Power, Influence and Stability: The Unified Energy Systems of Russia in the Southern Tier FSU

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Energy remains a key component of Russia’s relations with its southern former Soviet neighboring states. In electricity exports, oil and gas imports and exports, and ownership of the associated infrastructure, energy serves as a tool of Russia’s foreign policy and as an important market for Russian companies. Although it has long been in vogue in energy and energy policy circles to worry about Russian energy behavior in its “near abroad,” it is increasingly inappropriate to speak of the energy sector as if it is unitary, and to conflate interests of the Russian energy corporations and the Russian state. This paper will focus on the lesser-known electricity sector. Some “natural monopolies,” such as the gas giant Gazprom, remain very close to the government and are used by the government directly to further foreign policy goals. The Russian Joint-Stock Company-Unified Energy Systems of Russia (RAO-UESR), is far more likely to pursue its own market interests, even when those are at odds with Russian state interests.

In fall 2003, a RAO-UESR press release announced that, under its leadership, all of the former Soviet republics were now operating on a parallel grid. Parallel grid operation for the entire former Soviet space is particularly notable because it was never achieved during the Soviet era (Unified Energy System of Russia 2003a). Such a grid increases the quality and reliability of electricity, by ensuring that shortfall in one area can be supplied by another area, and that surplus electricity in one area can be exported rather than wasted.

1 The views expressed in this article are those of the author and do not reflect the official policy or position of the National Defense University, the Department of Defense, or the US Government.
RAO-UESR has been explicit about its plans to further expand its operations throughout the CIS (Financial Times Information 2003). Anatoly Chubais is CEO of the company and chairman of the CIS Electric Energy Council, founded in 1992. All eight of the Central Asian and Caucasus states are among the 11 council members. Through this body, the decisions were made to synchronize all the southern-tier grids. RAO-UESR has offices in Tbilisi and Astana, and exports electricity to Azerbaijan, Belarus, Georgia, Kazakhstan, Latvia, Moldova, and Ukraine (Unified Energy System of Russia 2003b). It has bought or is negotiating to buy holdings in generation and/or transmission in five of the southern tier countries. RAO-UESR completed significant purchases in the Caucasus in 2003 and in Central Asia in 2004. Subsequent sections of this paper will examine each region, the participation of RAO-UESR, and the state and market interests at stake.

The Caucasus States

Located at the far edge of the Soviet grid, the Caucasus electricity system was designed to meet the needs of the region as a whole, not the needs of each constituent member. Armenia and Georgia have substantial generation capacity relative to their population size, but no significant indigenous energy resources, while Azerbaijan has energy resources, but limited generation capacity. Independence and subsequent conflicts (especially in Nagorno-Karabakh and Abkhazia) compelled each of the three states to try to function independently. None was able to rationalize its system. High levels of debt, poor transmission capability, gross inefficiencies in generation and transmission, and the inability to recover costs have plagued all three states. Energy experts raised the idea many times of reintegrating the regional utility network to rationalize electricity provision once again.

In 2003, RAO-UESR completed significant debt-for-equity purchases, acquiring 75 percent of Tbilisi's electricity network (Energy Information Administration 2003). In Armenia, through a combination of buying out the American company AES and exchanging debt for equity, RAO-UESR acquired approximately 50 percent of Armenia's generating capacity. RAO-UESR also acquired a five-year license to operate the nuclear power plant, Medzamor-2. In Azerbaijan in 2003, RAO-UESR restored and commissioned a 330 kV high-voltage line connecting Russia, Daghestan and Azerbaijan (Unified Energy System of Russia 2003b), and signed a contract for transmission of Azerbaijani electricity to Turkey.

RAO-UESR appears to have two corporate goals in the region. The first is to make the troubled electricity sectors of these states successful (and thereby convert some bad debt into good equity), and the second is to stabilize the grid so that the company can supply Turkey and northern Iran with electricity — making the Caucasus no longer the end of the grid, but a bridge to less troubled markets.

RAO-UESR has a rich record of success in improving the sector in the transition economies, increasing payments, and moving states away from barter into cash payments. The Caucasian states had significant payments problems. Worst of the three has been Georgia, partly because the plant in Abkhazia continues to supply power to residents, and Moscow continues to present the Georgian government with the bill for fuel in spite of Abkhazia's inaccessibility to the Georgian government. RAO-UESR appears to be making significant progress overall — reportedly, payments in Georgia improved 40 percent in the first year (Prime-Tass 2004).

Regarding the use of the Caucasus as an electricity transit route, RAO-UESR announced a contract with Turkey for supply of 2 to 2.5 million kWh daily in March 2001. This supply was to come via Georgia, with Georgia receiving 33 percent of all electricity transported across its territory as payment. Electricity exports began on March 20, 2001 (Unified Energy System of Russia 2001). Even prior to purchases in the Caucasus, RAO-UESR had expressed a hope that supply would increase to 100-110 million kWh per month. This electricity is expected to come in part from Armenia, transiting across Georgia, and in part from Azerbaijan.

Caucasus States' Interests and Perceptions

Critics in Armenia and Georgia have worried about the potentially hidden hand of the Russian state. The opposition in Armenia asserts that RAO-UESR does not operate in accordance with international corporate standards, and has access to too many state secrets while it manages the nuclear power plant. In Georgia, the sale of AES assets to RAO-UESR occurred so suddenly that some suspected the Shevardnadze government had been taken by surprise. Many Georgians suspected that control of the electricity grid could enable Russia to further strengthen the breakaway republics of Abkhazia and
South Ossetia. The new Saakashvili government came to office expressing skepticism about the RAO-UESR deal, but the first winter of Russian-owned electricity services passed with a notable improvement in the quality of service. According to a 2004 survey of Tbilisi residents, 87 percent believed that power supply has significantly improved (Prime-Tass 2004). By spring 2004, Georgian Premier Zurab Zhvania was asserting that the working relationship with RAO-UESR was mutually beneficial (Financial Times Information 2004a).

In retrospect, the RAO-UESR takeovers appear advantageous for all the involved parties. At the outset, however, the potential impact on interests of the Caucasus states appeared very different. Armenia was eager to have supply commitments from Russia because of its hostile borders and paucity of energy resources. In addition, the Medzamor nuclear power plant, seen as vital to national energy security, was under pressure from otherwise generous donors. It was widely believed that Russian management would both calm Western fears about the plant and help Armenia lobby more effectively on Medzamor’s behalf.

In Georgia, the advantages were far less clear. Given the tense climate of Russian-Georgian relations, many were nervous about inviting a Russian company in to take over the failing sector. RAO-UESR won majority shares in much of the electricity sector in Armenia largely because the American company, AES, had such a negative experience there that no other Western buyers were interested.

In Azerbaijan, increased independence from Russia in energy has been an explicit goal of both Aliyev administrations. Azerbaijan already imports most of its natural gas from Russia, and its oil export routes run principally through Russia. Since Azerbaijan has sufficient resources that its energy sector is not debt-ridden, it was not vulnerable to a RAO-UESR purchase. The sector, however, remains in significant disrepair.

**The Central Asian States**

Like the Caucasus, Central Asia represented a far end of the Soviet grid. The northern portion of Kazakhstan’s grid, based on coal, was designed to export electricity to Siberia and to the industrial towns of Kazakhstan. The Central Asian Soviet grid (comprised of southern Kazakhstan and the four remaining states) was geared towards the more agricultural southern regions, designed to integrate the seasonal hydroelectric resources of Kyrgyzstan and Tajikistan with Kazakhstan’s thermal resources and the considerable gas reserves of Turkmenistan and Uzbekistan. There was not interstate armed conflict in Central Asia, but these states also attempted to create national grids when the Soviet Union fell apart. As a result, energy shocks reverberated through even the energy-rich states, exacerbated by each country pursuing distinct (and in many instances incompatible) national energy policies.

As in the Caucasus, the idea of re integrating the regional utility network was considered repeatedly, but the Central Asian states were persistently unable to resolve the problems. The United Central Asia Power System grid continued to connect the five states, but the states’ pricing systems were incompatible, and the grid suffered from surplus in the spring and summer coupled with shortfalls in the winter and fall.

Parallel operations with RAO-UESR have been in place in Central Asia since July 20, 2000, but 2004 marked its most significant advances in the region. In September 2004, RAO-UESR concluded an agreement to acquire a 50 percent share in Kazakhstan’s Ekibastuz power plant, partly in a debt-for-equity swap (Gleason 2004). RAO-UESR continues negotiating for additional stakes in generation and transmission, including the 500 kV Ekibastuz-Omsk power transmission line. In August 2004, RAO-UESR began negotiating for some new assets in Kyrgyzstan and Tajikistan as well: offering debt-for-equity swaps, the company has proposed finishing major hydro stations in Kambar-Ata (Kyrgyzstan) and Sangtuda (Tajikistan) that were begun in the Soviet era but then abandoned at independence (Gleason 2004).

**Central Asian States’ Interests and Perceptions**

The RAO-UESR Ekibastuz purchase is very recent, so it is impossible to assess its impact, but local resistance almost prevented the agreement. The agreement had already been finalized in May 2004, but in summer 2004 the Eurasian Industrial Association of Kazakhstan and Russian Aluminum attempted to buy the plant. This group sought to

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2 Kazakhstan began parallel operations with UES at this date, bringing the entire region with it, since all the Central Asian states were already synchronized by way of the United Central Asia Power System.
block RAO-UESR partly because they were concerned about rate increases. RAO-UESR is likely to apply what it has learned in the Caucasus to push Kazakhstan into a more market-based tariff system. RAO-UESR also has an interest in improvement of transmission in Kazakhstan, especially in ensuring that the northern and southern grids are properly linked. This project, however, has attracted funding from EBRD and from the Kazakh Development Bank (Financial Times Information 2004b), so Kazakhstan will probably resolve it without RAO-UESR.

Both Kyrgyzstan and Tajikistan are enthusiastic about the prospects of generating more hydroelectricity and thereby reducing their payments to neighboring states for fossil fuels. However, RAO-UESR may find the cost of doing business higher than they originally anticipated. In September 2004, President Khatami of Iran offered $250 million to purchase a controlling block of shares in Tajikistan’s Sangtuda Hydrostation No. 1, substantially more than RAO-UESR’s original offer (Financial Times Information, 2004c). Following meetings with the Iranian President, President Rahmonov of Tajikistan suggested that Iran, RAO-UESR and Tajikistan will each invest in shares, with Iran as the majority shareholder (Financial Times Information 2004c). RAO-UESR had originally hoped to purchase controlling shares in a debt-for-equity swap. It remains to be seen if RAO-UESR will accept the new proposal.

In Kyrgyzstan, RAO-UESR participation is welcomed. Kyrgyz export of electricity to Russia in 2004 exceeded one billion kWh (Unified Energy System of Russia 2004), and this has generated much-needed revenues for Kyrgyzstan, as well as generating jobs and reducing the tensions associated with the water-for-electricity swaps of past years. Under the water-electricity swaps, Kazakhstan was compelled to accept — and pay for — spring and summer electricity from Kyrgyzstan which it did not want, since it has a surplus of generation capacity, most of which is in private hands.\(^3\) Because RAO-UESR now incorporates Kyrgyzstan into a much larger grid, the problems of seasonal surplus have been resolved. Kyrgyzstan has found RAO-UESR to be a reliable customer, so there is little domestic objection to an increased presence.

**Russian State Interests and RAO-UESR Corporate Interests**

The RAO-UESR interests in the Caucasus are fairly straightforward: 1) to export power to desirable markets including Turkey and Iran; 2) to obtain some value for otherwise bad debt in debt-for-equity swaps; 3) to reduce disputes over debt and theft of power (essential for transit); and 4) to position itself better for an eventual link to a larger European grid (through Turkey).

RAO-UESR interests in Central Asia are similar: 1) to export power to new markets to the south and east, including Iran, Afghanistan, Pakistan and China; 2) to capture some returns on energy debt; 3) to capture cheap hydroelectricity for the Russian market; and 4) to stabilize and fully integrate the Central Asian grid.

These interests are not necessarily antagonistic to Russian state interests. For example, the link to European, southern or Asian grids serves Russian state interests of increasing the importance of Russia to these markets, and diversifying and increasing the portion of value-added energy exports.

RAO-UESR electricity successes in the southern tier may also make it possible to continue to subsidize electricity consumption in Russia, where energy reforms are needed but politically very costly. The European Union has agreed to drop objections to Russia’s membership in the WTO when Russian domestic energy charges are high enough to pay the actual cost of the service.\(^4\) The difficult task of domestic price reform in Russia will be made substantially easier if RAO-UESR can attract more hydro (the lowest-cost source for electricity) into its electricity supply.

Finally, having Russian companies on the ground — even companies not historically close to the Kremlin — may provide some opportunity for the Kremlin to project power. Iran’s bid for ownership in Tajik hydro demonstrates that other states have an interest in the same markets and the influence that may come with them.

In some ways, however, RAO-UESR’s goals for the region may be at odds with Russian state

\(^3\) Water is typically not monetized. In an effort to make the swaps successful, Kyrgyzstan was promised a payment for the storage of the water, and full payment for the associated electricity, when it spilled water for Kazakh, Uzbek and Turkmen irrigation in the spring and summer.

\(^4\) The EU shifted from seeking world market prices to accepting cost-replacement in return for Russia’s agreement to sign the Kyoto Protocol.
goals. By converting non-performing markets into commercially successful ones, RAO-UESR reduces the extent to which Russia can leverage energy debt for cooperation in other areas such as troop placements. By transforming the status of these states from end-of-the-grid to strategically significant transit states, RAO-UESR gives them a measure of influence over Russia’s profits and increases their leverage significantly. Successful, functioning electricity transmission in the Caucasus and Central Asia is now essential for Russian electricity imports and exports.

Finally, RAO-UESR is perfecting mechanisms in the Caucasus (and beginning to implement mechanisms in Central Asia) that increase transparency, rationalize electricity consumption, and push governments out of the sector. Many of these potentially politically costly reforms have yet to take place in Russia, and Russia itself has not yet resolved the optimal relationship between electricity and the state.

Market-led Energy Relations in the Southern Tier: Some Observations

RAO-UESR is an undeniable force in the southern tier, and its involvement will probably continue to grow. Although some commentators have expressed alarm at its expansion (Gleason 2004), both the company’s performance and its ability to provide key public goods suggest that it is not spreading Russian state influence at the expense of the southern tier states. As an electricity giant, RAO-UESR can do something the sovereign states of the southern tier cannot do without it: rationalize the grids, so that types of power (hydro, thermal and nuclear) are more optimally balanced, seasonal surplus is managed and finds a market, peak power loads are met, and the frequency of the grid remains stable. Reintegration has improved the quality of power dramatically. Many leaders of the electricity sectors in these states — veterans of the all-Soviet grid — have been key proponents of RAO-UESR’s reunification of the sector.

RAO-UESR’s relative independence from the Russian government has reassured the southern tier states, but the company’s distance from the Kremlin may yet prove to be a liability. Relations between RAO-UESR and the Russian government are problematic. The corporation has been pressing for liberalization of import and export of electricity and has been active in suits that seek to protect ownership rights of smaller electricity firms. The German-based company, “E.ON Engineering” just concluded an agreement with Gazprom to move into power generation in pursuit of European markets (Troika Dialog 2004), and Gazprom has recently purchased approximately ten percent of RAO-UESR (Faulconbridge 2004). These agreements suggest that RAO-UESR may either be increasingly influenced by less transparent parastatal companies, or may be under threat of takeover. The Russian government has mooted the possibility of restructuring RAO-UESR repeatedly, and may yet compel RAO-UESR to be dramatically restructured. If this happens, it is not clear what the impact would be for the southern tier.

Even if RAO-UESR is restructured, however, the countries most likely to suffer may not be its established client states. In a year’s time, RAO-UESR’s impact on the electricity sector in Armenia and Georgia has been noticeable, and may be difficult to reverse. By dramatically improving the sector’s performance for its client states while simultaneously making the sector profitable, RAO-UESR has already contributed irrevocably to the security of these states. In the early transition years, the World Bank tried to convince the post-Soviet states that the way to achieve “energy security” was to pay their bills on time, rather than to pursue autarkic energy policies. It will most likely continue to be true that the health of the sector, more than the nationhood of the corporate shareholder, determines the energy security of the state.

The states in which electricity will continue to be a poorly performing sector are precisely those which have succeeded in keeping RAO-UESR out: Azerbaijan, Turkmenistan and Uzbekistan. Each lacks the modernizing technologies that could make their electricity sector more efficient and the market restructuring which could make their sector more rational. Although all southern tier states would be rightly concerned to see fundamental changes in RAO-UESR, it is possible that the states most at risk of Russian “electricity imperialism” in the future might be those whose autarkic approach has led them to keep RAO-UESR out of their markets, and has caused them to remain at the end of extensive grids, rather than in the middle. Energy security for FSU states under less independent corporate leadership than RAO-UESR may well reside in both profitability and location.
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Institutional Reforms in Kyrgyzstan

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Since independence in 1991 Kyrgyzstan has been undergoing major institutional reforms emphasizing sustainable development, democratization and effective governance. This paper looks at potential effects of these reforms on the existing governance institutions through the lenses of past experiences and current trends.2 Some of the assumptions underlying Kyrgyzstan’s current development strategy are questioned and, with due credit to its achievements, its limitations are suggested. The preliminary implications drawn from these observations may also apply to its Central Asian neighbors and other countries experiencing similar governance problems and reforms.

Background

Kyrgyzstan launched a structural adjustment program in the early 1990s following the International Monetary Fund’s (IMF) “big-bang” strategy, which involved simultaneously initiating and implementing macroeconomic stabilization, price and market reforms, enterprise restructuring and privatization, and institutional reorganization.

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2 A detailed analysis of some of the current institutional reforms in Kyrgyzstan will comprise the next step in this research.