



Annual report on contractual congestions at interconnection points of the Energy Community Contracting Parties

2023



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INTRODUCTION

1. About ECRB

The Energy Community Regulatory Board (ECRB) operates based on the Energy Community Treaty. As an institution of the Energy Community, the ECRB advises the Energy Community Ministerial Council and Permanent High Level Group on details of statutory, technical and regulatory rules and makes recommendations in the case of cross-border disputes between regulators.¹ ECRB is the independent regional voice of energy regulators in the Energy Community. ECRB's mission builds on three pillars: providing coordinated regulatory positions to energy policy debates, harmonising regulatory rules across borders and sharing regulatory knowledge and experience.

2. Background

Congestion management procedures in the event of contractual congestion have been included in the *acquis communautaire* (acquis) of the Energy Community, in the form of a Decision of the Permanent High Level Group,² on 12 January 2018. The deadline for implementation of this decision was set to October 2018. According to paragraph 2.2.1(2) of the Annex 1 to Regulation (EC) 715/2009 on conditions for access to the natural gas transmission networks, as amended at EU level by Commission Decision (EU) 2012/490 of 24 August 2012 and Commission Decision (EU) 2015/715 of 30 April 2015³ (hereafter 'CMP Guidelines'), the ECRB has to publish by 1 June of every year, commencing with the year 2021, a monitoring report on congestion at interconnection points with respect to firm capacity products sold in the previous year, taking into consideration, to the extent possible, capacity trading on secondary market and the use of interruptible capacity.

The present report serves as a basis for implementation of firm-day-ahead use-it-or-lose-it mechanism ('FDA UIOLI'), as prescribed by paragraph 2.2.3 (1) of the CMP Guidelines. Namely, the national regulatory authorities (NRAs; regulators) should

¹ www.energy-community.org. The Energy Community comprises the EU and Albania, Bosnia and Herzegovina, North Macedonia, Georgia, Kosovo*, Moldova, Montenegro, Serbia and Ukraine. Armenia, Turkey and Norway are Observer Countries. Throughout this document the symbol * refers to the following statement: This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Advisory Opinion on the Kosovo declaration of independence.

² Decision No 2018/01/PHLG-EnC of the Permanent High Level Group of the Energy Community of 12 January 2018 on amending Annex I to Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks, as amended at EU level by Commission Decision (EU) 2012/490 of 24 August 2012 and Commission Decision (EU) 2015/715 of 30 April 2015 (https://www.energy-community.org/dam/jcr:c7dde5f9-a070-48c9-9a9e-a07677e7206f/Decision_2018_01_PHLG.pdf).

³ ANNEX I to Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks, as amended at EU level by Commission Decision (EU) 2012/490 of 24 August 2012 and Commission Decision (EU) 2015/715 of 30 April 2015 (https://www.energy-community.org/dam/jcr:d0f7d046-57cb-479a-a39a-9bce06065155/Regulation_715_2009_GAS.pdf).

require transmission system operators (TSOs) to apply FDA UIOLI if, on the basis of this report, it is shown that at interconnection points (IPs) demand exceeded offer at the reserve price when auctions are used in the course of capacity allocation procedures in the year covered by the monitoring report for products for use in either that year or in one of the subsequent two years:

- (a) for at least three firm capacity products with a duration of one month or
- (b) for at least two firm capacity products with a duration of one quarter or
- (c) for at least one firm capacity product with a duration of one year or more or
- (d) where no firm capacity product with a duration of one month or more has been offered.

In the following years, if the ECRB report on contractual congestions shows that a situation described above is unlikely to reoccur in the following three years, the NRAs may decide to terminate the FDA UIOLI mechanism.

Due to Russian aggression against Ukraine and the introduction of the martial law, the information on capacity bookings and usage became available at the later stage. Therefore the present report on contractual congestions is published with a delay.

3. Scope and methodology

The concept of contractual congestion is defined in Article 2(21) of the Regulation (EC) 715/2009 as a situation where the level of firm capacity demand exceeds the technical capacity. The procedures set by the CMP Guidelines target reducing contractual congestions, if identified. In the case the transmission capacity is allocated via auctions, it is clear that a contractual congestion exists, if the auction is cleared with an auction premium.

In the Energy Community Contracting Parties (hereafter 'Contracting Parties'), capacity allocation was not performed based on Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) 984/2013 (hereafter 'CAM NC') in the reporting period, except for Ukraine where the CAM NC is applied since June 2020⁴ and Moldova, where it is applied as of November 2022. In Serbia, on the IPs of the transmission system operator Gastrans, only non-exempted short-term capacity is allocated based on CAM NC. Therefore, the information on actual capacity demand was provided by the NRAs of the Contracting Parties to the extent it was available to them. For Ukraine, the information on the results of capacity auctions that were held in 2022 were provided. In addition to capacity demand, other possible indicators of

⁴ Since 06.07.2020, all capacities at IPs are allocated in line with the CAM NC. However, it has to be noted that the allocated capacity is not bundled at IPs, as required by Article 19 of CAM NC. The Ukrainian transmission network code stipulates rules for bundling of capacity at these points, according to which bundling is subject to agreement of neighboring transmission system operators. Such agreements were not in place in 2022.

contractual congestion as well as the implementation of the CMP Guidelines were analyzed.

The present report covers IPs between adjacent entry-exit systems between the Contracting Parties with an operational gas market as well as between the Contracting Parties and neighboring EU Member States, whereby the information on the latter is available only for the Contracting Parties' side of the IP.

The report reflects the status quo with regard to capacity demand in 2022 and 2023. The information on the CMP Guidelines' implementation is related to 2022.

FINDINGS

1. Capacity bookings

In 2022, most of the capacity for the years, 2022, 2023 and 2024 at IPs between the Contracting Parties and between Contracting Parties and EU Member States was allocated based on long - term contracts, except in Ukraine, where all capacity is allocated for the periods shorter than one year. In Serbia and Moldova, both long and short- term capacity was allocated in 2022.

- **In Moldova**, allocation of unbundled capacity on the Hungarian booking platform (RBP) started for the first time in November 2022. Daily products were booked in December at entry point Kaushany and in November and December at entry point Oleksiivka. During the auctions, no premium occurred meaning that the criteria prescribed by paragraph 2.2.3 (1) of the CMP Guidelines were not met.
- **In Serbia**, the capacity at IPs is allocated based on the Serbian TSO's Transportgas Serbia invitation published on its web page and corresponding applications of network users. In case demand is higher than the available capacity, the allocation is done proportionally to the requests – meaning pro-rata allocation applied in case of congestion). However, the Serbian transmission system operator excluded the entry point Horgos from the “Invitation for contracting annual firm capacity” in 2022. Capacity is offered for the next three gas years.

For the second TSO in Serbia – Gastrans, unbundled short term capacity at IPs with Bulgaria and Hungary is allocated on the Hungarian booking platform (RBP).

Thus, there are four IPs analyzed **in Serbia**, where nearly 90% of technical capacity was booked by yearly products at the IP Kiskundorzma 2 (exit point from Serbia to Hungary), the IP Zajecar (entry point from Bulgaria to Serbia), and around 70% of technical capacity was booked by yearly products for the period of January – September and 50% for October – December at the IP Zvornik (exit point from Serbia to Bosnia and Hercegovina). Two shippers ordered yearly capacity at the IP Zvornik, four at the IP Zajecar and three shippers at the IP Kiskundorzma 2. At the IP Horgos (entry point in Serbia from Kiskundorzma in Hungary), three monthly products were booked by one shipper, daily products were booked by one shipper; the share of booked capacity in technical capacity for daily and monthly products in average was 51% in January, 21% in February and 11-12% in March, April, November, December. In other months, capacity at the IP Kiskundorzma 2 was almost not used.

- **In Ukraine**, starting from 6th of July 2020, all IP capacities have been allocated via auctions in accordance with the CAM NC requirements. At the border with Poland, the GSA capacity allocation platform is used, at the other borders the RBP capacity allocation platform. All types of products (quarterly, monthly, daily and intra-day) were offered and booked at almost all IPs. Yearly capacity was booked at the exit IP to Moldova.

During auctions held in 2022 **in Ukraine** none of the criteria prescribed by paragraph 2.2.3 (1) of the CMP Guidelines were met. No auction premium was in place. Daily and monthly firm capacity products were offered at all IPs (where there was a possibility within the requirements of interconnection agreements) and with the duration of one year was offered at one virtual IPs with Moldova. The highest number of participants in the capacity auctions was six, compared to four the previous year (2021).

The information on capacity bookings at IPs in Serbia, Ukraine and Moldova is to a certain extent available in Annex I of this report. For all other IPs in the Contracting Parties, only information on technical capacity or flows may be found in Annex I.⁵

Based on the information on capacity bookings in the Contracting Parties in 2022, it can be concluded that there were no contractual congestions on the analyzed interconnection points.

2. Other possible indicators of contractual congestion

In the absence of the CAM NC implementation in all Contracting Parties, except Ukraine, which would allow using auction results as the main source of data for

⁵ The NRAs also provided data on monthly physical flows and, in some cases, on daily peaks. This information was used as a support to the analysis.

identification of contractual congestion, another set of indicators was agreed by the ECRB Gas Working Group. These indicators should point out to a demand for capacity exceeding the offer. In this respect, the following aspects were analyzed for the IPs of the Contracting Parties:

- ✓ Whether there was any unsuccessful capacity request;
- ✓ Whether there was any non - offer of capacity;
- ✓ Whether there was any interruptible capacity offer and, if so, whether there was any booking of interruptible capacity; and
- ✓ Whether there was any trade of capacity on secondary market.

The responses reveal that there was no unsuccessful capacity request for the IPs of the Contracting Parties. The transmission system operators of the Contracting Parties did not publish any information on the occurrence of unsuccessful capacity request for firm capacity products.

Non- offer of firm capacity could indicate that the firm capacity is fully booked or that a part of capacity is withdrawn from the market, whereby the first indication may point out to an existence of contractual congestion and the second reveals the lack of third party access to the transmission capacity. In the Contracting Parties, there was no indication of the fully reserved capacity.

Booking of interruptible capacity at an IP, other than for backhaul, may also suggest that capacity demand exceeds capacity offer. It is also a requirement of Article 2.2.1 of the CMP Guidelines to take into consideration the use of interruptible capacity when monitoring congestions at IPs.

In Serbia, unlike in the previous gas year 2020/2021, in the reporting period there was no bookings of interruptible capacity. It is worth mentioning the reason for using interruptible capacity in Serbia is of procedural nature. Namely, according to the applicable network code, the TSO offers the same amount of firm and interruptible capacity for all capacity products. If network users miss the deadline for requesting firm capacity, they request an interruptible capacity at a later stage, but this does not mean that all firm capacity was already booked.

In Ukraine, capacity at the IP Uzgorod (entry from Slovakia), IP Orlovka-Isaccea I (entry from Romania) is offered on interruptible basis, as prescribed by the relevant interconnection agreements. However, according to the regulatory authority of Ukraine, these offers of interruptible capacity do not point towards contractual congestions. Rather, capacity is offered on interruptible basis due to the conditions of Interconnection agreements signed between TSOs.

In Moldova, 37% of offered interruptible capacity at the entry IP Kaushany was booked by network users. Similarly to Serbia and Ukraine, the usage of interruptible capacity does not point out to contractual congestion.

ECRB investigated whether there was any trading of IP capacities on the secondary market in 2022. Based on the information provided by the NRAs, there was no such a commercial activity in the Contracting Parties except for Serbia where the transfer of monthly and daily capacities took place at two IPs (the IP Kiskundorzma 2 – monthly capacity, the IP Zajecar – monthly and daily capacity).

Finally, in addition to indicators pointing out to the presence of contractual congestions, the analysis of capacity used by network users along with maximal technical availability was conducted. This information complements the figures on bookings and enables the full overview of the IPs' capacity demand.

Likewise, in Serbia the mostly used IPs were Kiskundorzma 2 (SRB - HU) and Zajecar (BG-SRB) – around 60 % of technical capacity. The highest share of peak demand in technical capacity at the IP Kiskundorzma 2 (SRB - HU) was almost 100% (99,95) in September 2022, at the IP Zajecar (BG-SRB) – 88 % in October 2022, at the IP Zvornik (SRB-BA) – 69 % in January and March 2022 and at the IP Kiskundorozszma–Horgos (SRB-HU) – 79 %. It is worth mentioning that the described indicators were at the much more lower level in the previous reporting period, that shows the increase of demand for IP capacities in Serbia in 2022.

The information on gas flows at each IP was not provided for Ukraine in this reporting period due to the law restriction prescribed by the war conditions.

In Moldova, the IP point Oleksiivka was used the most, the highest level of daily peak of actual gas flow in technical capacity was 57% in January meaning that congestions would not occur. The capacity at entry point Kaushany was used by not more than 7%, IP Lymanske – 28%.

3. Implementation of congestion management procedures

Application of congestion management procedures in the event of contractual congestion is an obligation introduced by the CMP Guidelines. Capacity made available after congestion management procedures has to be offered by transmission system operators in the regular allocation process. For the purpose of this report, the regulators were asked to provide an overview of the congestion management procedures implemented by their respective transmission system operators.

The responses showed that only in Ukraine CMP measures are stipulated in the applicable rules (transmission network code), namely a long-term use-it-or-lose-it mechanism, surrender of contracted capacity and oversubscription and a buy-back scheme.

In all other Contracting Parties, none of the congestion management procedures was applied until June 2022.

CONCLUSIONS AND RECOMMENDATIONS

Having in mind that the CAM NC was not used in all the Contracting Parties (Ukraine and Moldova are the exception) for transmission capacity allocation in 2022, the identification of possible contractual congestions was also performed based on the information on actual capacity demand, provided by the NRAs of the Contracting Parties. In addition to capacity demand, other possible indicators of contractual congestion as well as the implementation of CMP Guidelines were analyzed.

Based on the information on capacity bookings in the Contracting Parties in 2022, it can be concluded that there were no contractual congestions on the analyzed interconnection points. Other possible indicators did also not point out to existence of contractual congestions. Therefore, with reference to Articles 2.2.1 and 2.2.3 of CMP Guidelines, **the ECRB concludes that the national regulatory authorities of the Contracting Parties do not have to request transmission system operators to apply firm day-ahead use-it-or-lose-it mechanism.**

On the other side, during this analysis, ECRB identified a number of obstacles stemming from data availability, consistency and reliability and **invites the transmission system operators to comply without delay with transparency related provisions of Regulation (EC) 715/2009 and, in particular, Annex I of that Regulation.**

Finally, **ECRB invites Governments, national regulatory authorities and transmission system operators of the Contracting Parties and, where relevant, neighboring EU Member States, to enable full implementation of the CMP Guidelines and the CAM NC on interconnection points between the Contracting Parties and between the Contracting Parties and EU Members States.**

ANNEX I - TECHNICAL AND BOOKED CAPACITY

Information on capacity	
Interconnection point	
IP Kiskundoroszma - Horgos) Hungary to Serbia	<p>Technical capacity: 141,977,184 kWh/day</p> <p>In three months (January, November, December), monthly products were booked and 144 daily products in seven months (January to May, November, December); one shipper booked monthly and daily capacity.</p> <p>The highest average daily product capacity was recorded in February – 29,167,714 kWh/day.</p>
IP Zvornik Serbia to Bosnia and Herzegovina	<p>Technical capacity: 21,129,833 kWh/day</p> <p>Booked yearly capacity in 2022: 10,224,736 kWh/day for January-September, 14,301,742 kWh/day for September-December; two shippers booked yearly capacity.</p> <p>In five months (January, February, March, April, November), monthly products were booked. One shipper booked monthly capacity.</p>
IP Zajecar Bulgaria to Serbia	<p>Technical capacity: 366,731,712 kWh/day</p> <p>Booked yearly capacity: 330,053,520 kWh/day; four shippers booked yearly capacity.</p> <p>In six months (January, February, March, September, November, December), monthly products were booked and 46 daily products in four months (September, October, November, December); nine monthly capacity and seven daily capacity products were booked. The highest average daily product capacity was recorded in November- 723,218 kWh/day.</p>

<p>IP Kiskundorzma 2 Serbia to Hungary</p>	<p>Technical capacity: 245,765,592 kWh/day</p> <p>Booked yearly capacity: 221,189,016 kWh/day; three shippers booked yearly capacity.</p> <p>In four months (September, October, November, December), monthly products were booked and 19 daily products (September, October, November, December); eight monthly capacity and six daily capacity products were booked. The highest average daily product capacity was recorded in September – 156,800 kWh/day.</p>
<p>IP Zdilovo – Kuystendil Bulgaria to North Macedonia</p>	<p>Technical capacity: 20,820,000 kWh/day</p>
<p>GCP Gaz-System/UA TSO (VIP) Ukraine to Poland</p>	<p>Technical capacity: 137,256,000 kWh/day.</p> <p>Daily products as well as one monthly products were booked. The biggest amount of capacity was allocated as a daily product – 21,599,200 kWh/day.</p>
<p>GCP Gaz-System/UA TSO (VIP) Poland to Ukraine</p>	<p>Technical capacity: 137,256,000 kWh/day.</p> <p>Monthly, daily and within-day products were booked. The biggest amount of capacity was allocated as a daily product – 27,613,306 kWh/day.</p>
<p>IP Budince Slovakia to Ukraine</p>	<p>Technical capacity: 287,280,000 kWh/day</p> <p>Monthly, daily and within-day capacities were booked.</p> <p>The biggest amount of capacity allocated was as product daily allocation in November 2022 – 132,629,897 kWh/day.</p>
<p>IP Budince Ukraine to Slovakia</p>	<p>Technical capacity: 202,160,000 kWh/day</p> <p>Daily capacity products were only booked with the maximum amount of 25,491,578 kWh/day.</p>
<p>IP Uzgorod - Velke Kapushany,</p>	<p>Technical capacity: 2,989,840,000 kWh/day</p> <p>Monthly and daily capacities were booked. The biggest amount of capacity was allocated as daily product –69,160,000 kWh/day.</p>

Ukraine Slovakia	to	
IP Uzgorod Velke Kapushany Slovakia Ukraine	- to	Technical capacity: 2,989,840,000 kWh/day Only daily capacities were allocated. The biggest amount allocated was 13,832,000 kWh/day.
VIP Bereg Hungary Ukraine	to	Technical capacity: 1,003,352,000 kWh/day. Monthly, weekly and daily and within-day capacities were allocated.
VIP Bereg Ukraine Hungary	to	Technical capacity: 519,232,000 kWh/day Monthly, weekly and daily and within-day products were booked. The biggest amount of capacity was booked with daily allocation – 139,203,120 kWh/day.
IP Orlovka Isaccea I Romania Ukraine	- to	Technical capacity: 122,360,000 kWh/day. In 2022, only daily products were booked in four months. The biggest amount was 47,880,000 kWh/day.
IP Orlovka Isaccea I Ukraine Romania	- to	Technical capacity: 203,224,000 kWh/day. Monthly and daily products were booked. The biggest amount of capacity was allocated as daily product – 12,560,871 kWh/day.
IP Oleksiivka Ukraine Moldova	to	Technical capacity: 84,056,000 kWh/day. Monthly and daily products were booked. The biggest amount of capacity was booked as daily product – 8,299,200 kWh/day.
IP Ananiv Ukraine Moldova	to	Technical capacity: 84,056,000 kWh/day Not used in 2022.

IP Lymanske Ukraine- Moldova	Technical capacity: 7,660,800 kWh/day Not used in 2022.
IP Lymanske Moldova to Ukraine	Technical capacity: 23,400,000 kWh/day Not used in 2022.
IP Grebenyky Ukraine to Moldova	Technical capacity: 383,040,000 kWh/day. Monthly and daily products were booked. The biggest amount of capacity was allocated as daily product – 21,290,640 kWh/day.
IP Grebenyky Moldova to Ukraine	Technical capacity: 42,134,400 kWh/day. Daily products were booked. The biggest amount of capacity allocated was 47,880,000 kWh/day.
IP Kaushany Moldova to Ukraine	Technical capacity: 383,040,000 kWh/day Quarterly, monthly and daily products were booked. The biggest amount of capacity was allocated as daily product – 258,104,907 kWh/day.
IP Kaushany Ukraine to Moldova	Only daily products were allocated. The greatest capacity allocated was 47,880,000 kWh/day as daily product.