

“If Dushanbe is able to come to another agreement with Iran, then this is the country, in our view, that would be able to invest in the Rogun HPP. Additionally, Iran will not consider Uzbekistan’s complaints, especially since Tajikistan already has the legitimate reasons and the World Bank’s favorable findings on Rogun’s construction,” - Tajik experts Hamidjon Arifov and Nurali Davlatov examine the perspectives and problems facing the resolution of hydroelectric issues in this cabar.asia exclusive.



The collapse of the USSR opened the space for a disruption in the balance in the use of water and hydroelectric interests in post-Soviet Central Asia. Each country in the region began looking for the best options based exclusively on their own interests.



The downstream states of the Aral Sea basin were at an advantage due to their hydrocarbon and resource-rich lands. They expertly secured a continuation of the unfair Soviet-era regional water sharing through regional agreements. They then moved to the next stage of blocking the upstream states from exercising their internationally recognized right to use their own wealth and natural resources, which, naturally, included water and hydroelectric resources.

Estimates of the water supplies of countries in the region vary. Below is the total natural river flow of the Central Asian states of the Aral Sea basin according to a diagnostic report from the United Nations Special Programme for the Economies of Central Asia (SPECA).

**Table 1.** Total natural water flow from the Central Asian states to the Aral Sea basin

#	Country	km <sup>3</sup>	%
1	Tajikistan	50.5	43
2	Kyrgyzstan	29.2	25.1
3	Uzbekistan	11.2	9.6
4	Kazakhstan	2.4	2.1
5	Turkmenistan	1.5	1.2

The downstream countries refusing to pay compensation for the water received from upstream countries led to Kyrgyzstan responding with measures such as changing the flow regime of the Syr-Darya River. Changes were made to the scheduling and conditions of the

mutual exchange of electricity in the Central Asian Integrated Power System (IPS).<sup>[1]</sup>

As a country rich in water resources, Tajikistan found itself in the worst possible position. For more than two decades, Tajikistan has spent the so called 'winter' period in a 'limited' regime in which most regions are provided with electricity for less than 10 hours a day.

Since 2008 Uzbekistan has blocked the transit of winter electricity (1-1.2 billion kWh) from Turkmenistan to Tajikistan. In 2009 Tajikistan was excluded from parallel work in the integrated power system.

Due to Uzbekistan's deliberate blocking of energy produced by HPPs in Tajikistan thereby forcing a decrease in summer generation, the winter deficits and summer surpluses in Tajikistan increased. The losses in generation from unused water discharges vary: 7 billion kWh<sup>[2]</sup> in 2010, 5 billion kWh in 2011, and 4.1 billion kWh in 2014. In monetary terms the losses vary depending on the price charged, but those losses range from \$50-70 million (1 cent<sup>[3]</sup> per kWh) to \$300-420 million dollar (at 3 cents per kWh).

Many observers consider this pressure from Uzbekistan as the main reason for the cooling in political cooperation between the two neighbors. However, there are also economic reasons, and the most important of all is the construction of the powerful Rogun hydropower plant (HPP) and regulatory water reservoir.

### **Rogun HPP - "Bone of Contention"**

The Rogun HPP (at 335 meters the highest dam in the world) is one of the Tashkent *Gidroproekt* Institute's best projects. Tajikistan has high hopes for this project, which is one of the biggest long-term construction projects in the world. Construction on the HPP began in the mid-1970s with the first units to be put into operation by the mid-1990s, but the project remained incomplete due to the collapse of the USSR and the Tajik Civil War.

In 2004 Russia promised to invest \$2 billion in the Tajik economy, including the construction of the Rogun HPP, in return for permission to build a military base in the country as well as a 50-year lease on the space surveillance station near Nurek. However, Rusal, the Russian company that has taken responsibility for Rogun's construction, has not begun work on the project as Russian specialists began imposing unnecessary discussions on the Tajik side relating to the dam's height, construction materials and the HPP's capacity. In August 2007, the Tajik government terminated the contract with Rusal.<sup>[4]</sup>

Unhappy with the termination of the contract with Tajikistan, the head of Rusal, Oleg

Deripaska, visited Uzbekistan, after which the Uzbeks found a reason to protest against the construction on the HPP. At this moment the Tajik hydroelectric plant gained a new, uncompromising opponent in Uzbekistan, which has continued to block its construction at every level.

Uzbekistan feels that construction of the Rogun HPP on the Vakhsh River jeopardizes the water supply and environmental balance of downstream countries. Tashkent puts forward several criticisms such as the height of the dam, which, according to the Uzbek side, is in a very seismically active region, which places the downstream states in danger in the event of the dam breaking. Uzbekistan also fears that, after the 13.3 km<sup>3</sup> reservoir is filled, less water will flow to the Amu-Darya River, which would negatively impact Uzbek agriculture.

This neighboring state continues to ignore the results of an international study, upon which Uzbekistan itself insisted. Beginning in 2012, experts from the World Bank conducted a multiyear study and came to the conclusion that the project does not present the threats that Tashkent speaks of.<sup>[5]</sup>

However, Uzbekistan considered the expert conclusions to be unsatisfactory and continues to insist that construction on the Rogun HPP presents a serious danger. Uzbekistan also turned down the Tajik proposal to participate in the project and share in the energy produced.

Tajik specialists have their own counterarguments for each of Uzbekistan's arguments. For example, the amount of water from the Vakhsh River upon which the Rogun HPP is to be built provides but 15% of the Amu-Darya's flow. In building the HPP, it would be impossible to completely block the Vakhsh, because the four HPP of the Vakhsh Cascade are currently in operation downstream from Rogun. If the Vakhsh was blocked, Tajikistan itself would find itself in a total energy collapse.

The large dam is safe and could even withstand a strong earthquake, as proven by the Nurek HPP's 45 years of operation. The Nurek HPP is located downstream from Rogun and also has a large dam. The experts who conducted the international study also noted this. In the final reports they pronounced the Rogun HPP to be safe for the environment and population of Central Asia. Tajikistan also committed itself to using only its own water limit in filling the Rogun HPP's reservoir, which will be filled for no less than 15 years.<sup>[6]</sup>

However Uzbekistan refuses to consider any of these arguments. More than likely, Uzbekistan's fears stem from a fear that, after building this massive hydroelectric unit with a capacity of 3,600 MW<sup>[7]</sup>, Tajikistan will have the opportunity to become the main exporter

of electricity to southern countries such as Afghanistan, Pakistan, India and China. **Uzbekistan is pursuing analogous aims and, in this way, is attempting to deprive competitors of these opportunities.**

Currently Tajikistan exports its electricity at a price of 3 cents per kWh. A cost-benefit analysis of the project found that bringing the Rogun HPP online would lead to a drop in the price of electricity in Tajikistan to .65 cents for 1 kWh. Uzbek electricity costs Afghanistan 10 cents. By dragging out the time until construction on the Rogun HPP is complete, Uzbekistan is trying to buy time to fully corner the market in Afghanistan and Pakistan. Furthermore, the fears of Tashkent with regards to regulating water flows for its agriculture are, of course, understandable.

### **Building the Rogun HPP - There Is No Alternative!**

Tajikistan cannot make do without the Rogun HPP; therefore Tajikistan is placing all of its bets on it to solve its hydroelectric problems. At the moment, Tajikistan does not have the political support of the main geopolitical players in its fight with neighboring Uzbekistan, and it does not have the strength to complete the project itself. The main geopolitical players are, above all others, Russia, China, and the United States. We will now consider which of the geopolitical players in the region could help finish the construction of Rogun.

**Russia:** Currently, it is not necessary to view Russia, even theoretically, as a potential investor in the Rogun HPP. After the agreement with Rusal fell apart, there have not been any observable efforts to pursue cooperation in this area from either party. In our view, Russia in practice always pursued its own military interests in Tajikistan and was able to apply pressure when necessary on the Tajik government through an army of disenfranchised and low-paid Tajik labor migrants, of which over a million are working in Russia. Additionally, Moscow recently refused to participate in the construction of the Kambarata HPP in Kyrgyzstan due to the introduction of Western sanctions.

**United States and China:** Tajikistan has as of yet been unable to attract Washington's attention to the Rogun HPP. Even though the other player, the People's Republic of China, is one of the leading investors in the Tajik economy, Beijing does not want to ruin its relationship with Uzbekistan and therefore does not wish to participate in the Rogun project.

**World Bank:** It is not particularly worthwhile to place any hope in the World Bank. The bank fulfilled its mission. It provided its positive expertise and stepped aside. Meanwhile, the Tajiks lost a few years waiting for the results of this study.

**European Union:** It seems that the countries of the European Union do not care about Tajikistan, particularly now as the continent is being flooded with refugees from various Arab countries in Asia and Africa. Moreover, the EU exclusively considers humanitarian projects related to the defense of human rights and the introduction of Western-style democracy, which is not always comfortable for the Tajik government. Therefore, it is also not worthwhile to place any hope in the EU.

**The Islamic world:** The Gulf States have shown no interest in hydroelectric projects, despite the many appeals of President Emomali Rahmon. The Islamic world, in particular the rich Gulf States, reacted with indifference to the numerous appeals of the Tajik government for investment in hydroelectric projects in Tajikistan and the Rogun HPP in particular. Today, Qatar, the conductor of American policies in the Muslim world, is more or less present in Tajikistan. The Qataris built the prestigious suburb for the nouveau riche, Diyar Qatar. Currently, construction on a mosque capable of holding tens of thousands of people, the largest mosque in Central Asia, is underway, but there have not been any other serious agreements reached.

It is possible that it would be valuable to examine the participation of smaller geopolitical players in the region. In theory, this is not a bad idea.

However, nobody in Tajikistan has seriously considered this option.

**Pakistan and Afghanistan:** Pakistan is one of the countries that, at some point stated an interest in the completion of the Rogun HPP construction. In the summer of 1992, then Tajik President Rahmon Nabiev signed an agreement with Pakistan, which promised to provide Tajikistan with the \$500 million needed to complete the project. A month later the civil war began, and President Nabiev was ousted by opposition fighters. Over the past quarter century, Tajikistan has not embarked on any efforts to reach an agreement with this country.

Currently, Pakistan is involved in the US-funded CASA-1000 project, which is designed to transport electricity from Kyrgyzstan and Tajikistan to the South Asian states.<sup>[8]</sup>

War has been raging in Afghanistan for nearly 40 years; therefore Kabul is unable to participate in the Rogun project regardless of its level of interest. That being said, these two countries are strategic partners of the United States, which is committed to reviving the New Silk Road project. Tajik diplomats should exploit this advantage. It is necessary either directly or indirectly to convince Washington, either through Kabul or Islamabad, of the usefulness of the Rogun HPP for the White House's strategic partners. Moreover, if Hillary

Clinton is victorious in the Presidential Election, she will try to realize the New Silk Road project and this should be taken advantage of.

**Iran:** Persian-speaking Iran played an important role, together with Russia, in establishing peace in Tajikistan. Thanks to interest from this country, large investors once came to Tajikistan. In 2003, Tehran and Dushanbe signed an agreement on the construction of Sangtuda-1 HPP, whose construction came to a halt at the very beginning of the civil war. Iran's participation in this project intrigued the leading trio of world powers.

The Russian Federation, United States, and the People's Republic of China soon came to Tajikistan. Russia announced that it would finish building Rogun; the Chinese committed to the Yovon HPP on the Zarafshan River; and the American AES Corporation signed on to Dashti-Jum, the largest HPP in the world. But then **the Chinese and the Americans backed out of participating in the aforementioned HPPs, due to complaints from Uzbekistan.** Russia finished construction on Sangtuda-1 and Iran completed the Sangtuda-2 HPP. Furthermore, Iran has offered the most favorable conditions for investment. When the project has succeeded in paying for itself, the HPP will be transferred completely to Tajik control. Additionally, Iran, then economically isolated due to American sanctions, actively invested in other projects in Tajikistan.

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Iran's arrival in Tajikistan is important for two reasons. First, Iran, like Tajikistan, is a Persian-speaking country that extended a helping hand to the Tajik government during its most difficult moments. Second, Iran already has positive experience in investing in large projects such as the construction the Sangtuda-2 HPP as well as the high-altitude Istikol tunnel connecting the northern and southern regions of Tajikistan. Regardless of a few weaknesses and flaws from either side, this is the most vivid example of mutually beneficial cooperation. Moreover, when the economic sanctions and blockade on Iran are lifted, Iran will have more opportunities to invest. Currently, relations between the two countries have noticeably cooled, but Dushanbe should consider how to take advantage of these new opportunities.

Since 2010, the Tajik government itself has been building the Rogun HPP. According to press reports, the Tajik government spends millions of dollars of the state budget annually

on the construction of the Rogun HPP. It was officially announced that, in 2018, the first two turbines will be activated. It can be said with confidence that Tajikistan is capable of bringing the first two turbines online without external assistance. However, today, in conditions of economic crisis, it is harder for the government to allot hundreds of millions of dollars towards completion of the project as they had in previous years.

Globally, it is being said more and more that hydropower is a safer alternative to hydrocarbon energy. According to the 2016 Global Energy Architecture Performance Index (EAPI) report, Tajikistan is ranked 45th out of 126 countries in the effectiveness of its energy system. It is the leading Central Asian state and is ahead of Kazakhstan in 57th place, Uzbekistan in 84th place, Kyrgyzstan in 97th place, and Turkmenistan in 118th place.<sup>[9]</sup>

**Policy will be crafted first of all in relation to these regions. There are efforts to either destabilize and place them under control or acquire their energy assets.** This factor will be taken advantage of, and sooner or later one of the global powers will assist Tajikistan in building either the Rogun HPP or another of the available projects. The question for Dushanbe is when and under what conditions this will be undertaken.

Meanwhile, the project was and remains beneficial for all of the Central Asian states, primarily for Uzbekistan itself. It should not be forgotten that in Uzbekistan there is a deficit of electricity in both summer and winter, while the state harms its own population by exporting electricity. If this question can be solved without unnecessary politicization and if the parties can come to a mutual agreement, then each country in the region can benefit from the distribution of electricity as well as the distribution and regulation the flow of water.

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