



ANTIMONOPOLY COMMITTEE OF UKRAINE

on the results of comprehensive research of electricity and thermal coal markets

Kyiv, June 1, 2016



PURPOSE OF THE RESEARCH

- 1. full and objective analysis of the functioning of electricity and thermal coal markets in Ukraine;
- 2. analysis of competition in the relevant markets;
- 3. identification of the main factors preventing the development of competition and creating preconditions for violation of legislation on protection of economic competition;
- 4. development of proposals aimed at solving the issues and removing factors preventing the development of competition;
- development of proposals for bringing the conditions of electricity markets functioning in line with the Treaty establishing the Energy Community and Association Agreement between Ukraine and the EU as soon as possible.



SIGNIFICANT NUMBER OF COMMENTS WAS RECEIVED TO PRELIMINARY CONCLUSIONS

MAIN COMMENTS WERE RELATED TO:

- 1. Market boundaries (product, territorial and time boundaries)
- 2. Market participants
- 3. Status of certain participants in the market and their market power
- 4. Competition law enforcement practice (including EU and USA practice)

INFORMATION PROVIDED BY PARTICIPANTS WAS ANALYZED AND TAKEN INTO CONSIDERATION DURING THE PREPARATION OF THE FINAL REPORT



STRUCTURE OF REPORT ON THE RESULTS OF COMPREHENSIVE RESEARCH OF ELECTRICITY AND THERMAL COAL MARKETS

INTRODUCTION

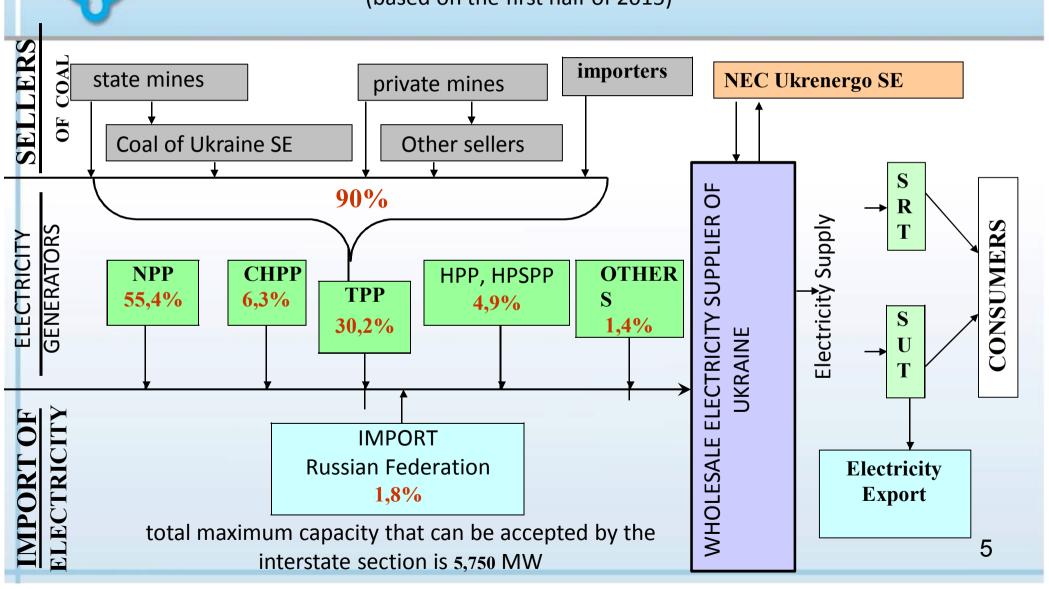
- 1 REGULATORY FRAMEWORK OF ELECTRICITY INDUSTRY FUNCTIONING AND STATE REGULATION OF ELECTRICITY INDUSTRY.
- 1.1 Legislation in the field of electricity generation, supply, transmission and distribution
- 1.2 The main principles of operation of the Wholesale Electricity Market of Ukraine
- 2 COMPETITION IN THE WEM MARKETS, ISSUES AND SOLUTIONS.
- 2.1 Electricity generation market
- 2.2 Wholesale electricity purchase market and the factors preventing the development of competition
- 2.3 Electricity transmission market issues and solutions
- 3 ELECTRICITY DISTRIBUTION. ACTUAL STATE OF COMPETITION. ISSUES AND SOLUTIONS.
- 4 CONNECTION TO THE ELECTRIC NETWORKS. ACTUAL STATE OF COMPETITION. ISSUES AND SOLUTIONS.
- 5 STATE AID TO BUSINESS ENTITIES IN THE ENERGY SECTOR.

CONCLUSIONS. PROPOSALS.



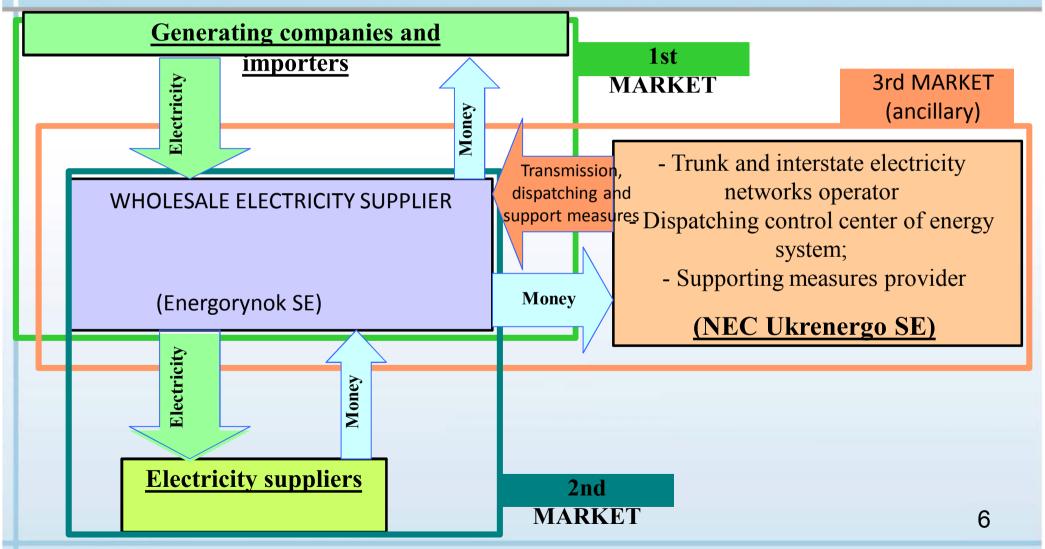
The existing model of the Wholesale Electricity Market and thermal coal market

(based on the first half of 2015)





SEPARATE MARKETS IN THE WEM





MARKETS CHARACTERISTICS

MARKET NAME	Sellers	Purchasers
The national market of electricity, which is acquired by Energorynok SE to conduct the wholesale supply of electricity (generation market)	NAEC Energoatom SE DTEK Group, Ukrhydroenergo PJSC	Energorynok SE
The national market of electricity, which is sold by Energorynok SE to conduct the wholesale supply of electricity (wholesale market).	Energorynok SE	-
The national market of electricity transmission via trunk and interstate electric networks, including central dispatching control of the UES of Ukraine and provision of supporting measures purchased by Energorynok SE to conduct the wholesale supply of electricity (electricity transmission market).	NEC Ukrenergo SE	Energorynok SE



GENERATION MARKET

PRODUCT- electricity
TERRITORIAL BOUNDARIES - the territory of Ukraine
TIME BOUNDARIES - calendar year (research period - 2013, 2014 and the first half of 2015)

The following business entities had structural features of the monopoly (dominant) position:

SELLERS: NAEC Energoatom SE, DTEK Group, Ukrhydroenergo PJSC

PURCHASER: Energorynok SE

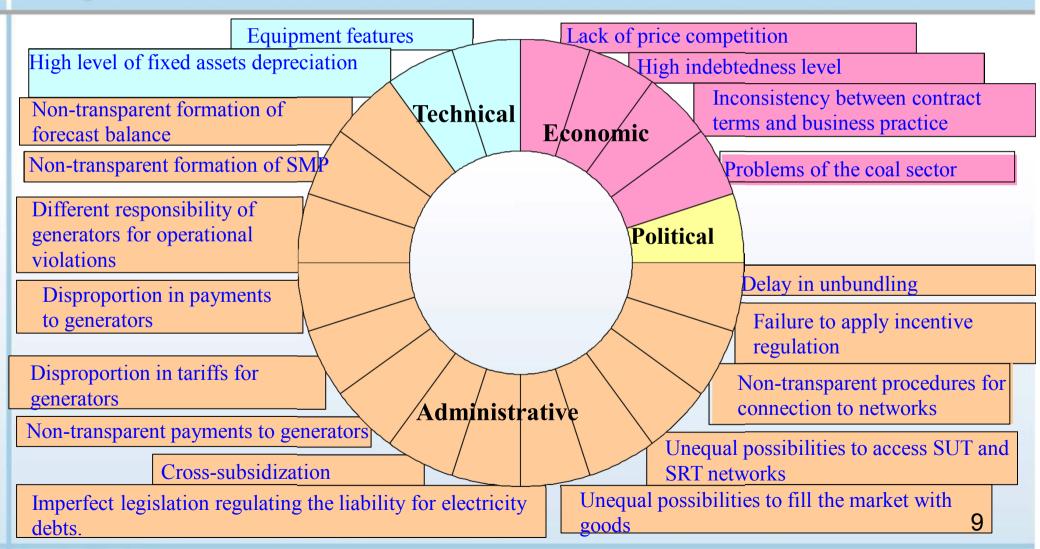




from 2013 to first half of 2015 increased by 28% and amounted to 3718.04

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ECONOMIC

LACK OF PRICE COMPETITION

HIGH INDEBTEDNESS LEVEL INCONSISTENCY
BETWEEN CONTRACT
TERMS AND BUSINESS
PRACTICE

PROBLEMS OF THE COAL SECTOR

GENERATI ON MARKET ≈ 70% - tariff preestablished by the NEURC

≈ UAH 3 billion* debt to the generation NO
support services market
(and the market of
bilateral contracts, and
balancing market)

of state mines

State aid

No thermal coal market

WHOLESAL E MARKET

price competition between SUT and SRT is absent ≈ UAH 2 billion*

ABSENCE of possibility fo

of possibility for end consumer to influence the price and volume

TRANSMI SSION MARKET

Tariff is set by the NEURC

≈ UAH 134 million*
debt to NEC Ukrenergo
SE

* - for 2016 as of May 16, 2016 ** - for 4 months of 2016 10



INCOMPLETE REGULATION OF NATURAL MONOPOLIES

DELAY IN UNBUNDLING

Distorts competition in the adjacent markets

NON-TRANSPARENT PROCEDURES FOR CONNECTION TO NETWORK

Inconsistency of time limits stipulated by the legislation regulating electricity and urban planning sector

Inability to refuse from standard connection services

Non-transparency of selection of design and construction and installation works executors

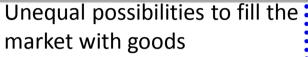
Unsolved issue of payment for specifications and design and estimate documentation

FAILURE TO APPLY INCENTIVE REGULATION

No incentives for:

- Saving resources
- Introduction of new technologies
 - Improving the quality of services





No procedure for formation of SMP restriction (Kneurc)

Non-transparency of payments (advance and additional payments), including in part of defining the amount

Different liability for the operational violation:

for TPP - payments are reduced, but not for other generators

Disproportion of 100% payment payment for "green" energy to other generators - payment may be lower

Increasing tariffs disproportion:

- of lowest (NPP) and highest ("green") tariffs

- TPP and CHPP tariffs



Imperfect legislation regulating the

liability for electricity debts.

Cross-subsidization and application of subsidy certificates

≈ 30% - subsidies in the WEM

Unequal possibilities to access the networks of SUT and SRT

the share of SUT in the WEM reduced twice in 2015

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TECHNICAL

EQUIPMENT FEATURES

Different flexibility of different types of generating units

Limitations of:

import - due networks' installed capacity generation - due to power plants' capacity and networks' installed capacity

Limited access to primary energy source

TRANSMIS SION MARKET

MARKET

GENERATI

DISTRIBUTI ON SECTOR Limited installed capacity of interstate, trunk and distribution networks

HIGH LEVEL OF FIXED ASSETS DEPRECIATION

*83% of TPP and CHPP units - worn out and outdated

*60% of NPP units require lifetime extension in the nearest 10 years

Flexible and regulating capacitiesoutdated and deficient*

>25 years in operation - 90% of transmission lines and 55% of substations

>40 years in operation - 56 % of transmission lines and 17 % of substations

12.1%** - average costs in networks

18%** - costs in networks of individual companies

* - from the website of NEC Ukrenergo SE

** - from the website of the NEURC

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INFLUENCE OF THE STATE

CONSISTS OF:

- regulation of the market resource filling with goods
- pricing regulation
- legal regulation and establishing the rules for market participants

LACK OF TRANSPARENCY

MAY PREVENT THE DEVELOPMENT OF COMPETITION, AND, THEREFORE, HIGH ECONOMIC POTENTIAL OF MARKET PARTICIPANTS



UKRAINE'S INTERNATIONAL OBLIGATIONS REGARDING STATE AID TO BUSINESS ENTITIES IN THE ENERGY SECTOR

The Treaty establishing the Energy Community

(Protocol on Ukraine's accession to the Treaty entered into force for Ukraine on February 1, 2011).

Articles 6, 18(c) and 18(2) of the Treaty and Annex III to the Treaty provide for the state support on the basis of TFEU

Articles 262-267 of the Ukraine-EU Association Agreement

Schemes and measures for the state aid must be aligned with the EU rules in 2022

The Law of Ukraine No. 1555-VII

"On State Aid to Business Entities"



State aid to business entities in Ukraine in the electricity sector in the context of the EU legislation

State aid in the EU electricity sector is provided to ensure:

- reliable energy supply at reasonable prices for business entities and consumers
- environmental protection and actions against climate change

STATE SUPPORT TO BUSINESS ENTITIES IN UKRAINE IN THE COAL MINING INDUSTRY SECTOR IN THE CONTEXT OF THE EU LEGISLATION

Compatibility of state aid in the coal mining industry in the EU:

- State aid for finance recovery and restructuring in the coal mining sector is prohibited
- Other special rules, in particular, regarding aid for research, development and innovation, aid for environmental protection, and aid for training **still apply**



Example: state support to coal extraction companies of Ukraine

Evaluation criteria	Problem
Purpose and form of state aid	State aid is provided to support loss-making enterprises; for construction of coal and turf production companies; re-equipment
State aid recipients	There are no clear criteria for selecting recipients. State enterprises are preferential.
Allowed expenses	Should be limited only to costs associated with shut down and liquidation of mines.



Nota Bene

The Law of Ukraine
"On State Aid to Business Entities" No. 1555-VII takes effect on
August 2, 2017.

State aid providers will be obliged to inform the Antimonopoly Committee of Ukraine of state aid as of August 2, 2017.

Such aid should be aligned with the Law no later than August 2, 2022.

Should you have questions with regards to application of the Law of Ukraine "On State Aid to Business Entities", please contact the department of state aid monitoring of the Antimonopoly Committee of Ukraine:

<u>dudnyk@amcu.gov.ua</u>; <u>culic@amcu.gov.ua</u> (044) 251-62-25 (*64-30); (044) 251-62-25 (*62-96)



- 1. Adopt statutory regulations determining the procedure and/or method of calculation and/or the formation of SMP limitation by the NEURC.
- 2. Take measures to introduce price competition between electricity generators and importers
- 3. Develop and adopt regulations, which would define transparent and non-discriminatory procedure and/or methods of calculation of advance payments for electricity generators, including payments at the account of loans.
- 4. Introduce ancillary services sale mechanisms (procedure for ancillary services purchase and relevant agreements).
- 5. Take measures for cancellation (decrease) of additional payments to generators working through bidding.



- 6. Take measures to improve the settlements at the WEM of Ukraine between:
 - electricity generators and Energorynok SE,
 - Energorynok SE and SRT,
 - SRT and consumers.
- 7. Take measures for creation of equal conditions for generators and importers of electricity to ensure the possibility of filling the market with goods
- 8. Develop and adopt regulations for establishing transparent and non-discriminatory formation procedure for:
 - 1) The electricity forecast balance of the UES of Ukraine (annual/quarterly/monthly).
 - 2) The forecast balance of electricity, fuel and the costs of generating companies' TPP.

9. Take measures for introduction of the thermal coal market in Ukraine.



- 10. Take measures for bringing the state aid of state coal enterprises to a level which shall not result in distortions of competition in the thermal coal market of Ukraine in accordance with Article 18 of the Treaty establishing the Energy Community.
- Take measures to stop (decrease) cross-subsidization of certain categories of consumers through the wholesale market price for electricity
- 12. Take measures to increase the capacity of trunk and interstate electric networks and full integration of the UES of Ukraine to the ENTSO-E.
- 13. Ensure transparent conditions for access to capacity of interstate networks, in particular by:
 - 1) Ensuring auctions for access to installed capacity of interstate networks to import electricity.
 - 2) Ensuring increase of transparency and competition during the auction for allocation of installed capacity of interstate electric networks by introducing electronic auctions and daily auctions.



- 14. Take measures for the unbundling of NEC Ukrenergo SE activity on electricity transmission via trunk and interstate electric networks from activities of central dispatching (operational) control of the UES of Ukraine.
- 15. Take exhaustive measures aimed at transition of natural monopolies in the electricity sector to stimulating regulation.
- 16. Take measures aimed at introducing the mechanism of purchase of electricity by electricity transmission and electricity distribution companies in order to compensate for the technological electricity losses during its transmission and distribution.
- 17. Develop a regulatory act or amend the Procedure for electricity suppliers at unregulated rates access to local electric networks approved by the resolution of the NERC No. 1421 as of October 29, 2010, in terms of preventing rejection, disagreement or delaying the review of communications and notices of electricity suppliers at unregulated tariff by electricity transmission companies.



18. Bring terms of provision of connection services in accordance with the terms prescribed by other regulatory acts, necessary for performance of works, providing (obtaining) services, related to connection to electric networks.

Provide to connection services customers, connection of which complies with the standard connection, the right to refuse from the standard connection services and choose the non-standard connection service.

Settle the issue of payment (or non-payment) for providing technical specifications for connection contracts and evaluation of connection project documentation, developed by the customer for compliance with provided specifications.

Implement the obligation of ETC to choose the executor of construction works of external electricity supply units for the customer on a competitive basis.



- 19. Conduct inventory of existing state aid programs in the energy sector.
- Take measures for timely notification of the AMCU on all existing, as of August 2, 2017, state aid programs to determine their compatibility with the competition rules, including the activity of electricity generation from alternative sources.
- In the course of development of draft laws that define the conditions for granting state aid to business entities of Ukraine in the energy sector, to take into account provisions of the Law of Ukraine "On state aid to business entities" and Ukraine's obligations under the terms of the Treaty establishing the Energy Community and the Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community and their member states, on the other hand.



- 1. To finalize the draft Law of Ukraine "On the Electricity Market of Ukraine" (registered with the Verkhovna Rada of Ukraine under No. 4493 on April 21, 2016), as follows:
 - 1) Make amendment on the need for approval by the Antimonopoly Committee of Ukraine of all draft legislation and decisions that may effect competition.
 - 2) Exclude regulations providing for benefits (priorities) to certain electricity generators as compared to competitors in the course of resource filling of the market and pricing, namely:
 - i) with regards to providing priorities to generation capacities that use primary energy sources produced in Ukraine:
 - ii) with regards to defining surcharge to the "green" tariff under condition of compliance with the requirements for use of Ukrainian generation equipment.
 - 3) Make amendment on providing to connection services customers, connection of which complies with the standard connection, the right to refuse from the standard connection services and choose the non-standard connection service.
 - 4) Make amendment on settlement of the issue of payment for providing technical specifications for connection contracts and evaluation of connection project documentation, developed by the customer for compliance with provided specifications.
 - 5) Make amendment on implementation of obligation to choose the executor of works on construction of external electricity supply units for the customer on a competitive basis.



- 2. with regards to finalization of the draft Law of Ukraine "On Amendments to the Laws of Ukraine (regarding improvements to the electric network connection)" (registered with the Verkhovna Rada of Ukraine under No. 4310-1 on March 28, 2016) by introducing the following amendments:
 - 1) Providing to connection services customers, connection of which complies with the standard connection, the right to refuse from the standard connection services and choose the non-standard connection service.
 - 2) Settlement of the issue of payment for providing technical specifications for connection contracts and evaluation of connection project documentation, developed by the customer for compliance with provided specifications.
 - 3) Implementation of obligation to choose the executor of works on construction of external electricity supply units for the customer on a competitive basis.



- 3. with regards to finalization of the draft Law of Ukraine "On the National Energy and Utilities Regulatory Commission" (registered with the Verkhovna Rada of Ukraine under No. 2966-d on February 19, 2016) by:
 - 1) Excluding part two of Article 5 of the draft law (which provides for the possibility of not fulfillment by Commission of decisions (recommendations) of the Antimonopoly Committee of Ukraine, which can lead to the prevention, elimination or distortion of competition).
 - 2) Providing an exhaustive list of decisions (in accordance with the scope of the decision), implementation of which may be suspended in connection with the appeal against relevant decisions in court.
 - 3) Settlement of the issue of independent, non-discriminatory and transparent funding of the Commission.



- 4. with regards to finalization of the draft Law of Ukraine "On Amendments to the Laws of Ukraine with regards to simplified procedure for connection to electric networks" and/or other draft laws aimed at solving issues related to connection and supply by introducing the following amendments:
 - 1) Providing to connection services customers, connection of which complies with the standard connection, the right to refuse from the standard connection services and choose the non-standard connection service.
 - 2) Settlement of the issue of payment for providing technical specifications for connection contracts and evaluation of connection project documentation, developed by the customer for compliance with provided specifications.
 - 3) Implementation of obligation to choose the executor of works on construction of external electricity supply units for the customer on a competitive basis.



- 5. with regards to development and filing to the Verkhovna Rada of Ukraine of draft laws implementing the procedure for and specifics of settlement of debts for electricity, which were formed on the wholesale electricity market.
- Take measures to prevent the adoption of decisions aimed at providing benefits and preferences to certain entities with regards to repayment of bad debts, charging additional fees, provision of other benefits and advantages which may result in prevention, elimination or restriction of competition.



The Antimonopoly Committee of Ukraine

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