

Annual Plan of Transmission System Operations

Belgrade, November 18th, 2019

Introduction

- In line with Grid Code EMS JSC Belgrade is drawing up Annual plan of transmission system operations based on the annual plan of balance groups' operations.
- Balance responsible parties are obliged to deliver the annual plan of their balance groups' operations to EMS JSC Belgrade not later than October 1st in current year for the following year. The annual plan comprises at a monthly level data stipulated in Article 6.4.2.6. of Grid Code.
- The annual plan of balance groups' operations shall be **in balance** and delivered **on Serbian language** on email address: gpr@ems.rs

Content of the annual plan of balance groups' operations at a monthly level

- 1) planned summarized load of active power ;
- 2) planned consumption of active power by certain facilities, at the EMS JSC Belgrade special request;
- 3) planned consumption of active power required for pumping;
- 4) planned generation of active power(at connection point) in the facilities connected to the transmission system;
- 5) planned summarized generation in the facilities connected to the distribution system;
- 6) planned active power exchange both in the control area of EMS JSC Belgrade and on its borders (import and export are disclosed separately);
- 7) the plans of available capacities for the provision of contracted ancillary services;
- 8) planned unavailability of generation units connected to the transmission system on a daily basis, with reasons for unavailability;
- 9) all plans referred to in indents 1-7 herein related to the hour of maximum load on a specific date (11th hour in 3rd Wednesday in a month).

Forms of the annual plan of balance groups' operations

- There are two forms:
 - Form 1 for balance groups without balance entities
 - Form 2 for balance groups with balance entities
- Both forms comprise of energy balance (BilEn in GWh) and power balance (BilSN in MW)

Form 1 of the annual plan of balance groups' operations for balance groups without balance entities 1/3

■ Energy balance 1/2

Ordinal number	Title	Amounts of active energy per month in [GWh]				
		I	II	III	IV	V
	Delivered to the transmission system EMS without KOSTT					
1	Total delivered to the transmission system (Production of power plants)	0.00	0.00	0.00	0.00	0.00
1.1	Total hydroelectric power plants					
1.2	Total thermal power plants					
1.11	Other power plants					
1.12	Taken from the distribution system					
	Taken from the transmission system EMS without KOSTT					
2	Total taken from the transmission system (Consumption)	0.00	0.00	0.00	0.00	0.00
2.1	Total delivery to distribution system operators					
2.2	Total delivery to customers in the transmission system					
2.3	Total for balance group purposes	0.00	0.00	0.00	0.00	0.00
2.4	Delivery for electricity generation purposes (Own use in power plants)	0.00	0.00	0.00	0.00	0.00
2.4.1	Thermal power plants					
2.4.5	Other power plants					
2.5	Delivery for pumping purposes (Used for pumping storage)	0.00	0.00	0.00	0.00	0.00
2.5.1	<i>Pumping (enter pump name)</i>					

Form 1 of the annual plan of balance groups' operations for balance groups without balance entities 2/3

■ Energy balance 2/2

Ordinal number	Title	Amounts of active energy per month in [GWh]				
		I	II	III	IV	V
	Delivery to other partners)					
3	Total delivery (Export of energy)	0.00	0.00	0.00	0.00	0.00
3.1	Delivery to other balance groups within EMS without KOSTT					
3.2	Delivery to KOSTT					
3.3	Delivery at EMS borders					
	Taken from other partners					
4	Total taken (Import of energy)	0.00	0.00	0.00	0.00	0.00
4.1	Taken from other balance groups within EMS without KOSTT					
4.2	Taken from KOSTT					
4.3	Taken at the EMS borders					
5	NET delivery to system+reception from others (+) taken from the system+delivery to others (-) EMS without KOSTT	0	0	0	0	0

Form 1 of the annual plan of balance groups' operations for balance groups without balance entities 3/3

■ Power balance

Ordinal number	Title	Nominal power at connection point [MW]	Monthly Available Power at connection point in [MW]			
			I	II	III	IV
	TAKEN FROM OTHER PARTNERS					
1	Total taken		0.00	0.00	0.00	0.00
1.1	Taken from other balance groups					
1.2	Taken from KOSTT					
2	AVAILABLE POWER - EMS without KOSTT		0.0	0.0	0.0	0.0
	CONSUMPTION POWER					
3	Monthly maximum power consumption		0.0	0.0	0.0	0.0
3.1	Monthly maximum power consumption in the distribution system					
3.2	Monthly maximum power consumption in the transmission system					
	DELIVERY TO OTHER PARTNERS					
4	Total delivery		0.00	0.00	0.00	0.00
4.1	Delivery to other balance groups					
4.2	Delivery to KOSTT					
5	TOTAL POWER NEEDS - EMS without KOSTT		0.0	0.0	0.0	0.0
6	SURPLUS (+) SHORTAGE (-) EMS without KOSTT		0.0	0.0	0.0	0.0

Form2 of the annual plan of balance groups' operations for balance groups with balance entities 1/2

■ Energy balance

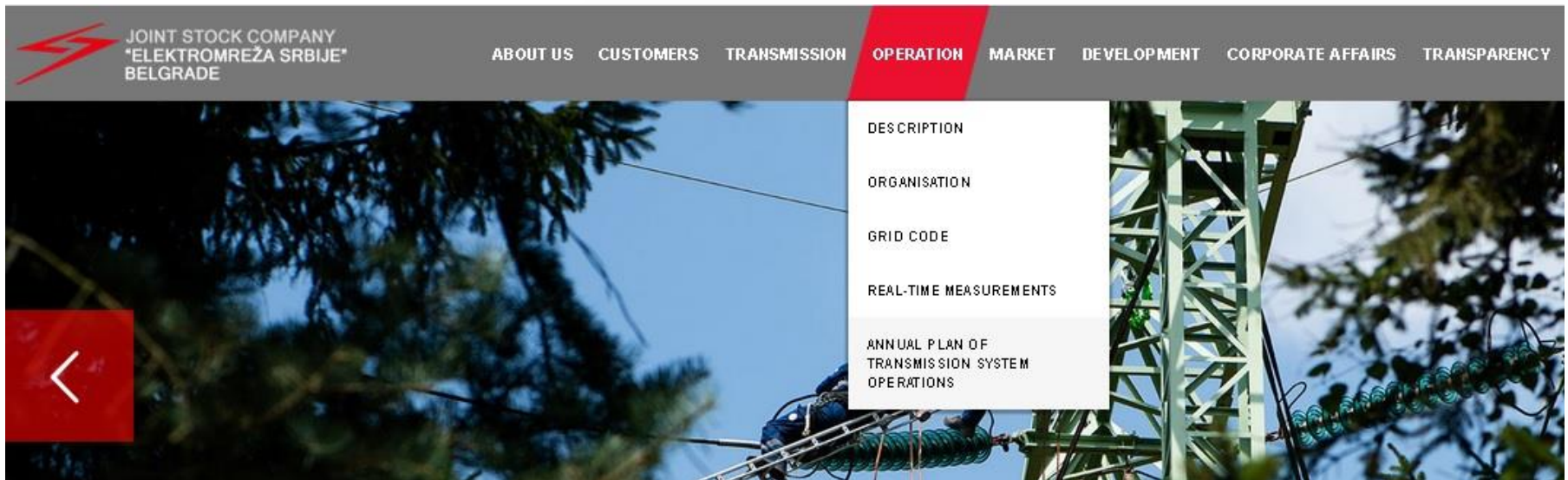
Редни број	Назив	Количине активне енергије по месецима у [GWh]				
		I	II	III	IV	V
	Предато у преносни систем EMC без KOSTT					
1	Укупно предато на систем	0.00	0.00	0.00	0.00	0.00
1.1	Укупно хидроелектране					
1.2	Укупно термоелектране					
1.3	Укупно ТЕ-ТО					
1.4	Укупно ветроелектране					
1.5	Укупно соларне електране					
1.6	Укупно електране на биомасу					
1.7	Укупно електране на биогаз					
1.8	Укупно електране на депонијски гас и гас из отпадних вода					
1.9	Укупно електране на геотермалну енергију					
1.10	Укупно електране на отпад					
1.11	Остале електране					
1.12	Преузето из дистрибутивног система					

Form2 of the annual plan of balance groups' operations for balance groups with balance entities 2/2

■ Power balance

Редни број	Назив	Номин. сн. на прагу преноса [MW]	Расположиве снаге на прагу преноса по месецима у [MW]			
			I	II	III	IV
	ХИДРОЕЛЕКТРАНЕ - EMC без KOSTT					
1	Укупно проточне ХЕ	0.0	0.0	0.0	0.0	0.0
1.1	<i>Унети назив проточне ХЕ1</i>					
1.2	<i>Унети назив проточне ХЕ2</i>					
1.3	<i>Унети назив проточне ХЕ3</i>					
1.4	<i>Унети назив проточне ХЕ4</i>					
1.5	<i>Унети назив проточне ХЕ5</i>					
1.6	<i>Унети назив проточне ХЕ6</i>					
2	Укупно акумулационе ХЕ	0.0	0.0	0.0	0.0	0.0
2.1	<i>Унети назив акумулационе ХЕ1</i>					
2.2	<i>Унети назив акумулационе ХЕ2</i>					
2.3	<i>Унети назив акумулационе ХЕ3</i>					
2.4	<i>Унети назив акумулационе ХЕ4</i>					
2.5	<i>Унети назив акумулационе ХЕ5</i>					
2.6	<i>Унети назив акумулационе ХЕ6</i>					
3	<i>Унети назив ПД1</i>	0.0	0.0	0.0	0.0	0.0
4	<i>Унети назив ПД2</i>	0.0	0.0	0.0	0.0	0.0

Where to find information? 1/2



Where to find information? 2/2

Forms are in Excel available on:

- ▶ on Serbian language: http://www.ems.rs/page.php?kat_id=773
- ▶ on English language: http://www.ems.rs/page.php?kat_id=774

Additional questions could be directed to Bilateral Market Department:

- ▶ Contact persons: Vladica Nikolić, Ivan Vasiljević
- ▶ Email address: gpr@ems.rs

Questions?



Thank you for your attention!