

**ASSESSMENT OF NATIONAL GOVERNMENT  
ENERGY POLICIES AND THE STATUS OF THE FUEL  
SUPPLY SUBSECTORS OF THE GEORGIA POWER  
SECTOR**

**Georgia Power Sector Reform  
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### APPENDIX

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## **ASSESSMENT OF NATIONAL GOVERNMENT ENERGY POLICIES AND THE STATUS OF THE FUEL SUPPLY SUBSECTORS OF THE GEORGIA POWER SECTOR**

This is the assessment of Georgia national government energy policies and the status of the fuel supply subsector called for by Subtask E of Contract No. LAG-I-00-98-00005-00, Task Order 4, Georgia Power Sector Reform. This assessment consists in part of material presented by Hagler Bailly in an earlier assessment dated September 25, 1998.<sup>1</sup>

### **Georgian Energy Policies**

The year 1999 has thus far seen substantial changes in the laws and policies governing the Georgia oil and gas sector, as Parliament has enacted significant items of legislation

#### **The Georgian Law on Electricity and Natural Gas**

One of the earliest and most significant achievements in the area of Georgian energy legislation was the Georgian Electricity Law of 1997. This Law created a scheme of regulation of the rates, terms and conditions of service for the generation, transmission, dispatch, and distribution of electricity and established order in the electric power sector based on an unbundled structure capable of operating under market conditions where feasible. The Law created a new agency, the Georgian National Electricity Regulatory Commission (GNERC), to oversee the sector by means of a system of licenses and tariffs. It enunciated certain regulatory and competitive principles, including a definition of the principal functions of the lead Ministry, the Ministry of Fuel and Energy. Among other things, the Law required that the Ministry to:

1. Limit its activities to the development of policies;
2. Relinquish ownership, regulatory and operational rights in the electricity sector; and
3. Assume certain limited siting and licensing responsibilities.

The most far-reaching provision of the original Law on Electricity was the establishment, noted above, of GNERC as a permanent independent regulatory body. Establishing such a

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<sup>1</sup> Hagler Bailly, Final Report, "Policy Assessment of the Georgian Fuels Sector for Electricity Generation," September 1998.

Commission that escapes direct central government controls represented a dramatic break with the Soviet system, in which all economic activities were strictly and centrally controlled. Previously, all prices were set in ignorance of, and more often than not in conflict with, prevailing market forces. The allocation of resources, by being centrally directed, was largely misdirected. However, the establishment of the Commission was also a break with immediate post-Soviet economic practices when market signals were no more heeded than they had been during the Soviet period.

In addition to creating the Commission, the Law on Electricity spelled out its principal responsibilities, including the regulation and granting of licenses, the establishment of tariffs, and the resolution of disputes arising in the electric industry. Moreover, the Law gave GNERC sweeping powers to develop and approve its own Charter and operational rules and regulations, subject to a legal framework that spelled out the terms and conditions for appointment of Commissioners, the duties of GNERC's Chairman, broad outlines for the conduct of official business, and budgetary and financial details.

The Georgian Law on Electricity has now been amended to include the natural gas sector and has been renamed the Georgian Law on Electricity and Natural Gas. The Law renames GNERC the Georgian National Energy Regulatory Commission. Rather than adding a separate section on natural gas, the amendments add terms like "natural gas" to "electricity" wherever appropriate. The amendments thereby extend the provisions that have functioned satisfactorily in the electric sector to the natural gas sector.

### **Development of a Natural Gas Tariff Methodology and Tariffs**

With the Georgian Law on Electricity and Natural Gas now in force, a companion effort is underway to give GNERC the tools it needs to fulfill the natural gas tariff function envisioned under the new law. Starting in November of 1998, a two-member team under subcontract to Hagler Bailly went to work to develop a tariff methodology for natural gas pipelines and distribution companies in Georgia, and to establish reasonable cost-recovery tariffs. These consultants consulted and cooperated in depth with Georgian counterparts, including both the old and the new tariff regulators—that is, with officials of the Ministry of Economy and of the GNERC, the designated successor to the Ministry of Economy as gas tariff regulator. The consultants also consulted and cooperated with the natural gas industry's officials, notably representatives of Saktransgasmretsvi and the Georgian Gas International Corporation.

In spite of the usual difficulties associated with the introduction of new regulatory or legislative concepts in NIS countries, progress on the natural gas tariff front has been satisfactory. A first-round tariff proposal for pipelines has been completed and data collection begun in earnest for work on distribution tariffs. Of two specific barriers to designing a pipeline tariff, one has been overcome. The pipeline inventory has been fully and accurately accounted for and its valuation completed. The second barrier has to do with the resolution of the transit cost-recovery tariff

(not to be confused with transit fees) for gas being shipped across Georgia into Armenia. Under a true cost-recovery regime, the end-users in Armenia will not be charged for operational and maintenance expenses associated with natural gas destined for consumption in Georgia. The problem is that the extreme under-utilization of pipeline capacity and the small consumption volume in Georgia will give rise to a very high pipeline tariff within Georgia that may be found to be unacceptable. These models deal with average cost-recovery tariffs, Georgian cost-recovery tariffs and purely Armenian transit gas cost-recovery tariffs.

A partial Russian-language translation of present data forms used by the US Federal Energy Regulatory Commission has also been made. The forms will be used in Armenia but the choice of the Russian language was dictated on the very pragmatic grounds that they would also be usable in other NIS countries. The Chairman of the GNERC has shown great interest in this work and has indicated that he would want to use these forms in Georgia as well, perhaps with appropriate adjustments to reflect Georgian data peculiarities.

The analytical and modeling work has been complemented by discussions with Georgian tariff technicians and with high-ranking officials of jurisdictional government agencies and industry sub-sectors. These efforts have included face-to-face discussions with individual counterparts or groups of counterparts as well as a full-fledged two-day seminar. Progress has been satisfactory in preparing the natural gas community for the types and sizes of tariffs that will meet the cash flow requirements for adequate pipeline and distribution operations, while taking into account the concerns of a largely impoverished consumer population. Until now, the GNERC has been very supportive and has indicated that it intends to implement the proposed tariff methodology, if not the exact tariffs proposed.

Based in part on the foregoing technical assistance, GNERC has now released a draft tariff methodology to govern rate formation in the natural gas sector.<sup>2</sup> GNERC is also working on draft licenses, and terms and conditions of licensing, for natural gas supply, transportation, and distribution licensees. When finalized, these regulatory initiatives will establish the policy for natural gas regulation in coming years.

### **The Georgian Law on Oil and Gas**

Even though Georgia currently produces virtually no oil or natural gas, several factors that should interest prospective oil and gas producers. Georgia presents a ready market for natural gas, with pipeline and distribution facilities in place. As a rule, the initial discovery of gas is a mixed blessing, since its transportation to markets generally requires the development of an expensive delivery system. At the volumes and pressures required for delivery of Georgia's gas

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<sup>2</sup> See Hagler Bailly, "Final Report on Natural Gas Tariff Methodology," 14 July 1999. Hagler Bailly submitted this report to USAID under Task Order 5 of Contract No. LAG-I-00-98-00005-00, Georgia Oil and Gas Sector Reform.

needs, the system is nearly adequate. Rehabilitation expenditures, while necessary, will not be anywhere near as great as they would have to be for a full-fledged resumption of Georgia's pre-independence gas consumption and transit deliveries.

If oil were found in modest quantities, Georgia would probably rehabilitate an existing refinery or put in place additional low-cost mini-refineries sized to handle product volumes needed for domestic consumption. If large commercial deposits are discovered on-shore, Georgia's generally flat terrain towards the Black Sea would make exports relatively inexpensive, and certainly competitive with oil that reaches the Black Sea from Azerbaijan and central Asia. For off-shore oil discoveries, deliveries would present no problem almost by definition.

These advantages have not escaped the international oil industry. As a result, some interest has been shown in securing exploration and production rights in Georgia. A major obstacle standing in the way of promoting exploration activities has been the lack of a legal basis assuring potential oil or gas investors that rights they have negotiated with the Government of Georgia's representatives will hold up in court. That obstacle has been eliminated with the passage of the Georgian Law on Oil and Gas in April 1999.

Some of the more prominent features of the law are:

- 1) Where conflicts arise, the law takes priority over the old Soviet Law on the Subsoil that has many features that would be sure to scare off foreign investors.
- 2) Existing contracts are grandfathered as legal even if in conflict with the law.
- 3) The law provides for the creation of a State Agency that will be responsible for the regulation of all but trunk line transportation activities in the oil and gas sector. Responsibilities include, among others, the selection of exploration tracts, the development, tendering and awarding of tenders for such tracts, the negotiation and conclusion of petroleum agreements, the issuance of licenses, the monitoring of petroleum operations, and others.
- 4) Saknavtobi may conclude agreements with third parties or in its own right and carry out normal oil and gas operational functions.
- 5) The law spells out procedures that must be followed to secure petroleum exploration and production rights.
- 6) The law permits various types of petroleum agreements, including:
  - Production Sharing Agreements that provide for the recovery of costs from produced oil or gas. Instead of the usual cost-recovery set-asides, the

production-sharing agreement has a royalty clause, not usually associated with such agreements.

- Concession Agreements in which the State does not have a claim on a share of the produced oil and gas, but covers its claims through taxes and royalties.
  - Risk Service Agreements in which the investor takes all exploratory risks, but where the State enters negotiations regarding its take after the discovery of commercial reserves.
  - Service Agreements where the service provider does not generally take a share of the produced oil or gas, but performs his service for cash. This type of agreement is typically used for service operations such as contract production operations, well work-overs and the like.
- 7) The law provides for maximum terms of 5 years for exploration licenses and 20 years maximum for production operations.
  - 8) A non-refundable "Participation Fee," designed to recover the issuing Agency's expenses in preparing the tender, is to be paid by all respondents to the tender offer, and a "Mineral Usage Fee" must be paid by the winning bidder.
  - 9) Various other provisions deal with such standard features as access to and use of land (if necessary by invoking eminent domain), transportation of produced oil or gas, and the transfer of investor's rights, joint field development.
  - 10) The law also contains a weak stabilization clause allowing the State to provide for compensating amendments to Agreements in those cases where subsequent acts or legislation have a negative impact on the profitability originally associated with the licensed petroleum operations.

The Law reflects certain defects and uncertainties, and others are sure to emerge as the law is administered, but enactment of the Law on Oil and Gas represents a major step forward in reform of the sector.

### **Other Legislative Developments**

Parliament has adopted two other laws relevant to the fuel supply subsector, both in July 1999. First, Parliament passed the Law on Obligation to Compensate for Harm Caused by Hazardous Substances, which creates strict liability for harm caused by certain substances, among them oil and gas products transported in or through Georgia. Second, Parliament has enacted a law giving the owners or developers of oil and gas pipelines (among others) the right to condemn land or other property necessary for the construction and operation of the pipelines.

## **Geothermal and Hydropower**

There have been no changes in national energy policies regarding hydropower and geothermal energy since Hagler Bailly last reported on those topics.

## **The Georgian Energy Policy Concept**

The Law on Electricity and Natural Gas delegates regulatory authority to GNERC, but delegates to the Ministry of Fuel and Energy the task of developing national energy policies. The Ministry has been quiescent on that score until, in early July 1999, it released its draft "Georgian Energy Policy Concept," a policy paper. Hagler Bailly has just completed translating the paper, but has not yet had the opportunity to analyze the paper.

## **The Georgian Fuel Supply Sector**

In terms of fuel production, little has changed in Georgia since the Fall of 1998, when the predecessor to this report was written. Domestic production of oil and gas continues to be negligible and demand has changed little. Today, as then, the country depends almost exclusively on imports to fuel its economy. The one exception is hydro power which accounts for 80%+ of Georgian electricity supply and which is recovering from the severe drought conditions that affected the country in the last half of 1998.

## **The Natural Gas Sector**

The predecessor report gave a brief history of Georgia's natural gas market. Suffice it here to reiterate that in its peak year, 1989, the country imported and consumed some 6.1 billion cubic meters (bcm) per year compared to around 780 million cubic meters (mcm) now or about 13 percent of its peak-year consumption. By comparison, Armenia's imports and consumption in its peak year, also 1989, amounted to an almost identical volume of natural gas (6.3 bcm), but its current imports are twice those of Georgia, or nearly 25 percent of its peak-year consumption. This is in spite of the fact that Armenia is subject to an energy embargo by Azerbaijan and that a substantial portion of its electric power output is met through nuclear power production, thereby substantially reducing the need for natural gas imports to fuel thermal power plants.

Much has been said about Georgia's potential for natural gas production. Proven reserves are claimed to be 2.5 bcm. That kind of a reserve base, if actively under production, should yield some 250 mcm per year, or one third of current consumption. However, virtually no gas is being produced. What is more, Georgia's estimated probable reserves reportedly are 95 bcm. The term "probable reserves" is ambiguous. In the Western world it denotes natural gas in reservoirs that have been proved up, but the precise extent of which has not yet been determined for lack of sufficient appraisal drilling. In the old Soviet system, the term was more restricted, i.e., reserves would not be qualified as "probable" until approved by duly authorized State Committees in response to and as a basis for budgetary requirements dealing with needed gas exploration and

development funds. Thus, in the area of natural gas and oil resources in the former Soviet Union, the term "probable reserves" assumed a political dimension that it lacks in the West.

If the non-political Western definition of probable reserves (95 bcm) is accepted, and if half of those reserves were to be developed over the next ten or so years, the country should be able to eventually produce some 3-4 bcm per year. Yet, there is no rush to develop such a potentially lucrative market. There are three possible reasons for this. One is that the reserves do not really exist, except in the minds of optimists. A second possibility is that while there is some basis for the estimates, current Georgian energy policies do not encourage their development. Finally, and this is a real possibility, the proximity of a gas-producing giant (Gazprom) capable of reducing prices long enough to kill off its rivals at the moment of greatest vulnerability, when their exploration capital has been spent but before any significant cash flow has been generated, poses such a risk that no one is eager to take a chance on Georgian gas. In any event, there is no really good prospect on the horizon for development of domestic gas reserves in Georgia. This is in spite of the fact that the country has a fully-developed gas transmission and distribution infrastructure that, though currently in disrepair, is nevertheless capable of delivering to market any gas to be found almost anywhere in Georgia.

As noted, Georgia is almost totally dependent on imported energy, but that is not the reason for its current economic difficulties. Japan has no resources of its own, and Germany has very few, yet both countries, admittedly much larger than Georgia, are world economic powers, and have been for decades. Nor is the current import price for natural gas, \$60.00 per 1000 cubic meters, in itself an insurmountable handicap for Georgia. At that price, Georgia's annual import bill for natural gas runs around \$46.8 million (not counting gas losses), or roughly \$8.67 per person per year, based on Georgia's population of 5.4 million people. Taken in total, the gas-related trade imbalance is only about 10 percent of Georgia's official 1996 trade deficit of US\$457 million, and 15% of the country's estimated unofficial deficit of \$314 million which includes substantial unrecorded export transactions. The real problem is that Georgia has built up a cumulative debt to its previous principal gas supplier, Turkmenistan, of about \$400 million, and has, in the process, destroyed its creditworthiness not just in the gas market, but in world financial markets generally. This will prove a major problem when it turns to the world market for credits needed to rehabilitate its infrastructure, and in particular its natural gas infrastructure.

In terms of gas transmission and distribution, Georgia has long neglected its capital investments through inadequate maintenance, so much so that, by Western standards, the delivery system is operating at the brink of un-serviceability. The inability to finance maintenance and rehabilitation is as much a matter of inadequate bill collection from end-users as it is inadequate tariffs. USAID and the World Bank are providing assistance in the areas of bill collection and in establishing reasonable tariffs, but to be effective this assistance must be matched by Georgia's political will to adopt and enforce meaningful remedial measures.

One relatively new development on the natural gas transportation side is the prospect of Georgia becoming a gateway for Caspian natural gas shipments to Turkey and Eastern Europe. Georgia is now reaping the early fruits of providing a transit corridor for Caspian crude oil to the West and a similar East-West natural gas pipeline is a distinct possibility. But, for this to become a reality, many things have to fall in place, including Georgia's ability correctly to assess the costs and the benefits to foreign investors of financing such a line and to set its transit fees within competitive brackets. One serious competitor to an East-West line, at least as far as the Turkish gas market is concerned, is the rehabilitation and extension of the existing North Caucasus-Trans Caucasus gas trunk line. Such a refurbished line from the north could transport either Caspian or Russian gas, but would be largely controlled by Russian gas interests.

When the predecessor report was written, the principal participants in Georgia's natural gas industry were the operator of its pipeline system, Saktransgasmretsvi; the owner of the system, the State, which has delegated most ownership functions to a Joint Stock Company called Georgia Gas International Corporation; a foreign investor, Interpac and its subsidiary Intergaz (now called Sakgaz), which has acquired several of Georgia's larger gas distribution companies; and at least three State agencies, the Ministry of State Property Management, the Ministry of Economy, and the Ministry of Fuel and Energy. How these institutions have evolved over the last nine months is the story of the section that follows.

### **Saktransgasmretsvi**

The transportation of oil within or through Georgian territory is well established and no longer a subject of dispute. This is not the case in the gas sector where ownership, management and operational rights have undergone, and continue to undergo, significant changes. These changes have at times been met with resistance, including attempts to resolve points of contention through litigation.

As already noted, Saktransgasmretsvi has been and continues to be the operating company of the Georgian gas pipeline system. Established in November of 1996 as a successor company to the Ministry-controlled Sakgaz (not to be confused with the foreign investor by the same name) and Transgaz companies, Saktransgasmretsvi transports natural gas for consumption in Georgia, some 780 bcm per year in 1998 (based on an extrapolation of the first 11 months of that year), plus some 1.5 bcm of transit gas to Armenia. Its principal customers are the Gardabani Power Plant, a metallurgical plant and a cement plant in Rustavi, and a handful of local distribution companies, among them the Tbilisi Distribution Company Tbilgazi. Deliveries to these customers and Georgia transit gas shipments to Armenia in 1997 and 1998 are listed in the Appendix. The pipeline system is badly deteriorated and needs urgent repairs. A TACIS study, completed in April of this year, indicates that the needed rehabilitation funds will be close to US\$250 million.

### **Georgia Gas International Corporation**

When Saktransgasmretsvi was first created, it was essentially in control of Georgia's natural gas sector. The first significant change was the spinning off of Georgia's gas distribution companies that were then organized as joint-stock companies and placed under the control of their respective municipalities in preparation for eventual privatization.

Following the successful pattern of the oil pipeline system, what remained of Saktransgasmretsvi was subsequently transformed into an operating company. Its entire trunk line and auxiliary inventory, which remained State property throughout this process, was transferred to a new company, the Georgia Gas International Corporation (GGIC). Two Presidential Decrees were issued to make this happen. The first, in August of 1996, ordered the creation of the Corporation (under a slightly different name) and appointed its President who was also given the status of Special Envoy of the President of Georgia. The second decree, issued some nine months later, established the Corporation as a State-Owned Joint-Stock Company, "for the transportation of natural gas and for the purpose of organized transit transportation of natural gas from the territories of Russia, Turkmenistan, Kazakhstan and others through the territory of Georgia". The latter decree conferred sweeping powers to GGIC, including ownership of the pipeline and all auxiliary facilities, posting of GGIC on Georgia's list of monopolies in lieu of Saktransgasmretsvi, the right to represent State interests in all foreign gas negotiations, the right to "own, use, operate, manage, reconstruct and other necessary rights needed for a signatory agreement for the transit of natural gas through the territory of Georgia", and the right to receive all income generated by this property.

### **Sakgaz**

In January of 1998, five local distribution companies were auctioned off (Rustavi, Tetriskaro, Bolnisi, Kaspi, and Kutaisi), with two more following shortly thereafter (Gori and Tbilisi). A Sakgaz predecessor emerged as the successful bidder in all of these transactions. Sakgaz also acquired a major gas consumer, the Rustavi Cement Company, at that time. The acquisition of the local distribution companies reportedly was premised on a commitment by Sakgaz to rehabilitate the distribution systems. The company does not, however, appear to have a source of capital for these investments, and it is now seeking investors or lenders to finance the rehabilitation programs. In addition, there seems to be a question as to whether or not Sakgaz is responsible under its contract for the liabilities of the acquired companies.

Finally, in May of 1998, The Ministry of State Property Management put out a tender for a 5-year management contract over Saktransgasmretsvi. Sakgaz won that tender over GGIC because, according to the Ministry, the company submitted a detailed rehabilitation plan for the trunk line system as part of its bid.

### **Ministry of State Property Management**

The Ministry of State Property Management holds and manages the State's interests in State-owned enterprises and conducts the process of selling enterprises for privatization. GGIC is a State-owned enterprise and, therefore, ultimately accountable to the Ministry, except that its President also reports directly to the President of the Republic of Georgia. It was in its capacity as manager of the State's interests that the Ministry awarded the management contract over Saktransgasmretsvi to Sakgaz.

### **Ministry of Economy**

The Ministry of Economy was, until recently, the regulator of natural gas pipeline tariffs. It set transit tariffs and wholesale prices for gas delivered by Saktransgasmretsvi. The Ministry also had approval power for end-user tariffs that were set by the respective municipalities, taking into consideration underlying costs. However, as a result of the Parliament's recent passage of the Law on Electricity and Natural Gas, the tariff regulatory function has been transferred to the GNERC.

### **Ministry of Fuel and Energy**

The Ministry of Fuel and Energy plays a minor role in the Georgian natural gas sector. It issues technical licenses to gas supply enterprises and has signature rights on tariff adjustments that have been approved by the GNERC.

### **Developments since September 1998**

A new joint-stock company, Sakrusgasmretsvi, was created in October 1998, by order of Presidential Decree No. 773. This company, to be held by the Russian gas supplier Gazprom and GGIC, was established to assure supplies of Russian gas for Georgian consumers, to facilitate shipments of transit gas through Georgia, to provide for more effective operations and for the rehabilitation of existing trunk lines. The decree stipulates that the legal form, the organizational structure, and respective company participations be determined at a later point in time between the parties and in accordance with existing law, subject to approval by the Ministry of Fuel and Energy.

While this was taking place, a feud erupted between Saktransgasmretsvi and its new manager, Sakgaz. The new management company established its own Board of Supervisors which re-registered the company in its new format in January of 1999 and then proceeded with the development of a restructuring plan for Saktransgasmretsvi. When the plan met opposition by the General Director of Saktransgasmretsvi, the Board replaced him with a new General Director. For a while it was unclear as to who was in charge. In the end, the displaced Saktransgasmretsvi General Director filed suit and the courts held in favor of plaintiff with the

result that the re-registration was annulled and further structural changes that would result in the dismissal of plaintiff were prohibited.

A disagreement also arose between Saktransgasmretsvi and GGIC because, GGIC claims, the pipeline company had restructuring and rehabilitation plans of its own and it continued to negotiate gas imports which, in accordance with Presidential Order No. 206, are the exclusive responsibility of GGIC. As the nominal holder of the pipeline, GGIC canceled the 30-year operating contract it had awarded to Saktransgasmretsvi earlier. According to GGIC, Saktransgasmretsvi will continue handling operations until a new agreement is in place.

Another unresolved issue in the gas sector involves the 5-year management contract held by Sakgaz. As mentioned, the Ministry of State Property Management had awarded that contract to Sakgaz. The Sakgaz tender contained a business plan that envisioned rehabilitation expenditures of \$32.5 million in the first year, and some \$30 million thereafter for 10 years. However, no money has been invested and it is reported that additional stipulations in the contract have not yet been met.

Finally, there is the issue of the Tbilisi Distribution Company. A tender offer to privatize Tbilgazi was published in August of 1998, and Sakgaz was the winning bidder. According to Tbilgazi officials, the winning offer involved the sale of 36% of the company's shares for \$6 million, \$600,000 of which were payable and paid upon award of the contract. The contract is reported to have contained a clause under which Sakgaz would assume the liabilities of Tbilgazi, some 38 million Lari (approximately US\$ 19 million at the mid-June 1999 exchange rate). In addition, Sakgaz would assume a commitment to invest 30 million Lari over a period of 2 years for rehabilitation, including a sizable cash payment. It appears that Sakgaz contested its obligation to assume the outstanding Tbilgazi debt, and the contract was eventually canceled. Preparations are now under way to develop a new tender offer.

## **The Oil Sector**

The Georgian oil story is much like its natural gas story. There was a brief period of modest oil production, which peaked in 1980 at over 3 million tons a year. Today, about one thirtieth of that, or some 100 thousand tons, are being produced per year. As in the gas sector, Georgia's current oil production is not in line with estimated proven reserves. Output should be on the order of 1.2 million tons annually given the estimated proven reserve base of 12 million tons. If experience from other former soviet republics is a guide, the oil reservoirs were probably heavily overproduced and damaged in the process, so that the "proved reserve" classification is likely to be illusory. Similarly, while Georgia's reported 580 million tons of probable reserves may well be within the realm of possibility (Chevron believes they are highly overrated, by a factor of nearly 2), especially given the much less explored off-shore area, it will take reasonable oil policies applied for a long time to mobilize significant venture capital to prove up and develop significant resources. At least there is no powerful and potentially deal-killing competitor on the

oil scene, and the end-user market is nearby, so that the risks involved in investing in oil ventures are more conventional, including the usual geological and industry risks plus the country's political risk. This will be explored in more detail in the oil policy section of this report.

Major players in the oil sector are Saknavtobi, the Georgian International Oil Corporation, and the foreign exploration and production companies seeking or possessing oil and gas exploration and production rights.

### **Saknavtobi**

The Georgian oil sector is in such rapid transition that observers have found it difficult to keep track of unfolding developments. Perhaps the largest player in the recent past has been Saknavtobi. Like all of Georgia's "State Enterprises", Saknavtobi is in the process of being transformed into a 100% state-owned Joint Stock Company for the purpose of facilitating its eventual privatization. Saknavtobi was once engaged in many oil-related activities, including the operation of Georgia's oil pipelines. As mentioned, these pipelines have since been transferred to the Georgian International Oil Corporation (GIOC) which is responsible for representing Georgia's interests regarding shipments across Georgian territory and in Georgian-owned lines of the so-called early oil from Azerbaijan to Supsa.

While it was a State Enterprise attached to the Ministry of Fuel and Energy, Saknavtobi developed into a power center beyond its functional relevance. At one time it employed some 7,500 people. Today, many of Saknavtobi's remaining nominal activities are not operational, including Navtobgeophysica Ltd., its geophysical survey company, Samtomashveli Ltd., at least as far as its blow-out prevention operations are concerned, its Bureau for Housing and Accommodation, many of its 18 engineering departments and laboratories, and others. Although the company has now shrunk to about 20% of its former employee strength, Saknavtobi is still several months in arrears in meeting its payroll.

Saknavtobi's strength lay in attracting and negotiating exploration and production agreements with foreign investors, an activity that has been in conflict with the function of the Ministry of Environment and Natural Resources which is legally charged with preparing international tenders for oil and gas exploration and production contracts. The company also holds licenses of its own, but lacks the cash to develop them. Under normal world standards, the usual contractual obligations would prevent any one company from holding such licenses indefinitely.

Saknavtobi's conflict with the Ministry of Environment and Natural Resources has been resolved by passage of the Law on Oil and Natural Gas which has transferred much of Saknavtobi's negotiating activities to a State Agency for the Regulation of Oil and Gas Resources which has been created for this purpose. The new law also affirms the legality of Saknavtobi's agreements with potential oil investors that had been routinely ratified after the fact by presidential orders, a legal instrument of relatively low hierarchical standing, well below presidential decrees. As mentioned in our earlier report, those companies include a Canadian Firm (CANARGO), two

British firms (JKX and Ramco), a US firm (Frontera Resources), and a Swiss Firm (Ioris Valley).

Saknavtobi's Ioris Valley deal has been disappointing, with oil production considerably below expectations. In addition, Saknavtobi has experienced collection problems with some customers, notably the Gardabani Power Plant that owed the company some 1.2 million Lari as of early 1999. Another US Firm, ARCO, has left the scene short of signing an exploration and production contract. Another new development is that JKX is currently looking for an investor to buy out its off-shore exploration license.

### **Georgian International Oil Company**

The oil transit line from the Azeri border to the Black Sea is owned by the State which has created GIOC as the day-by-day working partner of the international consortium (the Azerbaijan International Operating Company or AIOC) which has rehabilitated the line and which will be operating it for 30 years. That line has been filled and is now in operation. It is reported to be capable of shipping around 300,000 barrels, or roughly 40,000 tons, per day. Unlike the natural gas sector, where pipeline management and operational rights are very much in dispute, these issues have been settled in the oil sector. This has been due in part to hard bargaining on the part AIOC which had the ownership and operations issues raised to the force of law prior to its full engagement. The shares of GIOC are held by the Ministry of State Property Management (MSPM).

### **The Saknavtoproducti Joint Stock Company**

One recent development is the recent signing of a contract by Chevron and the Ministry of Fuel and Energy establishing Saknavtoproducti. Till now, Chevron has been shipping its crude oil by rail from the Tengis Field on the North-Eastern Shore of the Caspian Sea to Batumi on Georgia's Black Sea shore. The new company will transfer the oil from rail tank cars to an existing product line at Khashuri that goes to Batumi. Thus the oil will be shipped the final 300 kilometers to Batumi by pipeline where Chevron uses the storage and loading facilities of the defunct Batumi Oil Refinery for loading the crude on sea-going tankers.

### **The Sartichala Oil Refinery**

In August of 1998, a new Georgian American mini-refinery was established in Sartichala, some 50 kilometers East of Tbilisi. Thirty-four percent of this Joint Stock Company is owned by the State of Georgia (through Saknavtobi), thirty-three percent belongs to an American company (Makoil), and the rest is owned by small producers in the region. The refinery has a design capacity of 100,000 tons per year (or 2000 barrels per day). It produces mazut (fuel oil), diesel, and kerosene with annual mazut production expected to be 40,000 tons to meet the winter fuel demand of the nearby Gardabani power plant. Unfortunately, a recent government decision to

levy excise taxes on the refinery's output has forced the operators to shut down operations due to an inability to compete with untaxed products entering the country illegally.

**CONCLUSION**

The foregoing assesses national government policies and the status of the fuel supply subsectors.

# APPENDIX

## NATURAL GAS DELIVERIES FOR VARIOUS CONSUMERS MONTHLY VOLUMES IN 1000 CM, 1997 and 1998

DATE	Total Deliveries	Transit to Armenia	Imports to Georgia	Volume Change with Pressure	Internal Losses	Internal Usage	Total Gas Sales in Georgia	Rustavi Metal Plant	Rustavi Chemical Plant	Gardabani Power Plant	Tbilgasi Distribution	Other Consumers
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1997												
Jan	292,987	151,319	141,668	-112	11,812	2,930	127,038	12,040	20,500	70,715	4,692	19,091
Feb	246,702	133,780	112,922	-4,168	10,029	2,467	104,594	13,075	5,261	65,181	5,356	15,721
Mar	209,240	132,090	77,150	2,763	10,090	2,092	62,205	3,589	11,883	36,324	1,721	8,688
Apr	209,873	105,229	104,644	1,331	6,258	2,098	94,957	11,889	23,111	47,176	3,393	9,388
May	141,703	65,660	76,043	-2,791	5,727	1,417	71,690	8,431	24,962	29,031	3,439	5,827
Jun	145,461	76,493	68,968	887	4,550	1,455	62,076	7,028	21,680	23,268	3,202	6,898
Jul	168,562	103,367	65,195	3,004	6,464	1,686	54,041	7,855	23,384	12,708	3,186	6,908
Aug	139,161	112,475	26,686	-3,076	7,830	1,391	20,541	4,568	4,959	60	1,958	8,996
Sep	153,161	129,071	24,090	965	7,906	1,531	13,688	4,606	120	45	2,082	6,835
Oct	188,223	150,196	38,027	438	8,158	1,882	27,550	9,215	8,467	90	2,372	7,406
Nov	218,860	151,215	67,645	170	13,733	2,188	51,554	8,011	24,071	7,482	4,741	7,249
Dec	241,531	134,032	107,499	280	12,771	2,415	92,033	3,200	8,800	56,872	7,035	16,126
Total	2,355,464	1,444,927	910,537	-309	105,327	23,552	781,966	93,507	177,198	348,952	43,177	119,132
1998			0									
Jan	276,094	170,006	106,088	-141	8,418	2,761	95,050	2,100	-	71,296	9,777	11,878
Feb	229,027	139,521	89,506	136	15,421	2,290	71,659	30	2,252	49,099	7,190	13,089
Mar	297,900	165,905	131,995	928	12,736	2,979	115,352		25,631	71,429	6,071	12,220
Apr	198,552	117,542	81,010	-1,448	13,557	1,985	66,916	1,304	25,138	25,189	4,749	10,536
May	136,640	85,077	51,563	196	9,785	1,366	40,216	5,000	21,715	71	4,096	9,334
Jun	135,699	84,893	50,806	1,507	11,606	1,357	36,337	6,131	19,027	51	3,703	7,425
Jul	121,747	81,169	40,578	-929	8,545	1,217	31,745	5,010	13,741	18	3,618	9,358
Aug	73,610	51,740	21,870	-2,232	8,033	736	15,333	2,318	288	54	3,482	9,192
Sep	144,049	87,340	56,709	1,490	7,623	1,440	46,157			30,407	3,826	11,923
Oct	264,177	159,200	104,977	-3,691	2,990	564	105,114	4,440	23,018	59,360	4,349	13,947
Nov	266,187	167,450	98,737	6	2,016	267	96,448	2,277	6,572	68,178	6,200	13,221
Dec												
Total	2,143,682	1,309,843	833,839	-4,168	100,728	16,962	720,327	28,610	137,382	375,152	57,061	122,122