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ENERGY REGULATORS REGIONAL ASSOCIATION (ERRA)



INTERVIEW WITH MR. GAREGIN BAGHRAMYAN, CHAIRMAN OF THE PUBLIC SERVICES REGULATORY COMMISSION, ARMENIA



Mr. Garegin Baghramyan, Chairman, PSRC Armenia

Chairman Baghramyan, please accept ERRA Secretariat's heartiest congratulations for PSRC's 25th anniversary! Our first question regards the historical developments – how has Armenian energy sector changed over this period, what were the milestones and how did PSRC's shape or contribute to them?

At the end of the 90s of the past century, the difficult socio-economic problems faced by the newly independent Republic of Armenia (RA) formed an objective demand for fundamental reforms in all aspects of public life, which was first realized in the energy sector.

It was necessary to specify the priorities of the policy implemented by the state in the given sector, then to direct all the potential to their comprehensive implementation. International best practices, first of all, required the separation of management and regulation functions in the sector, laying the foundation for the formation and establishment of an independent regulatory institution.

For that purpose, on 3 April, 1997, by the Decree of the President of the Republic of Armenia, the Energy Commission of the Republic of Armenia was established.

From the very first day of its establishment, the Commission made every effort to define the main legal regulations of the sector. Those aimed at ensuring the energy security of Armenia; promoting efficient use of local energy resources; utilizing renewable energy sources: guaranteeing reliable and safe supply of electricity, heat and natural gas to consumers; promoting formation of competitive environment in the sector; attracting local and foreign investment and others.

According to the RA Law on Energy adopted on 7 March, 2001, the Energy Commission of RA was renamed the Energy Regulatory Commission of RA. After that the water system as well as the regulation of the electronic communications sector were also included in the scope of regulation of the Commission. As a result, the Commission was renamed to Public Services Regulatory Commission of the Republic of Armenia.

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by 21 member organisations

In 2002-2004, the first fundamental reforms were initiated in the sector, that aimed at attracting investments, ensuring reliability and security, and establishing financial stability, in order to stimulate further development of the electricity market, which was formed as a result of the separation of management and regulation functions in the energy sector in 1997:

- The reforms were launched with the privatization of distribution networks: "Yerevan Electricity Network", "Northern Electricity Network", "Southern Electricity Network" and "Central Electricity Network" CJSC. As a result, the electricity distribution system was centralized within the framework of one company's activity.
- A single buyer-seller model was introduced with the creation of a single mandatory wholesale market. The functions of buying and selling the electricity produced in the market, as well as supplying system services were concentrated in a single joint company ("Armenergo" CJSC) in order to overcome the problems in the initial stage of market formation and to provide the most systematic solutions.

- The next stage of reforms in the sector started in 2004, when the transition was made to define producer-distributor contractual relations.
- 2018-2022 can be considered a turning point for the development of the electricity market of the Republic of Armenia. Prior to the reforms, the existing system was fully regulated. From 1 February, 2022, the electricity wholesale and retail markets switched from a fully regulated model to a new, more liberal model. Components of a competitive market were introduced into the system, which are aimed at ensuring the entry of new participants in the electricity market on competitive terms, improving long-term planning and introducing a mechanism for responsibility for deviations in the system, enabling consumers to choose another electricity supplier and promoting electricity trade with other countries.

PSRC is one of the founding members of ERRA. How has the association helped over the years to positively influence or accelerate changes that you described above?

Armenia highly appreciates the cooperation with ERRA. The representatives of the Commission have been participating in the meetings organized by the association the very beginning since membership in ERRA. These valuable exchanges have been allowing us to discuss issues of mutual interest and to find appropriate solutions. In addition, the Commission makes extensive use of the ERRA database and conducts relevant analyzes based on it.

Armenia has recently opened its market and the liberalization processes are quickly gaining momentum. What are the immediate next steps that PSRC is pursuing on this uneasy journey?



PSRC Armenia Board

Since 1 February, 2022 partial liberalization of electricity market of Armenia has started, the whole liberalization deadline prolonged till 1 February. 2023 and additional transitional regulations are envisaged, according to which the direct contracts segment of the wholesale market will be activated until 1 February, 2023. Until that time the producers with expired mandatory purchase period of electricity stations defined by Law who do not have such guarantee of electricity purchase will be defined as competitive producers that can sell electricity to the guaranteed supplier by minimum price set for the Balancing Service Provider. This regulation does not limit the right stations that have expired guarantee period to sell electricity to other participants of wholesale market.

How would you describe international regulatory cooperation under ERRA umbrella? What role do you see for the association in the upcoming years which, beyond any doubt, will be marked by energy transition and climate action challenges?

Due to the developments of recent years, the energy sector is on the verge of a breakthrough. Cooperation under ERRA umbrella can only contribute to overcome the challenges we face, as well as to contribute to the activation cross-border trade and achievement of sustainable development goals - the clean energy provision in particular. Armenia's experience in the field of renewables, especially the utilization of solar energy, can be an interesting example for other countries. According to the Strategic development plan of the energy sector of RA, the share of electricity production using solar energy by 2030 is planned to increase to 1000 MW.

As a result of the regulations that we have in place that aim at ensuring the target index, the sector registered significant progress. In particular:

- In 2017, the process of licensing of solar power plants with a small capacity of up to 1 MW was launched within the power limit of up to 10 MW. As a consequence, 12 solar power stations were built and are operational.
- For the period from November 2018 to December 31, 2020, a new threshold of additional 200 MW was envisaged for the construction of solar power plants with a capacity of up to 5 MW. Forty-nine solar power stations were built with total capacity of 77.8 MW, of which 22 stations are so far operational.

- Within the framework of the 15 MW total power limit, the process of licensing non-commercial community organizations for the construction and operation of 1 MW solar power plants was launched.
- Within the framework of the Public-Private Partnership concluded as a result of an international tender, a license for electricity generation was issued to "FRV Masrik" CJSC for the

construction and operation of the 55 MW Masrik-1 solar power plant. The tariff offered as a result of the tender, which received its further fixation in the license issued to the company, is 4.19 cents USD / kWh (excluding VAT). The mentioned tariff had a positive impact on the further tariff policy implemented or solar power plants, being a positive factor aimed at reducing the current tariffs.

The Government of the Republic of Armenia approved the results of the tender organized within the framework of the construction and operation program of the "Ayg-1" solar photovoltaic station with a capacity of 200 MW. The winner of the the tender, in which Commission is also involved, was Abu Dhabi **Future** Energy Company (Masdar) with a tariff of 2.9 cents USD / kWh (excluding VAT). ■

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PSRC Armenia

Recent Developments

- On September 25, 2021 Public Services Regulatory Commission (PSRC) of Armenia initiated the process of revising tariffs for large power stations, tariffs for service providers and distributor and on December 29, 2021 tariffs for generators, service providers and distribution of electricity were approved. In result of this review tariffs for end users have been changed: tariffs for vulnerable customers were remained unchanged, population with monthly consumption up to 200 kWh tariffs were increased for 1.5 AMD/kWh, for population with monthly consumption from 201 up to 400 kWh tariffs were increased for 3.5 AMD/kWh, and for population with monthly consumption above 401 kWh and for other customers tariffs were increased for 5.5 AMD/kWh.
- For electricity producers with capacity more than 30 MW tariffs in one-rate tariff system were set from 1st February, 2022 instead of before acting two-rate tariff system, except for those producers who works under contracts of private-public partnerships. For mentioned PPC stations tariffs remained in two-rate tariff system (rate of delivered electricity and capacity fee).
- Taking into account the start of market liberalization maximum and minimum tariffs for balancing services were set.
- In December, 2021 a new constructed efficient thermal power plant of "Armpower" JSC with capacity 254 MW entered into electricity system of Armenia.
- At the end of 2021 PSRC of RA confirmed amounts of contractual and available capacities of generators for 2022 submitted for approval by

producers working under contracts of private-public partnerships.

- Water supply company, accordance with the terms of the license applied for drinking water drainage (wastewater treatment) services tariff review for the 6th contractual lease year (2022) on August 9, 2021. PSRC, taking into account changes in retail water supply, inflation, changes in electricity tariffs, as well as additional revenue from the use of the water system for other purposes, calculated new tariffs for 2022 were increased and set on level 200.47 AMD/m3. For the first time, more low tariffs for vulnerable were set in water supply system. At the same time, in order to avoid huge fluctuations of tariffs and providing sustainability of tariffs in water system by initiative of PSRC changes were done in lease contract and new scenario for basic tariffs for upcoming 10 years of lease contract was approved.
- Taking into account changes made in contract on gas supply to Armenia, according which prices of gas for import to Armenia must be adjusted by caloric value, gas supply company on 13 January, 2022 applied for tariff review and new increased tariffs for gas sector came into force from 1 April, 2022. At the same time, tariffs for vulnerable customers were remained unchanged, for other customers tariffs increased for about 4700 AMD/thousand cub (or 9.9 USD/thousand).
- From February 1, 2022 started partial liberalization of electricity market of Armenia, the whole liberalization deadline prolonged till 01.02.2023 and additional transitional regulations are envisaged, according to which the direct contracts segment of wholesale market will be activated until February 1, 2023. Till that time the producers with expired mandatory purchase period of electricity defined by law or who have not such guaranty of purchase electricity and defined as

- competitive producers can sale electricity to the guaranteed supplier by minimum price set for the Balancing Service Provider. This regulation does not limit the right of stations that have expired warranty period to sell electricity to other participants of wholesale market.
- By the Resolution of PSRC RA N4-N of January 5, 2022 the network rules of electricity market distribution approved by the Resolution of PSRC RA N523-N of December 25, 2019 were amended, with the aim of ensuring the most optimal planning of the electricity market distribution network development, distribution network management, short-term planning and regulation in the electricity system, relations related to the connection of new consumers or reconstructed consumption systems the distribution network, connection of new capacities.
- By the Resolution of PSRC RA N5-N of January 5, 2022, the trade rules of the electricity retail market approved by Resolution of PSRC N517-N of December 25, 2019 were amended, with the aim of defining more clearly the principles of electricity retail market activity, the rules of trade in the retail market, procedure for electricity supply and (or) guaranteed supply, procedure for change of supplier by consumers, procedure for registration and payment of consumed electricity, procedure for recalculation in case of inaccuracy of commercial metering device operation, data retention in the retail market and transparency requirements, rules for increasing efficiency and other procedures.
- Currently there are 12 licensees that already have 7 electricity supply and 5 electricity traders licenses in the territory of Armenia. Those suppliers are currently in negotiations with appropriate consumers. We have 4 consumers who have chosen a supplier other than the guaranteed supplier. 2 of abovementioned 4 consumers are

connected to the Distribution network with the 35 kV voltage and the 2 other consumers are connected to the Distribution network with 6(10) kV voltage.

 As of April 1, in electricity we have 5 cross-border contracts.

Significant Energy News

order to provide more comprehensive and effective solutions to the issues of protection of fundamental principles of balancing the interests of consumers and regulated persons PSRC has developed drafts of Law on Amendments to the Law on Public Services Regulatory Body of RA, Law on Amendments to the Law on Energy of RA, Law on Amendments to the Law Public Services Regulatory Mandatory Payments of RA, Law on Amendments to the Law on Electronic Communications of RA, which were adopted by the National Assembly and entered into force on 1 December, 2021. The mentioned laws are, in essence, aimed at increasing the efficiency of the commission procedures (including the enactment of regulations aimed at the effective implementation of the commission's proceedings), promoting facilitating the activities in the energy sector. improving the financing mechanisms of the public services regulator.



AERA Azerbaijan

Recent Developments

– Since November 2021 Azerbaijan Energy Regulatory Agency (AERA) has continued with deepening and started new path of cooperation with regulatory bodies of Ukraine, Germany, UK, Turkey and Hungary on different regulatory issues, incl.: Renewable energy sources, Energy efficiency, Regulation of the energy markets, Issuance of licenses, Rules of

investment planning and monitoring, Energy transition and reduction of CO2 emissions, Procedures for connecting consumers to the grid, Rules for calculating fines and incentive payments, Integration of RES and electric vehicles into the power grid, Liberalization of energy markets and green tariffs, Grid code and security of network, Electricity and gas market, Monitoring of regulatory activities structures etc.

<u>Important events of the 1st quarter of 2022:</u>

- Since January 1, 2022, import and sale of hybrid cars with a production date of no more than 3 years and engine capacity of no more than 2,500 cubic centimeters as well as import and sale of second and third level electric chargers for electric cars are exempted from VAT for a period of 3 years.
- 13.01.2022 groundbreaking ceremony of the 240 MW Khizi-Absheron Wind Power Plant:
- 13.01.2022 the Ministry of Energy of Azerbaijan and ACWA Power of the Kingdom of Saudi Arabia signed a Memorandum of Understanding for an offshore wind project;
- -25.02.2022 changes were made to the Law "On gas supply".

From November 1st, new electricity tariffs are in effect. The tariff for used electricity up to 200 kWh (including 200 kWh) is set at 0.08 AZN, from 200 kWh to 300 kWh (including 300 kWh) - 0.09 AZN, and over 300 kWh - 0.13 AZN. Prior to that, when electricity consumption was up to 300 kWh, the population paid 0.07 AZN, and when consumed over 300 kWh, 0.11 AZN. For trade and services, the tariff increased from 0.09 to 0.11 AZN, and for other industries - from 0.09 to 0.10 AZN. According to the decision, the price of natural gas sold to the population from November 1st to 1200 m3 (including 1200 m3) is 0.12 AZN per 1 cubic meter (the previous price was 0.10 AZN). For the annual consumer volume from 1201 to 2500 cubic meters (including 2500 cubic meters), the tariff is set at 0.20 AZN, above 2500 cubic meters – 0.25 AZN. At the same time, prices for gas sold for industry and agriculture for every 1000 m3 have risen from 200 to 220 AZN.

Significant Energy News

A ground-breaking ceremony was held in Baku on 15 March 2022 in view of the construction of 230 MW Garadagh Solar Power Plant in Azerbaijan by Masdar/UAE. This is the first foreign investment-backed solar power plant in Azerbaijan. The plant will be built by the United Arab Emirates' leading energy company Masdar. The plant, which will reportedly become operational in 2023, is located about 70 km south of Baku. The overall energy output of the plant is estimated at half a billion kilowatt-hours of electricity per annum, which is enough to supply power to over 110,000 houses. At the same time, it will help reduce carbon emissions by more than 200,000 tons annually. Renewables are expected to make up 30 percent of Azerbaijan's installed generation capacity by 2030. Estimates put the renewable energy potential of Azerbaijan at 37,000 MW. The potential of wind power in Azerbaijan stands at 59.2 percent of overall renewable sources. Solar power as the second-largest green energy source in the country with a total of 8,000 MW potential. Potential among other renewables sources like Biomass, geothermal, hydropower and (excluding large hydropower stations) are 900 MW, 800 MW, and 650 MW, respectively.

The following MoUs were signed within the groundbreaking ceremony:

– The MoU between Masdar and the Ministry of Energy on cooperation in integrated offshore renewable energy which includes possible cooperation to support the use of renewable energy in Azerbaijan, as well as integrated

solutions covering offshore wind energy use, green hydrogen production, carbon capture, use and storage at the expense of this energy, as well as other activities;

- The MoU between Masdar and AREA on cooperation in the field of renewable and clean energy in the Karabakh and East Zangazur economic regions, which defines possible cooperation on the use of renewable energy sources in the liberated territories of Azerbaijan. Masdar and Ministry of Energy of Azerbaijan agreed to study investment opportunities in such areas as utility scale wind and solar PV plants, rooftop solar systems etc.

 The MoUs between Masdar and Ministry of Economy on energy production from solid waste, renewable energy and energy efficiency.



FERC Bosnia and Herzegovina

Recent Developments

Regulatory Commission for Energy in Federation of Bosnia and Herzegovina (FERK) informed that the electric power activities on electricity generation, distribution, supply and market are carried out according to rules governing market relations. Electricity power companies in accordance with the Law on Electricity

Electricity trade prices November 2021 - February 2022 (KM/MWH)

II 2022

I 2022

XII 2021

XI 2021

XI 2021

0 50 100 150 200 250 300 350 400 450

in Federation of Bosnia and Herzegovina are free to negotiate the quantity, price and conditions for electricity delivery on the manner to conclude short and long-term contracts or to take a part directly on organized market.

Bosnia and Herzegovina faced with electricity price increasing by the end of 2021 year as well as other neighboring countries and beyond.

In order to protect customers, as well as to protect the public interest Government of Federation of Bosnia and Herzegovina proposed the amendments on Law on Electricity in Federation of Bosnia and Herzegovina at the beginning of 2022. This Act entered into force on January 6, 2022. The amendments to that Law consider that if there is an unexpected disturbance on the electricity market that would cause increasing price of electricity supply for the customers over than 20% comparing with the price from previous year, the Federation BIH Government is obliged to limit increasing electricity supply prices up to 20% maximum. This measure applies to contracts with an annual duration or longer.

Based on Law on electricity amendments the Government of the Federation of Bosnia and Herzegovina also adopted Decision on limiting electricity supply prices. This Decision came into force one day after amending Law on Electricity (January 7, 2022). The Decision regulates that the Government of the Federation of

Bosnia and Herzegovina will limit increasing electricity supply prices in 2002 for customers up to 20% maximum, comparing with the prices from the previous year. This applies to contracts with an annual duration or longer.

The FBIH Government also demanded Federal Ministry of Energy, Mining and Industry to analyze the effects of this decision three months after entering into force and to propose some corrections to the Government of the Federation of BiH if needed. In such case Government will propose new measures to the Parliament of the Federation of Bosnia and Herzegovina.



Recent Developments

Gas & Oil Sector: From 1st January 2022 Croatian Energy Regulatory Agency (HERA) has adopted new tariff items for gas distribution for the third regulatory period 2022-2026 for all gas distribution system operators in Republic of Croatia, which resulted in the decrease of final gas price for household customers in public service obligation for tariff model TM2 (annual gas consumption from 5.001 to 25.000 kWh) on average for 1,1%. Information and graphics about that are available at the following link (unfortunately only in Croatian): https://www.hera.hr/hr/docs/2021/O bavijest 2021-12-30.pdf

Furthermore, from 1st April 2022 HERA has adopted new cost of gas purchase for gas suppliers in public service obligation, which resulted in increase of final gas price for household customers in public service obligation for tariff model TM2 (annual gas consumption from 5.001 to 25.000 kWh) on average for 77% (with value added tax 25%). However, Government of Republic of Croatia has adopted a decision for decrease of value added tax for gas from 25% to 5% from 1st April 2022, also with decision for subsidizing the gas bill for household customers in amount of 0,0133 EUR/kWh, which in the end resulted in the increase of final gas price for household customers in public service obligation for tariff

model TM2 (annual gas consumption from 5.001 to 25.000 kWh) for less than 20%. Information and graphics about that are available at the following link (unfortunately only in Croatian):

https://www.hera.hr/hr/docs/2022/Obavijest 2022-03-11 01.pdf

For industry customers for the period Q4 2021 in relation to Q4 2020 the final gas price has been increased on average for 151%. In this regard, Government of Republic of Croatia has adopted a decision for subsidizing the gas bill for industrial customers (with annual gas consumption less than 10 GWh) in amount of 0,0200 EUR/kWh, also with decreased amount of value added tax for gas from 25% to 5% from 1st April 2022.

Furthermore, in March 2022 HERA issued a Decision on the beginning of providing a SoLR to end customers connected to the distribution system, of gas supplier IVAPLIN Ltd, determining the beginning of the provision of a SoLR from April 1st, 2022.

HERA also issued a Decision on the beginning of providing a SoLR to end customers connected to the distribution system, of gas supplier BROD-PLIN Ltd, determining the beginning of the provision of a SoLR from April 20th, 2022.

Electricity Sector: In December 2021 the Croatian Energy Regulatory Agency (HERA) issued new tariffs for electricity transmission and distribution network use which entered into force on the 1st of April 2022. In accordance with new tariffs, average monthly network charges increased by 8,1% for households and by 3,9% for industry.

The new Electricity Market Act (Official Gazette 111/21), which entered into force in October 2021 changed the approach to connection charge to electricity network from deep model to hybrid model. Connection points and the fulfilment

of technical requirements are financed from connection charge.

Go-live of regional Core DA capacity calculation is expected in the near future. This will enable the coordinated day-ahead capacity calculation using flow-based approach in Core region which also encompasses Croatian borders with Slovenia and Hungary. In addition to that, this project will enable day-ahead market coupling between Croatia and Hungary.

In February 2022 HERA adopted the new Methodology for the determination of the prices for the supply of last resort for non-households. New prices for the April, May and June 2022 were calculated based on the average quarterly price index for the next four quarters on the HUDEX electricity exchange.

Other Legislation:

- The new Consumer Protection Act (Official Gazette 19/22, entering into force on 28 May 2022);

Furthermore, in March 2022 the Government of the Republic of Croatia issued the following decisions/regulations that deal with energy poverty:

- The Regulation on the Amendments to the Regulation on Criteria for Granting the Status of Vulnerable Energy Customers from Networked Systems,
- The Regulation on Monthly Compensation for Vulnerable Energy Customer, Participation in Covering the Energy Costs for Compensation Users and the Procedures of the Croatian Institute for Social Services,
- The Regulation on Implementation of Measures for Reduction of Energy Price Increase Impact on Providers of Social Services in the Republic of Croatia,
- The Decision on Single Payment to Retired Persons for Mitigation of Impact of Energy Prices Increase.

Significant Energy News

Gas & Oil Sector: HERA adopted Amendments to the Methodology for setting tariffs for gas supply as a public service and SoLR (Official Gazette No. 108/20 and 20/22) in February 2022. The Amendments to the Methodology included changes to the method of determining the final price of SoLR, which consists of cost of gas purchase for SoLR based on actual gas prices on the reference gas market ("TTF Price Assessment Quarter +1"), cost of gas distribution for corresponding distribution area and average cost of gas supply in Republic of Croatia.

Also, one consolidation and company merger of DSOs took place at the end of 2021. This result in reduction of the existing number of operators from 33 to 31.



Recent Developments

The bankruptcy of energy suppliers / Managing the transfer to supplier of resort. According to information by the **Energy Regulatory** Office (ERO), due to the turbulent market situation across the Europe, several companies in the Czech Republic have announced the termination of energy supplies. Since mid-October 2021 until March 2022 it has been the case for 17 companies with almost one million customers.

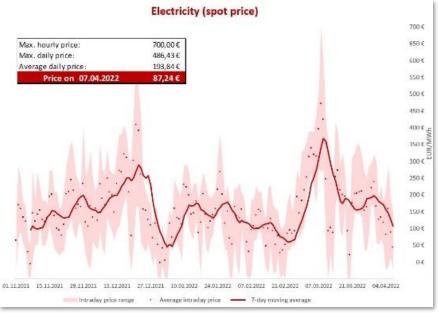
The largest of them, the Bohemia Energy group, had about 900,000 consumption points, both in electricity and This represents gas. approximately 10% of the total energy consumers - an amount not previously required to be transferred to a supplier of last resort. While the transferring to SoLR was successful, some issues were observed during the process. The extremely high wholesale prices resulted in difficulties for suppliers as they were not in a position

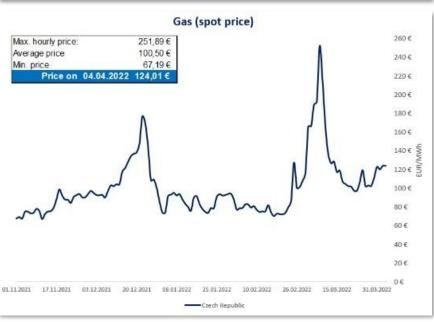
to offer similar price contracts to their new consumers and consumers saw an immediate and significant increase (4-5 times increase) in their energy costs (expected annual costs were spread across six months under SoLR mechanism as opposed to the usual twelve months).

Most of the consumers have to change their energy suppliers by April 14. In general, 97 percent of electricity customers already managed to find a new supplier, in case of gas it is 98 percent of households.

Regarding an unprecedent energy price surge we present at the two graphics – electricity and gas spot price surge from November 2021 until March 2022:

Hundreds of people were trained at **ERO's professional webinars.** The Energy Regulatory Office hosted, for the first time, an annual series of webinars. The pilot phase of the project targeted college and university students. The energy crisis has expanded the range of topics to include vulnerable consumer groups. Therefore, the demand expanded across way above the targeted group and so, the ERO supported the consumer group beyond the usual assistance. In total, hundreds of people attended professional webinars in 2021. The original intention of the project was to acquaint students of colleges and universities with the activities that the ERO deals with as a regulator.





Significant Energy News

Amendment to the Energy Act. After more than three years of preparations. negotiations and the legislative process, the amendment to the Energy Act finally came into force on 1 January 2022. The law prohibits the most common unfair practices of energy fraudsters. For the first time, the law clearly defines who an intermediary is and under what conditions he can carry out his activity. From January 2022. intermediary will have to inform the consumer that they are dealing with them as an intermediary, provide proof of the certificate and provide him with his identity, registered office identification address, registration number. Among the ERO's responsibilities is managing certain data of the authorization holder (the period of validity of the authorization etc). The purpose of this amendment is to prevent the current practice where energy savers pretended to be employees of suppliers or authorities and it was not possible to find out who forced an unfavorable contract on the customer.

The visit of Christian Zinglersen the Director of ACER. The Energy Regulatory Office had the pleasure to welcome Mr. Christian Zinglersen, Director of ACER. He arrived to Prague in November after a long-planned visit by regulators across the European Union. Among the topics discussed was European energy regulation and long-term cooperation between organizations, as well as the unprecedent situation of the energy price surge in the Czech Republic.

Stanislav Trávníček, Chairman of the ERO Council, described the situation in the Czech Republic as an exemplary example of the effects of the business strategy of ending suppliers, which borders on moral hazard. Mr. Zinglersen pointed out, that the current price shock at the wholesale level, which is the root of the problems in the retail markets, is completely

unprecedented and was primarily caused by global shifts in supply and demand. As such, it took place completely outside the control of the European Union, let alone the Member States themselves.



CRE France

Recent Developments

France's electricity smart meter, Linky, had a successful rollout: The massive rollout of the Linky smart meter is coming to an end, with more than 90% of Enedis' customers equipped by 31 December 2021. The project is now entering a new phase, involving both operation widespread deployment on the 10% of Enedis' meter base still equipped with generation meters. Energy old Regulatory Commission (CRE) has thus defined the new incentive regulation framework, in order to ensure that the expected gains during the Linky project's operating phase are actually realised, and that savings can be transferred to the consumers through reduced network tariffs.

Interruptibility as serious tool for mitigating the energy crisis: In France, both for and gas electricity, interruptibility mechanisms exist, to ensure that transmissions systems operators can proceed to the interruption of the consumption of approved final consumers, usually industrial sites representing important share of gas electricity or consumption, preserve the equilibrium and the safety transmission networks. The current energy crisis has led the regulator to increase the possibility to resort to these mechanisms.

 Regarding electricity: In January 2022, CRE gave RTE (the French electricity TSO) the possibility, for 2022 only and given the situation, to ask the sites selected during the call for tenders to contribute ten

- times a year (with financial compensation), compared to five times under the initial rules of the system.
- Regarding gas: For now, the subscription of interruptibility contracts is compensated by exonerating consumers from paying a contribution to storage. CRE is currently working on reshaping interruptibility mechanisms to fuel industrial consumer's participation in such mechanisms. The situation also for some adaptations regarding gas load shedding. A new decree on load shedding was published on the 8th of April. A new article R434 is introduced in the Energy code. The mechanism is as follows. Firstly, a survey conducted by the TSOs and DSOs among gas consumers with a consumption of more than 5 gigawatt-hours the previous year. Consumers must indicate the economic consequences they would suffer in the event of a reduction or cessation of their natural gas consumption, as well as the level of natural gas supply below which these economic consequences are likely to occur. Secondly, based on the information received, the prefect draws up a list of natural gas consumers consuming more than 5 gigawatt-hours per year and who are divided into several categories: consumers carrying out a mission of general interest, consumers likely to suffer major economic consequences in the event of a reduction or cessation of their natural gas consumption. These lists are notified to the TSOs and DSOs concerned. The decree then provides an order of priority for load shedding. In the event of a load shedding order, the consumer must comply with it within 2 hours. No financial compensation is provided for in this text.

CRE welcomes its European counterparts in Paris: On the occasion of the French Presidency of the Union, Jean-François European CARENCO. president of CRE. welcomed his European counterparts to Paris on 5 and 6 April. The regular meetings of the General Assembly of the Council of European Energy Regulators (CEER) and the Board of Regulators of the European Agency for the Cooperation of Energy Regulators (ACER) were held at the CRE premises, in the presence of numerous energy regulator chairpersons. On that occasion, European regulators the importance reaffirmed European cooperation during this energy crisis, even more so as energy was the founding element of the European project, 72 years ago.

Significant Energy News

The impacts of the rise of energy prices in France and Europe: The second half of 2021 saw exceptional rise in prices on the French and European electricity markets, linked in particular to the crisis on the gas market, the increase in the price of CO2, as well as uncertainties about the availability of the French nuclear fleet. In this crisis context, future wholesale electricity prices have reached unprecedented levels. regularly exceeding €/MWh for the 2022 base calendar product. The surge in wholesale electricity prices is having an impact on the entire retail electricity market. In addition to social measures such as the increase in the energy voucher, the government has taken steps to limit the impact of the price crisis on consumers' bills:

 A reduction in the domestic tax on final electricity consumption (TICFE), previously set at 22.5€/MWh, to its minimum value. This lever, authorised by the 2022 Finance Act, was implemented by decree on 28 January 2022.

- The freezing of the increase in regulated electricity sales tariffs (TRVE) at +4% (including tax), provided for in the 2022 Finance Act.
- The freezing of the increase of regulated gas sales at their October 2021 level.
- A financial aid for businesses that have operating losses with electricity and/or gas bills that are up by at least 40% and represent more than 3% of turnover. This aid will be granted regardless of size or sector of activity. The government will cover half of the excess energy costs. The budget authorised by the European Commission for this aid is 25 million euros maximum per business.

The ElecLink interconnector starts operations: The third electricity interconnector between France and Great Britain is about to enter commercial service. Using the Channel Tunnel, this interconnector has had to overcome complex technical challenges concerning the compatibility of the interconnector with the railway system. After five years of work, Eleclink obtained its operating licence on 17 February 2022 and will be able to offer 1 GW of additional electricity transmission capacity to market players to meet their short and long-term needs. CRE has accompanied the process from the outset, granting it a partial exemption from the application of network access rules from 2014 for a period of 25 years. However, the Brexit has changed the legal and technical context of the project, without however calling into question its economic relevance. By strengthening the links with the British market, Eleclink will contribute to security of supply and the development of competition in France and Great Britain.

+ + **GNERC Georgia** + +

Recent Developments

Georgian National Energy and Water Supply Regulatory Commission (GNERC) established Energy Learning Center, with the purpose of providing knowledge about energy and water supply sectors to interested individuals from regulated utility companies, students, media representatives and etc. Topic of the first training course is Fundamentals of Energy and Water VlaguZ Regulation.

An agreement was signed between the Georgian Energy Development Fund and the ABU DHABI Future Energy Company PJSC - MASDAR. According to the Agreement, the parties will carry out technical, commercial and financial activities for the further development of the solar power plant project.

An Agreement on supporting the "Creating Favorable program Environment for Development of Sustainable Energy in Georgia" was signed between the Government of Georgia and the Government of Denmark. Within the frames of the agreement, Denmark will assist Georgia in the development of energy efficiency and renewable energy by 2023 with a grant of 2 million Euros.

The memorandum of cooperation was signed between Georgian National Energy and water Supply Regulatory Commission and Kutaisi International University. That envisages internship programs for students of the university and support in their career development.

Media Club of GNERC Energy launched new course for media representatives about updates of new regulations in energy and water supply sectors. Whereas, classes are held in hybrid regime.

The amendments were made to the Commission Resolution №33

December 4, 2008 "On Electricity Tariffs". According to the amendment: temporary tariffs for universal electricity supply, PSO and SoLR for Ep Georgia Supply JSC and Tbilisi Electricity Supply Company LLC. were set until September 1, 2022.

Significant Energy News

- Amendment was made to the Commission Resolution №58 November 12, 2020, approving the Transitional Measures he Implemented in the Electricity Sector. Under the amendment, the date of conducting the energy exchange trading test by the market operator was redefined.
- was Amendment made to Commission Resolution №46 of 11 August 2020 on the Approval of Electricity Market Rules. According to the amendment, the launch date of DAM was set for September 1, 2022, and for the intra-day market - 2022, December 1.
- Amendment was made to the Resolution №33 of the Commission of December 4, 2008 on Electricity







REGULATORY STORY OF THE MONTH BILATERAL COOPERATION BETWEEN AERA AZERBAIJAN AND MEKH HUNGARY



- ENERGY MARKET FUNDAMENTALS; ELECTRICITY AND NATURAL GAS INFRASTRUCTURE; ELECTRICITY AND AND ORAL GAS INFRAST ROCTORE; RULES OF GRID CONNECTION; MONITORING OF REGULATED ACTIVITIES AND MARKET; QUALITY OF SUPPLY; ROLE OF ELECTRICITY TSO;

Tariffs. According to the amendment, the long-term marginal tariffs for the sale of electricity produced by JSC "Khrami HPP 2" have been adjusted.

- Amendment was made to the Commission Resolution №47 of August 13, 2020 on the Approval of the Electricity Retail Market Rules. The amendment re-established the article on the supply of electricity in the form of public service obligations, as well as the rules for the provision of universal services.

M

MEKH Hungary

Recent Developments

Hungarian Energy and Public Utility Regulatory Authority (MEKH) organised a workshop on the market entry of aggregators in January 2022, where participants reviewed international practices and trends in the regulation of aggregators and discussed the most important issues facing domestic regulation. The event focused on the consultation document prepared bv MEKH. which summarised the main points of discussion on the entry of aggregators into the market. Presentations held during the workshop are available here: http://www.mekh.hu/mekh-sworkshop-on-aggregators-thepresentations-are-now-available

By the end of 2021, MEKH has registered twenty-six aggregators with a total capacity of 820 MW.

MEKH organised a virtual training for the experts of Azerbaijan's regulatory authority AERA in February 2022. The two-day programme focused on the regulation of electricity and gas markets and energy transition. The event was the first step in implementing the Memorandum of Understanding signed by the two authorities. The program was included in ERRA's Regulatory Story of the Month in April 2022.

Significant energy news

Based on the proposals of MEKH, legislative amendments were introduced in early 2022 regarding guarantees of origin and fuel mix disclosure. On 1 February 2022 MEKH joined the EECS system, which means that the Hungarian guarantees of origin (GOs) may enter the international market. Since 1 January 2014, MEKH has been providing guarantees of origin and operating the related electronic invoicing system. Since then MEKH has registered 5,695,811 guarantees of origin for account holders. In 2021 1,683.566 GWh of electricity consumption was certified as coming from renewable sources by means of a guarantee of origin certificate, which represents approximately 3.6 percent of annual domestic consumption.

The Ministry of Innovation and Technology, in cooperation with MEKH and TSO MAVIR intended to adopt an action plan in order to eliminate by 31 December 2025 the structural congestions identified in a report. The action plan was put on a public consultation in late 2021 and afterwards was submitted to the European Commission. Pursuant to EU legislation, TSOs shall not limit the volume of interconnection capacity to be made available to market participants as a means of solving congestion inside their own bidding zone or as a means of managing flows resulting from transactions internal to bidding zones.

As a measure introduced in December 2021 due to rising electricity prices, the eligibility of **universal service in electricity** – where regulated prices are applied – was temporarily extended to certain small and medium enterprises. The universal supply contracts for these consumers were only be signed for a fixed term, with the latest expiry being 30 June 2022. In addition, central budget institutions ceased to be entitled to universal electricity supply within universal service and supplier of last resort.

In addition, the Hungarian Government introduced a new financial support program in order to reduce the overhead costs of small and medium-sized enterprises (SMEs). The program aims to boost energy efficiency developments of SMEs with 12 billion HUF (approx. 31 746 031 EUR). Since 11 April 2022 SMEs can apply for the support in order to upgrade their heating and lightning systems, to install a solar panel or a heat pump. SMEs may be awarded a

sum between 75 – 500 million HUF (approx. 198 000 – 1 322 751 EUR).

The announced tender is available in Hungarian on the link below: https://www.palyazat.gov.hu/ginop-415-22-energiahatkonysg-nvelst-clz-pletenergetikai-fejlesztsek-tmogatsakkv-k-rszre-1#

In the 4th quarter of 2021 the electricity supplier JAS Budapest Zrt. experienced financial difficulties due to high energy prices. JAS Budapest Zrt. was not able to manage the situation and terminated its contracts with its customers. In accordance with legislation MEKH appointed MVM Next Zrt. as a **supplier of last resort** to ensure the energy supply of the related consumers. From 1st January 2022 MEKH withdrew the trading license of JAS Budapest Zrt.

As a result of the exceptionally high natural gas prices experienced on the international and Hungarian natural gas markets, MEKH has decided to revise the level of the small adjustment, which plays an important role in the development of the daily balancing gas price. MEKH has reduced the level of the small adjustment from 6% to 3%, effective from 1 November 2021, in order to support the moderation of natural gas prices. With this measure MEKH aimed to protect the financial stability of natural gas traders and to restrict further increases in their risks and in the level of their required security deposits.



State Department, Kyrgyz Republic

Recent Developments

Department of the Fuel and Energy Complex Regulation under the Ministry of Energy of the Kyrgyz Republic has informed that since December 27, 2021 low-income families who receive a monthly allowance, needy citizens (families) with children under 16 years old - "uybulogo komok" are set separate tariffs for electricity for the consumer group "population" with consumption up to 700 kWh per month the tariff will be 0.50 KGS/kWh. For consumption above 700 kWh per month the tariff is 2,16 som/kWh. According to the list provided by the Ministry of Labor, Social Security and Migration of the Kyrgyz Republic.

Significant Energy News

According to the Decree of the Cabinet of Ministers of the Kyrgyz Republic on December 20, 2021 № 320 "On the issues of subordinate units of the Ministry of Energy of the Kyrgyz Republic," the State Agency for Regulation of the Fuel and Energy Complex under the Ministry of Energy and Industry of the Kyrgyz Republic was transformed into the Department for Regulation of the Fuel and Energy Complex under the Ministry of Energy of the Kyrgyz Republic.

Also, in accordance with the "Concept restructuring the management system of the Kyrgyz Republic" approved by the Cabinet of Ministers on February 8, 2022 № 51-r, work is carried out to reorganize the energy management system of the Kyrgyz Republic, i.e. the merger of distribution power companies OJSC "Severelectro", OJSC "Oshelektro", OJSC "Jalalabatelektro", "Vostokelektro" with OJSC "National Electric Network of Kyrgyzstan", and the merger of OJSC "Electric Stations" with OJSC "Bishkekteplosety".



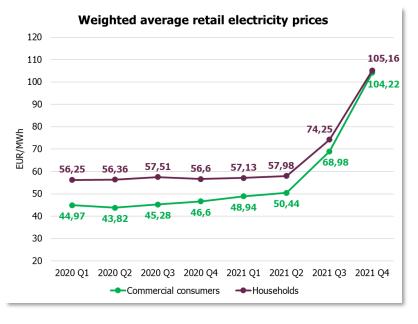
PUC Latvia

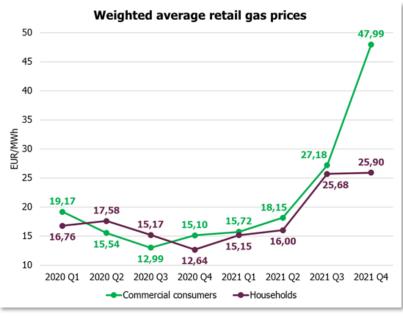
Recent Developments

New tariffs for the captive consumers of gas: In the 1st half of 2022 gas tariffs for the captive consumers of gas are 54.2% to 93% higher, depending on the amount of consumption. In Latvia, households can choose to receive gas either from a registered service provider at a market price or from the public trader JSC Latvijas Gaze at the captive consumer price (regulated tariffs) reviewed semi-annually.

Energy price developments: According to data gathered by the Public Utilities Commission (PUC):

- the weighted average retail electricity price without taxes and system services in 2021 Q4 was 104.22 EUR/MWh for commercial consumers (+123.65% compared to 2020 Q4) and 105.16 EUR/MWh for households (+85.80% compared to 2020 Q4);
- the weighted average retail gas price without taxes and system services in 2021 Q4 was 47.99 EUR/MWh for commercial consumers (+217,81% compared to 2020 Q4) and 25.90 EUR/MWh for households (+104.91% compared to 2020 Q4).





Measures implemented by the Government in response to price increases: From 1 November 2021 to 31 December 2022 all vulnerable of groups consumers receive additional 10 EUR support to cover electricity bills every month. The total amount of support is 15 EUR for poor household, 15 EUR for families with disabled children, 15 EUR for persons with group I disability or their guardian, 20 EUR for large families. From 1 January 2022 to 30 April 2022 the Government reimburses 100% of the cost of the electricity distribution system service and 100% mandatory purchase costs (RES support scheme) for all consumers. There are also additional payments for pensioners coming from state budget as a one-time financial support of 80 EUR and 50 EUR monthly allowance from January 2022 to the end of April 2022 for each child, including students under the age of 24 who are dependent on their parents or guardians. From January 2022 to the end of April 2022 the Government compensates the increase in the price of gas for households with annual gas consumption above 250 m³. The amount of the fee reduction per kWh depends on consumption. If the average monthly consumption over a 12-month period is from 221 kWh to 5269 kWh (21 m^3 - 500 m^3), the reduction of the fee for gas in the amount of 0.03045 EUR per kWh (excluding VAT) is compensated by the Government. For those whose average monthly consumption over a 12-month period is over 5,269 kWh (500 m^3), the Government compensates the reduction of the fee for gas in the amount of 0.02279 EUR per kWh (excluding VAT).

Significant Energy News

The PUC has approved the new operational strategy for 2022-2026. The new operational strategy sets out three strategic objectives the PUC will work on for the next five years: (1) High consumer awareness to

effectively exercise their rights and exploit the benefits of the market; (2) Sustainable and efficient market and infrastructure; (3) Responsible and targeted regulatory practice.



NERC Lithuania

Recent Developments

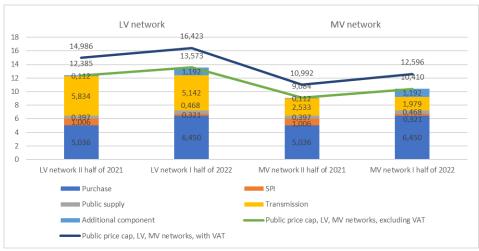
New electricity tariffs for I half of 2022: National Energy Regulatory Council (NERC) has approved the electricity tariffs of the public supplier **UAB** "Ignitis" for household consumers, which will be applied to consumers who use less than 5000 kWh/year and have not chosen an independent electricity supplier. The increase in electricity prices in 2022 was mainly due to an increase in the public electricity purchase price due to the forecast electricity market price growth, a higher price cap for the public supply service and a higher additional component. Lower prices for distribution services, transmission, system services, services of public

interest (SPI) reduced tariffs mentioned.

NERC approved tariffs of natural gas for household consumers for 1st half of 2022.

The price of natural gas for users of 1st subset increases due to the change in the price of natural gas (product). Growth of prices also was conditioned by a growing demand for gas, underfilled European gas storage facilities approaching the winter season and gas shortages in the market.

Measures to accommodate price increase for consumers in Lithuania: Amendments to the legal acts was made providing that in case regulated electricity or gas price cap for household customers would increase more than 40% - NERC has a right when setting the regulated tariffs to allot the increase in wholesale prices 5-years period. For over postponed income the interests are applied. **NERC** has prepared methodical changes to implement these amendments and used this



Average electricity prices for MV and LV network consumers in II half of 2021 and 2022, c/kWh

Group of household customers	Part of the tariff	2021 2 nd half	2022 1 st half	Variation, %
For users of 1st subset	fixed part of the tariff, EUR/mo.	0,56	0,56	0
Q≤300 m³	variable part of the tariff, EUR/m ³	0,63	0,80	26,87
For users of 2nd subset	fixed part of the tariff, EUR/mo.	3,99	3,99	0
300 <q≤20 m<sup="" thous.="">3</q≤20>	variable part of the tariff, EUR/m ³	0,41	0,55	34,22
For users of 3rd subset	fixed part of the tariff, EUR/mo.	3,99	3,99	0
Q>20 thous. m ³	variable part of the tariff, EUR/m ³	0,39	0,53	36,02

mechanism when calculating the gas tariffs for the I half of 2022. This mechanism was refused by the new support package announced by the Government in April, which foresees that the regulated prices for natural gas and electricity cannot increase of more than 40% with the rest of the increase being compensated from the state budget (foreseen 570 million euros). The price ceilings are foreseen for those consumers that have already chosen the independent supplier - the price cannot be higher than 23 c/kWh. The new support package will have to be adopted by the Parliament in May.

In the electricity sector for nonhousehold consumers was provided aid for business (soft loans) and deferrals of payments (on individual basis, according to the agreement with the supplier). For all consumers lower distribution prices for and transmission system services (~20%) was provided as well. Also, II stage of the liberalization was extended to give more time to make decisions on the choice of the independent supplier. Final date of liberalization process (31st December 2022) was not foreseen to be changed.

To ensure transparent and reasonable development of the electricity sector that would meet the needs of market participants, NERC has coordinated 400-110 kV the network development plan of the Lithuanian electricity system for 2021-2030 prepared by AB "Litgrid". Investments in the development reconstruction of the transmission network will amount to about EUR 1.38 billion. The largest part (EUR 1.24 billion or 90% of the total investment amount) in the planned investment portfolio consists of investments in strategic state projects (EUR 0.648 billion or 47% of the total investment portfolio) and investments in network reconstruction. The most important investments of strategic state projects are related to the integration of the electricity market into the European

electricity system and the connection of the Lithuanian electricity system to the continental European network system for synchronous operation.

Significant Energy News



NERC approved the proposal of AB "Litgrid" and other Baltic TSO's on establishment of the Baltic Regional Coordination Centre in accordance with the European Union's Regulation of Clean Energy Package. This Centre will be the main coordinator of the synchronization of the Baltic energy system with the continental European networks and will allow the Baltic TSOs to share their expertise, knowledge, data, and its analysis. It will replace the Regional Security Coordinator and will be responsible for a regional capacity calculation, determination of the volume of a regional reserve capacity, security analysis, creation of common network models, adequacy forecasts and other tasks, as well as contributing to the evaluation of TSO's system security and recovery plans. The Centre headquarters will be in Tallinn, its management will be appointed on a rotating basis, and the Baltic TSOs will have an equal number of shares in the Centre and the same number of experts from each country.

NERC has coordinated the investment project "Acquisition of an LNG storage vessel" of AB "Klaipėdos nafta", the value of which does not exceed EUR 138.4 million (excl. VAT). This will ensure the continuity of the LNG terminal activities and the implementation of the National Energy Independence Strategy, while maintaining the benefits of the LNG terminal for Lithuania: increasing energy independence and the

competitiveness of energy markets as well as providing access to global natural gas markets for Lithuanian and regional market participants importing natural gas.

NERC has harmonized the amendments to the Rules on the Use of the AB "Amber Grid" Natural Gas Transmission System, which include the conditions for ordering the capacity of the gas pipeline connection between Lithuania and Poland (GIPL), coordinating the provisions with the rules applicable in the Latvian, Estonian and Finnish gas markets. Amendments to the Rules on the AB "Amber Grid" Natural Transmission System Balancing and the Methodology for the Determination of the Revenue and Prices of the State-regulated Natural Gas Transmission Activities will provide market participants with incentives to self-balance, which will increase the liquidity and competition of the natural gas market. NERC has also changed the Methodology for Setting of State-Regulated Prices within the Natural Gas Sector, which provides that when calculating natural gas tariffs, a reduced forecasted natural gas purchase (product) price may be estimated, and the difference between the reduced forecasted and actual natural gas prices (product) of that period shall be allotted over a period determined by NERC, assessing the cost of a borrowing.

The Baltic electricity transmission network operators have unanimously decided to reduce commercial flows Russian networks. operation of the electricity system will be ensured by local electricity production in Lithuania and imports from strategic partners - EU countries through the existing connections with Sweden, Poland and Latvia. This will help to ensure the stability and reliable operation of the transmission networks. From 3rd March 2022, the total amount of electricity imported into the Baltic States from Russia will

not exceed 300 MW. Respectively, no more than 150 MW of electricity will be able to enter through the Lithuania-Russia and Latvia-Russia connections.



Seeking full energy independence from Russian gas, in response to Russia's energy

blackmail in Europe and the war in Ukraine, Lithuania has completely abandoned Russian gas: Lithuania's gas transmission system has been operating without Russian gas imports since the beginning of April. All Lithuanian gas demand is satisfied through Klaipeda liquefied natural gas (LNG) terminal. If necessary, gas can also be delivered to Lithuania via the gas link with Latvia, and from 1 May – through the gas link with Poland.



ANRE Moldova

The measures taken by the Republic of Moldova to ease the impact of soaring energy prices. The soaring gas prices in Europe prompted by strong demand from economies recovering from the depths of the COVID-19 pandemic and falling gas reserves, have had a major impact on gas and electricity prices across the EU and its bordering countries, including Republic of Moldova.

The last contract signed by the Moldovan company "Moldovagaz" with the main supplier of gas, the Russian Gazprom, in October 2021. applies a price formula that is based on a certain ratio of the European gas market prices (TTF) and oil price. As a result of record high gas prices in Europe and ongoing concerns of regional supply security the regulated prices in the Republic of Moldova rose above 200%. The new contract has prompt payment terms, that includes advance payment for the provided supplies. The contract has also set some preconditions for a new debt repayment schedule.

The surge in prices and difficulties in contracting sufficient quantities of natural gas, prompted the Parliament of the Republic of Moldova to declare the state of emergency on the energy market on October 22 2021. Additionally, the Parliament has made some amendments to the Gas Law no. that 108/2016 include: transposition of REMIT; the public service obligation for suppliers to keep mandatory stocks of gas for 2 months; the introduction of harmonized transmission tariffs; the regulation of the trading activity; unbundling of TSO

In order to support the households and businesses the Parliament has approved mechanism for compensating the price difference for natural gas and heating. Government compensates 67% of the gas bills for a consumption of up to 50 m3/month, 50 % for consumption of other 100 m3/month, and 67% for heat consumption of up to 1 gcal/month.

As the electricity production relies heavily on gas supplies, in April 2022 the prices for households have increased by 43,7%. The shortage of natural gas during October 2021 led some producers in the country to switch to alternative sources of electricity (fuel oil or coal). The electricity price surge and the state of emergency has delayed the entry into force of the new electricity market model following the approval of the Electricity Market Rules by National Energy Regulatory Agency (ANRE). The regulator has postponed the entry of the Rules into force from January 1 2022 to May 1 2022. ■



Recent Developments

The Government of Mozambique approved in the Council of Ministers,

by Decree, the Regulation for Off-Grid Energy Access: This regulation was published on December 10th after being formally approved in Sept 14th by the board of ministers and according to the rules it will be enter into force 45 days after publication. The regulation was developed as a response to strengthen the current legal framework of the energy sector to accelerate access to energy in offgrid areas with a particular emphasis of boosting productive uses of energy related socio-economic development across the country.

This regulation is the result of the work of the Government of Mozambique and the institutions involved, namely the Ministry of Mineral Resources and Energy (MIREME), the Energy Regulatory Authority (ARENE), and the National Energy Fund (FUNAE).

Significant Energy News

Total Energies granted right to build Dondo solar power plant (Mozambique): The Mozambican government has selected the French multinational oil and gas giant TotalEnergies to fund the construction of the solar power plant in Dondo district, in the central province of Sofala.

Five potential investors were prequalified, one of which subsequently dropped out. Thus, only four of the bidders upheld their interest. Of these, only two delivered viable technical proposals. After а thorough assessment by the multi-sector jury, Total was regarded as the bidder with the best technical and financial proposal, thus being granted the right to implement the project. This was the culmination of the Renewable Energies Auction Programme (PROLER) a process conducted by ARENE (Mozambique's Energy Regulating Authority).

Temane 450 MW Gas Project: Central Térmica de Temane (CTT) 450 MW gas-fired power project, located at

Temane in Inhambane Province in Mozambique has reached financial close and will soon start construction in early 2022. CTT will supply low cost, reliable power to Electricidade de Moçambique (EDM) under a 25-year tolling agreement using natural gas supplied from the Pande-Temane Fields operated by Sasol and ENH, the state-owned hydrocarbon company. CTT is expected to provide electricity to meet the demand of 1.5 million households and will contribute about 14% of the electricity supply capacity available to meet demand in Mozambique.

CTT is 85% owned by Mozambique Power Invest (MPI) and 15% by Sasol Africa. MPI is owned by Globeleq (76%) and EDM (24%).

Coral Sul FLNG arrives on site in Mozambique: The Coral Sul floating LNG (FLNG) vessel has arrived at Area 4, offshore Mozambique, with the aim of starting production in the second half of 2022. The Upstream Oil and Gas of Mozambique (INP) informed of the arrival of the vessel in the Rovuma Basin on January 3, 2022.

The production vessel is 432 meters long, 66 meters wide and weighs about 220,000 tonnes. It cost around \$7 billion and can liquefy 3.37 million tonnes per year. ■



Recent Developments

Energy price hikes dominated the last guarter of 2021 and the first guarter of 2022. At the end of December 2021 and Water **Services** Energy Regulatory Commission (ERC) adopted new decisions on regulated electricity and district heating prices, by which the average electricity price increased by 11,60%, while the district heating price average increased by 14%. However, to keep the price increases for households and

small consumers on a bearable level. there was a need for financial support by the Government of North Macedonia which subsidized state owned ESM JSC Skopje for purchases of the needed electricity from the free market and additionally purchases of coal and fuel oil. In the context of the energy crisis, declared by the Government on 9th of November 2021 and extended by the Parliament until 9th of June 2022, there were several electricity suppliers which defaulted stopped their commercial operations, but on the other hand there are new entrants on the electricity market in the beginning of 2022 which aim to gain better prospects from the recent electricity market developments. In January 2022 there was additional 20% increase in the district heating price for households, but the Government provided subsidies and in practice district heating price for households remained the same.

Additionally, at the end of 2021 ERC adopted new regulated natural gas transmission and distribution tariffs for 2022. The average natural gas transmission tariff for 2022 dropped by 9,65% compared to 2021, while the average distribution tariffs were slightly increased by 2,8%.

Significant Energy News



- ESM JSC Skopje in April 2022 commissioned the test operation of the PV Power Plant Oslomej 1 built in the area of Coal Power Plant Oslomej with a capacity of 10 MW. This is the first example of energy transition in Southeast Europe in which electricity will be produced by the sun through

panels placed on an old, exhausted coal mine.

- The PVPP Oslomej 1 is the first in a series of power plants that should completely replace the existing installed capacity of CPP Oslomej (120 MW). The total annual generation of PVPP Oslomej 1 is foreseen to be 15-17 GWh, which will cover electricity needs of approximately 2800 households. Total investment in PVPP Oslomej 1 is 7 million Euros, part of which are own funds of ESM JSC Skopje, and part is covered from a favorable credit line for investments in renewable sources provided by the European Bank for Reconstruction and Development. ■



APSR Oman

Recent Developments

Ibri II Solar Independent Power Plant: Oman's largest utility-scale solar PV independent power project was commissioned in November 2021 and is the first such solar IPP to be launched under the country's renewable energy program. The Authority for **Public Services** Regulation (APSR) granted Shams Ad-Dhahira Generating Company SAOC with a Renewable Energy generation licence effective for a period of 25 vears, with the Oman Power and Water Procurement Company (OPWP) off-taking the plant's electricity output during this period.

This landmark project known as the Ibri II Solar IPP is a 500 mega-watt greenfield solar photovoltaics power plant located in the northwest of the country in Ibri. The plant itself extends over an area of 13 million square meters and features an estimated 1.4 million N-type high efficiency bi-facial cells and modules that are deemed as ideal for Oman's environmental conditions and generate energy from both top and rear sides. The plant is therefore the largest bifacial-based

solar PV project to date in the Middle East and will produce enough carbon-free electricity to power an estimated 33,000 homes. The Ibri II project is a major accomplishment in meeting country's renewable energy target as well as the government's directives to increase the contribution of renewable energy in accordance with Oman's Vision 2040.



ERO Poland

Recent Developments

Instruments to mitigate rising energy & gas prices introduced in Poland:

- Poland's Government to offset rising energy prices prepared anti-inflation shield. The principle of the shield is simple: it is essentially a matter of reducing the share of taxes in the final price paid by consumers. From 1 January 2022 - the 1st anti-inflation package has been introduced. The aim is to prevent of households from the risk of a single, cumulative raise of gas prices in 2022. From 1 February 2022 - the 2nd anti-inflation package has come into effect to further counter the effects of high inflation. The shields introduced tax cuts on electricity, gas and network heat, including a reduction of excise duties on fuel and electricity along with a temporary exemption from excise duty on electricity for households. Details include VAT reduction from 8% to 0% for natural gas, to 5% for electricity & heat energy from 23 % to 8% for motor gasoline, diesel oil & liquefied gaseous. And other allowances for most vulnerable household.
- The key feature is also the new principles of gas tariff calculation. **New tariffs mechanism** is a unique solution. The system ensures, that gas suppliers will be able to transfer the ongoing gas prices increase for the following years and not as it was before including it only in the current tariff calculation. By the 30th of June 2022

- suppliers will have the possibility to submit the new tariffs application to **Energy Regulatory Office (ERO)**, calculated on the basis of only partial of reasonable costs, i.e. only partial gas purchase costs will be accounted. Whereas suppliers will be able to recover those partial costs not taken into account in the current tariffs for the following tariffs applicable from the beginning of 2023 or stakes and prices fee rates on competitive markets, for the next 3 years (up to the end of 2025).
- Freezing Gas Tariff Prices the prices of gaseous fuels will be frozen at the level of the prices included in the tariff of the so-called incumbent supplier - PGNiG. This price is also the maximum price, which means that the customers who previously concluded a contract with the supplier providing for a lower price, the lower price is applied until the expiry of the contract. Also in the event that during 2022 there are price reductions and entrepreneurs start to offer prices lower than in the supplier's tariff, these lower prices will apply. The adopted solutions exclude possibility of increasing the prices and tariff rates of gaseous fuel in 2022.
- In order to protect selected groups of gaseous fuel consumers, the catalogue of entities covered by tariff protection was extended and the provisions on tariff protection of natural gas consumers in multiapartment buildings were confirmed and clarified. As a consequence, the tariffs approved by URE currently cover not only household consumers but will also be able to use them for housing communities cooperatives & public utilities (such as hospitals, schools, kindergartens, orphanages etc.) which are entitled or obliged to provide gaseous fuel in their residential premises for consumption by households.

The following **NEW LAW** entered into force due to inflation and rising energy prices:

- Amendment to the **Poland's Energy Law Act** new rules for gas tariff calculation by suppliers the possibility of subsequent recovery of actually incurred costs in the next tariffs gas suppliers will be able to spread extra costs of gas purchase over next 3 years (by the end of 2025);
- Amendment to the **Poland's VAT Act** (adopted on 13 January 2022) new VAT rates reductions for certain products/groups of products. The reduced VAT rates apply to all supplies;
- Amendment to the **Poland's Act on special solutions for the protection of gas fuel consumers** (adopted 26th of January 2022) extension of gas consumer protection and other special instruments to increase energy security in Poland.

URE response to the challenge of transformational change in energy sector:

At the end of 2021 URE kicked off the project on elaborating social agreement of regulator and DSOs under the official name Polish **Electricity** Distribution Grids' Effective Transformation Charter. The main objective of these activities is the implementation of transparent and predictable regulatory policy for long-term investments in distribution grids, that is acceptable by both government itself, enterprises and also the entire society. Project Aim:

- Diagnosis of key needs related to distribution networks operation, resulting from formal and legal requirements for DSOs and from increasing number of RES connected to DSOs networks;
- Tools identification, that satisfy those needs;
- Defining methods and financial sources also assessment of their influence on tariffs (society):
- DSO regulatory model adjustments that support investments activity, in particular investments relating to

networks flexibility (including RES connection optimization and maximization of RES energy offtake);

- Proposing legislative changes for facilitating networks investments & obtaining funds.

The Charter will be developed by the Stakeholder Group (comprised of representatives of ministries, DSOs, TSO and independent energy experts), chaired by Steering Committee. The Steering Committee works has brought already significant effects:

- The formal and legal requirements for operators has been already presented, in particular in the field of planning and fulfilling networks investments, including network connections;
- In the field of networks infrastructure investments by 2030, there have been discussed two scenarios: the investments necessary to undertake and those required due to the Polish Energy Policy until 2040. The scenarios should be adopted as directional recommendations for further work.

The results of these works shall optimize to the fullest the effectiveness of distribution networks in Poland that must be prepared for more and more dynamic energy sector development.

Significant Energy News

URE kicked off consultation with market participants on the relevant points of gas transmission system:

According to regulation 715/2009, each TSO shall make public information on technical, contracted and available capacities on a numerical basis for all relevant points, including entry and exit points. The relevant points of a transmission system on which the information is to be made public shall be approved by the national regulatory authority after consultation with network users. 3 new points will be created on the

interconnections of the PL-LT, PL-SK and PL-CZ transmission systems:

- Poland - Lithuania (SANTAKA)

The commissioning of the new interconnection-point on the border between Poland and Lithuania (the Entry/Exit Point Poland – Lithuania of the GIPL in both directions of the gas flow) is planned for 2022. The Santaka IP on the Lithuanian-Polish border will become available once the GIPL pipeline

is commissioned and gas trading and transportation through the new pipeline starts. The creation of the Santaka IP will enable the cross-border connection of the gas systems of Lithuania, Latvia and Estonia with the European Gas Network. The Santaka IP will be launched in 2Q of 2022.

- Poland - Slovakia (VYRAVA) Výrava IP will connect the gas transmission system of Poland and Slovakia after the construction of a new cross border pipeline. This is part of the concept of "North-South Gas Interconnection in Central-Eastern and South-Eastern and South-Eastern Europe (NSI East Gas)", i.e. the North-South Corridor. The Výrava IP will be launched in the second half of 2022.

Poland - Czech Republic (ZŁOTE HORY)

In 2011, due to pressure differences, it was found that it was not possible to provide gas transport services at this However, point. after the modernization works, this point will be launched as an entry-exit point enabling the transmission of gas in both directions and will connect the Polish transmission system with the Czech distribution system, operated by GasNet. During winter, gas will be transported from the Czech Republic to Poland on a firm basis, while in the summer on an interruptible basis. On the other hand, gas supply to the Czech Republic will take place only for the purpose of emergency supply to the Czech distribution system.



ANRE Romania

Recent Developments

November 2021-March 2022: The Romanian Parliament adopted a series of measures regarding the cap of electricity and natural gas prices: Government Emergency Ordinance no. 118/2021 on the establishment of a compensation scheme for the consumption of electricity and natural gas covering the period 1 November 2021 - 31 March 2022, which received Parliamentary approval and further amendments under Law no. 259/2021. Therefore, for the period November 1, 2021 - March 31, 2022, a customer support scheme adopted. The support scheme included the following measures:

- For domestic customers granting a unitary compensation amounting to a maximum of **0.291 lei** / **kWh**, in the case of electricity and amounting to a maximum of **33%** of the value of the natural gas price component of the supply contract of the beneficiary customer, in the case of natural gas, under the conditions provided in this ordinance;
- For all final consumer economic operators:
 - Exemption, in the case of electricity, from the payment of the value of green certificates, the contribution for high efficiency cogeneration, the excise duty for the first 200 MWh consumed per month.
 - Exemption, in the case of natural gas, from the payment of the excise value for the first 500 MWh consumed per month.
 - The application of a reduced rate of value added tax of 5% on the tax base for the supply of electricity / natural gas to final customers, in case of a consumption between 0.1 - 500 MWh per month.

The settlement to suppliers of the amounts resulting from the application of the measures was carried out by the National Agency for Payments and Social Inspection for household customers and by the Ministry of Energy.

Significant Energy News

In view of the continuing rise in prices in the international electricity and gas markets and the effects of these increases, the Government considered necessary to introduce new temporary measures so that electricity and gas prices paid by end customers would not aggravate furthermore the level of energy poverty.

Therefore, Emergency Ordinance no. 27 of March 18, 2022 on the measures applicable to final customers in the electricity and natural gas market between April 1, 2022 and March 31, 2023, as well as for amending and supplementing some normative acts in the field of energy, was adopted.

The support measures provided in this normative act will be applied between April 1, 2022-March 31, 2023.

For the consumption made between April 1, 2022 and March 31, 2023.

The final price invoiced by the **electricity** suppliers/ electricity distribution operators that ensure the resale of electricity is:

- maximum 0.68 lei / kWh, VAT included, in the case of household customers whose average monthly consumption achieved at the place of consumption in 2021 is less than or equal to 100 KWh;
- maximum 0.8 lei / kWh, VAT included, in the case of household customers whose average monthly consumption achieved at the place of consumption in 2021 is between 100 kWh and 300 KWh inclusive;
- maximum 1 lei / kWh, VAT included,
 in the case of non-household customers.

The final price charged by **natural gas** suppliers is:

- maximum 0.31 lei / kWh, VAT included, in the case of household customers;
- maximum 0.37 lei / kWh, VAT included, in the case of non-household customers whose annual natural gas consumption achieved in 2021 at the place of consumption is at most 50,000 MWh, as well as in the case of producers of thermal energy intended for consumption.

The provisions are temporary and refer to measures applicable to endclients in the electricity and gas market between 1 April 2022 and 31 March 2023. These measures are intended to secure protection for vulnerable consumers and to overcome the hurdles caused by the COVID-19 pandemic, which affected various sectors now acing high energy/gas costs.



AERS Serbia

Recent Developments

- Nov 25, 2021 On sessions held on November 10 and 25, the Council of the Energy Agency of the Republic of Serbia (AERS) has approved rules regulating procedure and method of transmission capacity allocation on border between bidding zones of transmission system operators of the Republic of Serbia EMS AD and transmission system operators of North Macedonia (MEPSO), Bulgaria Romania (Transelektrika), (EAD). Hungary (MAVIR), Croatia (HOPS), Bosnia and Herzegovina (NOSBIH) and Montenegro (CGES) for 2022.
- Nov 25, 2021 On the session held on November 25, 2021, pursuant to methodologies which were adopted and to the Decree of the Government of the Republic of Serbia on the quota in the market premium system for wind power plants, the Council of AERS has adopted a decision on

setting maximum repurchase price for auctions for electricity in wind power plants. Maximum repurchase price of electricity produced in wind power plants with approved capacity higher than 3 MW amounts to 5.57 €c/kWh.

- Dec 30, 2021 On the session held on December 30, 2021, in line with the provisions of the Energy Law which are harmonized with the Third Package of European directives, the Council of AERS has adopted the Decision on the Adoption of the 2021 Report on Necessity of Regulation of Electricity Prices and of Supply of the Last Resort.
- Feb 3, 2022 On February 3, 2022, the Council of AERS has adopted a Decision on Change in Prices of Ancillary and System Services of Secondary and Tertiary Control for 2022. The Decision has been adopted in line with the Energy Law and by applying the Methodology defined by the Energy Agency.
- Mar 31, 2022 Market participants are hereby informed that the Rules on Prevention of Electricity and Natural Gas Wholesale Market Abuse ("Official Gazette of RS", No. 103/21) which were adopted by the Council of the Energy Agency of the Republic of Serbia on October 28, 2021 enter into force on April 1, 2022.
- Mar 31, 2022 On the session held on March 31, 2022, the Council of the Energy Agency of the Republic of Serbia has confirmed that the Limited Liability Company GASTRANS, LLC, Novi Sad submitted all required evidence to the Agency confirming its independent operation and management of constructed transmission system necessary for holding the certificate as independent transmission operator.



ÚRSO Slovakia

Recent Developments

The Regulatory Board adopts the Regulatory Policy for the regulatory period. In March, Regulatory Office for Network Industries (ÚRSO)' Regulatory Board adopted a new regulatory policy for the 6th regulatory period. The new regulatory period will start on 1 January 2023 and its duration will be 5 calendar years. The Regulatory Policy is a strategic document under the Regulatory Act defining the main regulatory principles, methods and objectives during the specified regulatory period. The document is said to reflect all the major changes and trends in the electricity, gas, heating and water sectors that are relevant in the current period. It is also compatible with the expected changes resulting from the forthcoming transposition of European legislation into the national law, but also already reflects the current difficult situation on wholesale energy markets resulting from the COVID-19 pandemic and, unfortunately, from the war in Ukraine.

URSO establishes а virtual ombudsman to protect Slovakia's energy consumers. "URSO Ombudsman" is a virtual platform that is the result of a year-long work of the Office seeking to find systemic solutions to energy consumer issues. It took off with negotiations with representatives consumer December 2020 and followed with the establishment of the Consumer Protection Platform in April 2021, which brought together consumer organizations active in the field of consumer rights protection Slovakia. The newly established virtual "URSO Ombudsman" will enable the Office to effectively link the knowhow of all these experts in Slovakia in an effort to address the most pressing issues of consumers, and to provide

them with assistance in the form of recommendations and advice.

Impact of energy price spikes on end prices mitigated due to the utilization of regulatory tools. At the end of 2021, URSO managed to significantly reduce the costs of electricity for households, thus mitigating the severe impact of commodity exchange price increases on end consumers. The main instruments included significant reduction of the system operation tariff which is part of the final electricity price and which could be decreased by extension of RES support over a longer period, less feedin-premiums paid due to high market prices and also subsidies from the state budget. Another electricity price reduced components were transmission and distribution tariffs and tariff for system services. By URSO's widest possible utilization of regulatory tools, regulated electricity prices for most households in 2022 were thus expected to reach almost their pre-pandemic levels in 2020 (apart from the conflict in Ukraine).

URSO considers introducing emergency regulation in Slovakia. With regard to the war conflict in Ukraine, the Slovak Republic finds itself in an extremely difficult situation in terms of energy security and URSO is analyzing all options, including the possible unprecedented introduction of the institute of emergency regulation. The institute is foreseen in Slovakia's Regulatory Act, whereby URSO may only implement it after prior consultation with the European Commission.

URSO leads a twinning project in **Palestinian** energy authorities. Together with its partner institutions from Italy and Greece, URSO was selected in an international competition as the lead authority for an EU-funded twinning project aimed at providing technical assistance and capacity building to two Palestinian governmental authorities for energy and natural resources (PERC and

PENRA). The project took off in the first quarter of this year and is expected to last 24 months.

Significant Energy News

More energy suppliers closing down their operations in Slovakia's market due to extremely high prices. The extraordinary situation on the energy commodity exchanges and its unprecedented rising prices have forced several other alternative gas and electricity suppliers to close their businesses in Slovakia. According to the national legislation, the customers of the exiting companies are automatically switched the suppliers of last resort (SoLR), an issue leading to further challenges for the SoLRs which must face an increasing number of their customers supplied under regulated tariffs and extremely high commodity purchasing prices at the same time.

Slovakia's gas TSO (Eustream) prepares to transport also hydrogen. Four leading central European gas infrastructure companies, including Eustream, have joined forces to Central develop the European Hydrogen Corridor, a hydrogen highway running through central Europe. The focus of the joint initiative is to develop a hydrogen route transporting hydrogen from major hydrogen suppliers in Ukraine which have the potential for large-scale green hydrogen production via Slovakia and the Czech Republic to large hydrogen demand areas in Germany and the EU. The hydrogen corridor will also enable hydrogen between transport hydrogen production facilities and hydrogen consumers in the Czech Republic and Slovakia.

Slovakia's gas DSO launches pilot project to test hydrogen distribution for household heating. Slovak gas DSO (SPP-distribúcia) launches a pilot project with hydrogen volume blending ratio of 10% in a medium-sized municipality with approximately 300 customers. If successful, the pilot

project will move the DSO closer to being able to distribute a gas mixture with a safe proportion of hydrogen throughout the country in the future. In addition to decarbonising gas consumption, this will also contribute significantly to the development of the Slovak hydrogen economy with a well-developed gas network connecting small or larger producers of lowemission hydrogen with customers requiring renewable gas.



EMRA Turkey

Recent Developments

Electricity Tariffs - Energy Market Regulatory Authority (EMRA) informed that for the low voltage single-time residential consumer group, graded electricity tariff mechanism depending on the daily average consumption level has been deployed:

- Up to daily average of 5 kWh consumption for invoices to be issued as of 1/1/2022,
- Up to daily average of 7 kWh consumption for invoices to be issued as of 1/2/2022,
- Up to daily average of 8 kWh consumption for invoices to be issued as of 1/3/2022, are subject to low tariff.

For the low voltage single-time commercial consumer group, graded electricity tariff mechanism depending on the daily average consumption level has been deployed:

 Up to daily average of 30 kWh consumption for invoices to be issued as of 1/3/2022, are subject to low tariff.

As of 1/1/2022, the TRT fund applied 2% of the active energy cost and the energy fund applied 0.7% of the active energy cost were abolished from the electricity invoices for all consumer groups.

As of 1/3/2022, VAT, which is 18% of the total electricity invoice, started to

be applied as 8% for residential and agricultural irrigation consumer groups.

Natural Gas Tariffs – In December 2021, the natural gas connection and service charges for the year 2022 were published. The connection charge for household consumers was increased app. %50 and other charges were increased by 20% on average.

In January 2022, the national natural gas consumption forecast was announced as about 60 bcm.

In March 2022, the natural gas underground storage tariffs were determined for the period of 1/4/2022-31/3/2024.

Transmission System Operator of Turkey has allocated a total capacity of 1.322,82 MW for hybrid power plants:

By the Law no.7164 (O.G. Date: 28.02.2019, No: 30700), amendment to the Electricity Market Law (No.6446) had been made which allows for hybrid power plants to be constructed. The changes on the By-Law for Electricity Market Licensing and By-Law for YEKDEM were made on March 3, 2020 and came into force on July 1, 2020. The companies can apply for building auxiliary units depending on a different source than the main source of the power plant as a hybrid power plant to EMRA since July 1, 2020. Transmission System Operator of Turkey (TEiAŞ) has allocated a total capacity of 2.787,7 MW for renewable energy projects, according to the board decision of EMRA dated 03.03.2022. 784,8 MW of this capacity is allocated for wind and solar energy power plants, 1.322,8 MW for hybrid power plants and 680,13 MW for unlicenced electricity generation power plants. Thus, auxiliary units based on wind and solar energy may be established by the companies for 1.322,8 MW capacity.

The Ministry of Energy and Natural Resources has issued new tender

notices for solar and onshore wind power:

- A new onshore wind tender (YEKA RES-3) notice for 2000 MW capacity prepared by the Ministry of Energy and Natural Resources was published in the Official Gazette on May 29, 2021. However, the tender capacity was reduced to 850 MW and the date for applications was updated as April 27, 2022.
- The Ministry of Energy and Natural Resources completed the auction process for 300 MW of solar energy connection capacity within the scope of the Renewable Energy Source Zone (YEKA GES-4) scheme. The ceiling price for the auction has been set at 0,95 TRY/kWh. Using the reverse auction method from the ceiling price, the winning prices for 3 separate districts have been resulted as 0,375 TRY/kWh, 0,39 TRY/kWh, and 0,427 TRY/kWh, respectively for 100 MW each.
- A new solar power tender (YEKA GES-5) notice for 1.500 MW capacity prepared by the Ministry of Energy and Natural Resources was published in the Official Gazette on September 30, 2021. However, the tender capacity was reduced to 1.200 MW and the date for applications was updated as May 31, 2022.

Natural Gas Market: With the decision of the Board of Energy Market Regulatory Authority dated 24/3/2022, many significant amendments made in the Regulation on Distribution and Customer Services aimed to:

- Strengthening consumer rights, providing payment facilities and providing consumer information,
- Improvements and troubleshooting arrangements for interior installation operations,
- Increasing the quality of customer service and efficiency in operations,
- Enhancements to benefit vulnerable consumers.

Electric Vehicles Charging Service: Regulation of the EV Charging Service has been published by the Energy Market Regulatory Authority of Turkey on April 2, 2022.

Significant Energy News

- By the Law no.7381 (O.G. Date: 08.03.2022, No: 31772), amendment to the Electricity Market Law (No.6446) was made which allows real persons and legal entities (counted as municipalities and their subsidiaries, industrial facilities and facilities for agricultural irrigation purposes) can establish unlicensed power plants based on renewable energy resources up to an amount that is twice the contract power of the consumption facility in the connection agreement.
- With the increase in available capacity at the Kiyikoy Entry Point from Russia and Turkgozu Entry Point from Azerbaijan, spot capacities at these points are allocated through the monthly/quarterly/yearly auctions held by EMRA Under the "Regulation on Determination of Spot Pipeline Import Methods and Quantities". For these auctions: announcement "Call for Proposal", companies that are eligible to participate in the auction upon their application and online auction results are regularly published on EMRA's website.
- Energy Transition Department has been established under the Energy Market Regulatory Authority of Turkey. Based on the amended law, the new department's duties are;
- Enhancing EV ecosystem, licensing EV charging operators, monitoring charging services and market activities,
- Monitoring the digitalization process in the energy market, promoting the digital transformation of the energy sector, disseminating best practices,

- Monitoring, developing and supporting R&D activities and innovations in the energy market,
- Designing and developing carbon market, emission trading, certificates and similar implementations processes, and enhancing hydrogen, biofuels, paraffinic synthetic and fuels, biomethane and other alternative fuels which can be used as substitute or supplement to fossil fuels.

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NARUC USA

Recent Developments

- National Association of Regulatory Commissioners (NARUC) publishes Dry Run Process Model Document (April 1, 2022) - With support from the United States Agency for International Development (USAID) Bureau for Europe and Eurasia, NARUC published a dry run model document titled "Electricity Market Development: Dry Run Process Model For Energy Regulators" that is aimed at assisting the National Regulatory Authorities (NRAs) of Europe and Eurasia in their undertakings of market liberalization and reforms and increasing their understanding of how to plan and prepare for an introduction of live market operations.
- NARUC Completes Cost-Reflective Tariff Toolkit (January 24, 2022) -With support from the USAID Bureau for Development, Democracy, and (DDI)/Center Innovation for Environment. Energy and Infrastructure/Energy Division, NARUC began developing a Cost-Reflective Tariff Toolkit in 2019. This toolkit consists of a series of primers focusing on the regulator's role in achieving cost-reflective tariffs. As the final addition to the Toolkit, the Primer on the Impact of Electricity Tariff Reform on Infrastructure Development and Economic Development discusses the

- impact of electricity tariff reforms on a country's economic development. The implementation of cost-reflective tariffs, based on sound economic principles, ensures that the appropriate incentives are in place for attracting investments in the sector, as well as for safeguarding the financial viability of the electricity sector.
- New NRRI Paper Addresses the **Economics** of Decarbonization (February 8, 2022) - The National Regulatory Research Institute has released а new paper decarbonization that describes an important tool for decarbonizing the electric system and the economy carbon capture and sequestration, also known as CCS. The Economics of Carbon Capture and Sequestration, funded by the Department of Energy, National Energy **Technology** Laboratory, provides the first comprehensive overview of the economics of carbon capture and sequestration.
- NARUC and Converge Offer Strategies for Building Partnerships Enhance Defense Energy Resilience in New White Paper (February 17, 2022) - NARUC recently released a new white paper on defense energy resilience, the Department of Energy's defense critical electric infrastructure program opportunities to enhance productive partnerships among state utility regulators, utilities, and critical facilities. The white paper, Regulatory Considerations for Utility Investments in Defense Energy Resilience, provides background on U.S. Department of Defense energy resilience policy, summarizes the drivers for state utility regulator-utility-military cooperation and presents case studies of successful resilience partnerships.
- New NARUC-NASEO Report on
 Resilience Valuation Highlights
 Potential of Microgrids (February 22,
 2022) NARUC and the National
 Association of State Energy Officials

announced the release of a new report on innovative approaches to estimating the value of resilience. Authored by NARUC, NASEO and Converge Strategies, LLC, <u>Valuing</u> <u>Resilience for Microgrids: Challenges, Innovative Approaches, and State Needs</u> summarizes new approaches to

valuing resilience that can be applied to proposed investments in microgrids and other resources.

The Energy Regulators Regional Association (ERRA) is an inter-institutional non-profit organisation unified by the shared goal of its regulatory members to improve energy regulation. ERRA's focus is to bring together effective energy regulators with the necessary autonomy and authority to make positive change. ERRA is widely seen as an example of a highly successful regional association and is recognized as an important international institution in facilitating the advancement of regulatory policy.

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