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Central Asian Countries Map Next Steps in Energy Sector Development through Participation in Regional Regulatory Partnership



October 2020 – Faced with increased energy generation demands and the need for new and better energy infrastructure, regulatory agencies and ministries in Central Asia are actively searching for new ways to improve the financial viability of the energy sector and strengthen institutional capacity.

With support from the United States Agency for International Development (USAID), the National Association of Regulatory Utility Commissioners (NARUC) is helping regulators achieve these objectives through the establishment of a regional regulatory partnership with Kazakhstan, Uzbekistan, Tajikistan, and the Kyrgyz Republic.ⁱ This partnership is designed to help enable regulatory agencies and ministries to more effectively carry out oversight functions by providing technical assistance and capacity building to move toward comprehensive and sustainable energy pricing policies and methodologies.

Addressing the need to modernize aging infrastructure

By engaging directly with several sets of energy stakeholders in the region, NARUC is identifying priority areas for support, assessing regulators' goals and objectives, and collecting information to build a more comprehensive understanding of the regional energy sector. So far, priority areas include the need to upgrade existing energy infrastructure (e.g., power plants, transmission lines, etc.) and create conditions that attract either the international or local investment necessary to do so.

Parts of Central Asia are home to an abundance of natural resources that vary in supply among countries, such as oil, hydropower, and natural gas. However, energy infrastructure is largely aging or underdeveloped, as it was inherited from the Soviet era and has stagnated over time due to insufficient investment for maintenance and upgrades. The aging energy infrastructure exacerbates existing problems that Central Asia faces concerning varying levels of electricity supply. When energy infrastructure is not properly maintained, it can lead to electricity shortages, which occur when the demand for electricity is greater than the supply.

These shortages can also take place alongside seasonal changes due to decreased hydropower capacity from low water flow in the winter.ⁱⁱ This situation can impose significant economic losses, particularly when low electricity prices do not accurately reflect the high cost of electricity generation. In addition, shortages can result in social consequences such as increased indoor air pollution from burning wood and coal in homes, resulting in negative health impacts.ⁱⁱⁱ

Attracting investment through enabling cost recovery

While efforts to modernize energy infrastructure are underway, costs are high. According to the Asian Development Bank, Central Asia will require at least \$33 billion in annual infrastructure spending through 2030 to meet growing international and domestic energy demand needs.^{iv} Moreover, infrastructure development projects tend to have high levels of state involvement. While state-owned

enterprises play an important role in overseeing development initiatives, their participation is often linked to high project and management fees, which can result in either infrastructure projects that are unable to reach completion or the government taking on debt.^v To attract the funds required to make progress on these issues, regulators in the region must first work to address the problem of balancing the need to provide financial sustainability for energy companies with social and political pressures to keep energy prices artificially low.

Throughout Central Asia, there is a lack of clarity and transparency regarding the actual costs of providing service. Currently, electricity tariffs are set below cost-reflective levels, meaning that most customers pay a rate that is much lower than the actual cost of purchasing or generating, transmitting, and distributing electricity. In exchange, the difference between these tariff prices and the actual cost is subsidized by the government.^{vi} When neither utilities nor regulators have a clear image of the cost of energy, it can result in cost-recovery problems for utilities. Moreover, any proposed tariff increases are also difficult to justify without clear disclosure of cost information.

Altogether, this situation is not ideal in terms of encouraging investment; investors view tariff pricing as an indicator of economic health, and the indication of cost-recovery issues could raise concerns that they might not receive a return on their investment, thus increasing risk premiums. In response, NARUC is proposing to train regulators and other relevant agencies on regulatory accounting methods that will help them to better understand true costs and incorporated subsidies. Accordingly, regulators can use this knowledge to increase utility transparency by making pricing information more accessible to both customers and stakeholders and to improve tariff design, which are both important factors in reducing any risk or uncertainty for potential investors.

Building regulatory capacity through stakeholder communications

Via the partnership, NARUC intends to build regulatory capacity by bringing together various energy sector stakeholders and regulators on a regional level through a series of workshops and trainings on utility-regulator exchanges, peer reviews, and additional engagements. Through encouraging the collaboration of regional peers, these opportunities can help to build consensus on regulatory initiatives and provide a more inclusive approach to partner engagement.

In this context, NARUC aims to train regulators on best practices in stakeholder communications, both through technology development – such as public-facing websites and customer portals – as well as communications regulations. With countries in Central Asia increasingly shifting to a mostly online mode as a response to modern challenges, this opportunity will better equip regulators to secure information from utilities and relay it to both stakeholders and the general public in a more engaging and transparent manner.

Moving forward, NARUC plans to build on the USAID/NARUC “[Cost Reflective Tariff Toolkit](#)” as a means of providing Central Asian policy makers and regulators with resources to expand their understanding of best practices used in the U.S. and identify approaches that can be adapted for use in their respective countries. As the partnership progresses, NARUC will continue to determine ways to support the Central Asian energy sector through future engagements with the overall goal of enabling the implementation of both national and regional policy initiatives.

This story is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of NARUC and do not necessarily reflect the views of USAID or the United States Government.

Photo Caption: The NARUC-USEA delegation meets with Kazakhstan’s Electricity and Power Market Operator, KOREM, in February 2020. NARUC was represented by Dave Bloom, Program Manager, International Programs, NARUC, and Eric Callisto, Partner, Michael Best & Friedrich LLP.

i NARUC has not yet reached out to energy regulators in Turkmenistan to include them in the regional partnership but hopes to engage them in upcoming regional work.

ii “Electricity in Central Asia. Market and Investment Opportunity Report.” World Energy Council. July 2007.

“https://www.worldenergy.org/assets/downloads/PUB_Asia_Regional_Report_Electricity_Market_And_Investment_Opportunity_2007_WEC.pdf”

iii “Towards Secure and Sustainable Energy Supply in Central Asia: Electricity Market Reform and Investment Protection.” Energy Charter Secretariat. 2015. PDF file.

https://www.energycharter.org/fileadmin/DocumentsMedia/Thematic/Power_Sector_Reform_in_Central_Asia_2015_en.pdf

iv Grant, James and Ariel Cohen. “Soft Infrastructure Development in Central Asia 2020: Effective Infrastructure Development through Legislation, Regulation, Policies, Governance, and Public-Private Frameworks.” International Tax and Investment Center. 2019. PDF file

<https://static1.squarespace.com/static/5a789b2a1f318da5a590af4a/t/5db9d742f670f63ed4a2e4b2/1572460355837/Soft+Infrastructure+Development+in+Central+Asia+2020.pdf>

v *Idem*.

vi “What is Cost Reflective Pricing?” Horizon Power. <https://horizonpower.com.au/help-support/miscellaneous/what-is-cost-reflective-pricing/#:~:text=Most%20customers%20of%20Horizon%20Power,subsidised%20by%20the%20State%20Government.>