

**Memorandum of understanding on the implementation of the day-ahead congestion management target model in the CEE REGION in conjunction with other European Regions**

The Transmission System Operators (TSOs),

50Hertz Transmission GmbH

ČEPS, a.s.

ELES, d.o.o., sistemski operater prenosnega elektroenergetskega omrežja

MAVIR Magyar Villamosenergia-ipari Átviteli Rendszerirányító Zártkörűen Működő Részvénytársaság

PSE S.A.

Slovenská elektrizačná prenosová sústava, a.s.

TenneT TSO GmbH

Austrian Power Grid AG

the Power Exchanges/market operators (PXs),

BSP Regionalna Energetska Borza d. o. o.

EPEX Spot SE

EXAA Energy Exchange Austria

HUPX Magyar Szervezett Villamosenergia-piac Zártkörűen Működő Részvénytársaság

OTE, a.s.

OKTE, a.s.

TGE Towarowa Giełda Energii S.A.

the National Regulatory Authorities (NRAs),

Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen

Energie-Control Austria

Energetický regulační úřad

Javna agencija Republike Slovenije za energijo

Magyar Energetikai és Közmű-szabályozási Hivatal

Urząd Regulacji Energetyki

Úrad pre reguláciu sieťových odvetví

of the Central Eastern European (CEE) region (Austria, Czech Republic, Germany, Hungary, Poland, Slovak Republic, Slovenia)

and the Agency for the Cooperation of Energy Regulators (ACER),

hereinafter referred to as the "Signatories",

## Considering

1. cross-border grid capacities in the region in many cases as not sufficient to allow all cross-border trading interests to be realized. Limitation of cross border exchange of electricity leads to market regions with partly converging but still different prices;
2. security and reliability of supply as a key issue for the successful operation of the grid, particularly with increased volatile generation resulting in flows and operational situations which are difficult to predict;
3. secure grid operation which should not be endangered considering physical flows stemming from different commercial transactions;
4. the overall aim to overcome market segmentation and to create an Internal Energy Market (IEM) to achieve efficiency gains, competitive prices and higher standards of services;
5. the efforts of the TSOs to increase the cross-border transmission capacities allocated for trading purposes in the region while ensuring security of supply by improving the utilisation of existing and by constructing new lines;
6. the efforts of the PXs to provide reliable and secure platforms to the market participants to ensure the transparent and competitive formation of the day-ahead market clearing prices;
7. the possibility of interim coupling projects which move towards the target model which shall contribute to and not endanger the progress of the overall CEE project;
8. that the Network Code on Capacity Allocation and Congestion Management (CACM NC) has been developed by ENTSO-E and recommended by ACER to the European Commission for adoption defining the target model for the day-ahead and intra-day timeframes.
9. that other European regions are also aiming for the implementation of the single European price coupling.

## Reaffirming

10. the legal and regulatory framework of interim regional integration of electricity markets towards an European electricity market in compliance with Regulation 714/2009, Framework Guidelines and Network Codes and the target model on congestion management defined there;
11. the Joint Declaration from 26 March 2012, agreed upon the National Regulatory Authorities (NRAs) from Central-Eastern Europe (CEE) and the Agency for the Cooperation of Energy Regulators (ACER);
12. that the Target Model for the day-ahead electricity market in the CEE Region is Flow-Based Market Coupling (FB MC, i.e. Flow-Based Capacity Calculation and implicit allocation with a single NWE-CEE day-ahead price coupling in one single step based on the Price Coupling of Regions "PCR" solution);
13. that a well-designed flow-based method for capacity calculation and allocation shall be developed for the CEE Region; able to fulfil all the necessary requirements defined in the cross-

regional roadmap for capacity calculation, FG CACM and the associated CACM NC and to ensure a positive benefit for each individual CEE country;

14. that a cooperation with CWE/NWE regions (NRAs, TSOs and PXs) is essential to ensure compatibility of the CEE and CWE flow-based methods as part of a common Flow-based market coupling based on the PCR solution and to ensure a smooth extension of the single price coupling to CEE region.

## **Agreeing**

15. on the establishment of a common project in order to develop, implement and to start the daily operation of the FB MC to ensure a better utilization of available cross-border capacities and at the same time to maintain the same level of security of operation;
16. that any update of the project roadmap resulting in a shift of defined milestones shall be consulted with NRAs;
17. on the finalization of the project roadmap;
18. that an efficient project management requires a clear demonstrably independent, non-discriminatory and transparent governance structure of the project which shall be set up appropriately by the involved entities considering the needed coordination with other regions.
19. that TSOs and PXs will make effort to provide and use all needed, reasonable and possible human and technical resources at their disposal in order to reach a commonly expressed goals of this MoU;
20. that all individual costs of each project participant (e.g. own personnel and travel costs, costs for adaptation of its own IT system, costs for the data connection, etc.) shall be borne by each project participant itself unless the contribution of the respective party is considered as common costs;
21. that sharing and reimbursement of common costs (including project costs) shall be defined and agreed upon separately at the establishment of the project

## **Express**

22. in order to reach the common goal to develop, implement and start a FB MC as outlined above according to the project roadmap in the quality as foreseen in the FG CACM and the associated draft NC as well as Joint Declaration the willingness to act in good faith and adopt a fair and loyal treatment towards each other, bearing in mind the multilateral spirit of the cooperation and the ambition of
  - a. the TSOs and PXs of the CEE region to be responsible and carry out an efficient project planning and analysis, to establish an efficient and adequate project structure working on the development and implementation of NWE-CEE FB MC, making use of existing structures as much as possible and defining new structures (e.g. pre- and post- coupling procedures) where needed as well as to conclude as soon as possible (a binding framework project agreement including the firm commitment of the TSOs and PXs to go-live with common FB MC if the elaborated solution achieves the needed quality /beforehand agreed acceptance criteria are fulfilled/ in order to allow for a swift start and timely implementation of the common FB MC project and to actively support the cooperation and communication with the NWE region as this is a key element for the successful implementation of common FB MC.
  - b. the NRAs of the CEE region and ACER to provide support to the needed, reasonable and possible extent, to supervise the Project and to monitor and govern the ongoing technical

development at the regulatory level. The NRAs of the CEE region and ACER commit themselves to do all in their powers to support TSOs and PXs to efficiently and timely achieve the goal defined above and elaborated in the project roadmap and relevant documents in particular by actively supporting the cooperation and communication with the NWE region on regulatory level.

23. This MoU constitutes a non-binding statement of the intentions of the Signatories.

January 2014



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between

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and the Agency for the Cooperation of Energy Regulators (ACER)

Dated: January 2014

signed by

50Hertz Transmission GmbH



Boris Schucht

CEO

on 12. 02. 14



Dirk Biermann

CMO

on 12. 02. 14

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Dated: January 2014

signed by

**ČEPS, a.s.**

**Elektrárenská 774/2**

**101 52 Praha 10**

**Czech Republic**



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Vladimír Tošovský

Chairman of the Board

on 31 January 2014



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Zbyněk Boldiš

Member of the Board

on 31 January 2014

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Dated: January 2014

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ELES, d.o.o., sistemski operater prenosnega elektroenergetskega omrežja



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Vitoslav Türk, M.Sc

General coordinator of international affairs



on February 4th



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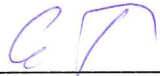
Dated: January 2014

signed by

MAVIR

Magyar Villamosenergia-ipari Átviteli Rendszerirányító Zártkörűen Működő Részvénytársaság

1.1 MAVIR  
Magyar Villamosenergia-ipari Átviteli Rendszerirányító  
Zártkörűen Működő Részvénytársaság



Zoltán Gyulay dr.

Director of Market Operations

on 12 February 2014



Réka Sárközi

Head of Market Development Department

on 12 February 2014

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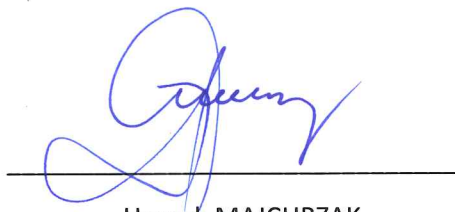
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Dated: January 2014

signed by

Polskie Sieci Elektroenergetyczne S.A.



Henryk MAJCHRZAK  
Chairman of the Board



Cezary SZWED  
Member of the Board

on ... 14.02.2014

on ... 14.02.2014

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Dated: January 2014

signed by

Slovenská elektrizačná prenosová sústava, a. s.

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Miroslav Stejskal

Chairman of the Board of Directors

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Michal Pokorný

Vice-Chairman of the Board of Directors

on 20.FEB. 2014

on 20.FEB. 2014

**Slovenská elektrizačná  
prenosová sústava, a.s.**

Mlynské nivy 89/A  
824 84 Bratislava 26

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Dated: January 2014

signed by

TenneT TSO GmbH



\_\_\_\_\_  
Martin Fuchs

Chief Executive Officer

on 04.02.2014

ppa. \_\_\_\_\_



Thorsten Dietz

Senior Manager Customers & Markets

on 04.02.2014



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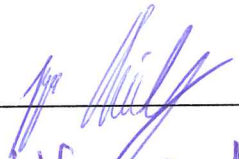
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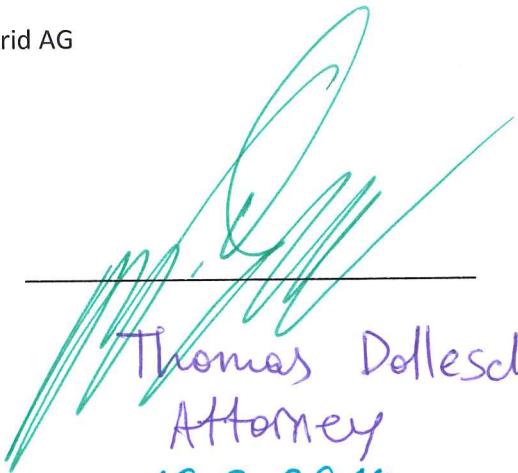
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Dated: January 2014

signed by

Austrian Power Grid AG

  
\_\_\_\_\_  
Wolfgang Müller  
Attorney  
on 18.2.2014

  
\_\_\_\_\_  
Thomas Dolleschal  
Attorney  
on 18.2.2014

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Dated: January 2014

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**BSP Regionalna Energetska Borza d.o.o.**



---

Anže Predovnik

General Manager

14. February 2014

WP



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and the Agency for the Cooperation of Energy Regulators (ACER)

Dated: January 2014

signed by

EPEX SPOT SE



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Jean-François Conil-Lacoste  
Chairman of the Management Board

on 13/02/2014

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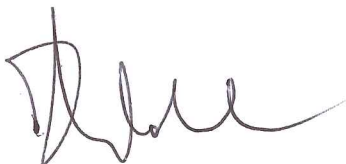
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[EXAA Abwicklungsstelle für Energieprodukte AG]

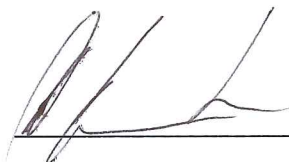


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[Jürgen Wahl]

[Joint CEO]

on [07-02-2014]



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[Rudolf Schneider]

[Joint CEO]

on [07-02-2014]

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Dated: January 2014

signed by

HUPX

Magyar Szervezett Villamosenergia-piac Zártkörűen Működő Részvénytársaság

György Istvánffy

Head of Operations and Market Development

on 19 February 2014

Júlia Lobenwein

Head of Sales

on 19 February 2014

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and the Agency for the Cooperation of Energy Regulators (ACER)

Dated: January 2014

signed by

OTE, a.s.



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Ing. Jiří Šťastný  
Chairman of the Board

on 17<sup>th</sup> February 2014



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Ing. Igor Chemišinec  
Member of the Board

on 17<sup>th</sup> February 2014

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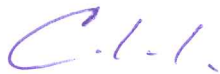
Dated: January 2014

signed by

**OKTE, a.s.**

a company founded and duly existing in accordance with the laws of the Slovak Republic and registered in the Company Register administrated by the District Court in Bratislava I, Section Sa, File 5087/B with registered office located at Mlynské nivy 59/A, 82109 Bratislava, the Slovak Republic; Registration Number of the Company (IČ): 45 687 862.

OKTE, a.s.  
Mlynské nivy 59/A  
821 09 Bratislava  
-4-



Michal Cabala

Chairman of the Board of Directors

on 5<sup>th</sup> January 2014



Milan Lipovský

Member of the Board of Directors

on 5<sup>th</sup> January 2014

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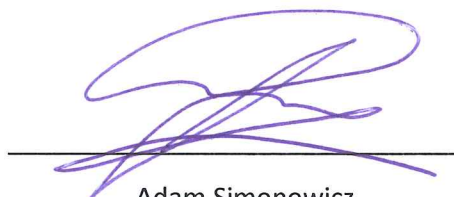
signed by

**Towarowa Giełda Energii S.A.**



Ireneusz Łazor  
President and CEO

on February 3<sup>rd</sup>, 2014



Adam Simonowicz  
Vice President

on February 3<sup>rd</sup>, 2014

**TOWAROWA  
GIEŁDA ENERGII SA**  
02-822 Warszawa  
ul. Politechniki 23, bud. H  
NIP: 527-22-66-714



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Dated: January 2014

signed by

Bundesnetzagentur  
für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen  
(Bundesnetzagentur)



Frau Dr. Annegret Groebel

Head of Department

International Relations / Postal Regulation

on 17. February 2014

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and the Agency for the Cooperation of Energy Regulators (ACER)

Dated: January 2014

signed by

Energie-Control Austria



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Walter Boltz  
Executive Director

on 30 January 2014



---

Martin Graf  
Executive Director

on 30 January 2014

**Energie-Control Austria**  
Vorstand  
Rudolfsplatz 13a  
A - 1010 Wien  
Tel.: +43 1 24 7 24 - 0  
Fax: +43 1 24 7 24 - 900

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Dated: January 2014

signed by

Energetický regulační úřad



---

Alena Vitásková

Chairwoman

on 11 February 2014

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Dated: January 2014

signed by



Javna agencija RS za energijo

**Energy Agency of the Republic of Slovenia**



Irena Praček

Director

On 10<sup>th</sup> February 2014

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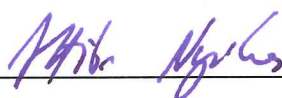
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Dated: January 2014

signed by

Hungarian Energy and Public Utility Regulatory Authority



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Attila Nyikos dr.

Vice President for International Affairs

on 31 January 2014

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Urząd Regulacji Energetyki



Maciej Bando

p.o. Prezesa Urzędu Regulacji Energetyki

on

14/02/2014



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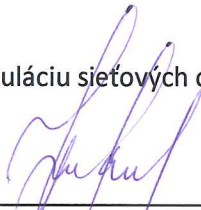
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Dated: January 2014

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Úrad pre reguláciu sieťových odvetví



---

Jozef Holjenčík

Chairman

18 February 2014

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Dated: January 2014

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Agency for the Cooperation of Energy Regulators (ACER)



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Alberto Pototschnig

Director

on 4 February 2014