Ensuring Reliable Power Supply

The State of Affairs in 2003

By 2000, Georgia’s power sector teetered on the edge of collapse. A decade of financial mismanagement, pervasive corruption, and even sabotage of power stations had left much of the country literally in the dark. Although power lines stretched into remote mountain villages—connecting 95 percent of the population—no part of the country had power around the clock, and some areas went without electricity for days. Even in Tbilisi, power was available only about seven hours a day on average.

Electricity in Georgia was traditionally supplied by local generation (hydro and thermal) and imports from what had been the Soviet Union. Georgia generated excess power in the summer, when rivers filled with water flowing from the snowcapped Caucasus Mountains. Under the Soviet regime, Georgia exported the excess power through a unified Soviet grid in exchange for winter imports. After independence, trading excess summer power for winter imports became unreliable, because of supply shortages and problems in making payments.

By 2000, power generation had fallen to half of 1990 levels. Some facilities had broken down completely and no longer supplied power. Those remaining were highly erratic, leading to frequent countrywide
blackouts that brought Georgia to a standstill. Unreliable power made even taking the metro dangerous, as underground trains would stop in total darkness, with only emergency lights illuminating the cars. Hopelessness with the power situation had reached such a point that demonstrations in Tbilisi were not about the fact that the power was usually out but about trying to get some advance notice of when it would be on.

Power shortages also resulted from sloppy management and electricity theft. Inaccurate measurement of consumption, a chaotic billing system, and failure by many customers to pay led to a shortage of funds for facility maintenance. Electricity theft was widespread. Single power poles would be festooned with hundreds of wires illegally connecting lines reputed to have reliable power to nearby homes and businesses. Theft from lines connecting hospitals, the metro system, factories, and even neighbors’ generators was common.

Corruption permeated every stage of operation, including generation, transmission, and retail and wholesale supply. Power company officials negotiated import contracts behind closed doors under murky circumstances, often using multiple middlemen. The parties actually selling the power and the prices and terms of the contracts were rarely disclosed. Ministry officials routinely sold on the black market diesel fuel meant to run power plants in the winter months. Consumers frequently paid bribes to power company employees to get lower charges or free connections or to connect their homes to the power supply of a local hospital or factory; some risked getting electrocuted trying to make the connections themselves. Utility workers paid kickbacks to their supervisors to keep their jobs. Cash collections were a mere 25–30 percent of billable amounts.

Payment discipline was also compromised by lack of metering, a legacy from the Soviet era; frustration with poor service reliability; and chaotic billing practices. Power companies did not always issue receipts or record transactions. People who got receipts kept them, because without company records, distributors assumed people had not paid and billed them again.

Corruption drained the sector of funds and caused distribution companies to regularly default on tax payments. Power companies were highly indebted to the state, their accounts sometimes seized by tax authorities. As a result, payments to suppliers, service providers, and collections were all cash based. Large amounts of cash changed hands, with few records or receipts to track cash flow. Some of this cash was used to supplement salaries or meet other needs of the power companies,
but cash-strapped power companies did not always pay salaries, leading some staff to solicit bribes to earn a living.

Utility employees were not the only ones who accepted bribes in return for promises of reliable power supplies or for turning a blind eye to illegal connections. People affiliated with power companies, such as law enforcement agents and government officials, also did so. In the regions, the head of police, the governor, and the head of the prosecutor’s office all needed money. According to Prime Minister Nika Gilauri, their main source of income was the power sector.

**Post–2003 Anticorruption Reforms**

The power sector reforms pursued by the government beginning in 2005 were holistic and aimed at quick results that would build a virtuous cycle of political support. They focused on restoring financial discipline and promoting investments to increase capacity, reduce technical losses, and improve service reliability. To push them through, in 2005, the government established a state energy commission, chaired by the prime minister, which initially met twice a week.

**Improving Financial Discipline**

The government instilled financial discipline by restructuring and privatizing the power sector, strengthening cash collections, and bringing in a new team to manage the power ministry. Improving cash collections and eliminating the problem of nonpayment required four main steps. First, the staff of state-owned distribution companies were held accountable for collections—a move that led to the prosecution of corrupt officials and the firing of some 3,000 of about 20,000 staff in 2004–05. Financial incentives were also introduced. In the 54 business units in the sector responsible for collections, for instance, the top 10 percent were given bonuses and the bottom 20 percent were fired. Efforts to improve cash collections were also supported through media campaigns.

Second, thousands of electricity meters were installed to link consumption directly with billing. Ideally, every house, apartment, and business would have been metered, so that individual consumption could be measured, but the government had neither had the time nor the money to do so. Where individualized metering was not possible, collective meters were installed. Groups of houses or apartment buildings were connected to a meter that measured total consumption for the group,
which then had to figure out how to divide the bill and collect the money. If the group failed to pay the bill, all units under the collective meter were cut off. The use of collective meters was instrumental in raising collection rates quickly. There were instances, however, where disputes over electricity bills among neighbors on the same meter ended in unrest and required police intervention. In addition to the meters, a new electronic billing system was introduced that allowed consumers to pay their bills at banks or online. The new system eliminated cash collections, reducing opportunities for bribery and theft.

Third, to show that the rules of the game had indeed changed, the government disconnected prominent nonpayers, such as the Poti Water Utility, the Tbilisi trolleybus company, and the Tbilisi General Hospital. For Prime Minister Gilauri, who was energy minister then, “Disconnecting the hospital was a difficult decision, but it worked, and the hospital management paid its arrears in a few hours.” Disconnecting the power sent a strong message to all nonpaying consumers that the rules of the game had changed, that everyone now had to pay for power.

Fourth, tariffs were raised, in steps, to cost-recovery levels. This increase in tariffs would not have been possible if Georgia’s citizens had not seen commensurate improvements in power supply. For former prime minister Zurab Nogaideli, “Total reform was only possible when the President realized that the political price of higher tariffs was less than the political cost of no electricity.” To soften the blow of higher tariffs, especially on the poor, the government introduced a new social protection program under which all consumers received a one-time electricity voucher worth GEL 50. It also introduced lifeline tariffs, targeting the poor, which provided a basic consumption threshold.

**Privatizing Power**

To boost efficiency and profitability, the government implemented a plan aimed at privatizing the sector, which had already been unbundled into generation, transmission, and distribution companies. Initially, two competing strategies emerged, one put forth by Nika Gilauri, the other by Kakha Bendukidze, who was then minister of economy. Both strategies shared the same goals, of providing around-the-clock electricity supplies to the entire country and making the power sector financially sustainable. They differed in how to achieve them. Bendukidze favored rebundling the sector and privatizing distribution and generation into four vertically integrated companies. Gilauri’s program, dubbed the Program for Lighting Georgia, called for making initial state investments in the unbundled
companies, clearing up their debts, restoring them to financial viability, and then privatizing them.

The second plan won out. The state made significant investments ($300 million from the state budget, along with substantial financing from donors) in the sector, rehabilitating hydropower and thermal power stations. A debt-restructuring plan with external suppliers was also worked out to bring the utilities’ balance sheets back to health. The government also suspended the operations of several small distribution companies, which had few customers and were sources of corruption.

Subsequently, private participation was attracted to the sector. Privatization was seen as an instrument with which to fight corruption and ensure efficiency in the sector. Power sector entities that were privatized included the United Energy Distribution Company, which supplies power to all consumers outside Tbilisi, and six hydropower stations.

**Changing the Team**

For Gilauri, the most difficult challenge was building a new, reform-minded team that could implement the needed reforms for “young, educated, hard-working people, with a mix of experience and youth.” He involved himself in the hiring of not only deputy ministers and heads of departments but also lower-level professionals. Key to hiring and retaining staff was paying them attractive salaries. Higher salaries became possible as tax collections increased and the financial strength of the power utilities improved.

**Results**

Reforms in the power sector achieved remarkable results, transforming a totally corrupt sector with a crumbling infrastructure into a financially stable net exporter of electricity and a potential source for new investment and growth. Many people, including some in government, believed that these results would never be achieved. Prime Minister Gilauri recalls a discussion he had in 2005, when, as minister of energy, he asked his deputy to create a balance sheet for electricity supply and demand that was realistic and based on round-the-clock electricity supply. His deputy responded, “Why do you want us to work for nothing? We can create the balance sheet, but 24/7 supply is not possible in Georgia ever.” The deputy was soon proven wrong.
Improved Power Sector Performance

Within a very short period of time, reformers completely turned around Georgia’s power sector:

- Power is now available around the clock. No nationwide blackouts were reported over 2009–11.
- Technical losses in the transmission system declined from 6.6 percent in 2004 to 1.7 percent in 2010.
- Collections increased from 22 percent of billings in 2004 to 95 percent in 2007 and 100 percent in 2009 and 2010.
- Tariff rates are at cost-recovery levels.
- Higher tariffs and collections forced households and businesses to improve consumption efficiency. Consumption in 2010 was only 8 percent higher than in 2004, despite the fact that electricity is now supplied around the clock.
- Domestic power generation increased from 6.9 TWh in 2004 to 10.0 TWh in 2010.
- Georgia, a net importer of power in 2003, is now a net exporter.

Stronger Accountability Framework

Before the Rose Revolution, there was little accountability in the sector. Corruption perpetuated nonpayment, lack of financial discipline, and overconsumption, all of which contributed to a shortage of electricity. The old government instructed distribution companies to keep electricity supplied at all costs. As power companies rarely disconnected customers for nonpayment, there was no accountability between consumers and service providers. A key driver for achieving results has been the strengthened accountability in the sector (figure 5.1).

Conclusions

Zero tolerance for nonpayment of electricity was essential to establishing credibility very early on in the reform process. The government was committed to disconnect nonpayers no matter who they were—hospitals, army bases, even state prisons. No payment meant no electricity, without exception. The government’s guarantee and subsequent delivery of 24/7 supply strengthened the credibility of reform. Similar disconnection efforts before the revolution had not been effective, because the power company had not been able to provide around-the-clock service for paying customers. The decision to adopt communal metering was an unconventional solution to
getting payments up quickly. By charging communities with responsibility for collecting payments and disconnecting blocks (or entire villages) if payments were not made, the government made it clear that the rules of the game had changed. Installing thousands of new meters and rolling out a new billing system were key tools for eradicating corruption within the distribution company. The billing system not only measured electricity consumption and issued bills, it also monitored abnormalities in the electricity bills that could have been caused by corruption.