

INFORMATION REPORT ON THE III INTERNATIONAL CONFERENCE "RISK MANAGEMENT IN ENERGY -2020" 28 May 2020

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The 3rd International Conference "Risk Management in Energy-2020" (the Conference) was held with support of the Ministry of Energy of the Russian Federation and the Organization of the Black Sea Economic Cooperation (BSEC) on May 28, 2020 via webinar. The event was organized by the "Institute for Energy and Finance" (IEF) from Russia in collaboration with the Regional Working Group (Turkey) of the Institute of Risk Management (IRM, UK). The Conference was included in BSEC's Plan of Actions for 2020.

The risks and prospects of transforming the global energy balance in terms of economy globalization, mechanisms of hedging risks to improve stability of investments in energy projects affected by the consequences of the COVID-19 pandemic and other uncertainties, usage of exchange mechanisms to increase the transparency of pricing in mercantile markets, challenges and opportunities for digitalizing power generation, development of innovative petrochemical industries, introduction of environmentally friendly technologies and equipment for expanding NGV fuel market, insurance of cyber risks and other issues were discussed by the Conference's participants.

The international video broadcast and moderation of the Conference was carried out from a professional video studio in Moscow through the Zoom application. All the Conference's events were accompanied by the Russian-English simultaneous online translation.

PLENARY SESSION

"RISKS AND PROSPECTS OF TRANSFORMING THE WORLD ENERGY BALANCE IN TERMS OF ECONOMY GLOBALIZATION"

The plenary session "Risks and prospects of transforming the world energy balance in terms of economy globalization" was moderated by Dr. Alexey Gromov, Principal Director for energy studies of the Institute for energy and finance (Russia).

The speakers of the Plenary Session were the Deputy Minister of Energy of Russia Mr. Anatoly Yanovsky, Deputy Minister of Energy of Bulgaria Mr. Zhecho Stankov, General Director of Foreign Relations of the Turkish Ministry of Energy and Natural Resources Dr. Safa Uslu, BSEC Secretary General Ambassador Michael B. Christides, Director-General of IRENA Mr. Francesco La Camera, Secretary General of the Association of European Energy Exchanges Mr. Christian Baer and Eurogas Policy Director Mr. Andreas Guth.



Opening the plenary session, the Russian Deputy Minister of Energy Mr. Anatoly Yanovsky emphasized the particular importance and relevance of the Conference in terms of ongoing changes in the global energy sector during the COVID-19 pandemic, directly affected many areas of the life activity.



"The current situation has destabilized the global fuel markets. Obviously, we are faced not with the usual cyclical recession, but with serious changes in the global economy, and as a result, in the energy sector", - he said.

Anatoly Yanovsky separately drew attention to the situation in the gas market: "The gas market continues to be not stable, consumption is declining. Prices in the European spot market have reached an absolute minimum for many years. Prices for long-term contracts are still reducing. It is expected that recovery in this market will be faster, since the average annual reduction in global gas demand is only 3-5%, mainly in industry and the commercial sector".

According to Anatoly Yanovsky, the way out of the crisis can be reached by different trajectories, with different priorities.

"To meet global energy demand, we proceed from the need for a balanced development of carbon, nuclear and renewable energy. At the same time, the inevitability of fossil energy sources in the global energy balance in the medium and long term is quite obvious to us. An important factor in ensuring energy security is diversification of energy sources, routes and suppliers,"- he explained.



The Deputy Minister also emphasized that the features of the upcoming period of developing the global energy markets are associated with the processes of their restructuring, increasing share of developing countries, sharpening competition and the consequences of the pandemic.

Also he noted that Russia is one of the world leaders in reserves, production and export of energy resources, including nuclear energy technologies and interested in maintaining stable relations with traditional consumers of Russian energy resources and forming sustainable ties in new energy markets.

Speaking at the Plenary Session the Bulgarian Deputy Minister of Energy Mr. Zhecho Stankov highlighted separately the measures taken in the European Union to solve the problems of the energy sector caused by the coronavirus pandemic.

"In response to the operational challenges related to the pandemic and the measures taken to limit it, the industry has implemented exceptional business measures to ensure the continuity of round-the-clock essential energy operations, while protecting the health and safety of staff. Instruments for ensuring the security of supply should be used in a spirit of solidarity between Member States. This requires not only solidarity in case of an energy accident, but also cooperation and mutual assistance to prevent a crisis. Mechanisms such as the Electricity

Coordination Group, the Gas Coordination Group and the Oil and Petroleum Products Coordination Group already exist within EU to coordinate various measures.



Preparedness measures need to be considered in different scenarios, including prolonged or renewed waves of constraints with interruptions in the mobility of energy workers and supply chains. The measures have been identified to address possible supply security risks, including:

- Providing greater flexibility in the mobility of specialized staff in energy companies, in order to operate and maintain crucial or other essential infrastructure;
- Prioritizing the needs of staff working with crucial energy infrastructure and those, who are often exposed to contact with other people, in the distribution of safety equipment and medical test kits;
- Overcoming the difficulties in the implementation of the supply chains of components, equipment and spare parts;
- Ensuring facilitated access of personnel for accomplishment of planned annual repairs and refueling the NPP's reactors;
- Integration of lessons learned and pandemic risks in the analysis of EU scenarios and regional risk" noted the Deputy Minister of Bulgaria.



According to Mr. Stankov in the short term, it should be first outlined measures aimed at the recovery of national economies, taking into account the socioeconomic impact and the challenges of the COVID19 pandemic.



Priority actions to overcome the crisis in the energy sector, as well as prospects for developing the oil and gas cooperation in the Black Sea region and

South-Eastern Europe were thoroughly analyzed by the Director General for International Relations of the Turkish Ministry of Energy and Natural Resources Mr. Safa Uslu. Among the priority areas, he noted diversification of hydrocarbon supplies, development of the gas transportation system in the region and expansion of interregional cooperation.

The BSEC PERMIS Secretary General, Ambassador Michael B. Christides noted the particular relevance of the issues, addressed at the Conference, taking into account the significance of the energy sector for the economic and social development of member countries: "Although the BSEC Organization is only involved in so-called "light Energy issues", particularly Energy conservation, Energy efficiency and alternative sources of Energy, its Member States and their people are directly affected by the current unstable situation of the global Energy sector".



The PERMIS SG stressed that the Coronavirus outbreak has shown how vulnerable the Energy Market remains to similar global pandemics, and expressed the hope that the extraordinary slowdown in industrial production, in energy demand and in transport activity during these last months could reorient the economic policy

of States towards more sustainable development goals by facilitating the financing of more green investments, especially in BSEC Member States.

"The BSEC Secretariat will follow closely today's deliberations and possible conclusions, on which we intend to inform the relevant authorities of all BSEC Member States"- noted the Secretary General.

The Director General of the International Renewable Energy Agency (IRENA) Mr. Francesco La Camera paid a special attention to the necessity of the coordinated interstate cooperation to overcome the consequences of the pandemic.

The International Renewable Energy Agency (IRENA) is an intergovernmental organization that supports countries in their transition to a sustainable energy future, and serves as the principal platform for international cooperation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. IRENA promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy in the pursuit of sustainable development, energy access, energy security and low-carbon economic growth and prosperity.



"As the virus continues spreading, it could hit developing countries with weak health care systems hardest — especially those with limited electricity access. Expanding access to reliable modern energy services would help to address the immediate health crisis and lso support a broader, longer-term economic recovery. Accelerated uptake of renewables both on-grid and off-grid would boost economic growth and bring broader socio-economic benefits. IRENA's recent Global Renewables Outlook shows how the combination of renewables and efficiency would add 2.4% more to global GDP in 2050 compared to current plans in the energy sector. Jobs in renewable energy could reach 42 million globally by 2050, four times their level today.

Stepping up progress on SDG 7 requires stronger political commitment as well as comprehensive enabling frameworks, long-term energy planning and increased public and private financing as part of post-pandemic stimulus and recovery packages",- Mr. La Camera emphased.



The Secretary General of the Association of European Energy Exchanges (EUROPEX) Mr. Christian Baer emphasized the crucial role of the exchange

mechanism in ensuring transparent pricing, which is especially important in times of volatility and uncertainty.

"Exchanges have remained fully operational throughout the pandemic, applying comprehensive measures to ensure business continuity,"- said Christian Baer.



Mr. Baer also drew attention to the common position of Germany and France (have been taken on the 18th of May, 2020) calling for the EU Green Deal climate policies to become "the EU's new growth strategy".

In the report of the EUROGAS Secretary General Mr. James Watson, presented by the Political Director Mr. Andreas Gough, it was stated that gas will continue to play a key role in the transition to the EU's carbon-neutral energy balance by 2050.

"The European Commission Long-Term Strategy confirms strong role of gas in the energy transition," - said Andreas Gough.



Among the key recommendations the EUROGAS Policy Director singled out maintaining the strategic role of gas infrastructure and ensuring the growth of renewable and decarbonized gas.



At the end of the plenary session, the speakers answered numerous questions from the delegates and took part in a lively discussion with the moderator Mr. Alexey Gromov, Chief Energy Director of the Institute for Energy and Finance (Russia).

SESSION "TRANSITION TO A LOW-CARBON ECONOMY - THREATS OR NEW PROSPECTS FOR DEVELOPING OIL AND GAS PRODUCTION AND PROCESSING?"



The key topics for discussion within this session were developing hydrocarbon energy in terms of the economy decarbonization, including gas transportation infrastructure and diversification of hydrocarbon supplies to Europe, expanding usage of exchange mechanisms to increase the transparency of pricing in mercantile markets, introducing innovative equipment, technologies and infrastructure for using natural gas as a gas engine fuel.

Opening the session, the President of the King Abdullah Petroleum Studies and Research Center ("KAPSARC") Mr. Adam Sieminski (Saudi Arabia) in his report "Circular Carbon Economy Guide" elaborated on four key components of this transition, so-called "4 Rs" (Reduce, Recycle, Reuse, Remove).

KAPSARC is an independent, non-profit, research think tank located in Riyadh, Saudi Arabia. Its mission is to advance the understanding of energy, economics, and the environment, while acting as a catalyst for dialogue on issues of importance to policy makers and the public.



Prior to joining KAPSARC in 2018, Mr. Sieminski held the James Schlesinger Chair for Energy and Geopolitics at the Center for Strategic and International Studies (CSIS) in Washington, DC. CSIS is one of the world's preeminent international policy institutions focused on security, regional studies, and transnational challenges including energy, trade, and global development.



Mr. Sieminski is an active member of the International Association for Energy Economics (IAEE), a Senior Fellow and former President of the U.S. Association

for Energy Economics (USAEE), and was the President of the National Association of Petroleum Investment Analysts.



The prospects for restoring the global energy markets, as well as the tools, that are available to market players in energy exchanges for managing risks were comprehensively analyzed by Mr. Ahmet Türkoğlu, General Director of the Energy Exchange Istanbul (EPİAŞ) in his presentation "COVID-19 and Gas Markets".



"US gas futures have rallied as a historic crash in oil prices is seen driving shale producers to halt more drilling and curb output of gas, which is extracted as a byproduct. In Europe and Asia, prices are sliding to fresh lows due to a supply glut and languishing consumption amid the pandemic. To be sure, this is likely temporary and not the new normal", - noted the EPİAŞ General Director.

Developing the topic under discussion in the presentation "Commodity Exchange: Efficient Price Discovery and E-Trading Mechanism", the President of the Saint-Petersburg International Mercantile Exchange (SPIMEX) Mr. Alexey Rybnikov pointed out that the Covid-19 pandemic and the global fight against it has changed the way of thinking in such an important sphere as commodity pricing. This is true both for the world as a whole and for Russia in particular.

Transactions which result in physical delivery will inevitably grew in prominence among numerous instruments currently used for pricing key commodities. This, however, will not invalidate financial instruments, especially as risk management tools. The role of e-trading platforms and commodity exchanges will rise due to their ability to ensure anonymity of trades and transparency of prices.



Aleksey Rybnikov also announced the launch of the SPIMEX Natural Gas futures by the end. This derivative contact will provide wide risk management opportunities to the trading participants and will boost competiveness in this market segment.



The SPIMEX's President also noted that the importance of exchange trading has grown in the context of transition to distance operating during the fight against coronavirus infection.



The President of NGV Italia Ms. Mariarosa Baroni in her presentation, titled "Threats and prospect for developing the use of Natural gas as a fuel" comprehensively examined the main problems and key steps to overcome them, that are necessary for the developing the gas engine fuel market.



The prospects for developing the national natural gas market and cooperation in this area were analyzed in detail by the Chairman of the Management Board of Moldovagaz JSC Mr.Vadim Ceban (Moldova) in his presentation «The perspectives for the development of the natural gas market and the related infrastructure for its use as gas engine fuel in the Republic of Moldova».

«Over epy last decade gas consumption in the world has grown by 20%. According to expert estimates, by 2040 the gas will be the only fossil fuel, the share of which among primary energy supply will grow, reaching the level of 5.4 trillion cubic meters. The gas consumption in transport by 2040 can grow by 160%, reaching 360 billion cubic meters.



In the recent years, the Republic of Moldova has been demonstrating insignificant growth dynamics in the field of the gas engine fuel use. There are 20 gas stations in the country, compared to the 14th in 2009. Last year, 26.2 million cubic meters of natural gas were sold through them, compared with 16.5 million cubic meters in 2009. The number of motor vehicles running on gas engine fuel is also growing, and today it exceeds 20 thousand units.



The next stage of cooperation will be transfer of metropolitan municipal vehicles to gas engine fuel. An important step in expanding the use of gas engines for our company will be construction of new gas stations in the south and north of Moldova, thereby building a "gas corridor" for vehicles from border to border. The main objective of the geographical expansion of the gas network is to achieve the optimal distance between gas stations within the country", - Vadim Cheban said.



A comprehensive comparative analysis and assessment of the role of Azerbaijan in developing the gas transportation infrastructure of the Black Sea region was presented by Mr. Otel Huseynov, acting Head of the Oil and Gas Division of the Ministry of Energy of Azerbaijan in his speech on the topic "Azerbaijan's contribution to the development of gas transportation infrastructure and diversification of supplies to ensure regional energy security".

Mr. Grant Griffiths, Chairman of the Black Sea Regional Group (Turkey) of the Risk Management Institute (IRM), comprehensively examined the economic, social and environmental aspects, which affected the risk management strategy. Particular attention in his report was paid to market drivers and risks associated with regulatory restrictions, which are among the three most significant risks in the modern world energy.



Mr. Grant Griffiths has held senior executive and board positions in global businesses including ALSTOM, Caminus and Siemens in addition to small cap technology firms in the energy and finance sectors.

As a risk management professional he has led ERM, governance, and energy trading engagements to clients in the energy and finance sectors across the UK and Europe; included among his recent successes are delivery of the complex utilities transformation programme for CLK Enerji (which was the largest transformation programme undertaken in the Turkish utilities sector), the Integrated Single Electricity Market (I-SEM) programme for two of the largest UK-based electricity market participants, and regulatory-based programmes in Australia for the Power of Choice market regulation changes where he led engagements at major utility companies.

Also Mr. Griffiths examined in detail the main risks that arise in the process of decarbonization of the economy.



At the end of the session an active discussion of the issues raised was held with the participation of the Conference delegates.



PANEL DISCUSSION

«CORPORATE STRATEGIES FOR RISK MANAGEMENT IN TRANSFORMING ENERGY»

Opening the panel discussion "Corporate Risk Management Strategies in Transforming Energy", the moderator Mr. Dmitry Gavrilov, Head of Engineering Risk Assessment Department, Alfa Insurance (Russia) emphasized the need to use the best international practices to find effective solutions to overcome the crisis's consequences at the corporate level.



The Panel Discussion focused on, inter alia, the following issues:

- How does the global energy transformation affect corporate risk
 management strategies and sustainability of energy companies in terms of
 the extraordinary uncertainty of the COVID-19 pandemic's impact?
- Challenges and threats of developing crisis phenomena in the banking sector for the energy industry.

- Challenges and opportunities for risk management in the process of digital transformation of enterprises.
- Cyber threats and vulnerability of physical infrastructure and assets: is it possible to predict the consequences?
- Insurance as a strategic solution to protect the property interests of business: globalization of the world insurance market. Control and insurance of cyber risks.



Head of the Internal Control and Risk Management Department of Inter RAO, Mr. Pavel Smolkov (Russia) in the speech, titled "Golden Risk Management Rules", examined in detail the characteristics of critical and non-critical risks and formulated four golden rules for risk management.

Mr. Smolkov especially emphasized that strategic risks are more important than other risks.



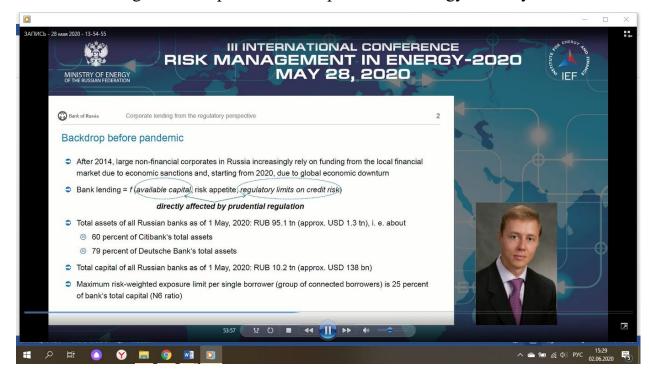
The main challenges and recommendations for ensuring the effectiveness of operational decisions and corrective actions, aimed at the development of power transmission networks in Europe, were presented in the report on the topic "Risk management in critical energy infrastructure" by Dr. Nadejda Komendantova, the Leader of governance in transition team of Advanced Systems Analysis Program, member of Internal Research Committee, International Institute for Applied Systems Analysis (IIASA).



The co-speaker of Mrs. Komendantova was Mr. Daniel Kroos, Senior Programme Officer, Organization for Security and Co-operation in Europe (OSCE).



The Director of the Banking Regulation Department of the Bank of Russia Mr. Alexei Lobanov in his speech on the topic "Regulatory measures in support of corporate lending and their implication for energy sector" paid a special attention to the necessity of more effective risk's assessment in terms of uncertainty over the duration and degree of the pandemic's impact on the energy industry.



The issues of changing the role of the risk manager in the corporate risk management system in the context of the energy industry's digitalization were dwelt in details by Mr. Dmitry Akopov, Risk Management Director of AKKUYU NUCLEAR A.S. in his speech "New challenges and opportunities for risk management in the course of digital transformation of enterprises".



Prospects for processing and using a new quality of raw industrial data, as well as the importance of relevance and accuracy of these data were considered by Mr. Andrei Suvorov, CEO of Adaptive Production Technology (APPROTECH), titled *«Raw oil industrial data refining. New source of energy income for digital production. BUT only valid with TRUSTED data»*.



Construction Insurance as a risk management tool for investment projects in the time of global challenges was the focus of the report of the same name, presented by Mr. Alexey Gusev, Construction, Drilling and Offshore Underwriting Practice Leader, Non-Marine Reinsurance of the Russian National Reinsurance Company (RNRC).



THE FINAL PROVISIONS AND RECOMMENDATIONS OF THE CONFERENCE PARTICIPANTS

The Conference was attended by more than 200 heads and representatives of the international organizations, energy ministries, leading energy, finance, insurance and consulting structures from 15 countries, including Russia, Bulgaria, Turkey, Great Britain, Italy, Belgium, Hungary, Saudi Arabia, UAE, Austria, Romania, Greece, Moldova, Azerbaijan, Armenia as well as from European Union.

Following the results of the Conference, the participants noted the necessity to continue further discussion of improving the risk management in the energy sector on a regular basis within the BSEC format and expressed their wish to the organizers to hold the next 4th International Conference "Risk Management in the Energy Sector - 2021" in May 2021 in Istanbul (Turkey).