Tomorrow's Affairs
Analysis of today
Assessment of tomorrow

By: Djoomart Otorbaev

Why did the energy mega-project in Central Asia effectively fail?

For a major infrastructure project to succeed, it must be underpinned by sustained political support and sound economics.

When political and strategic considerations are allowed to dominate decision-making, and long-term economic assessments suffer as a result, projects can fail before they start.

This appears to have been the case with the Central Asia-South Asia Electricity Transmission and Trade Project (CASA-1000).

Funded jointly by the European Bank for Reconstruction and Development, the Islamic Development Bank (IDB), the World Bank, and others, CASA-1000 was introduced in 2006 as a means of transmitting surplus hydropower from Kyrgyzstan and Tajikistan to alleviate energy shortages in Afghanistan and Pakistan.

Construction on the 1,387-kilometer (862-mile), 1,300-megawatt energy-transmission infrastructure began a decade later.

While CASA-1000 was presented as an energy-trade project, it served a wider strategic objective.

Beyond fostering inter-regional cooperation between Central Asia and South Asia, it became a pillar of the United States' short-lived "New Silk Road" strategy, announced by then-Secretary of State Hillary Clinton in 2011.

By strengthening North-South economic integration and reducing Central Asian countries' dependence on Russian electricity connections, the project was supposed to shift the region's geopolitical orientation.

Repeated delays

Despite this grand vision, CASA-1000 has run into repeated delays. Initially scheduled to begin operating in 2020, completion is now expected no earlier than 2027.

In the meantime, Kyrgyzstan has invested some $216 million in the project, with financing largely coming through concessional loans from the European Investment Bank, the IDB, and the World Bank.

Tajikistan's costs have surpassed $250 million. Both countries will be servicing these loans for many years to come.

Yet the economic assumption underlying this investment—that Central Asia would possess long-term structural electricity surpluses to export—has already collapsed.

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Over the last two decades, Central Asia has become one of the world's fastest-growing regions economically.

As industrial production has expanded, urbanization has accelerated, incomes have risen, and digital infrastructure has proliferated, electricity consumption has surged.

Domestic consumers have now absorbed the electricity surplus of 2006—and then some. In fact, Central Asia faces an energy deficit of some 10–15 billion kWh per year.

With regional governments expecting electricity demand to rise by another 40% by 2030, these countries will need to ramp up domestic electricity generation just to meet their own needs.

Nuclear power

This is not lost on Central Asian governments, which are already moving to introduce nuclear power into their national energy systems.

Following a nationwide referendum, Kazakhstan has begun work on its first commercial nuclear power station.

Uzbekistan has likewise begun building its first

nuclear plant, including two 1,000-MW reactors and two small modular reactors, which together are expected to meet approximately 15% of national electricity demand.

Kyrgyzstan has incorporated nuclear generation into its medium-term energy strategy.

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Even under optimistic scenarios, however, it will take years for these nuclear-power projects to bear fruit.

The specter of domestic electricity shortages thus looms large. Against this backdrop, the last thing Central Asian countries need is to pour yet more money into infrastructure whose only purpose is to export the energy they generate.

In fact, Kyrgyzstan recently proposed using the CASA-1000 system in reverse, importing electricity from Pakistan during winter months. But this is no solution.

Pakistan relies significantly on thermal electricity generation, powered by imported natural gas, liquefied natural gas (LNG), and petroleum products.

Generation costs regularly reach 8–10 US cents per kilowatt-hour—far higher than the costs of power generation in Central Asia.

Without massive subsidies, importing electricity from Pakistan to Central Asia is economically unworkable.

CASA-1000 has effectively failed

After hundreds of millions of dollars in investment by developing-country governments, and before a single watt of energy was transferred, CASA-1000 has effectively failed.

The international financial institutions that conceived, financed, and promoted the project must answer for this.

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Evaluations of CASA-1000 should be published in full. These institutions should explain which demand forecasts proved incorrect, which economic assumptions failed, how political considerations influenced investment decisions, and what lessons have been learned.

The question is not whether CASA-1000 achieved its original objectives—it did not, nor will it.

It is who will be accountable for a billion-dollar project whose economic failure was a tale foretold long before its completion.

Until international development institutions acknowledge that geopolitical ambition cannot overcome economic reality, developing economies will continue to pay the price.

Djoomart Otorbaev is a former Prime Minister of Kyrgyzstan.