale, GRTgaz now offers the market, as a preventative measure, several mechanisms designed to manage congestion on these types of points. These include:

- 1- UBI (Use-It-or-Buy-It) which enables a shipper to make within-day use of capacity subscribed for and not used by the other shippers.
- 2- Releasable capacity, available on the Dunkerque point, offering capacity for a term of 1 to 4 years from shippers possessing more than 20% of the firm capacity offered for sale by GRTgaz.
- 3- Interruptible capacity available on the majority of these points (excluding Midi and Taisnières H), which makes it possible to offer capacity available part of the time for long-term booking.
- 4- Documents setting out the conditions of availability of this interruptible capacity.
- 5- Short-term capacity adjusted on a day-to-day basis depending on system conditions.
- 6- Publication of the range of capacity products available for sale, including the quantity and nature of the products proposed, accessible on GRTgaz's website and in SmartGRTgaz.

In the case of the North-South link, a project for the development of this link was proposed as part of the 2015 France Spain Open Season, which did not allow the construction of new infrastructure that would increase firm capacity at this point, where there is currently physical congestion.

2- Dunkerque

Gas flows at Dunkerque appear clearly seasonal. In the last two years, they have frequently (9% of the time, i.e. on average for one month a year) exceeded the available firm capacity (570 GWh/d until September 2011, then 585 GWh/d), with the result that shippers use interruptible capacity. It should be noted that flows were more than 95% of available firm capacity (557 GWh/d) a quarter of

the time. These findings show that the Dunkerque point is not far from a state of physical congestion in winter.

76GWh/d are available as short-term capacities. Long-term firm capacity was fully subscribed until 2020. Firm capacity (including short-term) was fully subscribed until September 2012. Since October 2013, 15 GWh/d then 25 GWh/d of firm capacity has been available for sale. This means that releasable capacity (approximately 40 GWh/d) is no longer subscribed. The majority of the interruptible capacity (for which the level of availability is very high) is no longer subscribed, and the part that is still subscribed arises from clearing following release. It therefore seems that capacity is currently available for sale in the form of firm and interruptible product representing 10% of technical capacity.

Available daily capacity consists of unsold firm and interruptible monthly capacity and capacity generated by UBI/UIOLI products. Over the period April 2011-March 2013, an average daily amount of capacity of 120 GWh/d was available. A minimum of 28 GWh/d was available, except for 5% of the time. Over this period, shippers subscribed an average 17 GWh/d. Available daily capacity was subscribed two thirds of the time. The daily capacity regularly available on the Dunkerque point is therefore substantial.

Given the existing firm and interruptible capacity available for periods in excess of one month (10% of technical capacity for periods of more than one month, plus at least 4% and an average of 20% for daily capacity), the distribution of flows at this point (physical congestion in winter) and the difficulties of coordination between transmission operators, GRT proposes not to offer overbooking capacity on this point.

3- Obergailbach

Gas flows at Obergailbach appear clearly seasonal and have been rising for the last two years. However, they did not exceed the available firm capacity of 620 GWh/d. It should be noted that flows were below 475 GWh/d (75% of technical capacity) for 95% of the time. However, during the week of March 11 to 17, 2013, an extensive use of this point was observed (up to 97% allocation firm technical capabilities). These findings show that the Obergailbach point is currently far from a state of physical congestion.

154GWh/d are available as short-term capacities. Firm long-term capacity is available for sale on all timeframes. Firm capacity of 500 GWh/d is subscribed in the form of annual and monthly product. Since April 2011, except during maintenance periods, 120 GWh/d of firm capacity has been available for sale. Not all interruptible capacity, which is currently very available, has been subscribed. It therefore seems that capacity is currently available for sale in the form of firm and interruptible product representing 18% of technical capacity.

The available daily capacity consists of unsold firm and interruptible monthly capacity and capacity generated by UBI/UIOLI products. Over the period April 2011-March 2013, an average daily amount

of capacity of 300 GWh/d was available. A minimum of 75 GWh/d was available, except for 5% of the time. Over this period, shippers subscribed an average of 5 GWh/d and a maximum of 133 GWh/d. Daily available capacity was subscribed 20% of the time. On the Obergailbach point, therefore, large quantities of capacity are regularly available, which are little used in terms of total volume, though significantly used in exceptional circumstances.

An analysis of the link between the differences in the market price of gas between the NCG hub and the North PEG and the use of the capacity offered by GRTgaz, reveals some distinctive features. For example, on May 8, 2012, the price difference was at its maximum for the period February 2012-January 2013, whereas the level of use of available capacity was close to 50%. Conversely, during winter 2012-2013, negative price differences occurred, whereas the level of use of available capacity was very high (over 80%). It is therefore difficult to establish a correlation between the differences in the market price of gas between NCG/PEG-Nord and the use of available capacity. This means that the risks taken by GRTgaz in offering overbooking capacity on this point cannot currently be estimated on a statistical basis.

Given the existing firm and interruptible capacity available for periods in excess of one month (23% of technical capacity for periods of over a month, plus a minimum of 12% and an average of 45% for daily capacity), it is not clear that the market needs to have additional capacity available on the Obergailbach point. In addition, it should be noted that the adjacent German operators do not intend to introduce an overbooking mechanism, rather preferring to use the one-day UIOLI mechanism here. The need to offer a coordinated range of capacity on either side of the frontier, in terms both of the types of products and the quantities available, would therefore seem more than clear. In consequence, and given that the Germans only intend to offer a one-day UIOLI mechanism, GRTgaz proposes to offer only additional next-day capacity on a normative basis.

4- Taisnières

Gas flows at Taisnières do not seem to depend on the weather conditions or the seasons. In addition, they show no signs of either rising or falling overall. They did not exceed the available firm capacity of 570 GWh/d. In fact, it should be noted that flows were below 370 GWh/d (63% of technical capacity) for 95% of the time. These findings show that the Taisnières point is currently far from a state of physical congestion.

95GWh/d are available as short-term capacities. Available long-term firm capacity was fully subscribed until 2022. Firm capacity was subscribed at a maximum level of 440 GWh/d in the form of annual and monthly products at the start of the period, and has been falling steadily since then to reach a current level of 360 GWh/d. Since April 2011, except during maintenance periods, more than 130 GWh/d of firm capacity has been available for sale. Not all interruptible capacity, for which availability is currently very high, has been subscribed. It therefore seems that capacity is currently available for sale in the form of firm and interruptible products representing 29% of technical capacity.

The available daily capacity consists of unsold firm and interruptible monthly capacity and capacity generated by UBI/UIOLI products. Over the period April 2011-March 2013, an average daily amount of capacity of 200 GWh/d was available. A minimum of 40 GWh/d was available, except for 5% of the time. Over this period, shippers subscribed an average of 9 GWh/d and a maximum of 165 GWh/d. Available daily capacity was subscribed 75% of the time. On the Taisnières point, therefore, there are regularly large quantities of daily capacity available, which are little used in terms of total volume, but massively used in exceptional circumstances, though without exhausting available capacity.

In December 2013, it is intended to create 50 GWh/d of new firm capacity on this point, within the framework of the Taisnières H Open Season, thus increasing firm capacity on this point from 590 to 640 GWh/d.

An analysis of the link between the differences in the market price of gas between the ZTP hub and the North PEG and the use of the capacity offered by GRTgaz, reveals some distinctive features. On May 12, 2012, the price difference was at its maximum for the period February 2012-January 2013, whereas the level of use of available capacity was less than 50%. Conversely, on February 12 and 13 2012, the price difference was negative, whereas the level of use of available capacity was very high (over 80%). It is therefore difficult to establish a correlation between the differences in the market price of gas between ZTP/PEG-Nord and the use of available capacity. This means that the risks taken by GRTgaz in offering overbooking capacity on this point cannot currently be estimated on a statistical basis.

Given the existing firm and interruptible capacity available for periods in excess of one month (22% of technical capacity for periods of over a month, plus a minimum of 7% and an average of 33% for daily capacity), and given that flows at this point are always below the maximum available, it is not clear that the market needs additional capacity available on the Taisnières point. Given that the Belgians only intend to offer next-day overbooking capacity, GRTgaz proposes to adopt the same option for this point on a normative basis.

5- North-to-South Link

Gas flows at the link in the North-to-South direction do not seem to depend on the weather conditions or the seasons. They increased significantly at the end of 2011, following the reduction in LNG entering France. In the last two years, they have frequently (67% of the time) exceeded available firm capacity (230 GWh/d), with the result that shippers use interruptible capacity. These findings show that the North-to-South link has been physically congested for almost one and a half years.

46GWh/d are available as short-term capacities. Firm capacity has been fully subscribed since June 2011, interruptible capacity since June 2012.

The state of physical congestion on this point makes it impossible to offer additional overbooking capacity.

6- Oltingue

Gas flows at Oltingue show no signs of seasonal or weather-related factors and have been falling for two years, to a current level of close to zero. They have not exceeded the available firm capacity of 223 GWh/d since March 2012. It should be noted that flows were below 180 GWh/d (71% of technical capacity) for 95% of the time. These findings show that the Oltingue point is currently far from a state of physical congestion.

9GWh/d are available as short-term capacities. Available long-term firm capacity is entirely subscribed until 2020. All firm capacity (including short-term) has been subscribed in the form of annual products. Interruptible capacity, for which the level of availability is currently very high, was increased in October 2011 from 7 to 30 GWh/d to meet market needs. It would therefore seem that interruptible capacity is currently available for sale, representing 7% of technical capacity.

The available daily capacity consists of unsold firm and interruptible monthly capacity and capacity generated by UBI/UIOLI products. Over the period April 2011-March 2013, an average daily amount of capacity of 150 GWh/d was available. A minimum of 50 GWh/d was available, except for 5% of the time. Over this period, shippers subscribed an average of 1 GWh/d and a maximum of 20 GWh/d. Available daily capacity was subscribed 50% of the time. The daily capacity regularly available on the Oltingue point is therefore substantial but little used.

Given the steadily falling flows, the number of customers using this interface point and the problems of coordination between transmission operators experienced there, GRTgaz does not propose to offer overbooking capacity on this point.

7- Midi

Gas flows at PIR Midi appear clearly seasonal and low, and there are even entry flows (TIGF>GRTgaz) in winter. However, they have not exceeded the available firm capacity of 355 GWh/d in the outgoing direction. It should be noted that net flows (South>TIGF – TIGF>South) have been less than 290 GWh/d (80% of technical capacity) and greater than 10 GWh/d for 95% of the time. These findings show that the Midi point is currently far from a state of physical congestion.

40GWh/d (Resp. 50) are available as short-term basis exit (resp. entry) capacities. Firm exit capacity of 40 GWh/d and firm entry capacity of 355 GWh/d have been subscribed in the form of annual and monthly products. Since April 2011, firm capacity has remained available for sale, with total capacity being subscribed for a period of 4 months (August 2011, August to October 2012). Not all interruptible capacity has been subscribed. On this point, new capacity has been made available since April 2013, following the first phase of the France-Spain Open Season. In the direction TIGF to

GRTgaz, technical capacity as been increased from 80 to 255 GWh/d, in the direction GRTgaz to TIGF from 325 to 395 GWh/d. Currently, large amounts of capacity remain available for sale.

The available daily capacity consists of unsold firm and interruptible monthly capacity and capacity generated by UBI/UIOLI products. Over the period April 2011-March 2013, an average daily amount of entry capacity of 75 GWh/d, and 180 GWh/d of exit capacity was available. A minimum of 50 GWh/d was available, except for 5% of the time. Over this period, average shipper subscriptions were less than 5 GWh/d in both directions and a maximum of 50 GWh/d in entry capacity, 120 GWh/d in exit capacity. Daily entry capacity was subscribed 25% of the time, exit capacity 60% of the time. On the Midi point, therefore, there are regularly large quantities of capacity available, which are little used in terms of total volume, though significantly used in exceptional circumstances.

Given the trend in available capacity on this point and potentially high flows resulting from the reduction in LNG coming into Europe, there is a very significant risk for operators in offering overbooking capacity. In addition, the available daily capacity on offer at this point, including UBI, which is totally coordinated with TIGF, meets the conditions of contractual congestion without physical congestion.

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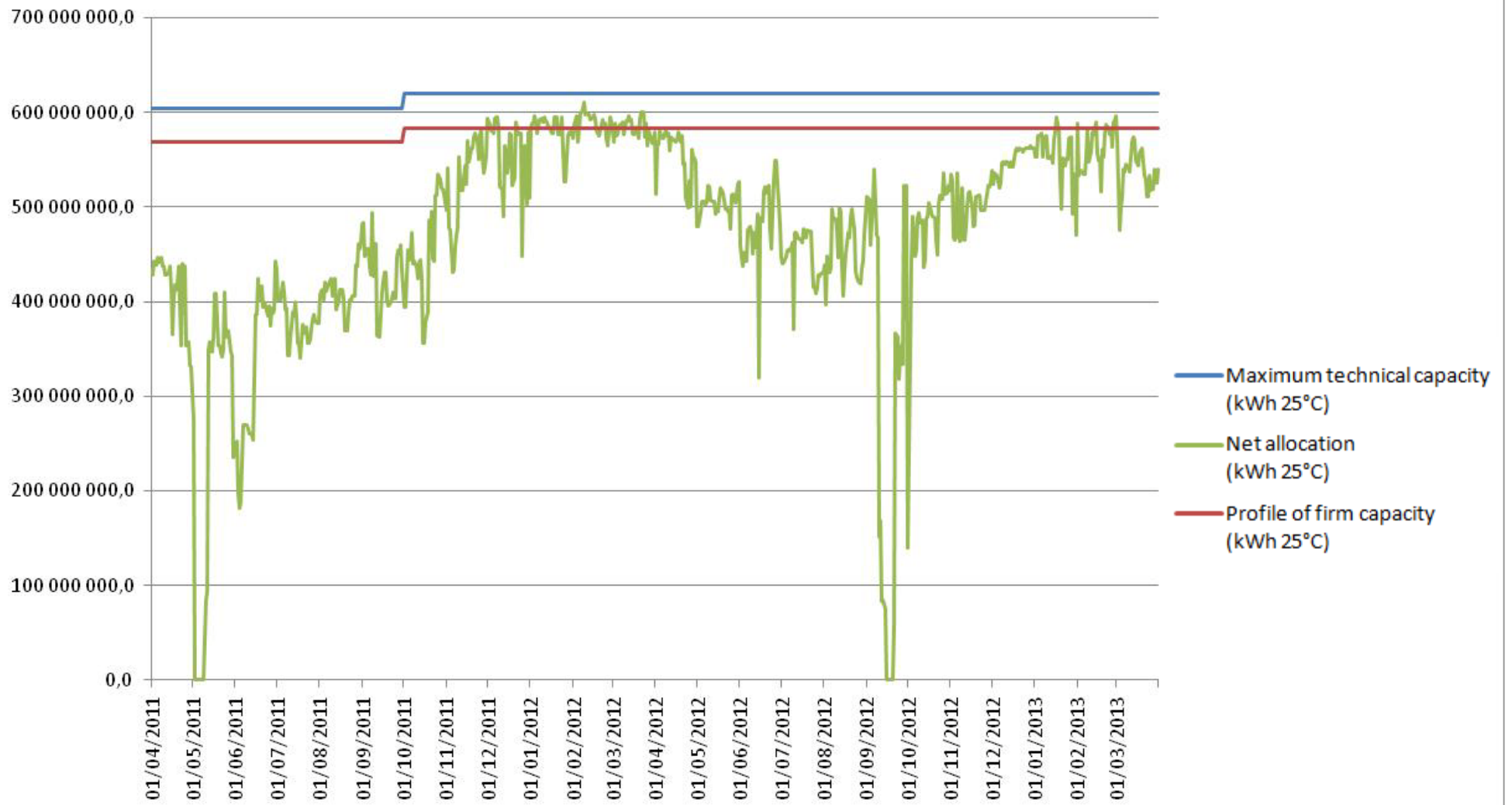
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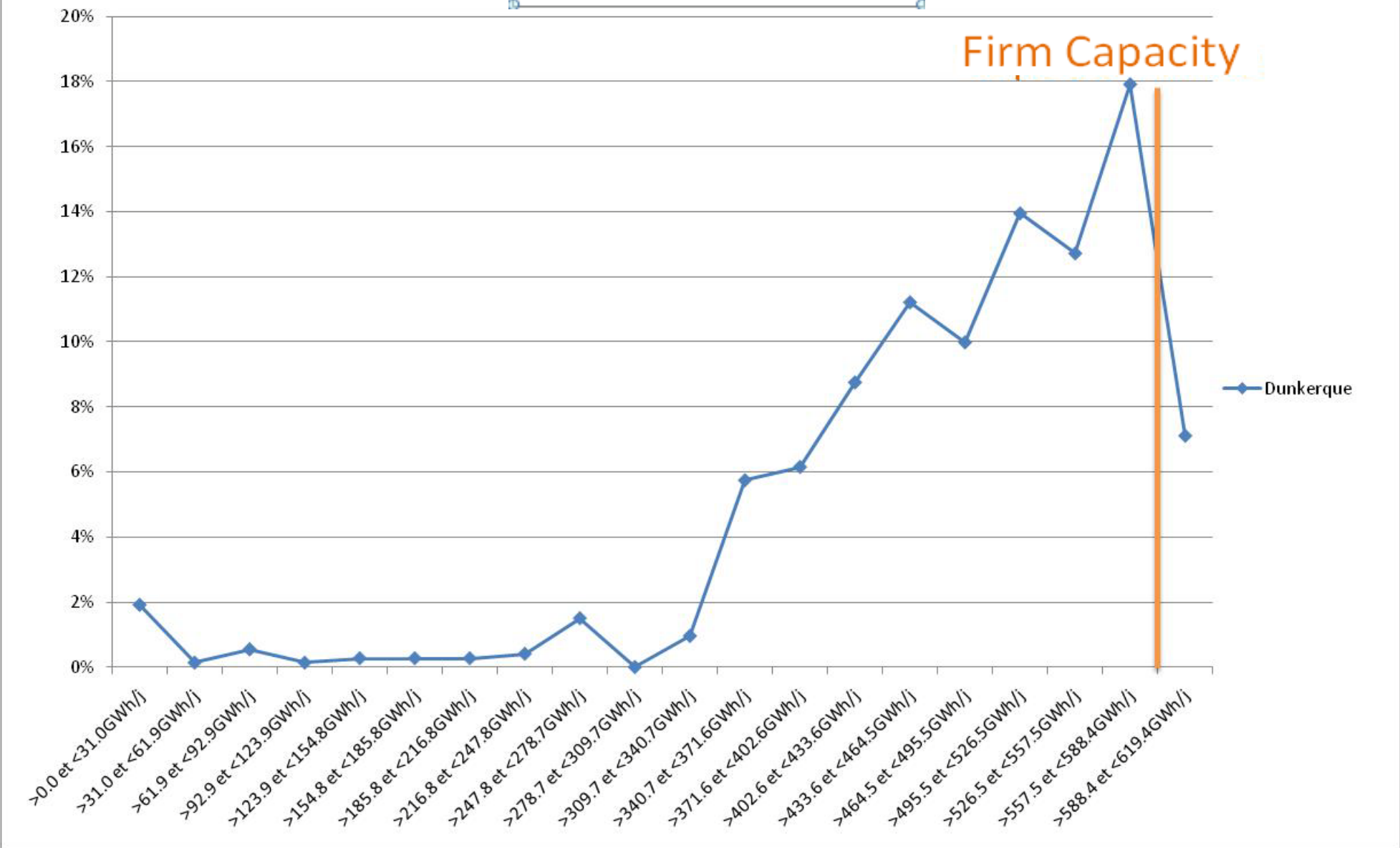
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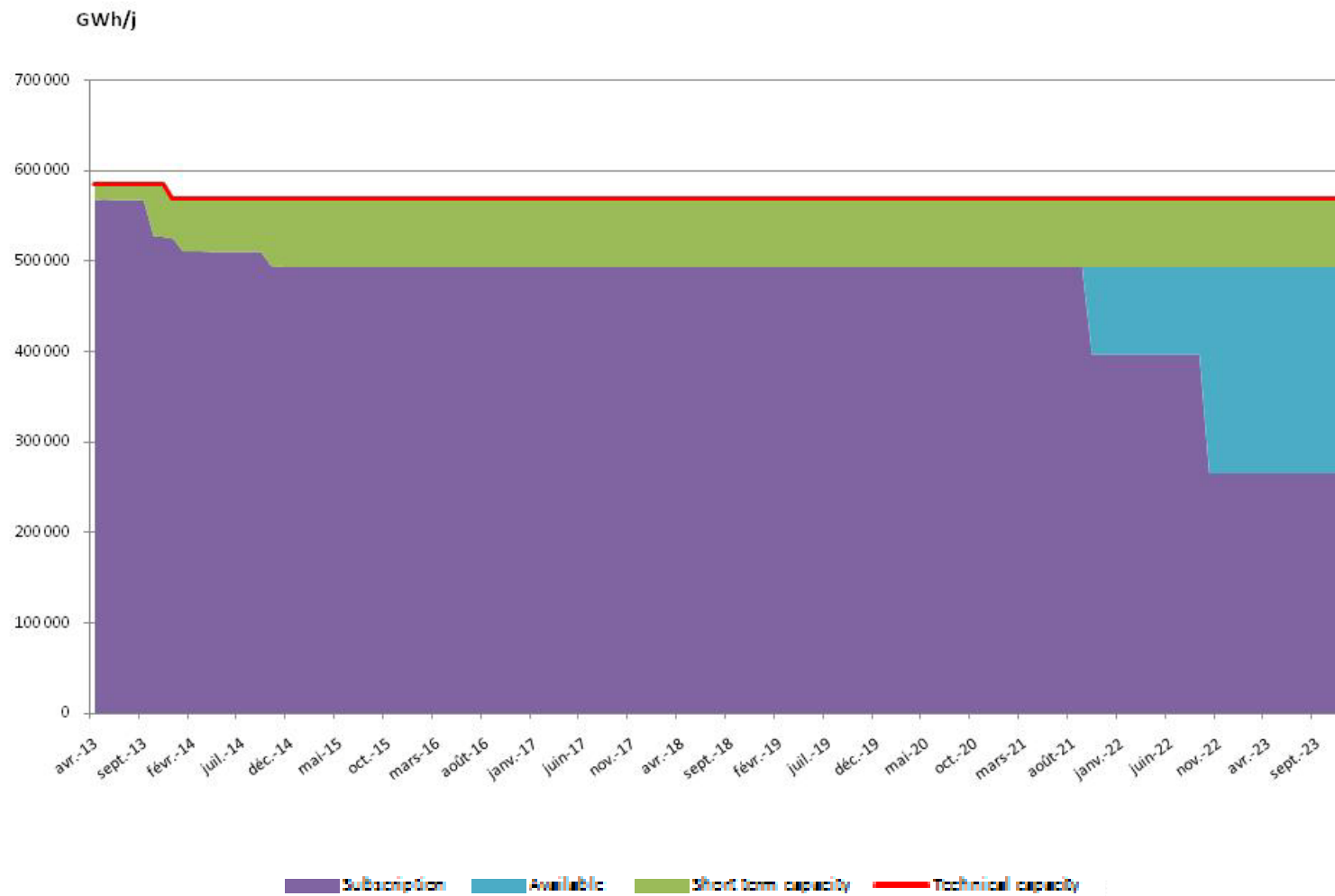
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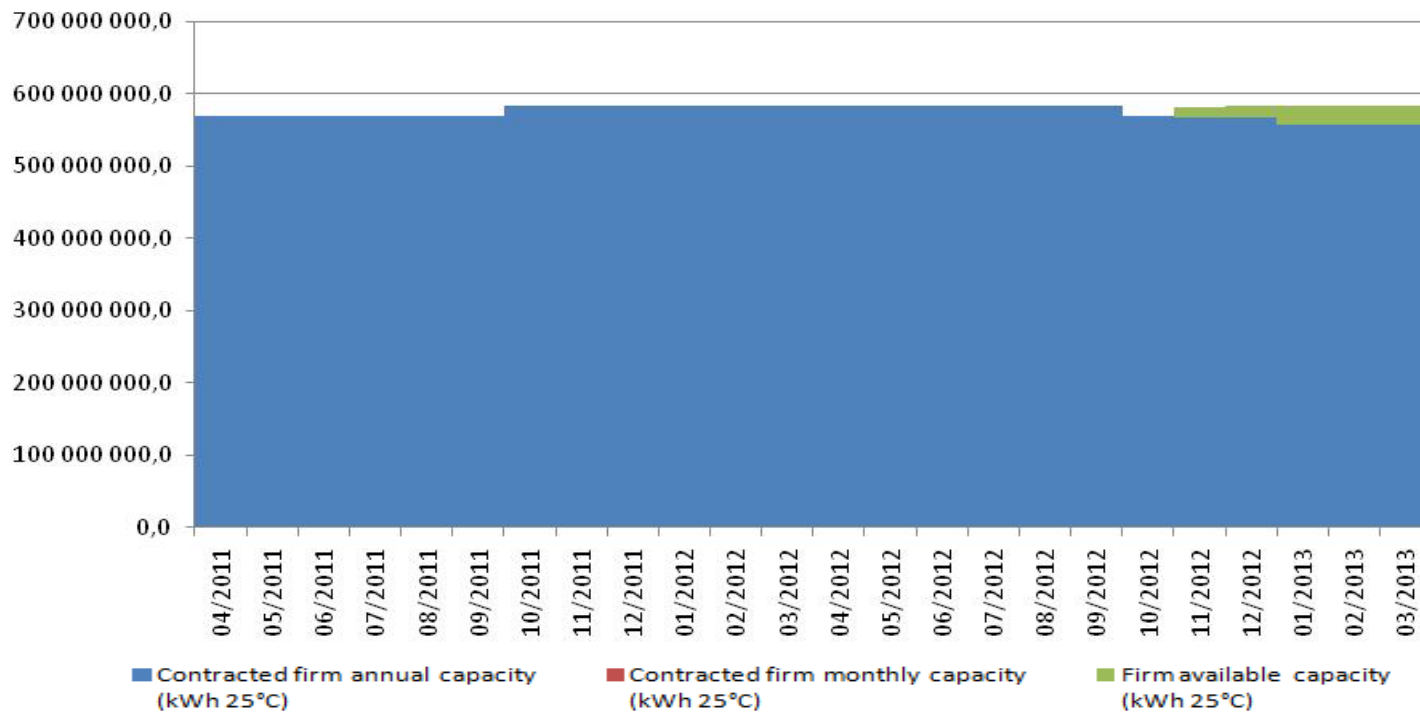
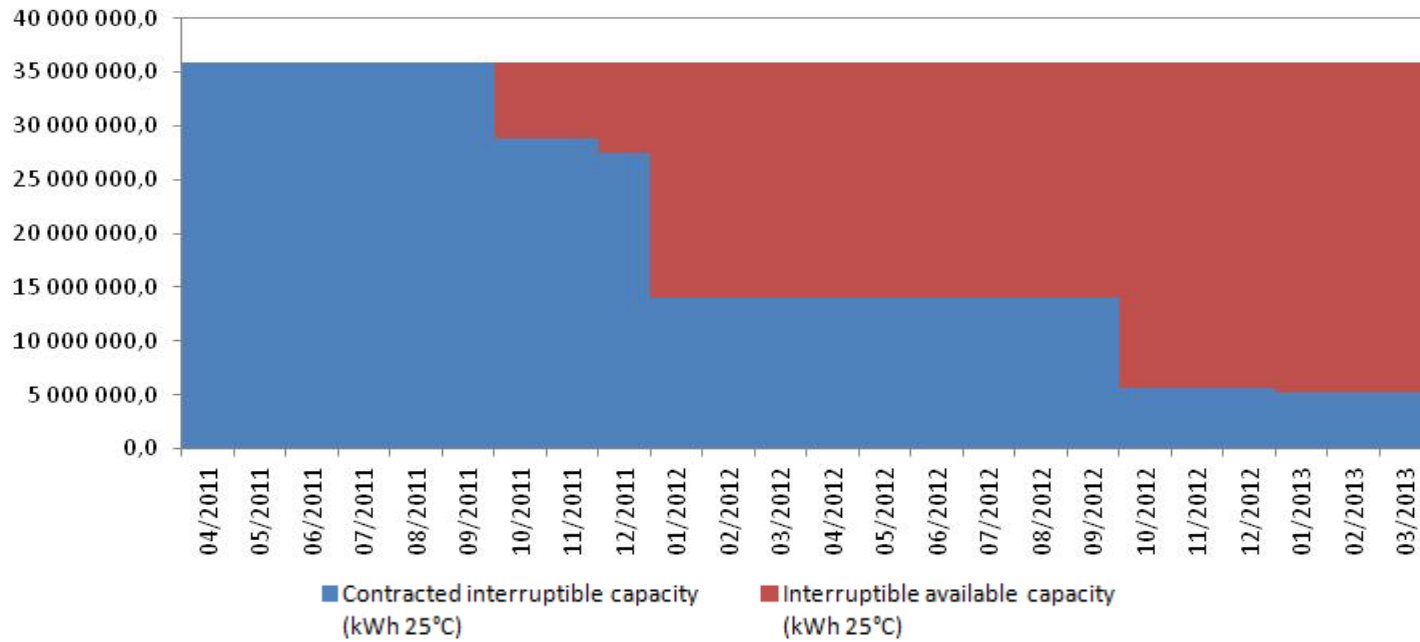
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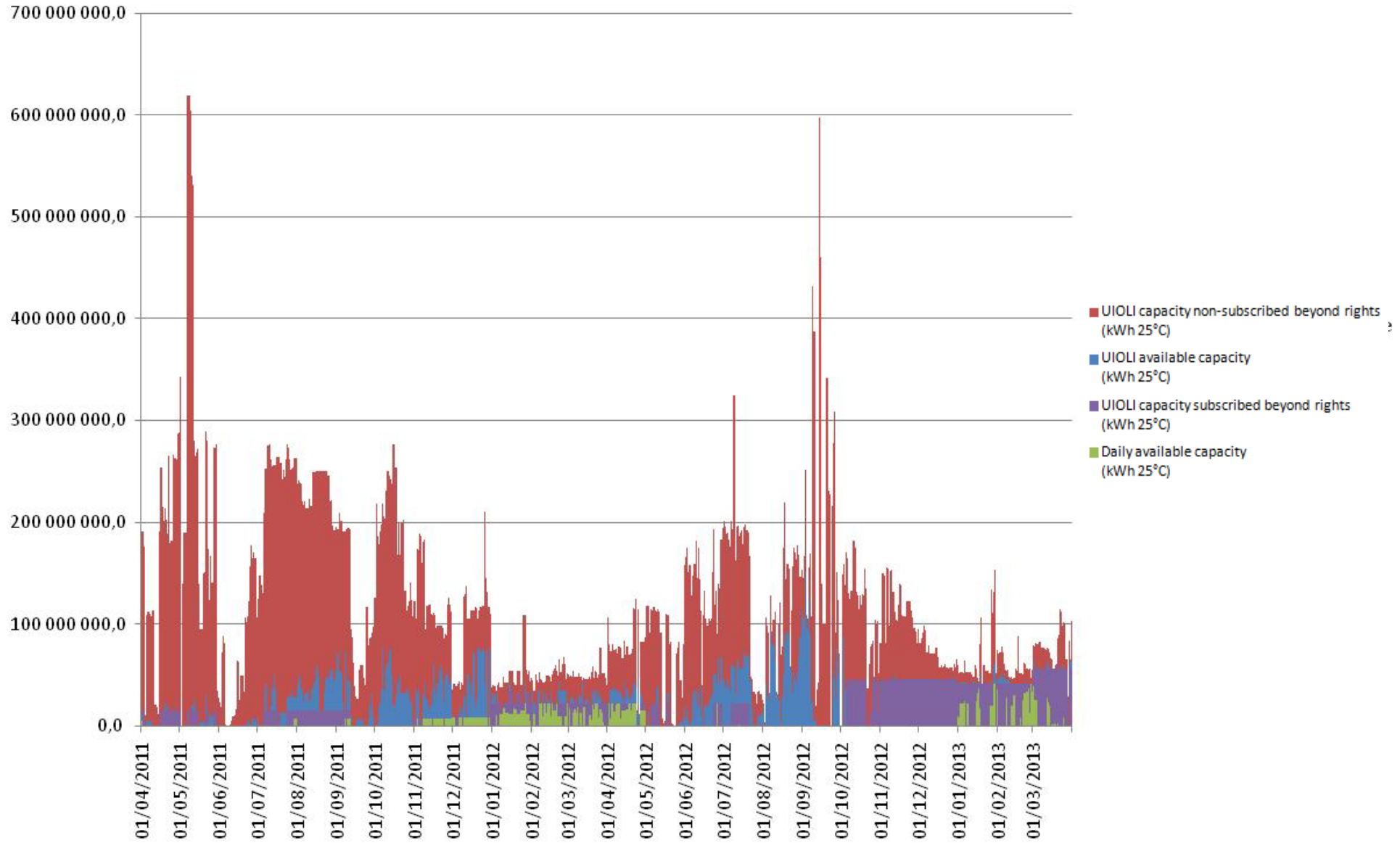
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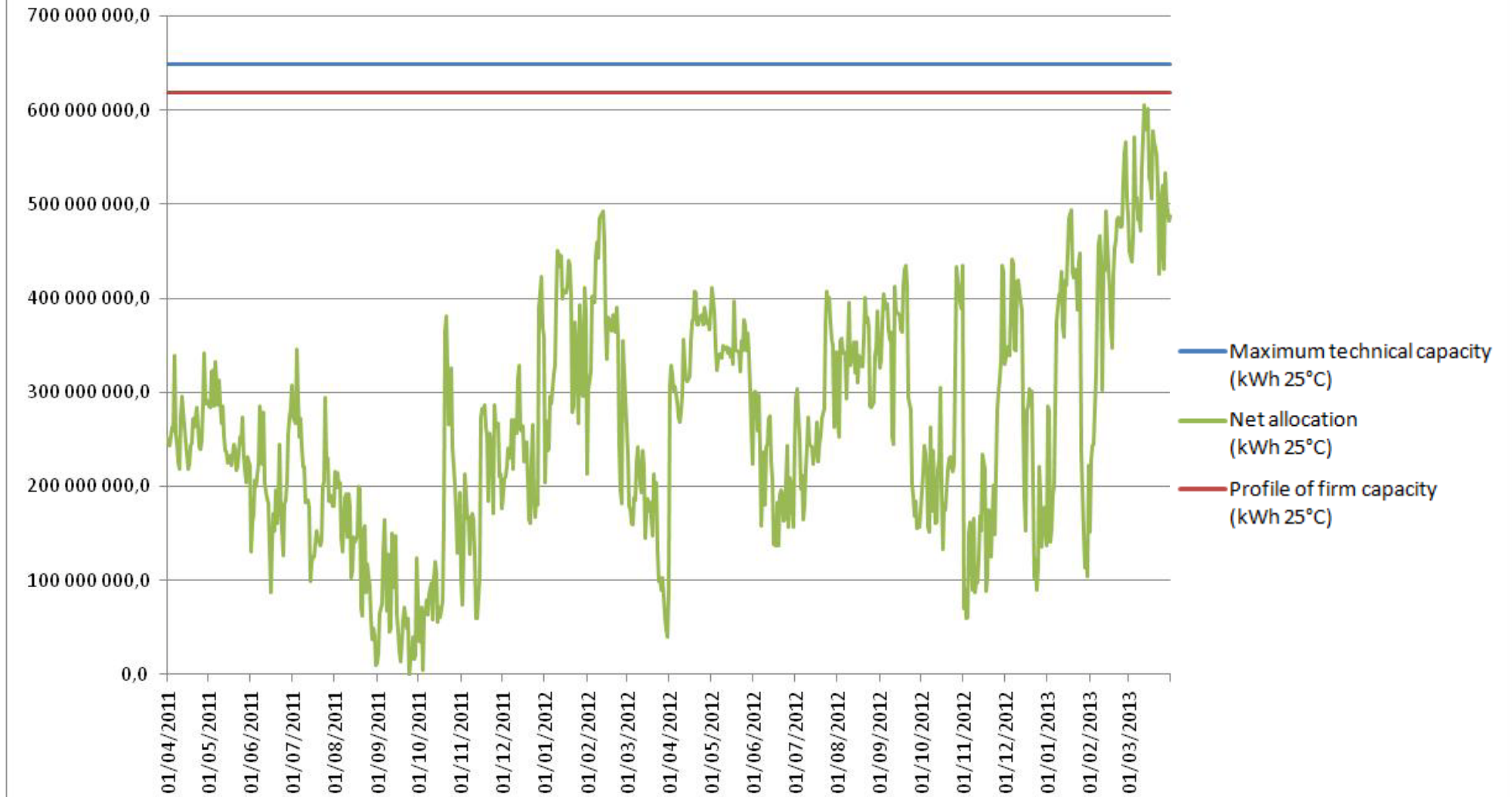
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Dunkerque

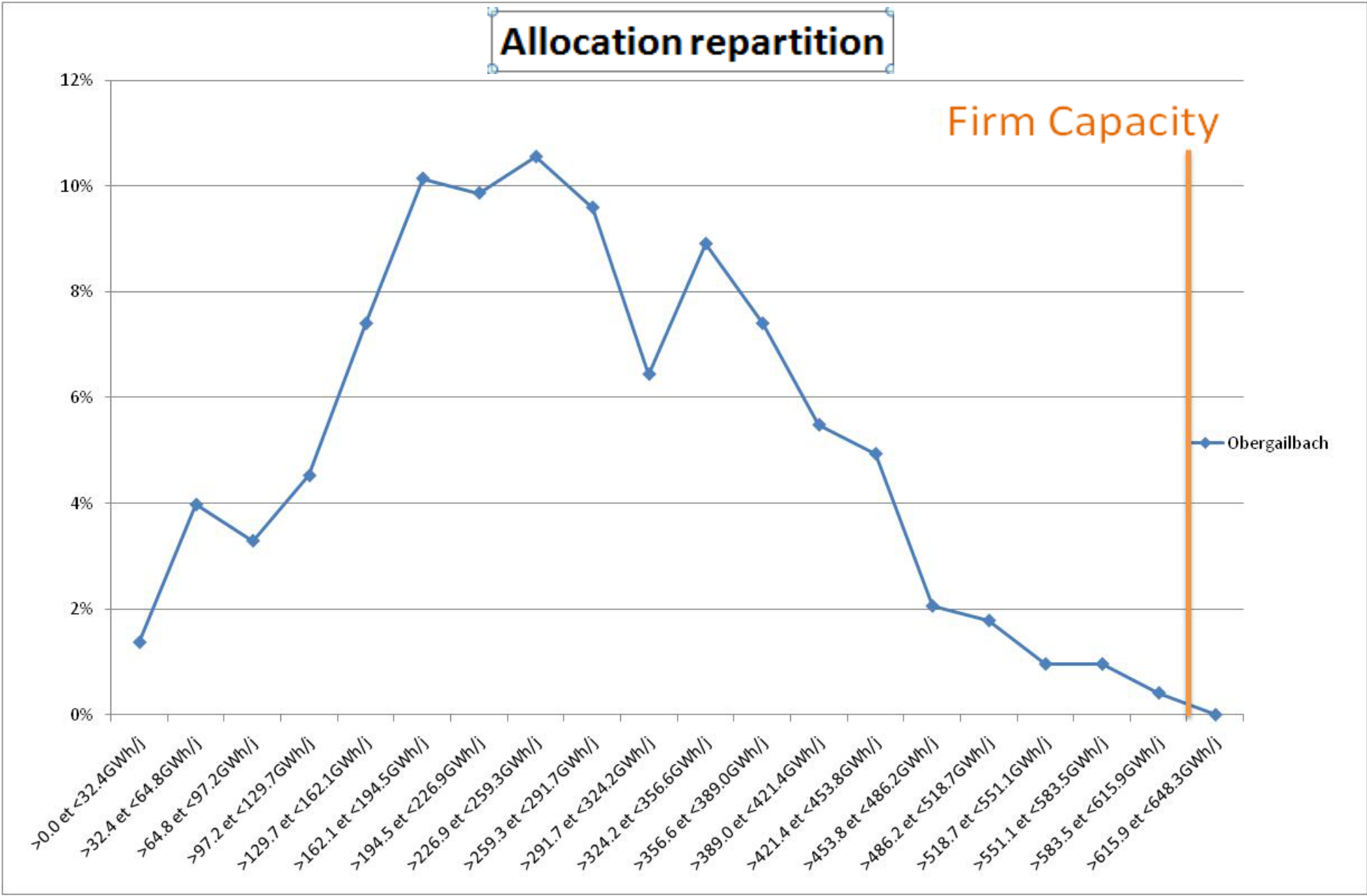


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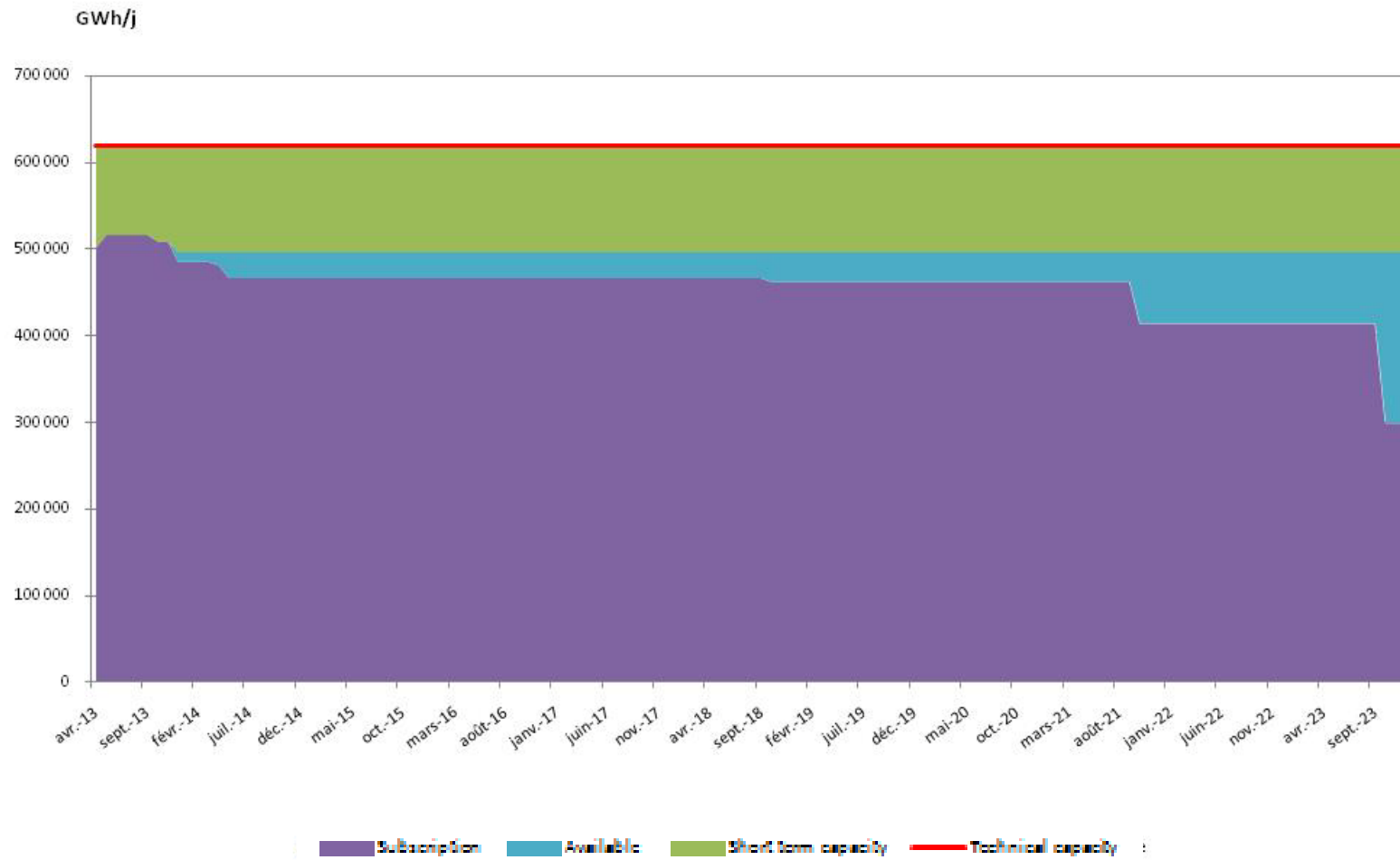


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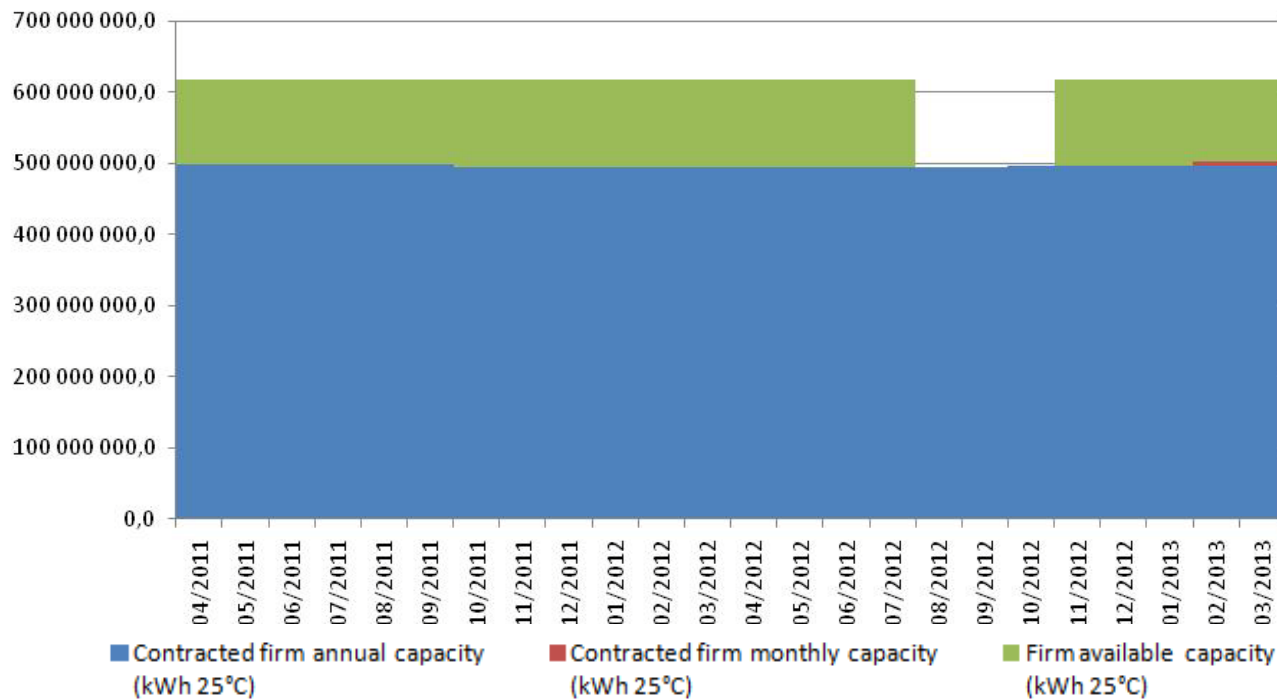
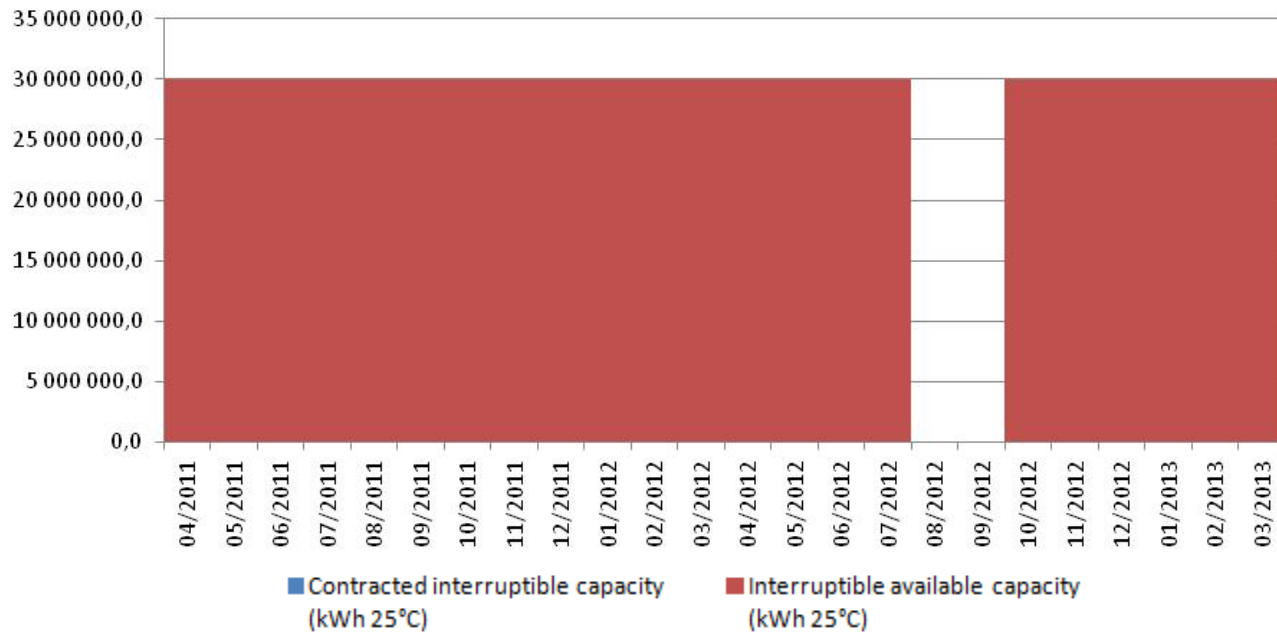
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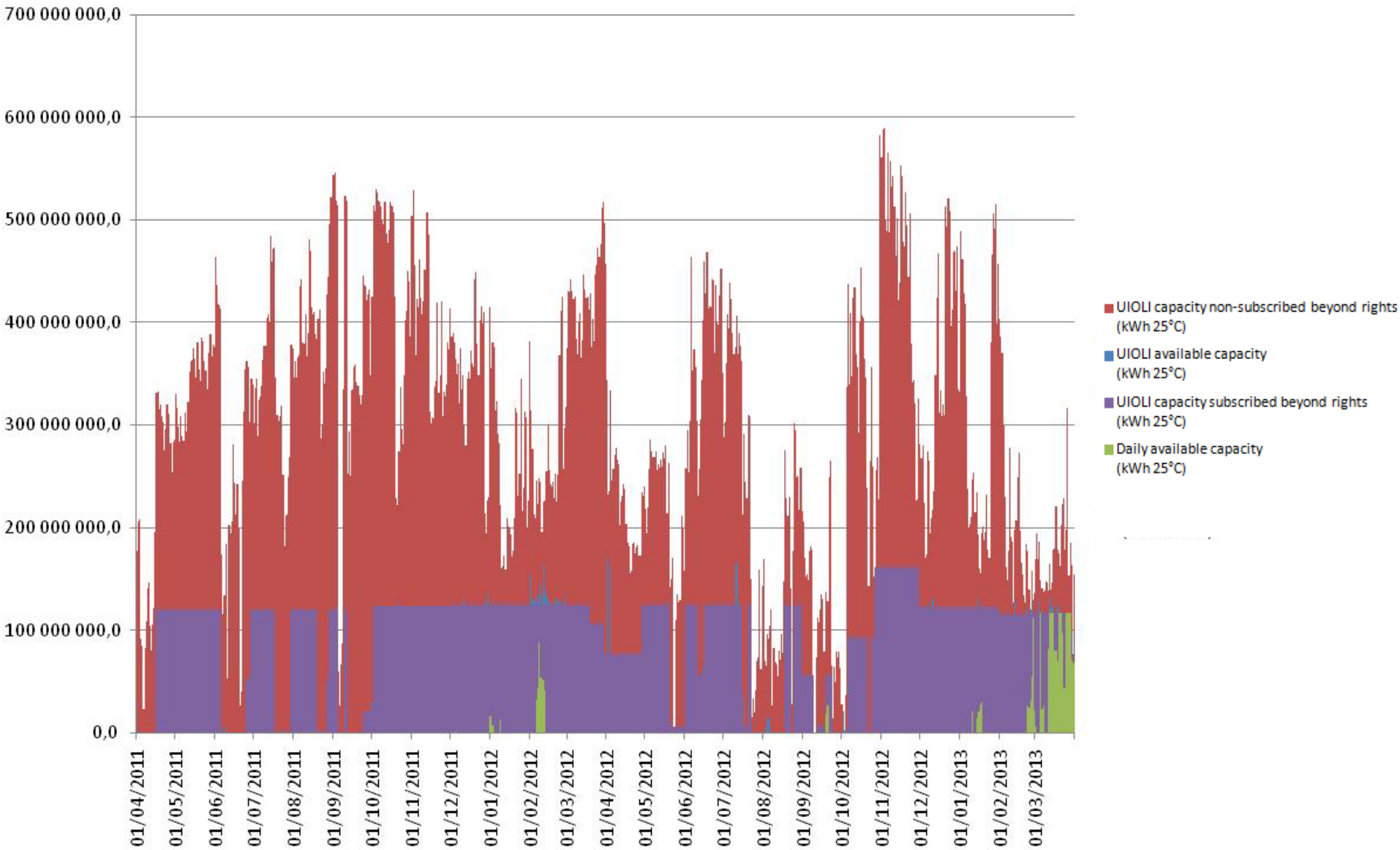
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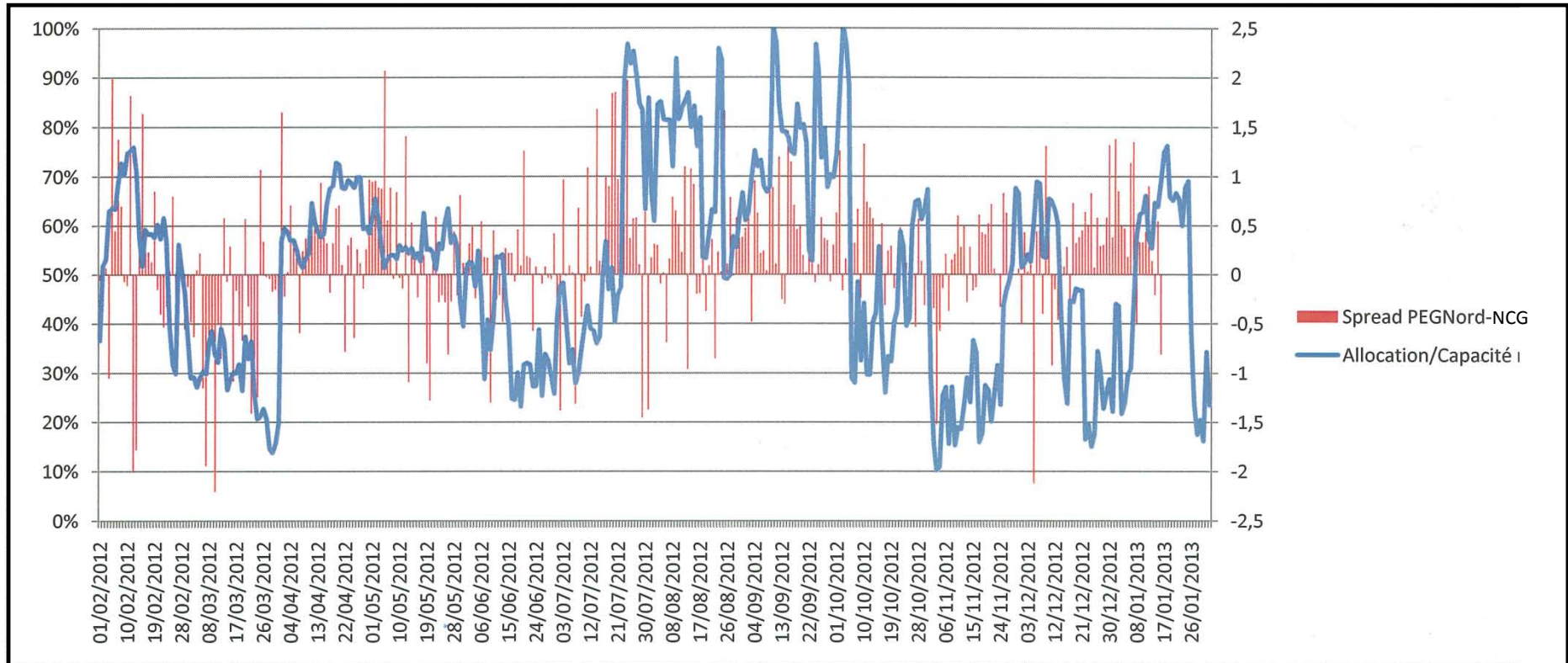
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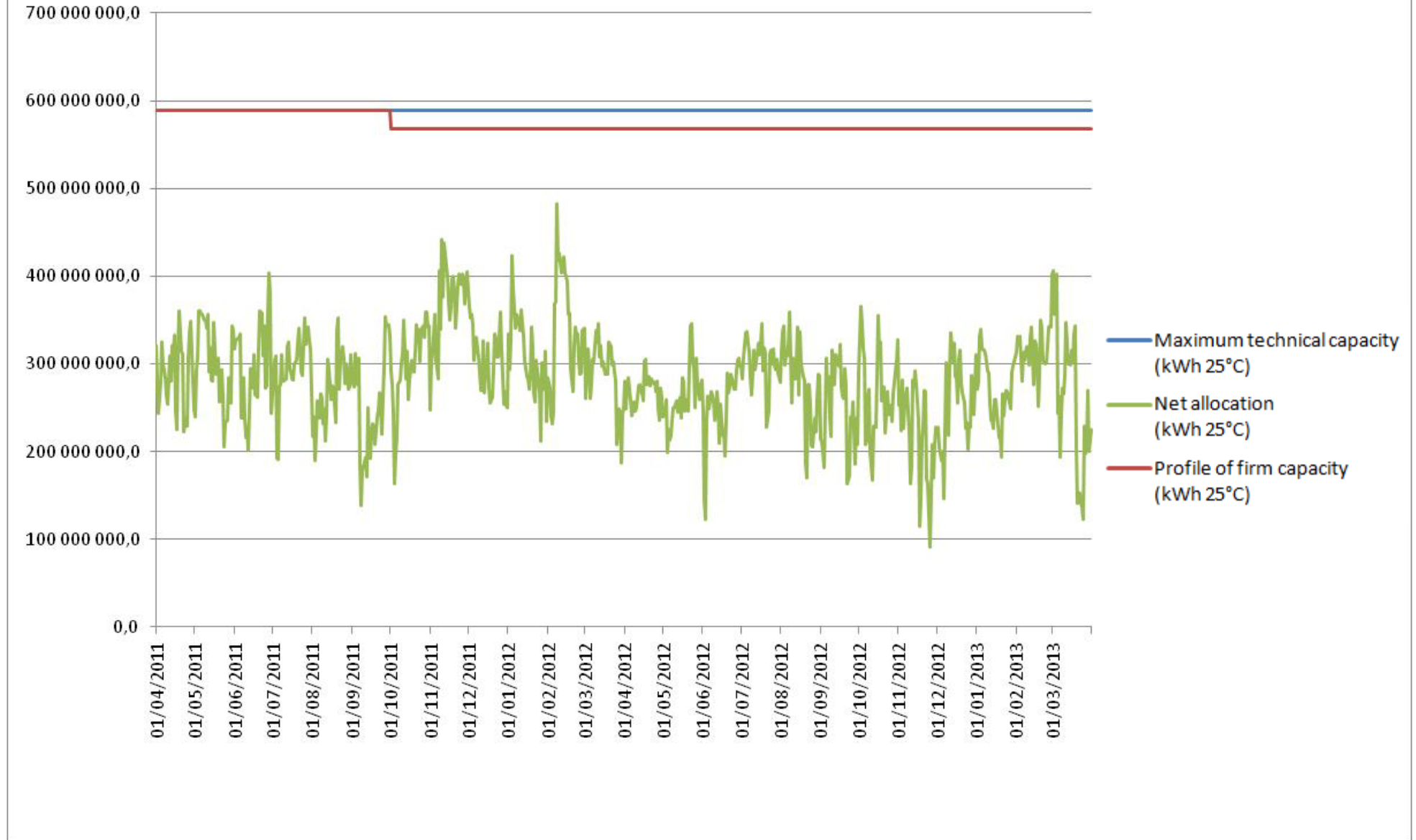
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Obergailbach

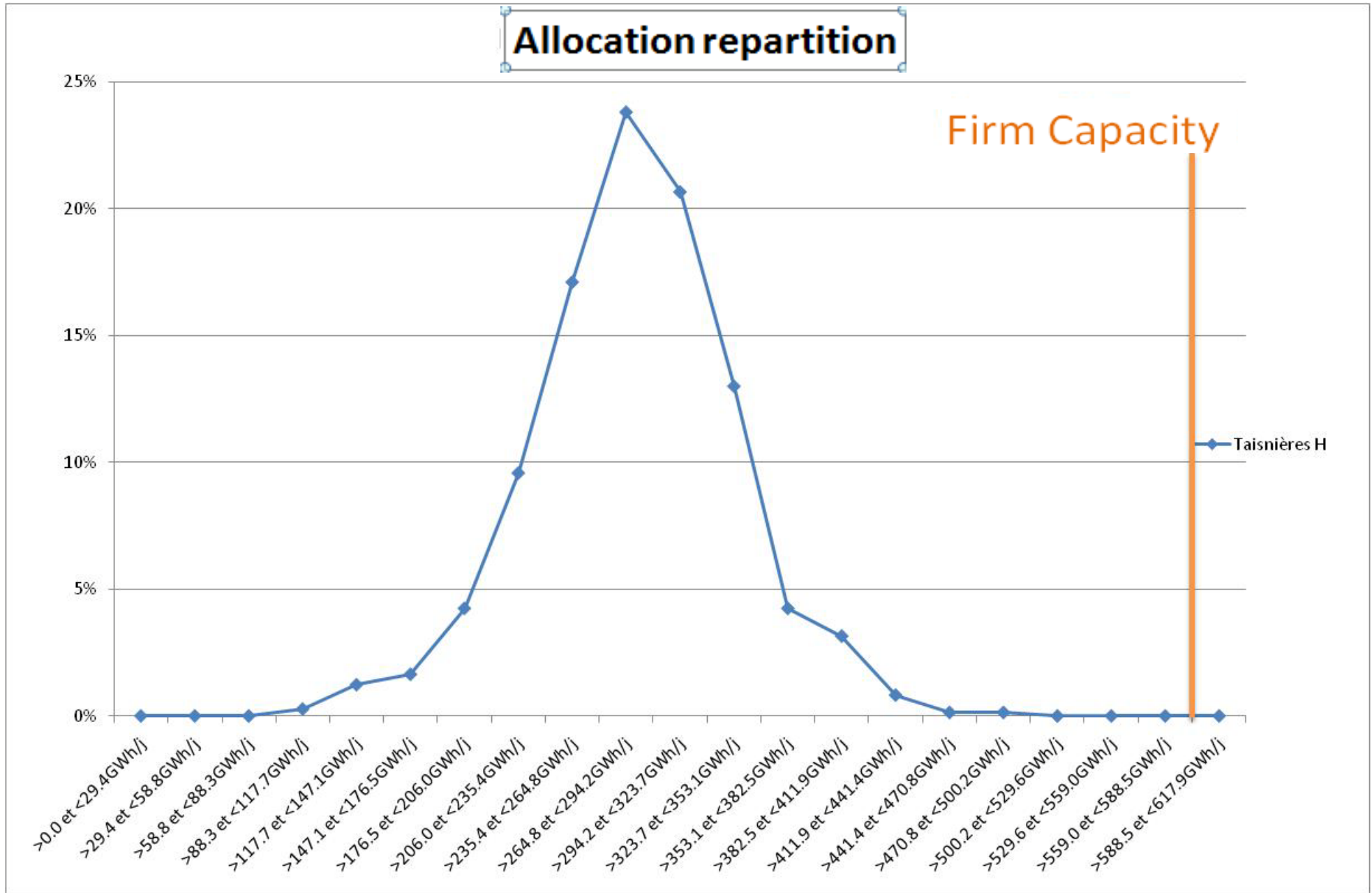


Taisnières H

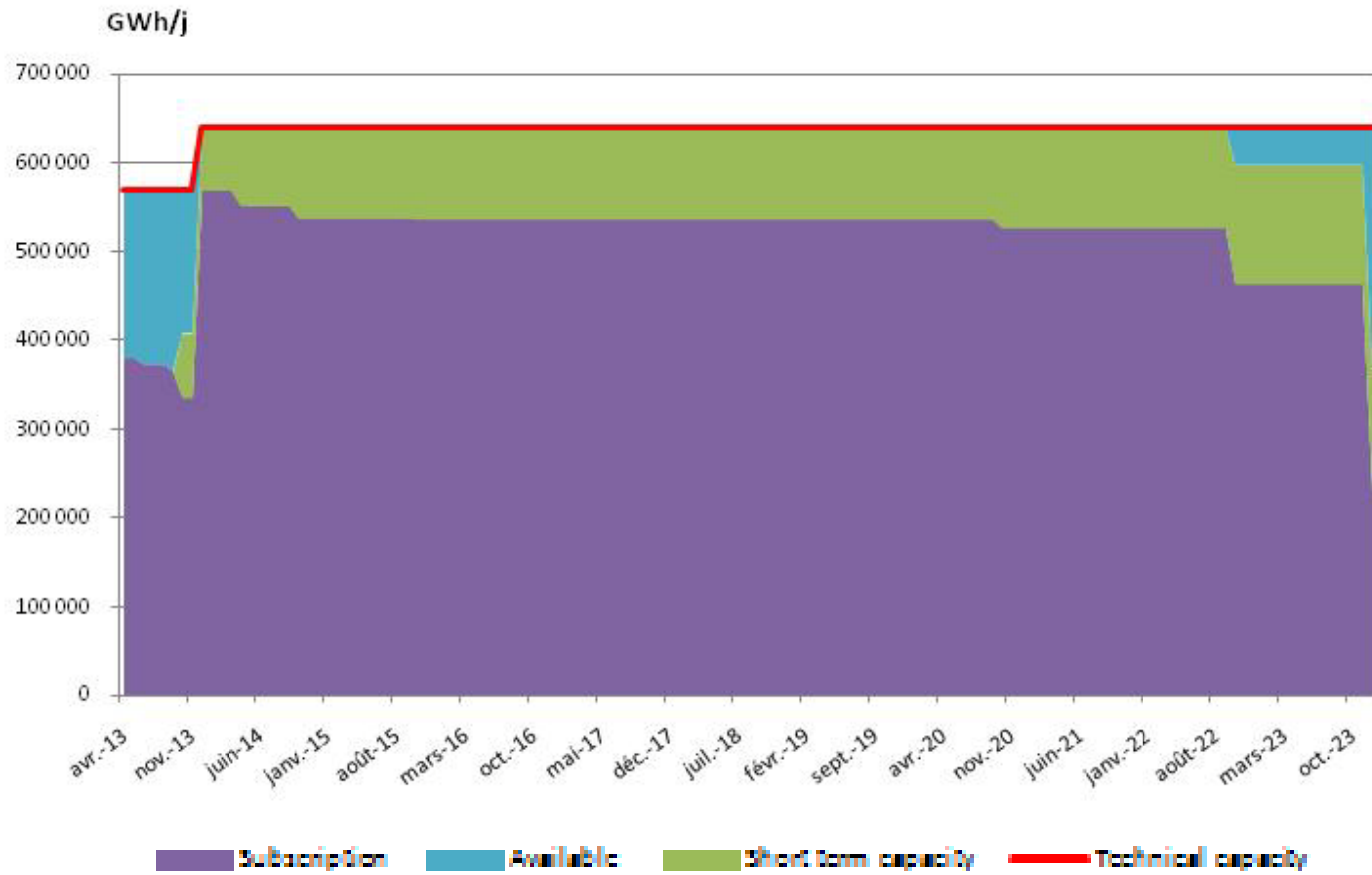


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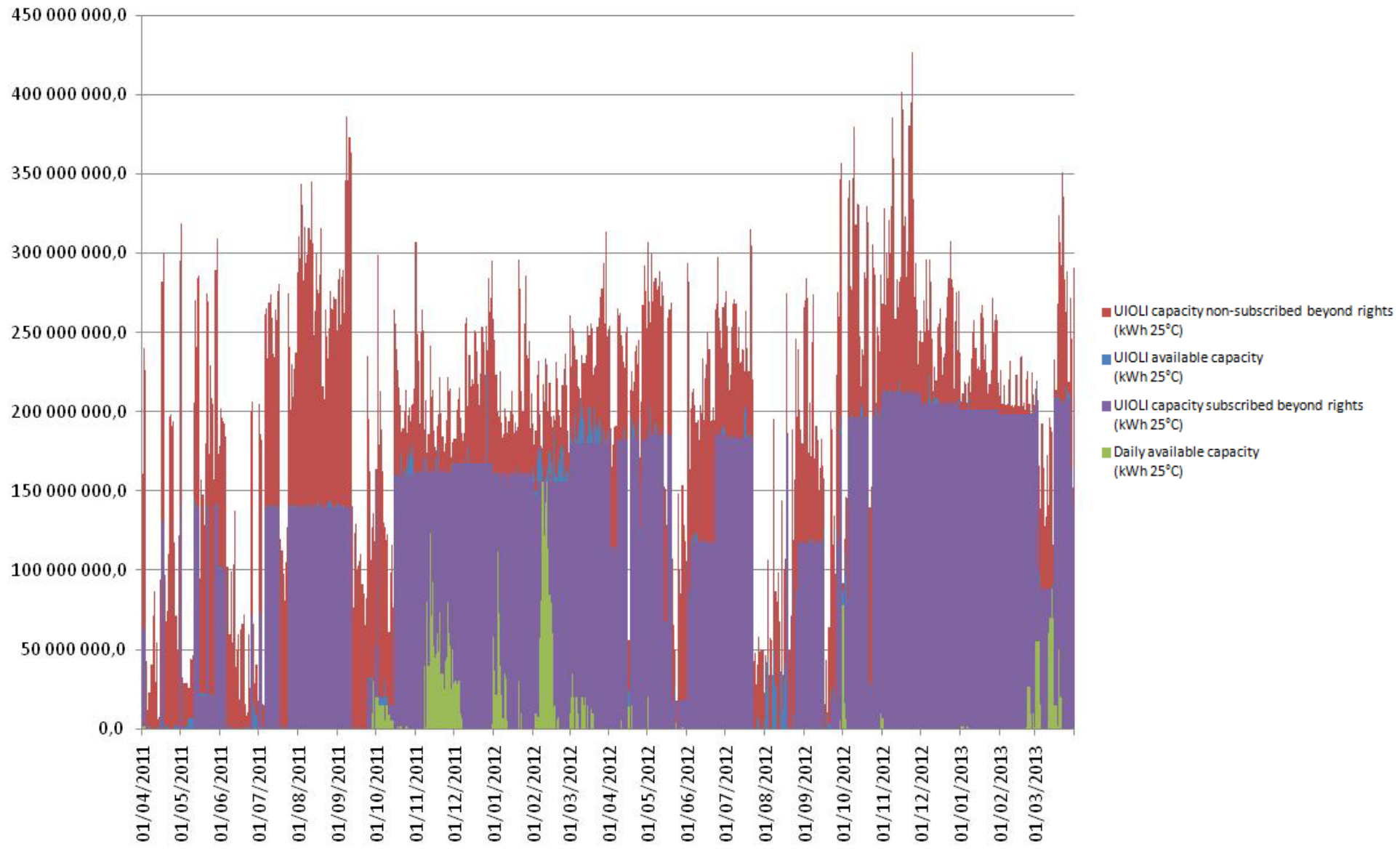
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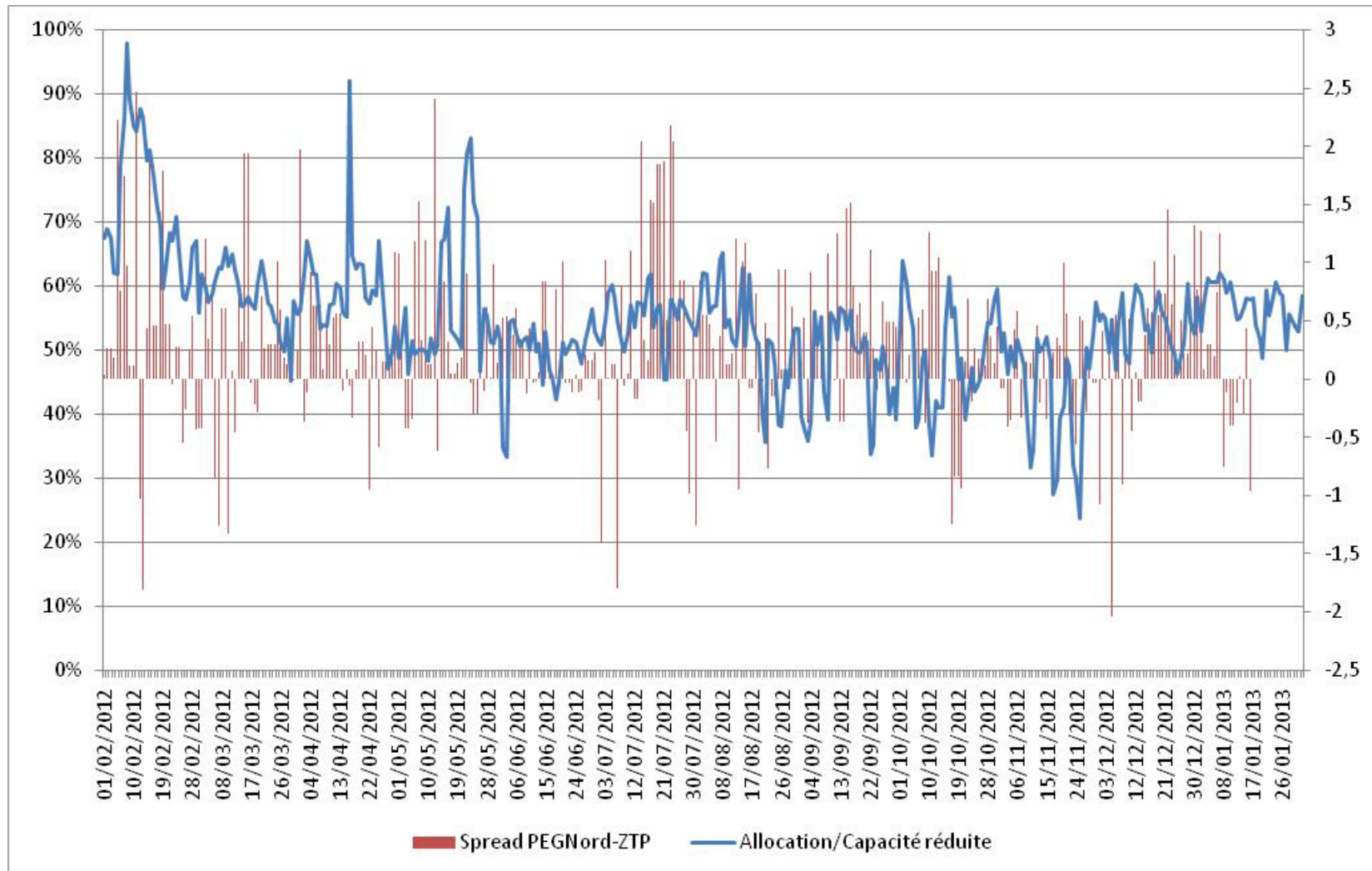
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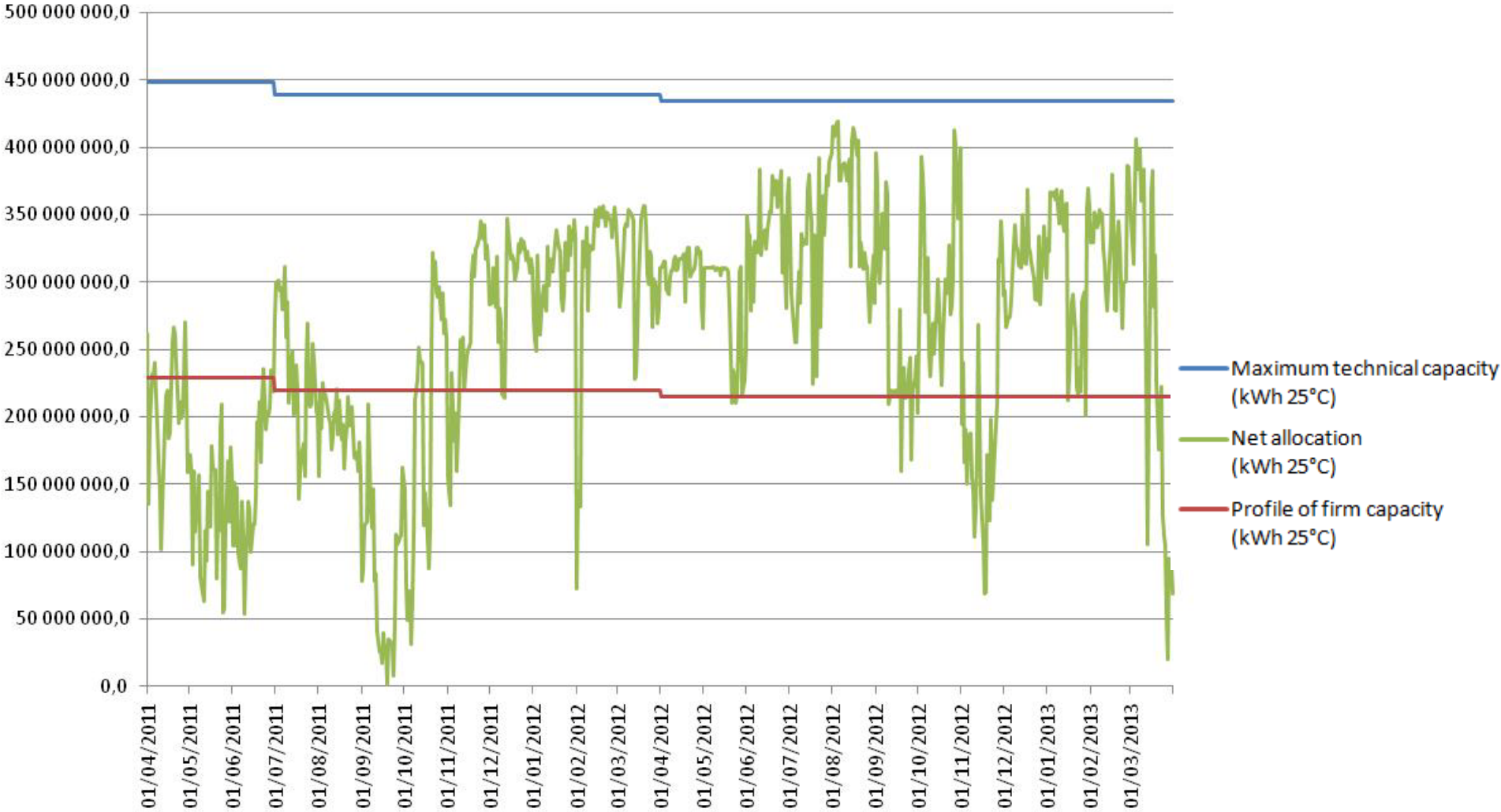
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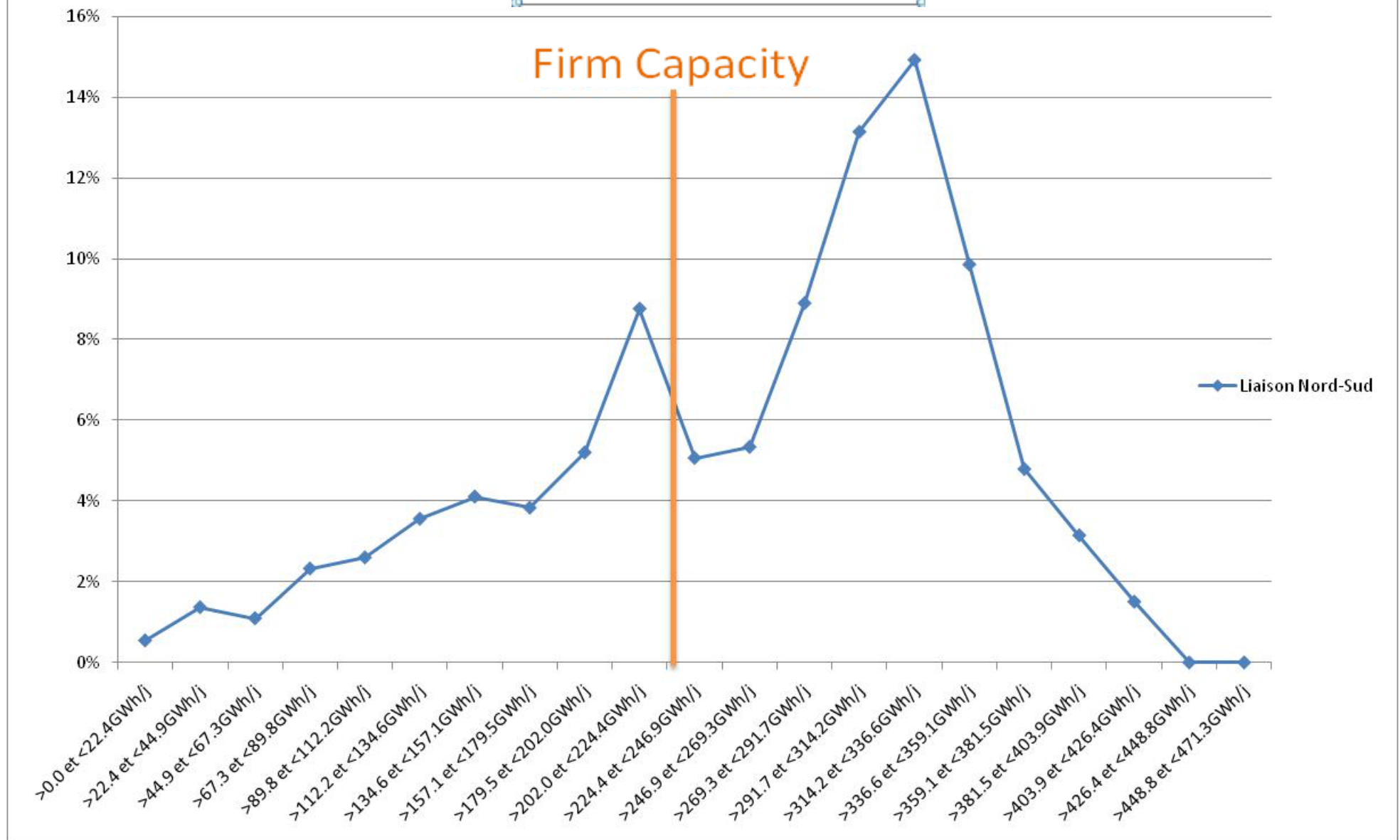
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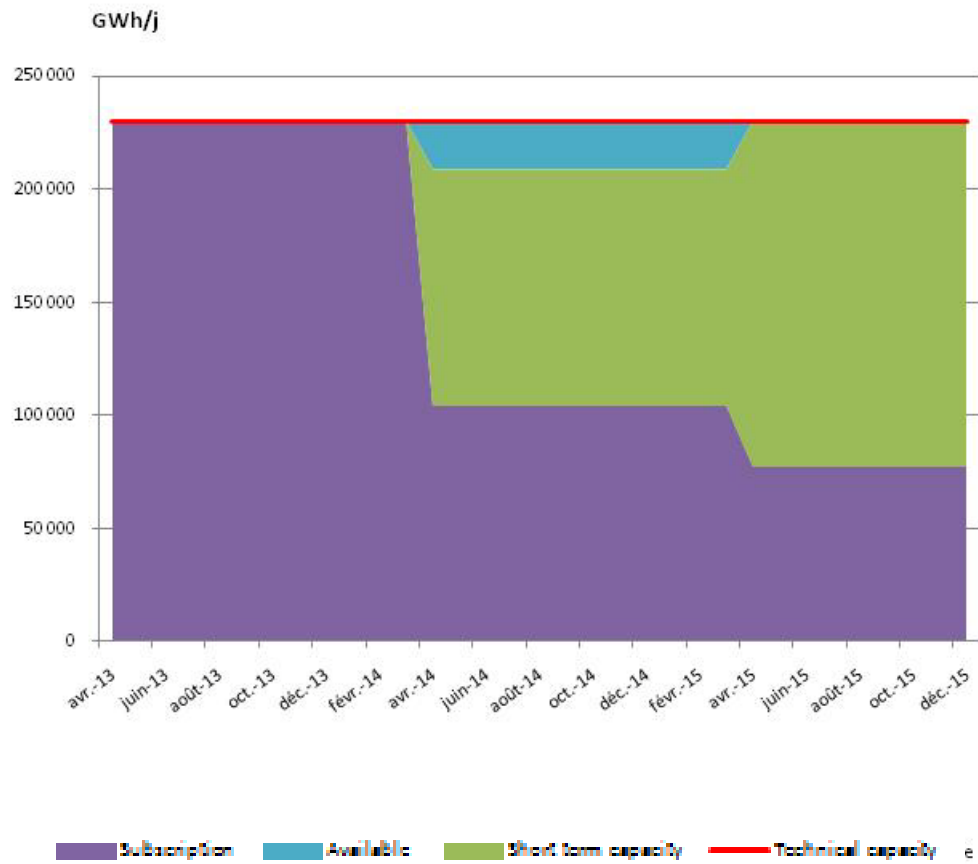


Liaison Nord-Sud

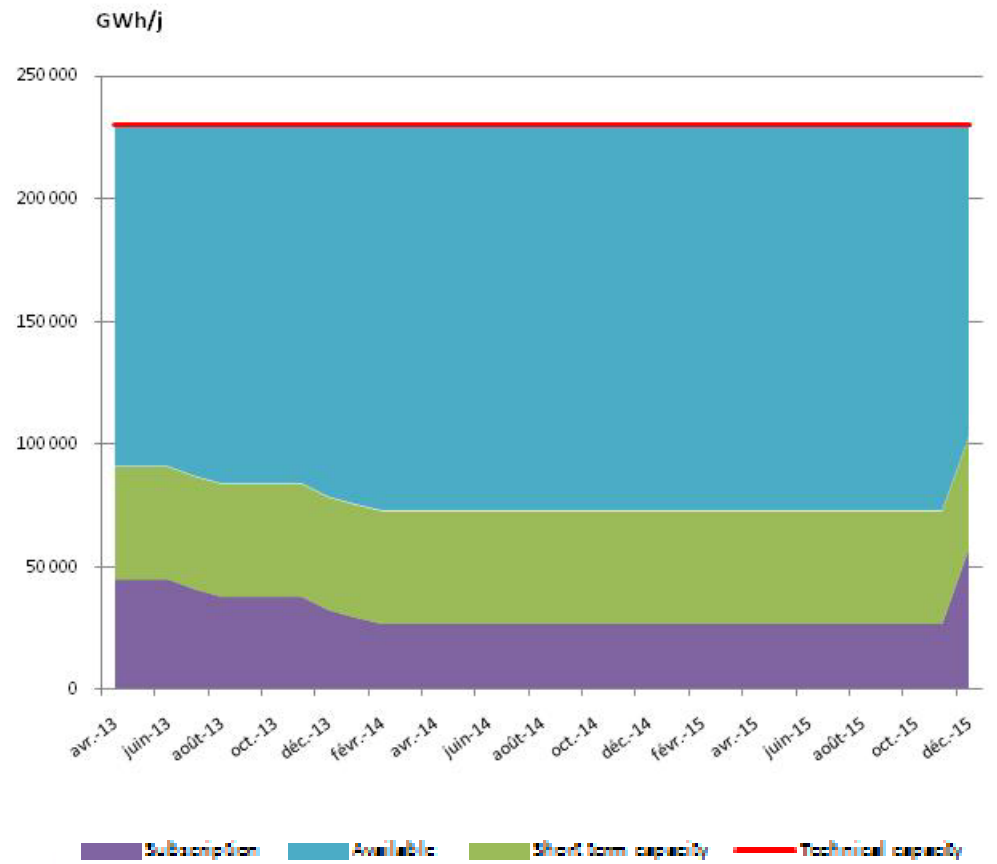


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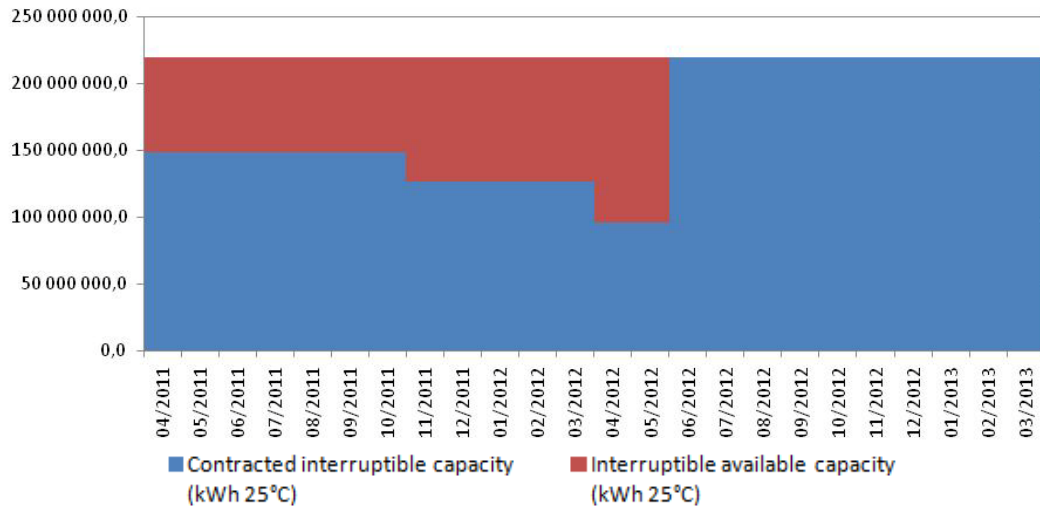


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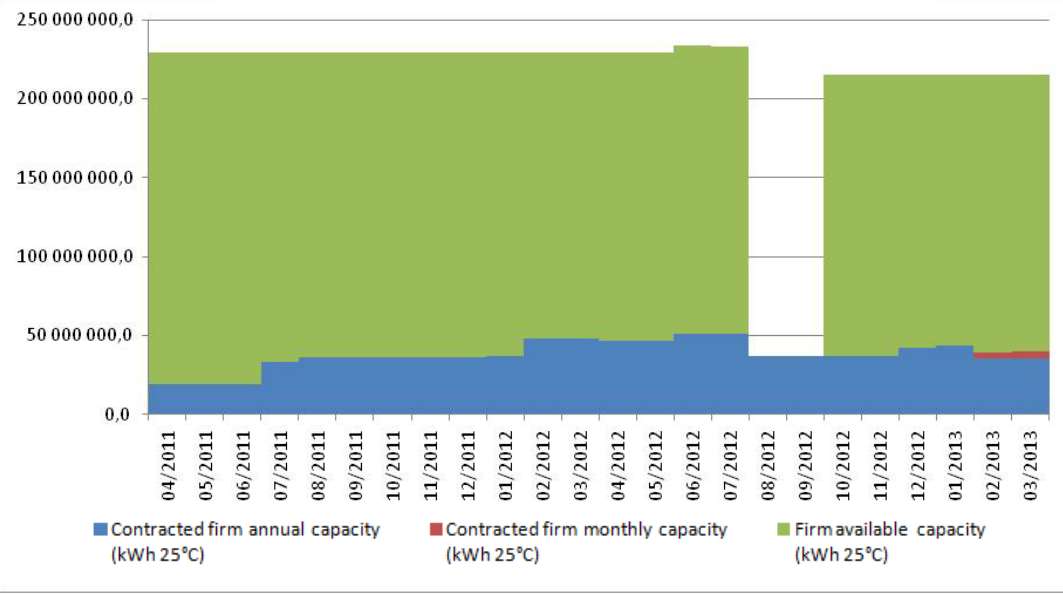
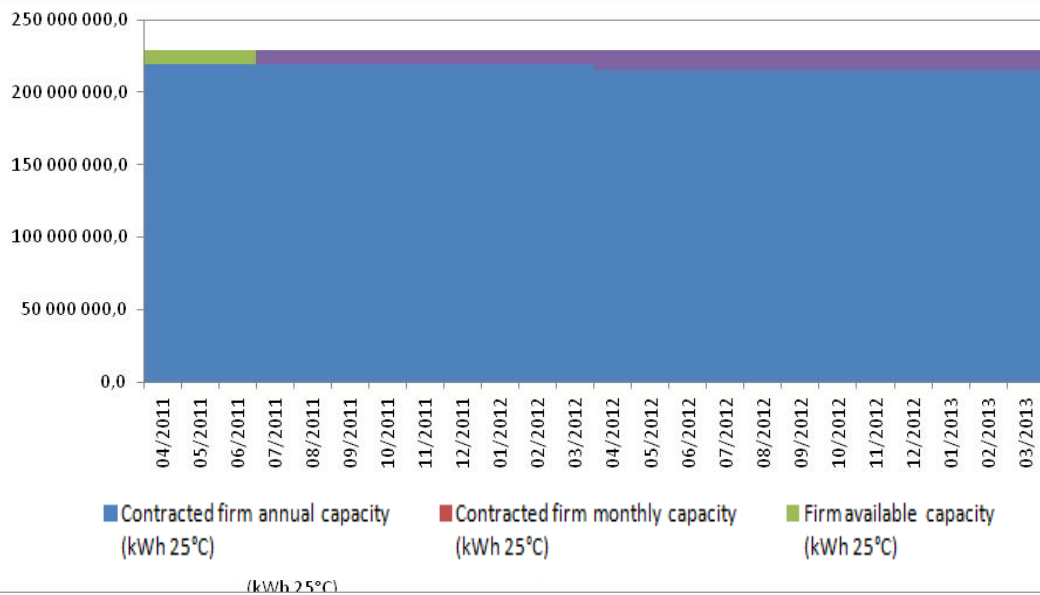
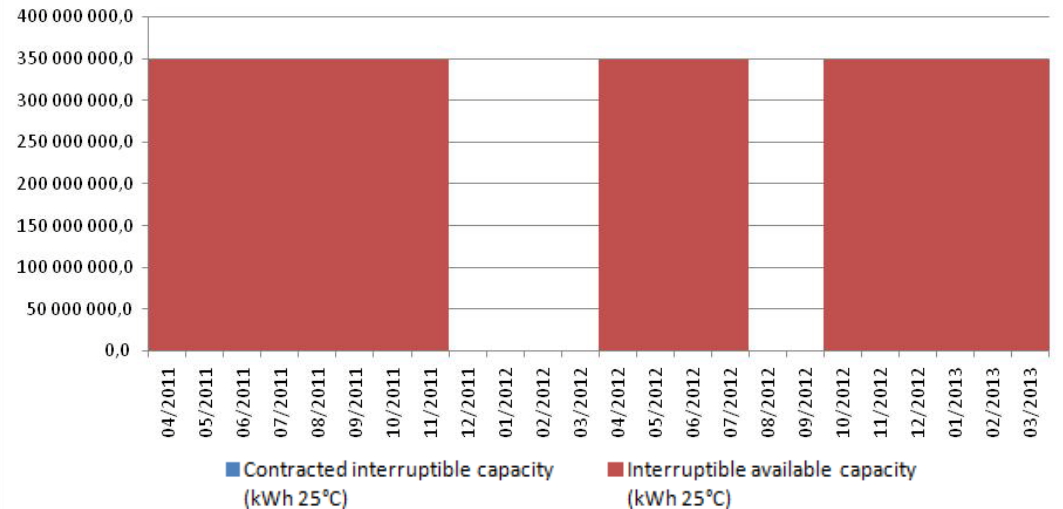


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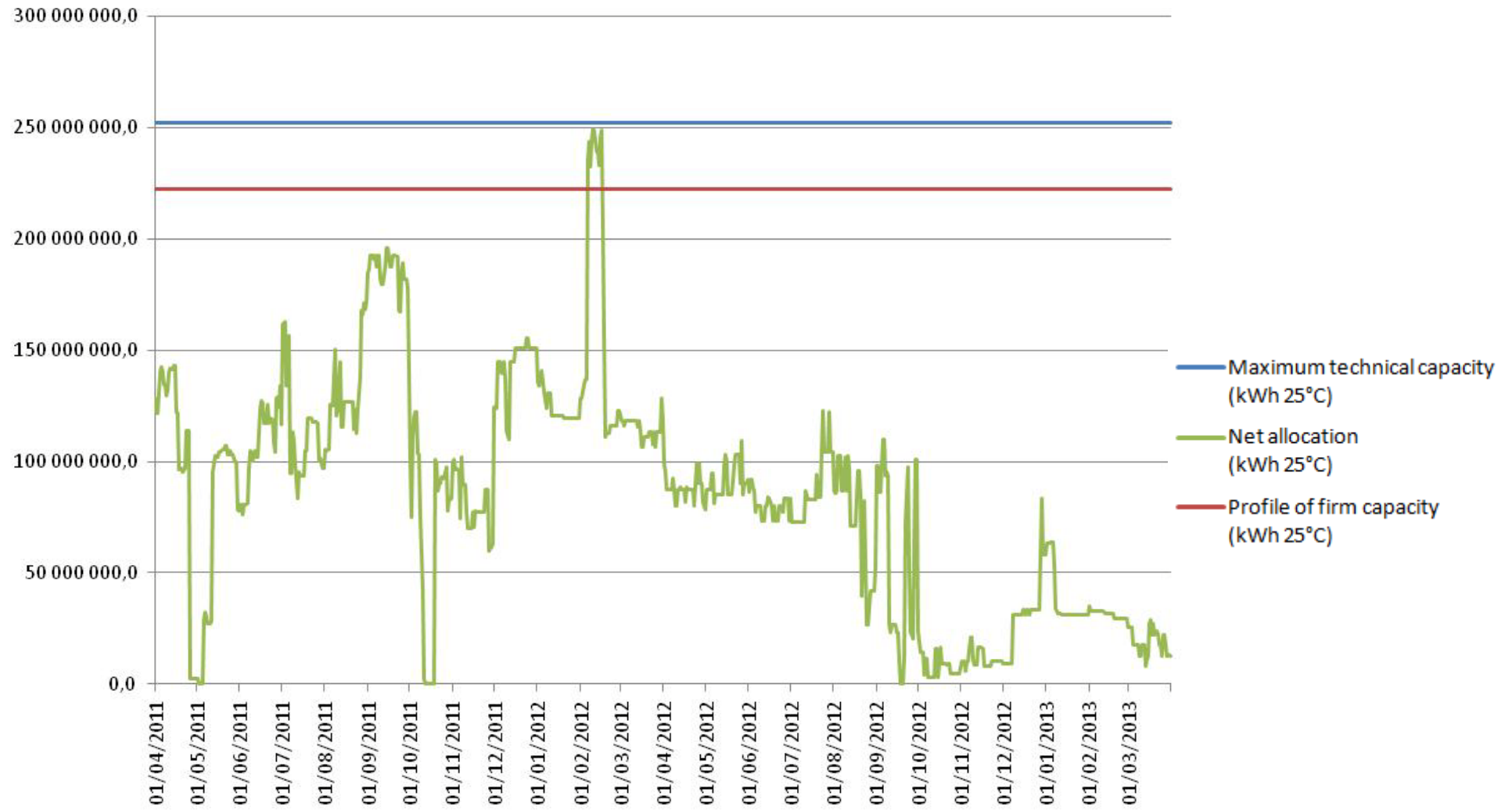
Nord vers Sud



Sud vers Nord



Oltingue

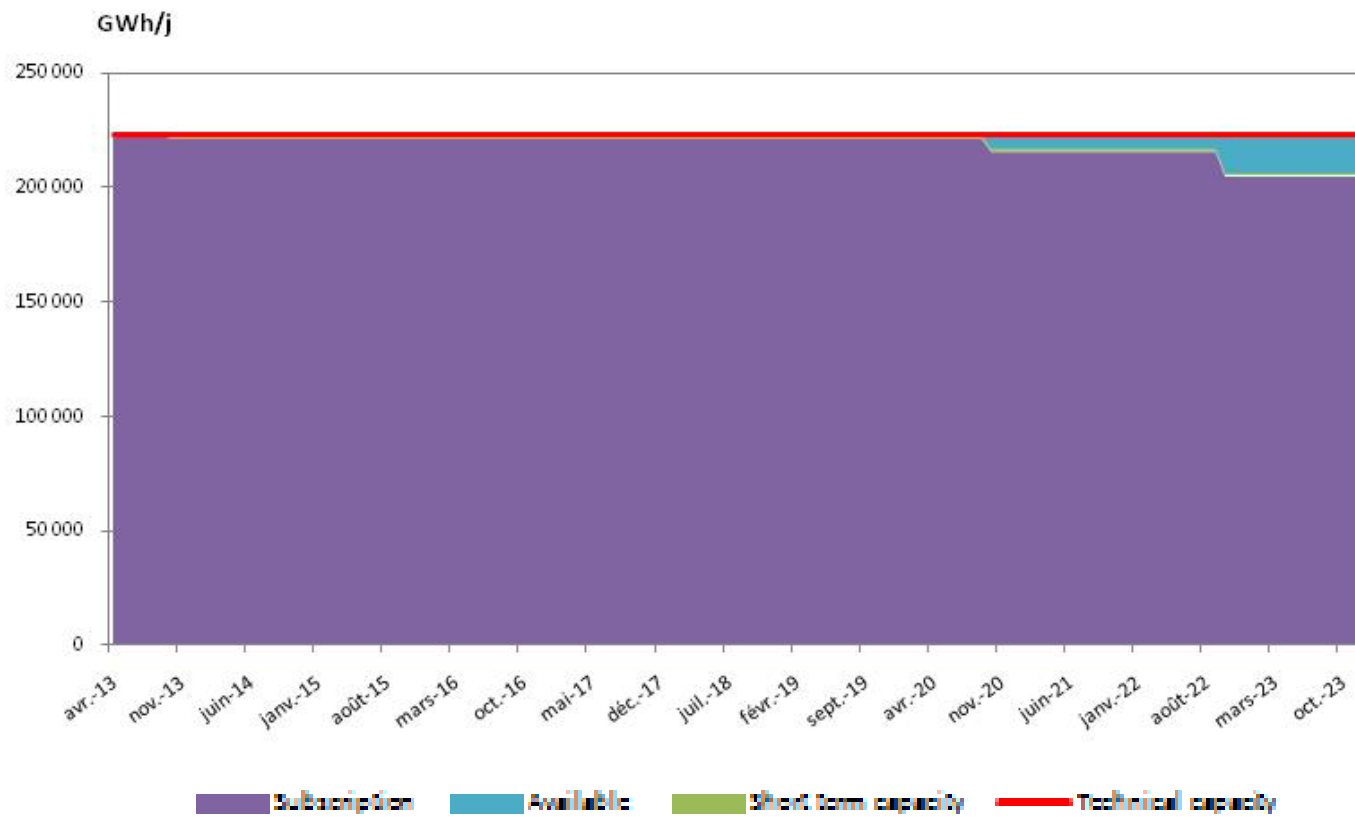


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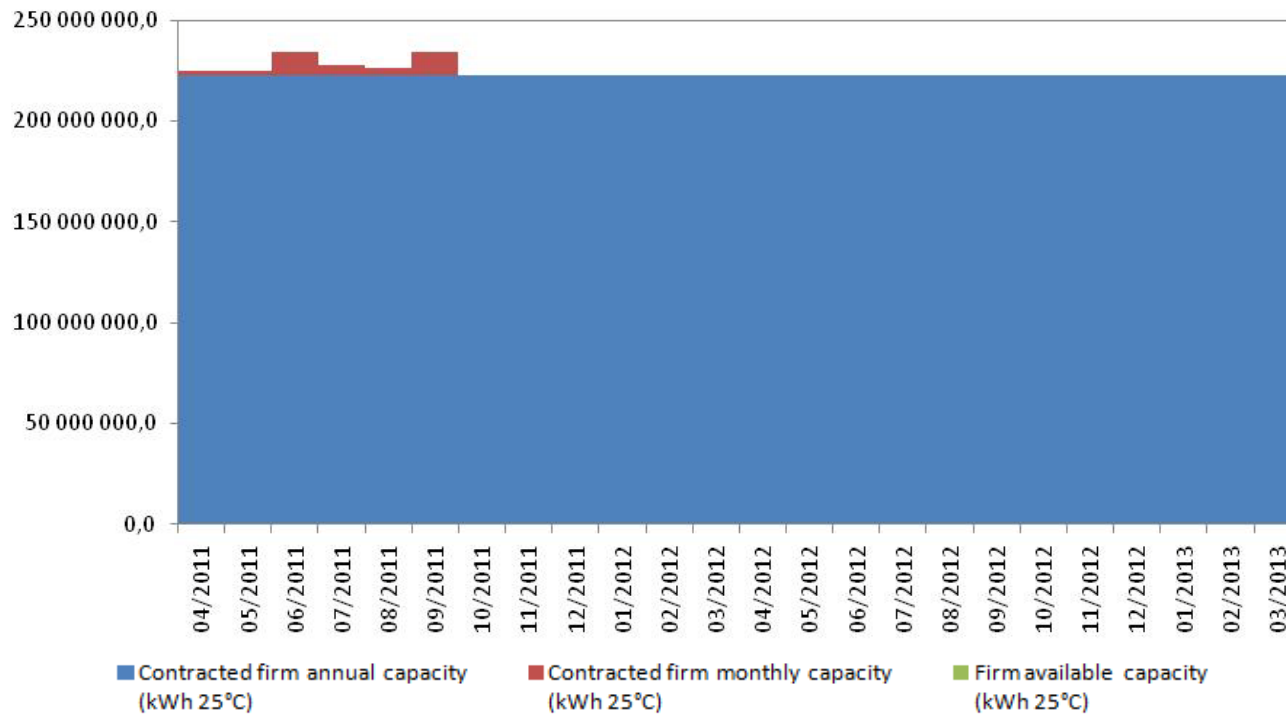
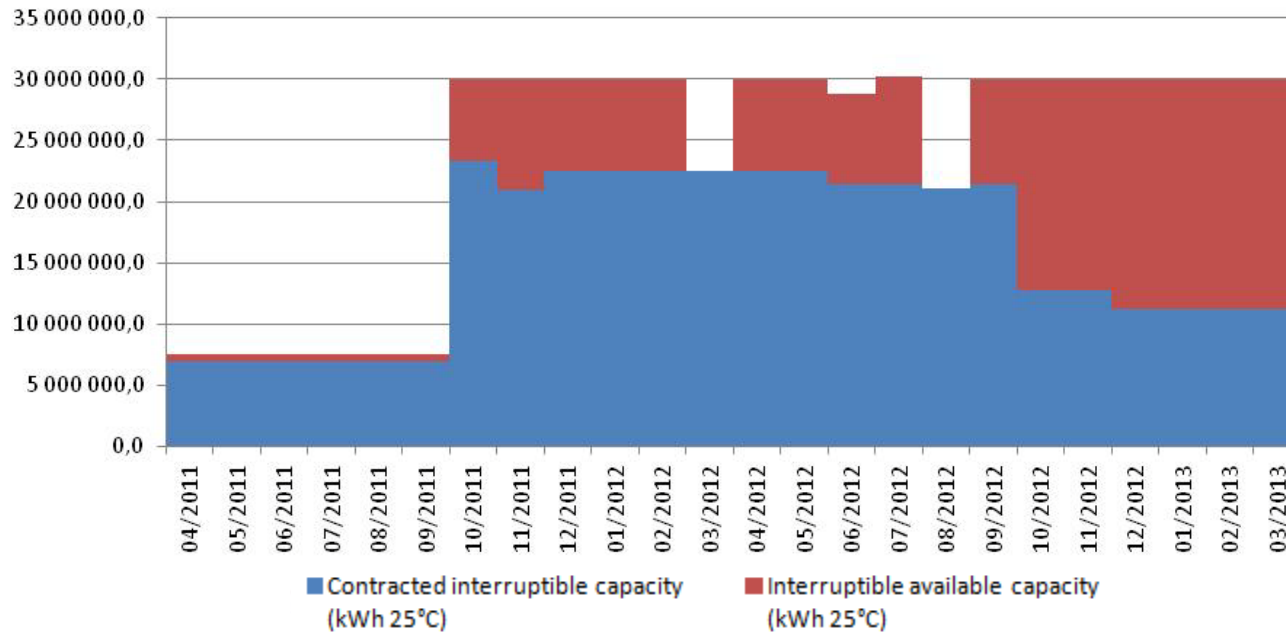
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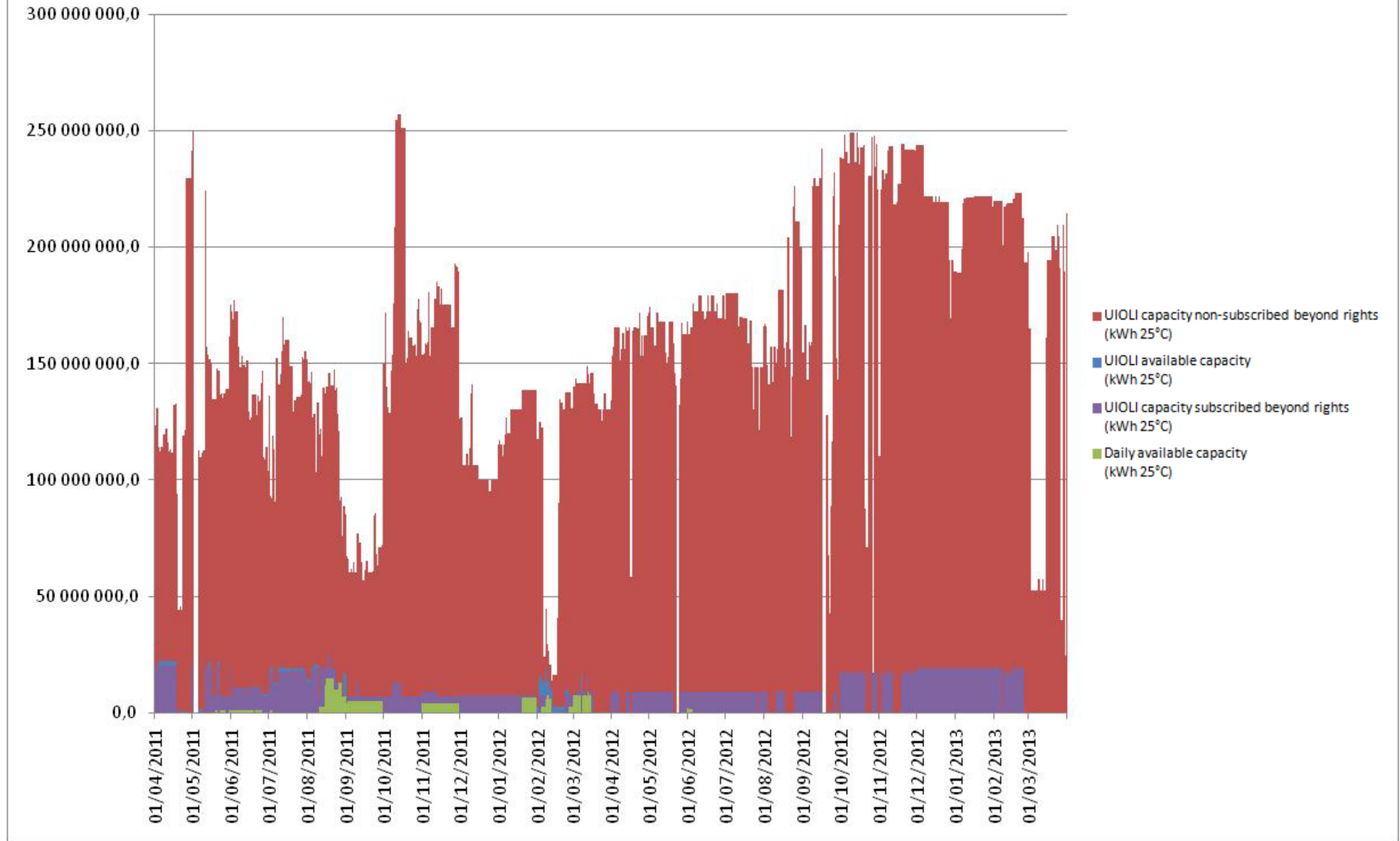
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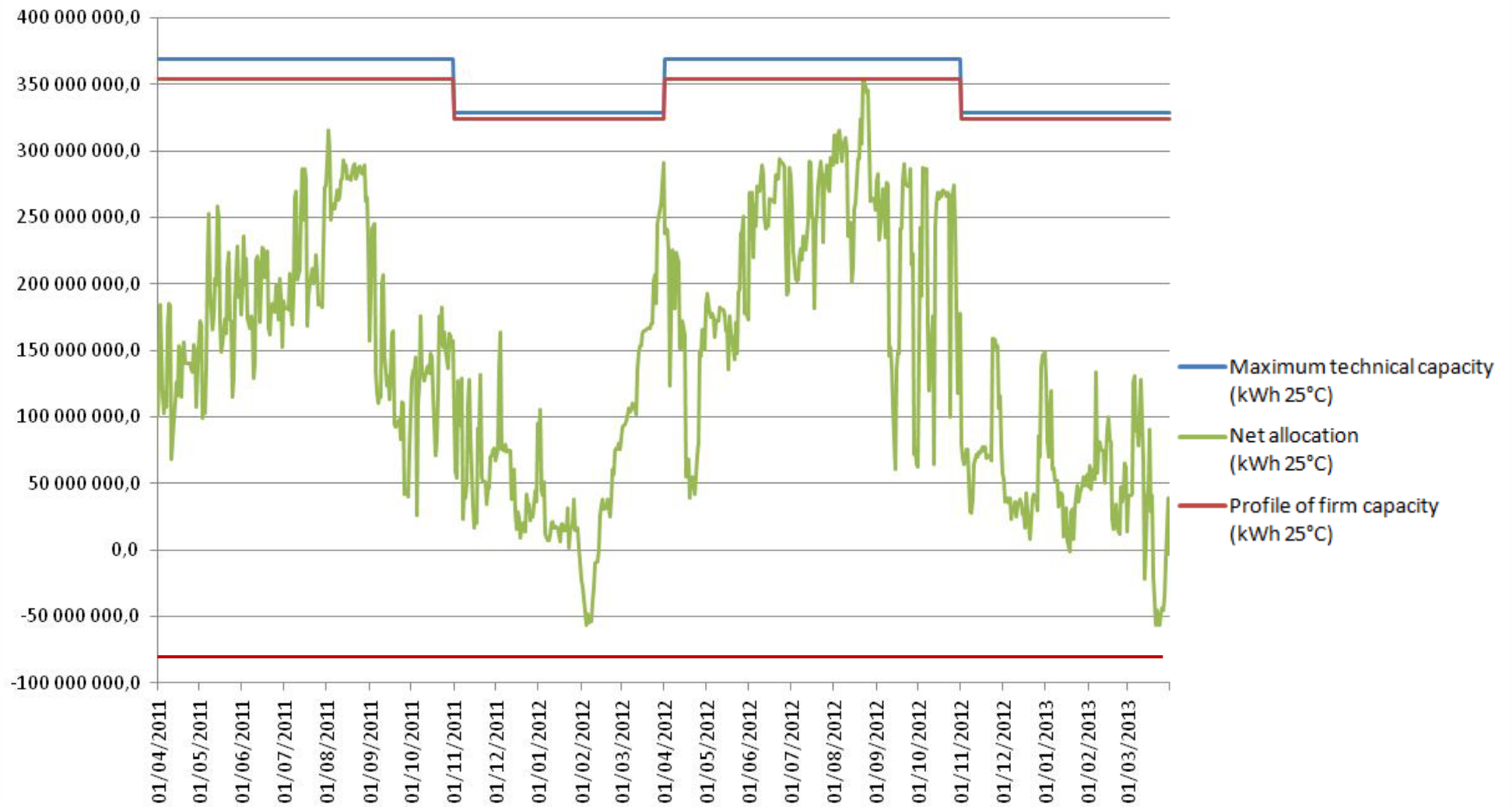
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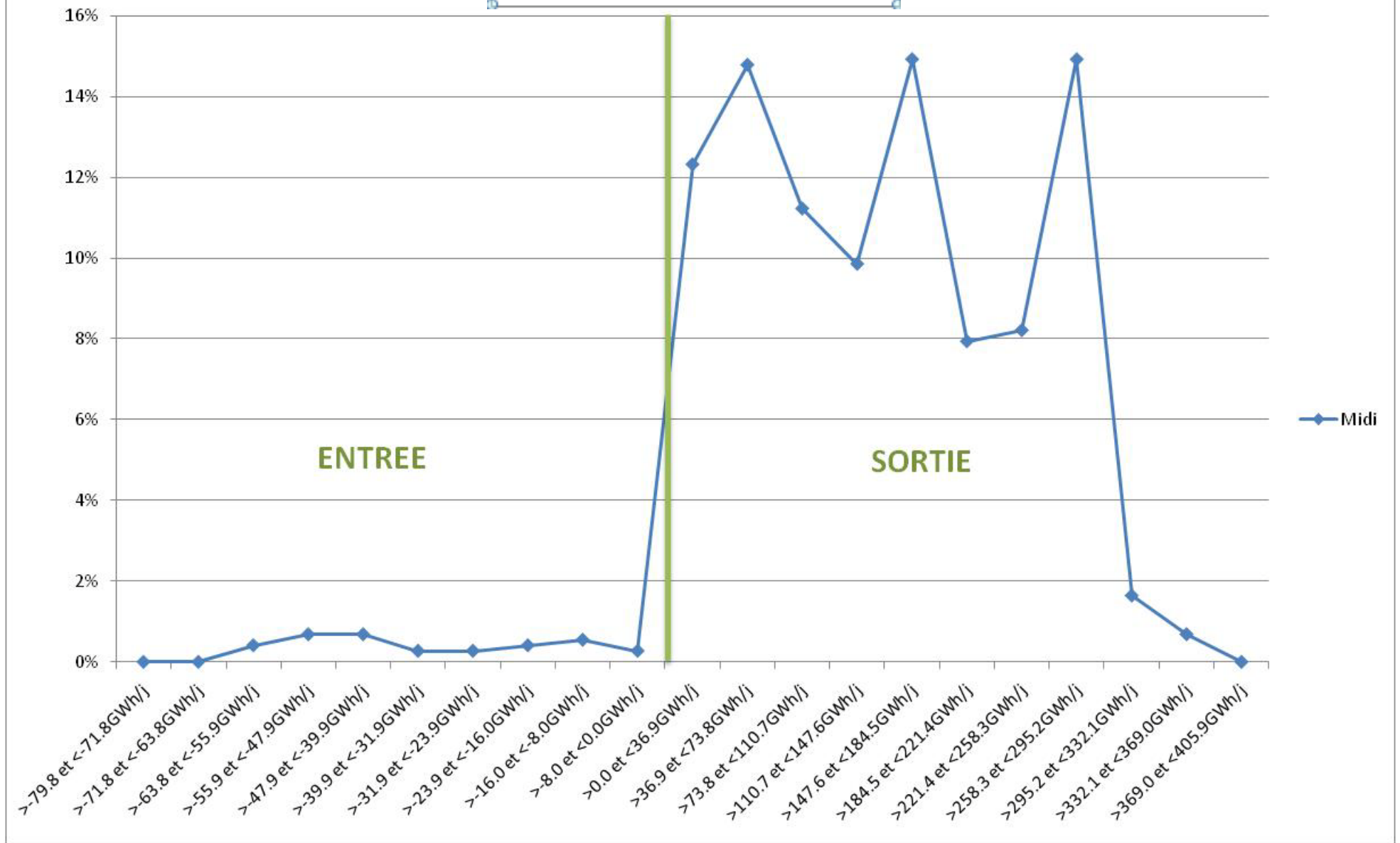
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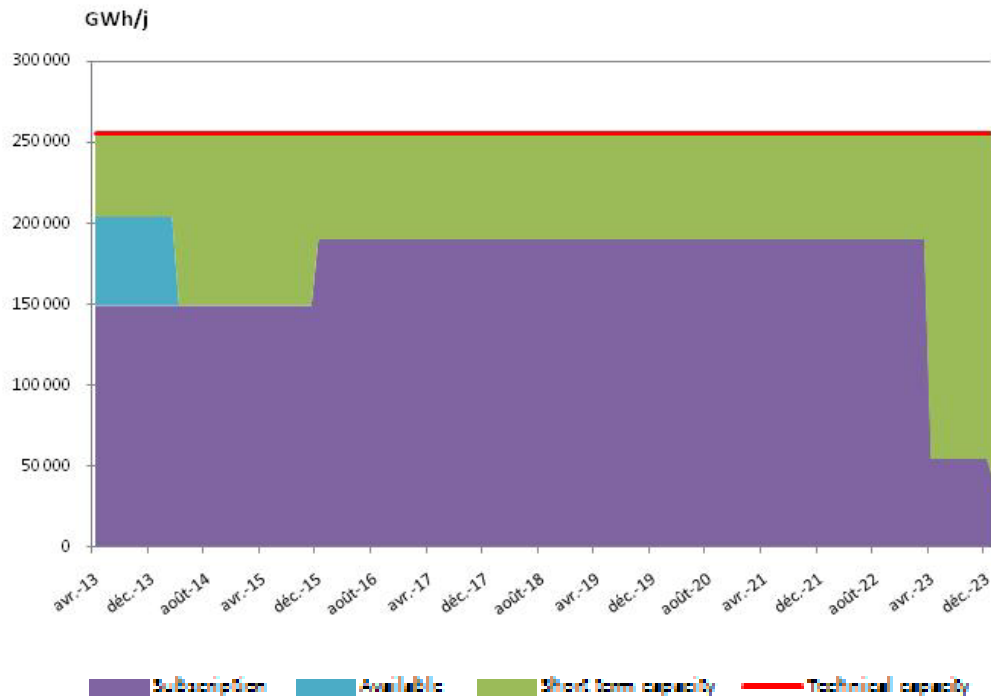
Midi



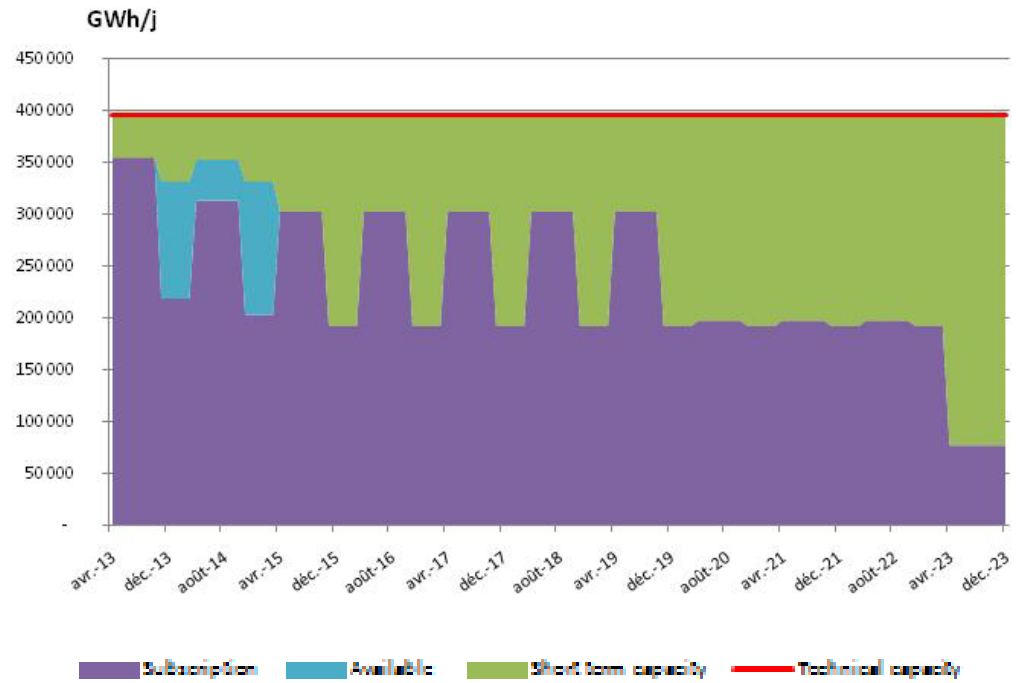
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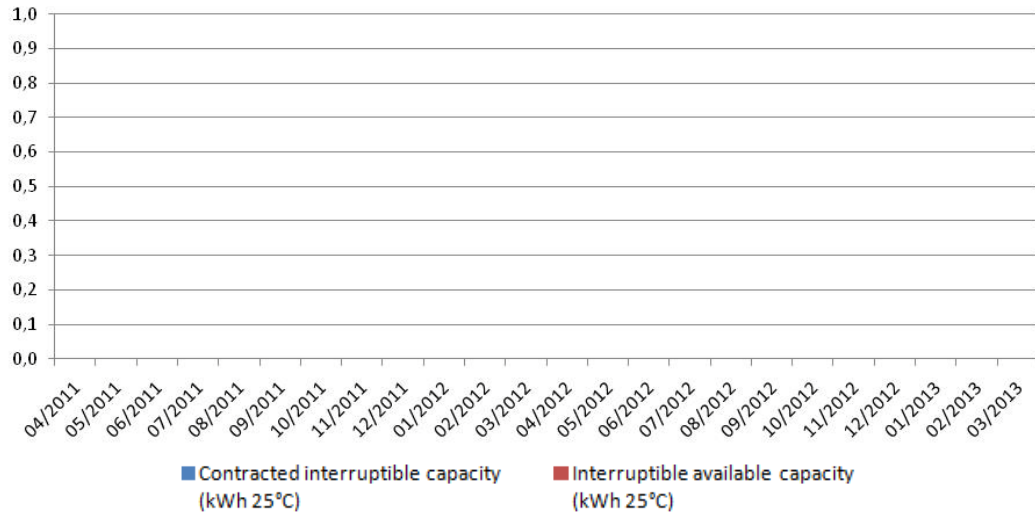


GRTgaz>TIGF



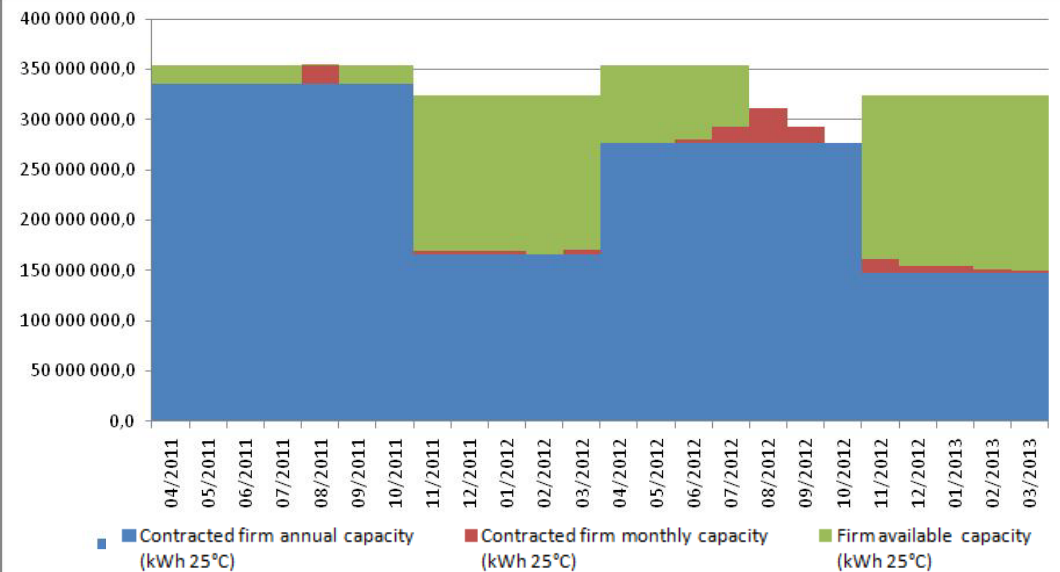
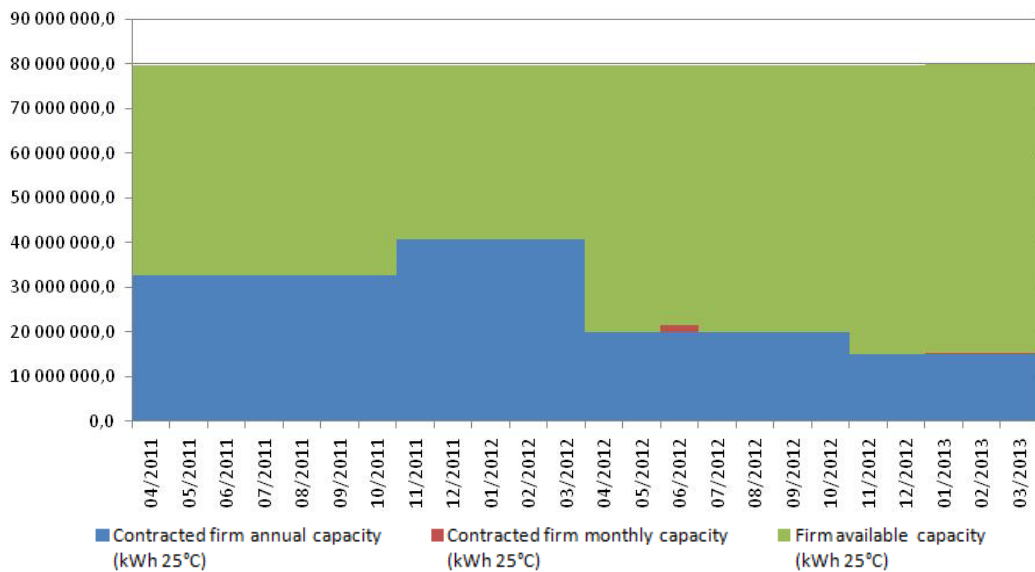
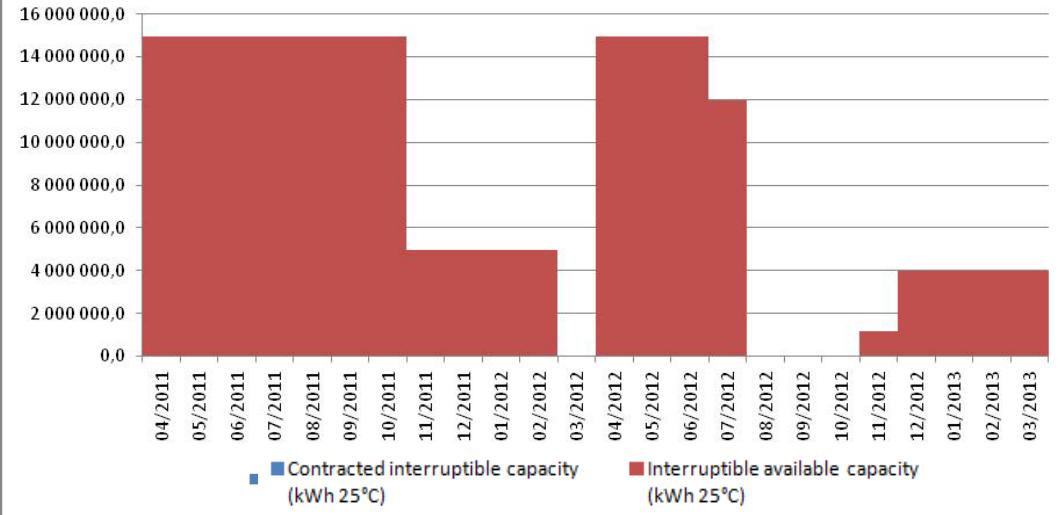
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Midi Entrée



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