Implications of Global Developments within the Energy Industry in the Caspian and Central Asia Region

Report of the 3rd IAEE Eurasian Conference, 18-20 October 2018

Introduction

The third IAEE Eurasian Conference on the topic "Implications of global developments within the energy industry in the Caspian and Central Asia Region" was held on 18-20 October 2018, in Baku, Azerbaijan. It was part of IAEE's Eurasian conferences series. The 1st IAEE Eurasian Conference on the topic of the "Energy Economics Emerging from the Caspian Region: Challenges and Opportunities" was held on 28-31 August 2016 in Baku, Azerbaijan. The 2nd IAEE Eurasian Conference on the topic of "Energy in Eurasia: Economic Perspectives on Challenges, Risks and Opportunities" was held on 13-14 October 2017, in Zagreb, Croatia.

The objectives of these conferences were to address energy-related challenges in the Eurasian region with the participation of business, government, academic institutions and international organizations.

The organization of the third Eurasia conference, again in Baku, had an important significance. Azerbaijan was the major and only place in the former Soviet Union where dedicated education on upstream, midstream and downstream operations oil & gas, was delivered, and relevant scientific researches and engineering activities were conducted. Azerbaijani experts and scientists implemented the key academic and research activities on oil & gas in Russia and Central Asia, as well as in overseas countries.

Now, with its convenient geographical position, Azerbaijan plays an essential role in energy supplies to Europe and in regional energy security efforts during its 27 years of independence. Azerbaijan, where big energy companies of BP, SOCAR and Exxon are operating, has been hosting traditional Caspian International Oil & Gas Exhibitions and Conferences and other similar high-level events that incorporate top energy industry managers and specialists in a single platform. The necessity of today's reality is therefore to protect the existing scientific potential and academic traditions in the oil & gas industry, and to integrate the accumulated knowledge to overseas specialists and

In this context, the 3rd IAEE Eurasia conference was an excellent platform to present and discuss in a broader audience with public, academic and business circles the issues on studying key challenges of energy economy, the analysis of contemporary global industry trends and the study and implementation of best international practice.

Event sponsorship

The publicity had high interest in the conference, which overlapped with the activities on IAEE's

expansion in Azerbaijan. Oil & gas sector has a leading role in Azerbaijan's economy, and the State Oil Company of Azerbaijan Republic (SOCAR) and BP are two main players in the country's oil & gas sector.

SOCAR has diverse activities in Azerbaijan, covering exploration and exploitation of oil & gas fields, production, processing, transportation and sale of oil, gas and gas condensate, production of petrochemical goods, natural gas import & export and overseas sale, as well as the domestic sale of natural gas to residential and non-residential consumers. SOCAR also has multilateral regional and international business activities, including petrol stations in Ukraine, Switzerland, international trade of oil and oil products, ownership and operation of the largest petrol stations chain and the gas distribution networks in Georgia.

BP Azerbaijan Georgia Turkey Region (AGTR) is part of BP plc, a British multinational oil & gas company. BP AGTR has been operating in the Caspian region since 1992. Over the past 25 years, in partnership with the Government of Azerbaijan and our co-venturers, BP-operated world-class projects, namely Azeri-Chirag-Gunashli, Shah Deniz, Baku-Tbilisi-Ceyhan and South Caucasus Pipeline. These projects have contributed to the development of the Caspian Sea region as a modern energy center.

The appeals for the support of the event were immediately accepted by SOCAR and BP in a positive manner. SOCAR was the Platinum Sponsor, and BP was the Gold Sponsor for the conference.

Azerbaijan Energy Engineering & Consulting LLC (AEEC) provided silver sponsorship for the event. With 25 years of operation, AEEC is a leading local private company providing engineering and consultancy services in Azerbaijan covering all aspects of the energy sector including oil & gas, electricity and renewable energy. The Baku representative of Schneider Electric, and local private company AzEcoConsulting provided bronze sponsorship for the conference.

Moreover, SOCAR Turkey served as an Activity Sponsor in the event, and funded the participation of five selected students of Boğaziçi University of Turkey.

Conference Venue

The conference was held at the new campus of SOCAR's Baku Higher Oil School. The organization of the event at the Baku Higher Oil School was supported by the Ministry of Energy and SOCAR.

The organization of the event at Baku Higher Oil School seems important in terms of IAEE's future expansion in the region. Baku Higher Oil School is currently one of the leading academic institution not just in Azerbaijan but also globally. Since its

establishment, the Oil School has been expanding its geography of cooperation, accomplishing academic success, supporting scientific researches along with education, and regularly hosting high-level academic events. All these efforts have contributed to its global recognition. The Oil School also serves as a hub for energy industry professionals, energy companies, academic and research institutions, and a center for laboratory and practical studies.

Welcoming Session, Presidential Address and Keynote Remarks

The representative of Baku Higher Oil School welcomed the participants on behalf of the school, followed by the presidential address by Christophe Bonnery, the Director of Economics and Foresight at ENEDIS and President-elect of IAEE.

The Government of Azerbaijan paid high attention to the event. Mr. Samir Valiyev, Deputy Minister of Energy, Mr. Niyazi Safarov, Deputy Minister of Economy, and Dr. Nurali Yusifbayli, Deputy Chairman of the State Agency for Alternative and Renewable Energy Agency of the Ministry of Energy of Azerbaijan Republic welcomed the participants on behalf of the Government of Azerbaijan, and expressed their wishes for a successful conference. Mr. Ramiz Aliyev, Head of the Strategic Development Department of SOCAR and Mr. Bakhtiyar Aslanbeyli, Vice President Communications & External Affairs, Strategy and Region, BP Azerbaijan-Georgia-Turkey Region also delivered opening remarks. Prof. Dr. Vilayat Valiyev, Director of Institute for Scientific Research and Institute on Economic Reforms under the Ministry of Economy of the Republic of Azerbaijan and Vice President of IAEE for Regional Affairs expressed his gratitude to all event supporters on behalf of the Conference Organizing Committee.

Plenary Sessions

The first plenary session on the topic "Global Challenges to Energy Security in Eurasia: Supply & Demand Curse" was moderated by Prof. Dr. Gürkan Kumbaroğlu, Director of the Energy Policy Research Center at Boğaziçi University, Founding President of Turkish Association for Energy Economics, and Past President of IAEE. The speakers for this session were Christophe Bonnery, Pres-dent Elect of IAEE, Mr. Ramiz Aliyev, Head of Strategic Development Department of SOCAR, Mr. Colin Allan, ACG (Azeri-Chirag-Gunashly) Planning and Commercial Manager of Henderson, BP Azerbaijan-Georgia-Turkey, and Mr. Elmir Musayev, Southern Gas Corridor CJSC. The session covered the presentations and discussions on the challenges to the energy industry in Eurasia region, SOCAR's and BP's activities to overcome these challenges, and the role of the Southern Gas Corridor project in these processes. The most intriguing part of the discussions was the supply and demand curse and relevant expectations caused by volatile market prices. The speakers addressed these matters from the perspective of their specific activities.

Having special significance for the Central Asian and Southern Caucasus and overall former Soviet Union countries, the second plenary session on the topic "Energy Markets and Regulation" was moderated by Prof. Dr. Vilayat Valiyev, Director of the Institute for Scientific Research and Institute on Economic Reforms under Ministry of Economy of the Republic of Azerbaijan and Vice President of IAEE for Regional Affairs. The speakers of this session delivered presentations on different regional and contextual aspects of energy markets and regulation, namely: Mr. Boyko Nitzov, Team Leader for Gas Infrastructure Development within the Gas Department, Agency for the Cooperation of Energy Regulators, talked mainly about operation principles, regulatory criteria and standards of the gas market in the European Union; Mr. David Narmania, Commissioner of the Georgian National Energy and Water Supply Regulatory Commission, delivered a presentation on the formation and regulation of the energy market in Georgia; Mr. Hikmat Hasanov, Head of Strategic Planning and Innovations Department of the State Agency for Regulation of Energy Issues under the Ministry of Energy of Azerbaijan Republic discussed the potential application of technical regulation standards in the Azerbaijan energy sector; Mr. Kenan Mamishov, Deputy Head of the Analysis and Regulation Department of the Tariff (price) Council Secretariat of Azerbaijan Republic talked about the key features and challenges of tariff regulation in Azerbaijan. It was stressed that the former Soviet Union countries still lack a comprehensive energy market, and the regulatory environment is therefore weak from an institutional and legislative point. Despite the formation of relevant market infrastructure and regulatory environment, Georgia needs to undertake more steps in this area. The panel session speakers also shared their thoughts on existing barriers impeding the establishment of regional energy markets.

The third plenary session on the topic "Electricity Supply Sustainability" was moderated by Prof. Dr. Nurali Yusifbayli, Deputy Chairman of the State Agency on Alternate and Renewable Energy Sources of the Ministry of Energy of Azerbaijan Republic. Recalling the two big power system blackouts that happened in Azerbaijan on July 2 and 4 this year, the topic was particularly important for the public generation & transmission company Azerenerji, the public distribution company Azerishig and other energy sector public and private agencies. Given this matter, the speakers, Mr. Christophe Bonnery, Prof. Dr. Gürkan Kumbaroğlu, Prof. Dr. Ionut Purica (Professor at Hyperion University, Corresponding Member of the Academy of Romanian Scientists, former President (State Secretary) of the Romanian Nuclear Agency) and Dr. Osman Bulent Tor (Managing Partner and Director, EPRA - Engineering Procurement Research Analysis) touched upon the various facets of the sustainability and safe operation of the power system during their presentations. It was highlighted that it is vital to conduct system diagnosis and monitoring in automatic

mode in order to ensure system sustainability. Furthermore, the panel session participants proposed the arrangement of a half-day or full-day workshop by IAEE on electricity system sustainability.

The 4th plenary session on the topic "Energy Efficiency in Eurasia: Conventional Energy, Renewables and District Heating" was moderated by Mr. Ilham Mirzaliyev, Deputy Chairman of Azeristilitejhizat ISC, the state-owned district heating company in Azerbaijan. The speakers shared the experience on renewable energy and green technologies in different regional countries - Prof. Dr. Siyavush Azakov (Baku Higher Oil School) talked about the studies of SOCAR and Baku Higher Oil School in the field of renewable energy; Mr. Gursu Baskan (Schneider Electric) shared Schneider Electric's experience in energy efficiency and environmental conservation standards; Mr. Arman Kashkinbekov (Vice Chairman, International Center for Green Technologies and Investment Projects; CEO, Association of Renewable Energy of Kazakhstan) briefed the participants on the status of green technologies and renewable energy use in Kazakhstan and implemented projects, including strategic targets of Kazakhstan on renewable energy; Mr. Sahib Khalilov (Head of the Department for Assessing Alternate and Renewable Energy Sources and Environment, State Agency on Alternate and Renewable Energy Sources) delivered a presentation on the development of alternative and renewable energy sources in Azerbaijan, key activities and strategic targets. The panel session participants stressed that the Central Asia and South Caucasus regions have huge potential for joint use of alternative and renewable energy and for energy efficiency.

Another plenary session that had regional significance was the last plenary session on the topic "Oil & Gas: Economics, Innovation and Industry Development". The moderator Mr. Fuad Panahov (Deputy Director of Sumgayit Chemical Industrial Park) noted that the discussion of oil & gas use and industrial development had high importance for the region and Azerbaijan. The speaker Mr. Farid Jafarov (Chief Executive Officer of SOCAR Polymer) provided information on the recently built SOCAR Polymer Plant, natural gas use in the plant and applied new technologies. Dr. Erol Metin (Independent Consultant, SEM (Sustainability, Energy & Management) Consulting) talked about the impacts of oil & gas price fluctuations to industries and innovations, while Dr. Javid Valiyev (Head of the Department for Foreign Policy Affairs Analysis, Strategic Studies Center under auspices of the President of Azerbaijan Republic) emphasized that similarly in all sectors, global technological evolutions trigger core changes in the energy sector. Fuad Panahov discussed gas consumption by the residents of Sumgayit Chemical Industrial Park and the relevant strategic targets. The panel session participants highlighted the necessity of due consideration of technological innovations in the light of volatile prices, and regularly monitoring of industrial evolution trends.

Concurrent sessions

IAEE organized two concurrent sessions on the topics "Energy Markets, Supply Security & Trading" and "Efficiency in the Electricity Sector". The participants of concurrent sessions from Chile, Pakistan, Turkey, Azerbaijan and Kyrgyz Republic delivered presentations on the proceedings of studies on electricity markets, power plant operational efficiency improvement from an economic perspective, potential regional energy trading, energy supply security, smart metering in electricity grids, solar power technology improvements, and oil & gas exploration.

Session for students and Baku Higher Oil School Tour

IAEE also organized a dedicated session for students within the framework of the conference. The IAEE President-elect C. Bonnery delivered a presentation on IAEE covering information on members, affiliates and upcoming events. He and IAEE's member from Azerbaijan Fariz Mammadov answered the questions raised by the students on IAEE's regional and local activities and potential benefits for students and researches. Baku Higher Oi School then organized a campus tour for the participants of the 3rd IAEE Eurasian conference. Its staff showed and informed the participants on the School facilities including tutorial, sport, laboratory and research facilities.

Conference follow-up activities

The organization of the conference at Baku Higher Oil School will significantly contribute to potential future academic and research collaboration between this school and IAEE. The School has already sent a formal letter to express their interest in organizing the IAEE's next Eurasia conference at the school in 2020.

On the other hand, it is important both for Azerbaijan and for the region to define and put in place relevant contemporary alternate approaches in addressing a number of outstanding issues, namely: energy security and electricity supply sustainability; institutional reforms in energy sectors; formation of energy markets and regulatory environment including tariff improvement; and energy efficiency and renewable energy use. It is therefore important to build an enabling platform to incorporate public, academic and business entities in order to provide practical support and to build up capacities for exports, through IAEE's dedicated specialized workshops using its professional members and resources.

Moreover, it would be beneficial to launch collaboration with regional countries on publishing scholarly articles in IAEE's highly recognized journals and possibly, publishing special editions of IAEE's Energy Journal for regional countries.

Last but not the least, the establishment of IAEE's affiliate in Azerbaijan (to be named Azerbaijan Association for Energy Economics) was launched, and the relevant activities are ongoing.