

# Project proposal

for incremental capacity between the entry-exit systems of Hungary ('HU') and Slovakia ('SK')

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## A. Description of the incremental capacity project, including cost estimation

The demand assessment report for incremental capacity between HU and SK, dated 21 October 2019, concludes that FGSZ and EUS conduct technical design studies for an incremental capacity project. The incremental capacity project aims at establishing increased firm technical capacity from HU to SK and SK to HU direction up to 600,000 Sm<sup>3</sup>/h (15°C), which equals 6,360,378 kWh/h (25°C/0°C).

The TSOs launched a public consultation about the draft project proposal between 13 January 2020 and 14 February 2020, but haven't received any comment.

### i. Parameters and components of a technical design of 600,000 Sm<sup>3</sup>/h (15°C)

Parameter	HU section	SK section
Technical capacity	600,000 Sm <sup>3</sup> /h (15°C)	600,000 Sm <sup>3</sup> /h (15°C) <sup>1</sup>
Capacity quality	Firm	Firm
Interconnection point	Exit / Entry Balassagyarmat/Velke Zlievce (HU>SK)	Entry / Exit Velke Zlievce/ Balassagyarmat (HU>SK)
Flow direction	HU>SK	HU>SK
Border delivery pressure	67/53 barg (minimum)*	67/53 barg (minimum)*
Above ground installations	Two compressor units at Szada (2x8 MW electrically driven), change of bundles of existing CS units	-
	Gödöllő node modification connection with existing pipeline with control valve	-
	Enabler project: a new CS at Dorog ('CS') (3x5.7 MW)	-
Total cost estimation	mn HUF 46,159; (2020 value)	-
Cost estimation related HU>SK	mn HUF 46,159 (2020 value)	-
Cost estimation accuracy	+/- 10%	

\* min 67 barg in HU>SK direction, applying Pressure Management Agreement

## B. Offer levels for bundled capacity products at the interconnection point

Based on the above description of the incremental capacity project, and setting aside an amount of 10% of the incremental technical capacity pursuant to Article 6(8) of the NC CAM, and applying a gross calorific value of 11.188 kWh/Nm<sup>3</sup> (0 °C) the offer levels for bundled capacity products at the interconnection point are as follows:

Gas year	Offer level in the direction from HU to SK for the technical design of 600,000 Sm <sup>3</sup> /h (15°C) (kWh/h/year rounded to integers)
2024/25	5,724,340
2025/26	5,512,328
2026/27	5,512,328
2027/28	5,512,328
2028/29	5,512,328
2029/30	5,512,328
2030/31	5,512,328
2031/32	5,512,328
2032/33	5,512,328
2033/34	5,512,328
2034/35	5,512,328
2035/36	5,512,328
2036/37	5,512,328
2037/38	5,512,328
2038/39	5,512,328

FGSZ and EUS did not receive conditional demand indications.

## C. Provisional timelines of the incremental capacity project

Milestone	Planned date of FGSZ	Planned date of EUS
Auctions & economic tests <sup>1</sup>	July 2020	July 2020
Final investment decision	3 <sup>rd</sup> Quarter 2020	
Engineering and Construction start	2 <sup>nd</sup> Quarter 2021	
Construction end	3 <sup>rd</sup> Quarter 2024	
Commercial start-up	01.10.2024	01.10.2024

<sup>1</sup> This milestone is viable only, if the concerned national regulatory authorities publish a coordinated and positive decision on the project proposal by 05 May 2020 at the latest.

#### **D. General rules and conditions that a network user must accept to participate in the binding capacity allocation phase of the incremental capacity process and access the contracted capacity**

EUS's general rules and conditions that a network user must accept to participate and access capacity in the binding capacity allocation phase of the incremental capacity process are set out in Operational Order of EUS accessible [here](#).

With regard to FGSZ, the Network User shall conclude a Network Usage Framework Contract according to the template in Annex 4.1 to the FGSZ Business Rules. By concluding the Network Usage Framework Contract, the Network User accepts the General Conditions of Contract regarding Network usage Contracts (GTC 4.d) which forms Annex to it. The special conditions for the incremental capacity procedure conducted under the present Project Proposal, other than the GTC 4.d, are set out in the Rulebook approved by the Hungarian Energy and Public Utility Regulatory Authority (MEKH). The Network User shall conclude a Capacity Booking Contract for Incremental Capacity with FGSZ, attached in Annex 3 to the Rulebook, which is different from the sample contract standardised for the GTC 4.d.

The rules and conditions governing participation in the binding capacity allocation phase, access to capacity and the use of capacity, including collaterals to be provided by Network Users, as well as how possible delays in the provision of capacity or the event of disruption to the project are dealt with contractually, are governed by the aforementioned documents.

Due to the emergency situation declared by Government Decree 40/2020 (III.11.) and the pandemic situation the resulting uncertain economic environment, FGSZ excludes its liability for damages resulting from the delayed implementation, if – because of the same reason – due to the possible supplier and/or construction delay, the incremental capacity is not available by the scheduled commissioning date (1 October 2024).

FGSZ's Business Rules and annexes (in Hungarian and English) are available [here](#). The Rulebook and the sample Capacity Booking Contract shall be published on FGSZ's website two months before the incremental capacity is offered for auction in accordance with Article 28 (3) of the CAM NC.

The Rulebook related to the binding capacity allocation phase can be found in Annex 3.

#### **E. Level of user commitments as an estimate of the f-factor, and the parameters of economic test**

The level of user commitments, expressed as EUS's estimate of the f-factor is 1.0.

The level of user commitments, expressed as FGSZ' estimate of the f-factor is 1.0.

Parameters according to Article 22 (1) of the NC CAM -Project proposal doesn't contain- are fixed by FGSZ in the Rulebook.

The details of estimated CAPEXes and f-factor of project parts of HU section can be found in Annex 1.

#### **F. Additional demand indications**

EUS did not receive any additional demand indications in accordance with Article 26(7) of the NC CAM.

FGSZ did not receive any additional demand indications in accordance with Article 26(7) of the NC CAM.

Reference is made to the demand assessment report for incremental capacity between HU and SK, dated 21 October 2019.

#### **G. Other condition related to HU section**

- a) the technical content of the developments to be implemented consists of the following elements (Szada CS 2x8 MW electric driven compressor unit expansion, replacement of 2 existing gas turbine units compressor bundle units, Gödöllő node connection, and background developments with Dorog CS 3x5.7 MW units. The installation of electric driven compressors is justified mainly by the reduction of noise pollution, but also supports FGSZ's efforts to reduce CO<sub>2</sub> emissions, but the installation and operation of gas turbine and electric driven compressors at a site means more investment and operational complexity and might result more risk.
- b) both MEKH and the Supervisory Board of FGSZ Ltd. approve the binding capacity allocation procedure that satisfies the system of conditions defined above (the applied procedure is the auction for incremental capacity on the Hungarian-Slovak border);
- c) during the applied capacity allocation procedure, the system users shall conclude capacity contracts within the framework of the Incremental Capacity Procedure in accordance with the provisions of the approved procedure, on the basis of which the final investment decision can be made.

Annexes:

Annex 1

Details of CAPEX and f factor

CAPEX (MHUF)	Total CAPEX demand with 10% contingency	f factor	CAPEX related HU>SK delivery with 10% contingency
Exchange rate related to CAPEX estimation (HUF/EUR)	HU>SK delivery		HU>SK delivery
HU>SK capacity	600 000 m3/h		600 000 m3/h
Border pressure	53>67*		53>67*
<b>Direct development</b>			
Szada CS enlargement 2x8,0 MW electric driven units + change of 2 bundles on existing units	25 408,2	1,00	25 408,2
Gödöllő node connection	1 551,1	1,00	1 551,1
<b>Total 1</b>	<b>26 959,4</b>		
<b>Enabler development</b>			
Dorog CS	19 199,4	1,00	19 199,4
<b>Total 2</b>	<b>19 199,4</b>		
		f average	1,00
<b>Total 1+2 with 10% contingency (MHUF)</b>	<b>46 158,8</b>		<b>46 158,8</b>
Exchange rate HUF/EUR	350		350
<b>Total 1+2 with 10% contingency (MEUR)</b>	<b>131,882</b>		<b>131,882</b>
* min. 67 barg HU>SK direction with pressure Management Agreement			

Annex 2:

Rulebook for allocation procedure of incremental capacity