



Transelectrica®
Societate Administrată în Sistem Dualist

MARKET MONITORING REPORT

Ancillary Services

December 2021



ANRE - Romanian Energy Regulatory Authority
HHI - Herfindahl-Hirschman Index
BRP - Balance Responsible Party
BM - Balancing Market
DAM - Day Ahead Market
TSO - Transmission System Operator
DU – Dispatchable Unit
PN – Physical Notification
NDC - National Dispatching Center
C1 – The market share of the largest market participant
C3 – Total market share of top 3 market participants
NPS – Minimum number of residual generators
TTC – Total Transfer Capacity
NTC – Net Transfer Capacity
ATC – Available Transfer Capacity
CMBC – Centralised Market for Electricity Bilateral Contracts
IDM – Intraday Market

According to the Commercial Code, Transelectrica, the Romanian Transmission System Operator, operates and monitors the activity of 3 types of markets: Balancing Market, Ancillary Services Market and Market for Allocation of Cross-Border Capacities.

Using the records from the markets data bases, Transelectrica prepares daily, weekly and monthly monitoring reports. A part of the data included in these reports (those data which are not confidential) are published on the website www.transelectrica.ro (section Transparency).

General Remarks

- The contracts signed between the Ancillary System Services Suppliers and Transelectrica covered 95.84% from TSO's necessary volume.
- The report contains requested quantities by Transelectrica (through NDC), contracted quantities based on bid amounts and realized quantities.
- 8 participants have supplied Ancillary Services: CE Hunedoara S.A., CE Oltenia S.A., Hidroelectrica S.A., Bepco S.R.L., Electro Energy Sud, OMV Petrom S.A., Electrogrup SA, Nova Gas & Power S.A.
- Transmission network losses have been contracted through CMBC market with: OMV Petrom S.A. (C42, C107, C476/2020), Hidroelectrica S.A. (C41, C60, C167/2020), Nuclearelectrica S.A. (C44/2020), Entrex Services S.R.L. (C28/2021), total contracted quantity includes also the energy traded by Transelectrica on DAM, IDM and BM.

Ancillary Services



Statistic Data

Average Prices [lei/hMW] and Costs [lei]

Reserves	Average weighted prices [lei/hMW]	Contracted services costs [lei]	Penalties for unfulfilled contracted services [lei]	Total costs Ancillary Services [lei]
Secondary regulation on / off consumption peak *	83.43	26,101,928.00	6,650.00	26,095,278.00
Fast Tertiary Regulation Upward	47.81	22,316,000.00	9,180.00	22,306,820.00
Fast Tertiary Regulation Downward	11.78	2,283,735.00	0.00	2,283,735.00
Network losses (CMBC)	258.18	8,643,754.80	0.00	8,643,754.80
Network losses (total)**	922.23	106,903,783.18	0.00	106,903,783.18

Quantities [hMW/h]

Reserves				Available regulation energy			Participants	
Requested	Contracted	Realized	Not realized	average	min	max	Number	HHI
*480,65/461,29	*428,00/415,18	*427,68/415,18	*0,32/0,00	*451,04/455,20	*324,00/260,00	*700,00/698,00	3	5499
627.42	627.42	627.15	0.27				7	7969
268.55	260.54	260.54	0.00				4	3916
45	45	45	0.00				4	2840
0	0	0	0.00					

* Secondary regulation band on /off peak

** Including contracted quantities on CMBC, DAM, BM and IDM

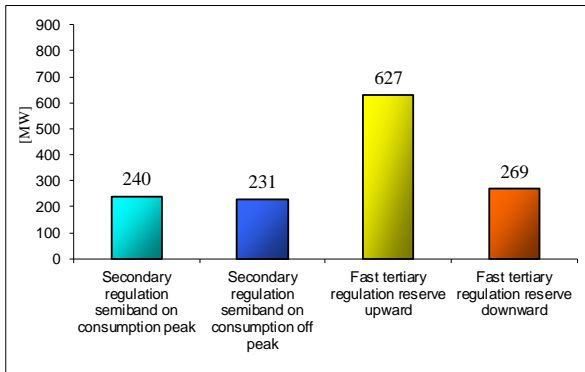
Note:

The average prices were calculated by deviding the total Ancillary Services to realized quantities

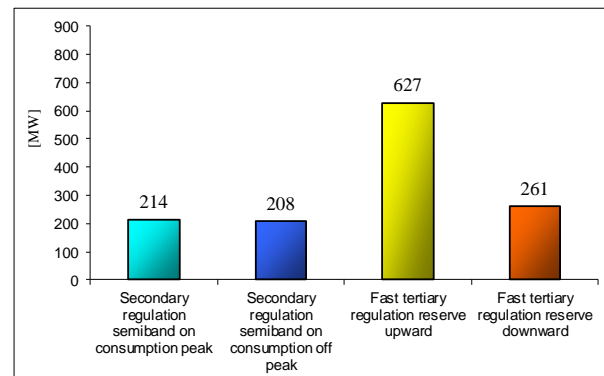
The network losses were contracted with OMV Petrom (C42, C107, C476/2020),

Hidroelectrica SA (C41, C60, C167/2020), Nuclearelectrica SA (C44/2020), Entrex Services SRL (CC28/2021).

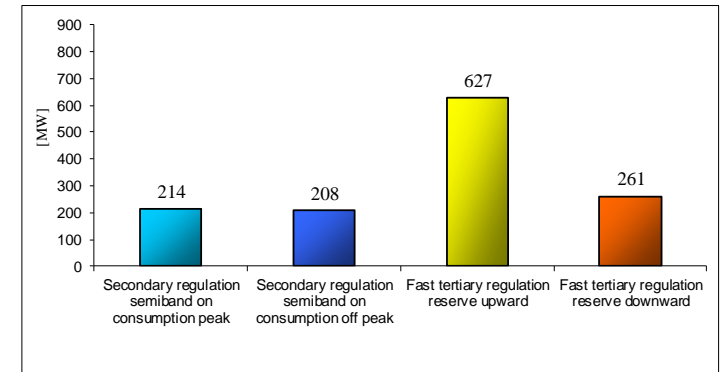
Average requested quantities [hMW/h]



Average contracted quantities [hMW/h]



Average realized quantities [hMW/h]



In December 2021, Ancillary Services contracts were concluded as a result of daily tenders organized by C.N.T.E.E. Transelectrica S.A. Necessary quantities to be purchased for Secondary Band Reserve decreased slightly compared to the previous month. The quantities needed to be purchased for Upward/Downward Fast Tertiary Reserve remained at the level of the previous month. In the case of Slow Tertiary Reserve, no tenders were held.

Ancillary Services

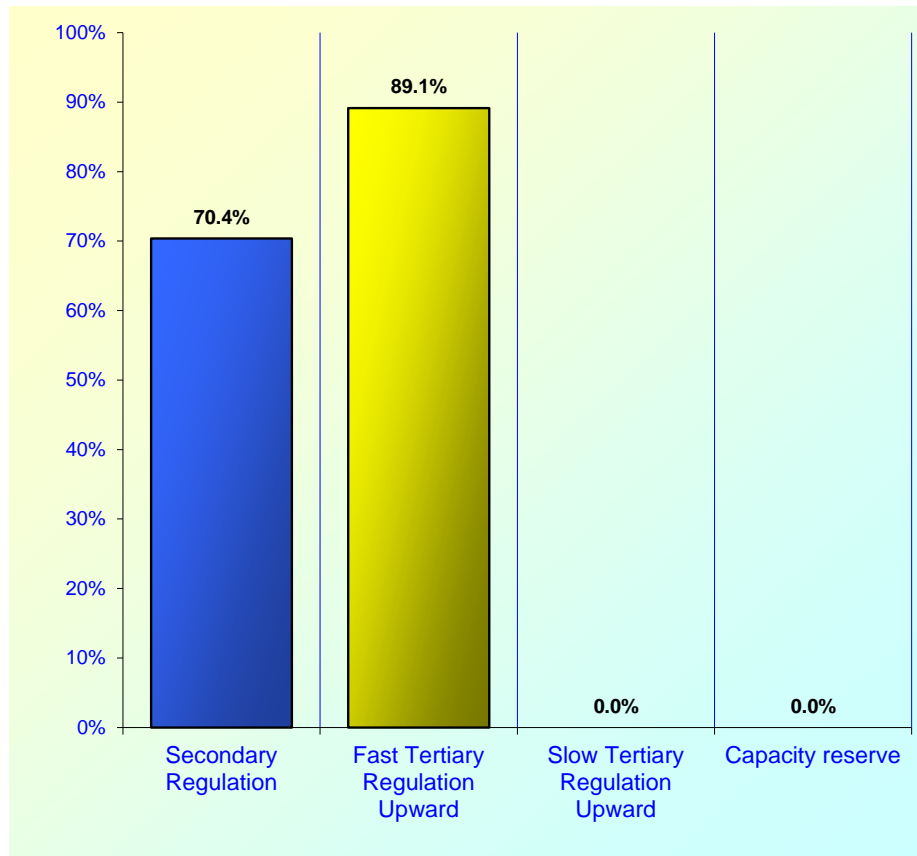


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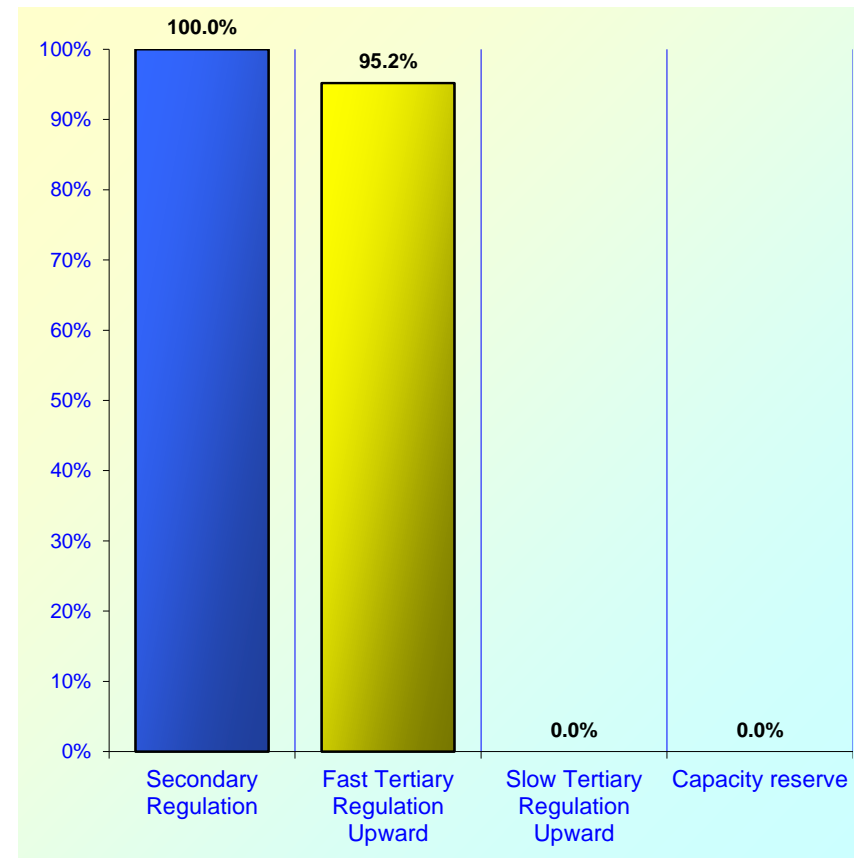
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Market share of the most significant Ancillary Services Market Participants

C1 (%) on type of regulation



C3 (%) on type of regulation



Public

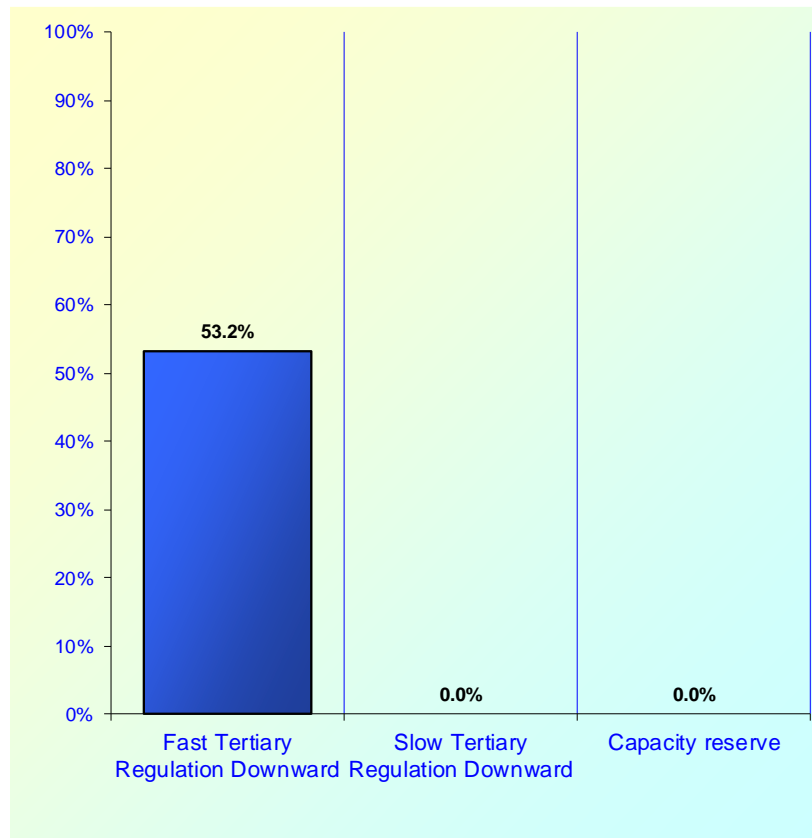
Ancillary Services



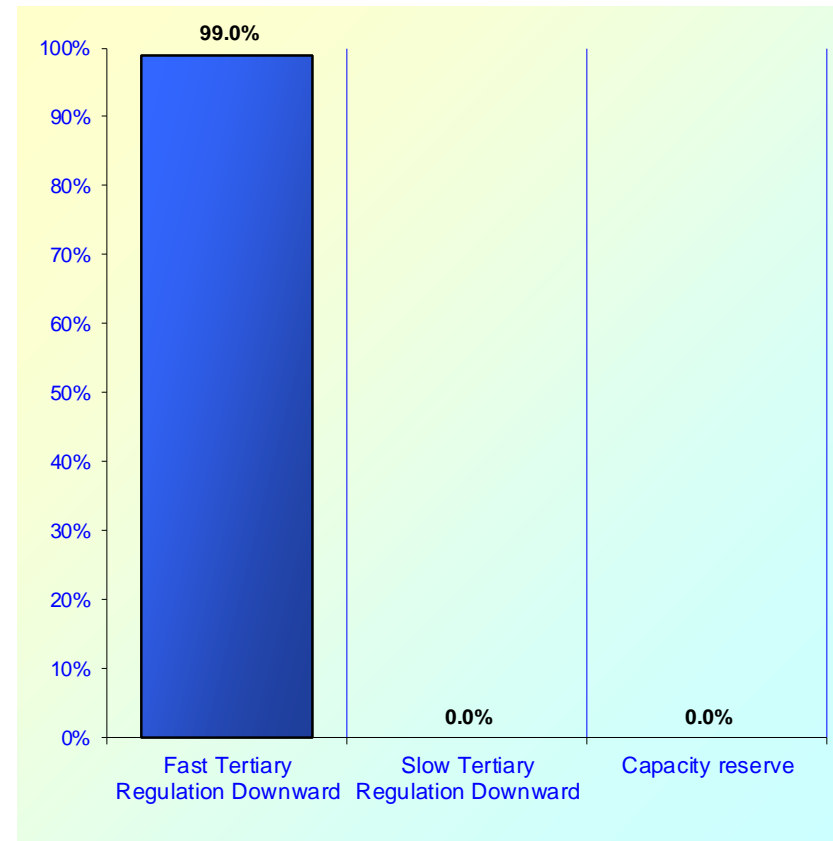
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Market share of the most significant Ancillary Services Market Participants

C1 (%) on type of regulation



C3 (%) on type of regulation



Public

Ancillary Services

Auction Price [lei/MWh] – Secondary Regulation



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Secondary Regulation Reserve	December 2021																										
	Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	
1	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
2	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	162.00	162.00
3	142.00	134.00	78.00	65.00	65.00	83.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	195.00	195.00
4	80.00	73.00	65.00	65.00	65.00	65.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	253.00	253.00
5	200.00	192.00	150.00	137.00	126.00	137.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	171.00	200.00
6	80.00	80.00	80.00	80.00	80.00	98.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	236.00	236.00
7	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	94.00	94.00
8	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	183.00	183.00
9	155.00	147.00	116.00	101.00	104.00	160.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	196.00	196.00
10	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	128.00	128.00
11	80.00	80.00	60.00	60.00	60.00	60.00	80.00	80.00	80.00	80.00	80.00	65.00	65.00	65.00	65.00	65.00	65.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	65.00	60.00	80.00
12	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	65.00	65.00	65.00	65.00	65.00	65.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	65.00	166.00
13	80.00	60.00	60.00	60.00	60.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	260.00	260.00
14	89.00	81.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	209.00	209.00
15	84.00	75.00	59.50	59.50	59.50	59.50	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	72.00	84.00
16	65.00	60.00	60.00	60.00	60.00	60.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	169.00	169.00
17	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
18	80.00	80.00	65.00	65.00	65.00	65.00	80.00	80.00	80.00	80.00	80.00	65.00	65.00	65.00	65.00	65.00	65.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	156.00	156.00
19	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	65.00	65.00	65.00	65.00	65.00	65.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
20	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
21	80.00	63.00	60.00	60.00	60.00	60.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	251.00	251.00
22	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
23	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
24	111.00	111.00	80.00	80.00	80.00	80.00	65.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	111.00
25	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	121.00	158.00	135.00	80.00	80.00	80.00	80.00	158.00
26	79.00	79.00	79.00	79.00	79.00	79.00	65.00	80.00	80.00	80.00	80.00	65.00	65.00	65.00	65.00	65.00	65.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
27	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
28	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
29	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
30	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	117.00	80.00	80.00	117.00
31	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	85.00	133.00	155.00	80.00	80.00	126.00	120.00	140.00	80.00	80.00	80.00	80.00	151.00	110.00	80.00	80.00	155.00	

Clearing Prices for auctions organized in December 2021 for Secondary Band Reserve were between 59.5 lei/hMW and 260 lei/hMW, in most hourly intervals (82.93%), the Clearing Price was 80 lei/hMW. The maximum price of 260 lei/hMW was registered in one of the hourly intervals (0.13%).

Auction Price [lei/MWh] additional organized tenders – Secondary Regulation

Secondary Regulation Reserve	December 2021																										
	Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	
14	42.00	0.00	-	-	-	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	-	42.00	
18	85.00	85.00	-	-	-	-	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	-	85.00
20	-	-	-	-	-	-	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	-	85.00

At the daily tenders organized in December 2021 for the Secondary Regulation Band, there were several hourly intervals in which was not purchased the entire required quantity. In order to cover the necessary, additional tender sessions were organized for the intervals that left uncovered on 14.12, 18.12 – 20.12, 22.12 and 23.12.2021, but only for the hourly intervals of 14.12, 18.12 and 20.12.2021, offers were received.

The clearing prices at the **additional** tenders organized in December 2021 for Secondary Regulation Band were between 42 lei/hMW and 85 lei/hMW, in most hourly intervals, the price being 85 lei/hMW.

Ancillary Services

Auction Price [lei/MWh] – Downward Fast Tertiary Regulation



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Fast Tertiary Reserve - Downward	December 2021																									
	Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
1	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00	15.00	17.00
2	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00
3	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
4	15.00	15.00	15.00	15.00	15.00	15.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00	15.00
5	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	12.00	12.00	12.00	12.00	15.00	15.00
6	12.00	15.00	15.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	15.00
7	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00
8	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00
9	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
10	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00
11	15.00	15.00	15.00	15.00	15.00	15.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	15.00
12	15.00	15.00	15.00	15.00	15.00	15.00	15.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	15.00	15.00	15.00	10.00	10.00	15.00	15.00	15.00	15.00	12.00	15.00
13	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
14	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
15	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00
16	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00
17	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
18	15.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	15.00	15.00
19	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
20	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
21	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00
22	12.00	15.00	15.00	15.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	15.00
23	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
24	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00
25	17.00	17.00	17.00	17.00	17.00	17.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	15.00	17.00
26	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	12.00	12.00	15.00	15.00	15.00	15.00	15.00	17.00
27	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
28	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
29	12.00	12.00	12.00	12.00	12.00	12.00	12.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	12.00
30	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	15.00
31	15.00	15.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	15.00	15.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	15.00

Clearing Prices for auctions organized in December 2021 for downward Fast Tertiary Reserve were between 10 lei/hMW and 17 lei/hMW, in most hourly intervals (47.04%), the Clearing Price was 10 lei/hMW. The maximum price of 17 lei/hMW was registered in 22 of the hourly intervals (2.96%).



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