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ASSESSMENT OF THE STATUS OF RESTRUCTURING OF THE GEORGIA POWER SECTOR

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Background

Under the Soviets, Georgian electric facilities served as part of the South Caucasus power system, consisting of Georgia, Armenia, and Azerbaijan, in which all major facilities were synchronized and centrally dispatched from Tbilisi. With the collapse of the Soviet Union and independence for Georgia, the Georgian system emerged as a vertically integrated, State-owned monopoly, operating for the most part in electrical isolation from neighboring systems. For a variety of reasons (principally lack of funds, as management proved unable to operate in a commercially viable manner), the system eventually failed to provide Georgians with an adequate or reliable supply of electricity. In that context, USAID decided to provide the Government of Georgia (GoG) with technical assistance to reform the power sector. That assistance, which included advice on restructuring, began in late 1995.

Acting without outside advice, GoG had already begun an *ad hoc* restructuring in early 1995 by privatizing a number of small hydro plants. This privatization was part of a general plan to put small businesses in the hands of local entrepreneurs. However, a formal approach to the restructuring process did not begin till the autumn of 1995.

1. Restructuring the Vertically-Integrated Monopoly

In October 1995, President Shevardnadze issued Decree No. 404, "On Organizational Support of Restructuring of the Power Sector of the Republic of Georgia," which appointed a restructuring committee consisting of representatives from sector enterprises, government ministries, institutes, and customers. During the autumn and winter of 1995-1996, this body, with the assistance of Hagler Bailly, examined numerous models for power sector restructuring including examples from Central and Latin America, Eastern Europe, the United Kingdom and the United States. As part of this evaluation, Hagler Bailly also organized a study tour of US regulatory agencies for a group of Georgian officials and parliamentarians in April 1996, because the establishment of an independent regulatory commission was one of the principal goals of the restructuring committee.

The committee completed its work in May of 1996, having prepared a draft presidential decree outlining a proposed restructuring program. This draft was adopted by the government and issued on July 4, 1996 as Presidential Decree No. 437, "On Restructuring of the Power Sector." Decree No. 437 caused the sector to be comprehensively restructured.

Generation

As ordered by Decree No. 437, the government created Joint Stock Companies for each generation project, and then transferred the relevant generation assets to those companies. All shares of the Joint Stock Companies are owned by the State and held by the Ministry of State Property Management.

Sakenergogeneratsia, a remnant of the old State-owned vertical monopoly, acts as a management and service company for many of the sector's generation facilities, including the Inguri and Vardnili hydropower projects. Many of the smaller hydropower projects are, however, independently managed and operated. Hagler Bailly at one time recommended that GoG consolidate generation enterprises into three or four groups to facilitate privatization, but that plan was not implemented.

Issue

As noted in the legal and regulatory reform assessment, the continued existence of Sakenergogeneratsia may cause undue and unnecessary costs on the generation sector.

Recommendation

As GoG privatizes individual generating projects, Sakenergogeneratsia's role will diminish naturally.

Transmission and Dispatch

Under Decree No. 437, the government transformed the transmission and dispatch subsectors of the State monopoly into a single unit called Sakenergo. No Joint Stock Company was created for Sakenergo, which remains State-owned, and Decree No. 437 directed that these assets not be subjected to privatization in the near-term.

In 1998, the Ministry of Fuel and Energy ordered an additional structural change: the separation of Sakenergo's dispatch and transmission functions into separate enterprises. The dispatch function currently includes a "sales" component, under which the dispatch entity buys power from generators, and sells to distributors and other direct customers.

Issue

Even though GoG has separated Sakenergo's transmission and dispatch functions, the dispatch entity retains the middleman function for bulk power, buying from generators and selling to distributors and other direct customers. The middleman's control of cash in the sector, as well as its power to manipulate deliveries, remains a problem.

Recommendation

Under the new wholesale market plan, discussed below, the middleman function will be eliminated.

Distribution

As with generation, restructuring of distribution assets consisted of the formation of Joint Stock Companies for distribution enterprises, to which distribution enterprises were then transferred. The State continues to own the distribution companies, although GoG has transferred operational control of the distribution enterprises to the municipalities that the enterprises serve. Shares of the distribution companies, of which there are more than 65, continue to be owned by the State and held by the Ministry of State Property Management.

Issue and recommendation

Both Hagler Bailly and the World Bank have recommended consolidating the numerous distribution companies into a handful of economically viable enterprises with optimized customer mixes. This recommendation has been accepted in principle by the Ministry of Energy, which has proposed grouping the entities in 8 clusters that would be offered as units to strategic investors. Hagler Bailly has recommended an even more concentrated grouping into three units, one of which would be the existing Telasi enterprise, which serves the capital city of Tbilisi.[1] It now appears that a final decision on these grouping recommendations will be taken up only when GoG, in consultation with Merrill Lynch, its privatization financial advisor, decides how to proceed with offering the remainder of the distribution sector to strategic investors.

2. The Wholesale Electric Market

In July 1998, in Decree No. 421, "On Main Principles of the Georgian Wholesale Electricity Market," the President approved a statement of principles that will govern a restructured electricity market beginning in 1999. The principles, which were prepared over a period of months by representatives of the Georgian National Electricity Regulatory Commission, the Ministry of Fuel and Energy, and Sakenergo, with technical assistance from Hagler Bailly, provide:

- For a new wholesale market into which generators will sell power and from which distributors and direct customers will buy power.

[1] As of this writing, the privatization of Telasi appears to have been successfully completed. In mid-1998, GoG offered Telasi to investors in a public tender, with final bids due 15 October. After extended negotiation over detailed terms and conditions with the winning bidder, AES Corporation, GoG signed a final agreement in December 1998. AES took possession of Telasi in early January 1999.

- For the elimination of Sakenergo as the middleman purchaser and reseller of electricity; the new market will not have a centralized buyer/reseller

- For the separation of the dispatch, settlement and billing, and cash management functions, each function to be undertaken by a contractor or service provider selected by the market members

- For a governance structure in which the market members appoint their representatives to an Executive Board, which will also include government representatives

- For a pricing scheme in which rates for generation will initially be set by the Commission, but over time will be set by the open market

The new wholesale market represents significant changes for the sector, the two biggest of which are the elimination of the middleman in transactions between buyers and sellers, and the separation of functions so that buy/sell transactions will be recorded with far more accountability and transparency than at present.

The market rules principles provide for three stages of market pricing. During Phase 1, generators will be paid a two-part rate, with capacity and energy payments calculated by GNERC. Buyers will pay on an embedded cost of service basis with capacity charges prorated among market buyers based on the ratio of their peak usage for a given period to the peak usage of all wholesale buyers for that same period. Buyers will pay an average rate for all of the energy purchased, and will also pay for a proportionate share of transmission losses. They will pay for the cost of transmission, dispatch and settlement according to cost-based tariffs approved by the Georgian National Electricity Regulatory Commission (GNERC). To a limited degree initially, distribution enterprises and large customers will also be able to purchase some power from smaller individual plants under direct contracts.

In a second stage, to become effective no more than two years after the first, capacity payments will be based on the marginal cost of capacity and the calculated capacity requirement for capacity. Electrical energy payments will be based on the actual cost of energy from the marginal generating facility in each settlement period. However, in periods of shortages, the marginal rate will be constrained.

In the third phase, payments for capacity will cease. There will be a single marginal price for all energy sold. It will not be constrained during times of shortage and will be allowed to balance supply and demand. Direct contracts will be readily available.

Since the President's Decree No. 421 in July, much has been done:

- Electric sector licensees and GoG agencies have, as provided in the market rules principles, selected an Interim Executive Board, the membership of which has been confirmed by GNERC.

- The Interim Executive Board has selected, on an interim basis,[2] the Market Manager (Iveri Shalamberidze, former Deputy Minister of Fuel and Energy).
- The Interim Executive Board has also selected a Settlements Manager and the Market Funds Manager, two important posts under the market rules principles.
- The Interim Executive Board has appointed the Market Rules Committee, which is charged with responsibility for drafting detailed market rules. The Committee, in turn, has commenced preparing the detailed market rules, with technical assistance from Hagler Bailly.
- The Interim Executive Board has appointed a technical committee to work on a grid code, which will define the technical parameters of the wholesale market.
- GoG has, with technical assistance from Hagler Bailly, prepared a draft set of amendments to the Electricity Law, designed to accommodate the new wholesale market, as defined in the market rules principles and as directed by Decree No. 421.

Work on the amendments to the Electricity Law, the detailed market rules, and the grid code continue on an ongoing basis.

Issues

1. As of late December, 1998, and despite the admonition in Decree No. 421 that the Ministry of Justice, the Ministry of Fuel and Energy, and GNERC collaborate on a package of amendments to the Electricity Law designed to accommodate the market rules and the new wholesale market, GoG has not yet submitted the amendments to Parliament.

2. In October, Hagler Bailly presented numerous agencies of GoG with a package of amendments to the Electricity Law designed to accommodate the wholesale market and to confer jurisdiction on GNERC to regulate the supply, transportation, and distribution of natural gas. There is every indication, however, that GoG--the Ministry of Fuel and Energy, for example--has pursued the wholesale market amendments to the exclusion of the natural gas amendments, thus creating the possibility of a patchwork approach to Electricity Law amendments.

3. The detailed market rules have not been completed as of late December.

4. The market is tentatively scheduled to open for business on or about 1 April, 1999. The market members, particularly the dispatch, settlements, and market funds functions, require training before the market opens.

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[2] All appointments by the Interim Executive Board will be on an interim basis. The permanent Executive Board will make or confirm permanent appointments.

5. Article VII ("Price Determination") of the market rules principles (approved by Decree No. 421) provides that the generation sales into the market will be at a two-part rate consisting of a capacity charge and an energy charge, to be set by GNERC. At present, GNERC has set only a one-part rate for generators.

6. Hagler Bailly's commercialization pilot project at Rustavi demonstrated, we believe, that customers may only be induced to pay their bills for electric service if they are promised, and receive, a full-time and stable supply of electricity. Otherwise, they will not pay their bills and submit to cut-off, on the rationale that unless they can rely on full service, there is no point to paying for any lesser service. As the distribution sector becomes privatized, beginning with Telasi, the ability of the distribution licensees to secure a reliable supply of power will be critical, if privatization is to succeed. Reliable supply may depend of the ability of distributors to execute direct contracts with generators, at least in the short term. GNERC has, however, limited the ability of generators to sell power by direct contract.[3]

Recommendations

1. The amendments to the Electricity Law must be completed, reviewed by relevant executive agencies of GoG, and presented to Parliament in timely fashion.

2. The wholesale market amendments should be coordinated with other amendments to the Electricity Law, such as those designed to clarify the Law or GNERC's authority under the law and those designed to confer authority on GNERC to regulate the supply, transportation, and distribution of natural gas. Ideally, the amendments should be presented to Parliament as a single package.

3. Hagler Bailly shall continue to work with the Market Rules Committee to finalize the market rules.

4. Hagler Bailly conducted a study tour of the United Kingdom and New England for key members of the new market for late January 1999. In addition, Hagler Bailly plans to design a program to train the market members in the operation of the market during the second quarter of 1999.

5. GNERC has the data with which to establish, at least on an interim basis, a two-part rate for generators. Hagler Bailly will work with GNERC to calculate such rates in time for the wholesale market to open.

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[3] GNERC Decision No. 2, "On Sales of Electricity by the Generation Licensees," issued 20 January 1998. The Commission limited sales to a percentage of output, depending on the output of the plant. Generators with an annual output of 400 million or more kWh could contract for a maximum of 10 percent of output; those between 400 and 100 million kWh/year, 15 percent; and those with less than 100 million kWh/year could sell up to 20 percent of output.

6. Hagler Bailly shall stress the importance of the opportunity for generators and customers to execute direct contracts to the Market Rules Committee, and recommend that the option for direct contracts be reserved in the detailed market rules. The detailed market rules will then be presented to GNERC for review and approval, at which time Hagler Bailly will further support the concept.[4]

Conclusion

Georgia has taken the essential steps required for restructuring by subdividing the power sector into the fundamental functions of generation, transmission and distribution and by creating multiple enterprises in the generation and distribution subsectors. The separation of transmission into dispatch has paved the way for institution of a wholesale market. The adoption of the necessary rules and market management structures should eventually lead to a truly competitive market for bulk power. Implementation of these concepts puts Georgia among those nations in the forefront of power sector reform.

[4] An alternative to direct contracts would be direct ownership of generation facilities (in whole or in part) by a distribution enterprise. The Electricity Law does not prohibit such arrangements; rather, Article 30.1 provides, "No licensee may hold more than one License or own shares in any other Licensee without Commission approval." Thus, cross-ownership may be permitted, in GNERC's discretion.