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**REPORT ON THE ANNUAL REPORT OF THE
GEORGIAN NATIONAL ELECTRICITY
REGULATORY COMMISSION**

**Georgia Power Sector Reform
Contract No. LAG-I-00-98-00005-00
Task Order No. 4**

Final Report

Prepared for:

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**REPORT ON THE ANNUAL REPORT
OF THE GEORGIAN NATIONAL ELECTRICITY
REGULATORY COMMISSION**

Background

Clause 21 of the Georgian Electricity Law of 1996 provides:

Each year the Commission shall make an annual report regarding its activities and present it to the President, the Parliament, and the Ministry [of Fuel and Energy]. Copies of the report shall also be made available to the public.

Subtask B.4(xii) of Task Order 4 provides that Hagler Bailly is to “assist with preparation of the Commission’s annual report”. This is Hagler Bailly’s report on the annual report of the Georgian National Electricity Regulatory Commission (GNERC).

The GNERC Annual Report

We have attached an English-language translation of the Commission’s Annual Report, which GNERC approved by Resolution No. 14 on 24 March, 1999.

Assistance Provided to the Commission

Hagler Bailly assisted GNERC, and particularly Commissioner Chomakhidze, who had principal responsibility for preparing the draft, by:

- Providing the Commission with a suggested outline for the Annual Report
- Providing the Commission with sample Annual Reports from regulatory agencies in the United States, including the Federal Energy Regulatory Commission, the Georgia Public Service Commission, the Virginia Corporation Commission, and the New York State Public Service Commission
- Reviewing and providing comments on GNERC’s draft Annual Report

Conclusion

We believe that the Commission’s first Annual Report provides a comprehensive, candid, and accurate summary of its work under the Electricity Law to date.

Georgian National Electricity Regulatory Commission (GNERC)

*Approved by resolution #14
March 24, 1999*

Annual Report

Tbilisi 1999

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Background

During the Soviet period Electricity in Georgia was a vertical integrated sector and was included in a united electricity system of the Soviet Union.

The large-scale economic reforms in the Georgian electricity sector have been carried out for the last three years, namely organizational-economic restructuring of the sector is covered by Decree #437 "On Restructuring of the Electricity Sector" passed by the President of Georgia in July 4, 1996.

Under the above Decree, following to reorganization of "Sakenergo" three financially independent sectors were formed – generation, transmission dispatching and distribution. Joint stock companies were founded on the basis of 15 enterprises included in the generation sector, all shares of these companies, prior to making decisions regarding their location, belong to the state. These shares together with the management right are transferred to the State Company "Sakenergogeneracia" formed for these purposes.

The transmission-dispatching structure was reformed into a single commercial, financially independent entity – "Sakenergo", and transmission structures were separated on the basis of their location.

Further reorganization of the State Company "Sakenergo" was performed in 1998 and two structural units were formed: the State Service for Management and Dispatching (to provide operational management of the entire electric system) and the State Company "Electricity Transmission" – a system of high current 35,110,220,330,500 KV transmission and relevant sub-stations.

In accordance with Decree #437 of the President of Georgia, dated July 4, 1997, electricity is recognized as a preferential sector; considering economic and social importance of electricity, and necessity on carrying out a rational state policy in the sector, separation of regulatory and commercial functions, development of demonopolisation, private enterprises and market relationships.

One of the most important issues in the course of restructuring was formation of the Regulatory Commission, under the above Decree, the Commission was initially formed at the Ministry of Economy. At the starting stage the Commission was instructed to regulate wholesale and retail electricity tariffs.

Establishment of such organization primarily is due to market economy principles.

It is recognized, that reliable and qualitative electricity supply is vital for society, and correspondingly the state shall pay a special attention to it, besides it is a natural monopoly sector, where competition is limited. Free market principles are not adequate for the sector. In such environment competition is replaced by economic regulation. Electricity generator, as well as customer needs protection, especially with regard of electricity tariffs and quality of service. In both cases regulation is so similar to market principles, as if there is a competition. Regulation makes the society highly privileged and sets minimal payments in case of absence of competition. Similar to competition market electricity is supplied only to those customers, who are willing and able to pay for electricity; and electricity tariffs are more reasonable, than in case of monopoly and other alternative cases of competition.

Out of the State Bodies an Independent Regulatory Commission can fulfil all the above mentioned functions in the most rational way, as it is recognized worldwide. Independent regulation of electricity has been used effectively in USA for more than 100 years and democratic countries gave preference to the same principles. Currently, the following countries are using the independent regulation: Great Britain, Ukraine, Hungary, Poland, Argentina, Norway, Sweden, also countries of Latino America, Europe and Asia, and most countries of the former SU; Baltic countries, Ukraine, Armenia, Kirgizia are highly developed in this regard.

Independent regulation is useful both for customer and supplier of electricity, also for investor and the state; International Agencies also give preference to independent regulation.

Under the Georgian Law "On Electricity" adopted by the Parliament in 1997, entrepreneur, operational-economic and regulatory functions are separated. The law has created legal basis for introduction of market relations, attraction of domestic and foreign investments, formation of competitive electricity market; the law recognizes sound international principles for integration of Georgian electricity sector with similar international systems under the practical worldwide rules. Under the law, the Commission is separated from the Ministry of Economy of Georgia and is an independent entity called the Georgian National Electricity Regulatory Commission (GNERC).

This report covers activities of GNERC from the date of its foundation till the end of 1998, also its functions, structure, material-technical and financial means.

I. Introduction

1.1. Short Review of “Georgian Electricity Law”.

In June 27, 1997 “Georgian Electricity Law” was adopted by the Parliament of Georgia. The Law became effective after publishing it in August 1, 1997. It is the main normative act in Georgian electricity sector. By adopting “Electricity Law” Georgian Government expressed political will for decentralized management of economy and independent regulation of natural monopolies.

This law determines cooperation between structural entities of electricity sector. This law is intended to promote the development of legal bases for implementation of market regulations, also attracting of investments, and establishment of competitive electricity market etc. “Georgian Electricity Law” incorporates 7 chapters and 44 articles. General provisions, objectives of the law and definitions of the terms are included in the First Chapter of the Law.

Second chapter covers responsibility for elaboration and implementation of State energy policy in the electricity sector. The ministry of Fuel and Energy is authorized to elaborate the main directions of energy policy, to develop a strategy and priorities within the sector, to promote Energy Efficiency, to provide restructuring and modernization of the sector, to develop fair legislative framework. The Ministry is also entitled to elaborate state energy policy in emergency situations.

The third and the following chapters of the law cover the regulation of Georgian electricity sector, establishment of the Georgian National Electricity Regulatory Commission (GNERC) and determining its functions; This law also regulates rights and obligations of physical and legal persons employed in the electricity sector.

The Georgian National Electricity Regulatory Commission ("Commission") is established as a permanent independent body with the status of a legal entity of public justice, and is not subordinated to any other governmental or private agencies or institutions. The activities of the commission shall be transparent and their decisions, at any time, shall be available for the interested party, Media and public.

The law in details covers issues on licensing within the electricity sector, setting and regulation of electricity tariffs, procedures for decision making, activities and responsibilities of the commission members, the rules on suspension of the Commissioner's activities, elaboration of a budget, license fees, etc. Commission, according the set rules, issue licenses for activities in electricity generation, transmission, dispatching and distribution. This law covers detailed requirements on granting the licenses, their duration, modification and termination, rights and obligations of licensees and financial guarantees.

Chapter six covers tariff setting procedures. Commission is entitled to elaborate the tariffs for wholesale level, as well as retail level. The law underlines importance of the tariffs in rehabilitation and development of electricity. The law is setting the principles which commission shall comply with, when the licensee presents the tariff application. Electricity Law also requires adoption of the uniform accounting system.

Last chapter of the law considers transitional and final provisions. Each Legal Person under this Law, engaged in electricity generation, transmission, dispatch and distribution, from the date this Law came into effect, was entitled to receive an interim License with a duration of two years. After expiring of this date, the licensee shall be granted with long term or permanent license. This chapter also lists the number of normative acts, which shall be abolished after this law is adopted.

The adoption of “Georgia Electricity Law” is the new stage in development of energy system of Georgia. Implementation of those principles shall reveal new possibilities for resolving the existing problems in the sector. The provides bases for development of self-financing system, promotes high level of bill collection, sets framework for attraction of investment, creates a fair “rules” for all persons engaged in electricity sector

Establishment of new independent regulatory system preserves the energy sector from political influence. Particularly, tariff regulation system shall be protected from political pressure. The commercial and political interests were unbundled by establishment of the Georgian National Electricity Commission. That is the good signal for international investors. Establishment of the Commission shall promote stable and fair relations among the Licensees, as well as with international organizations and investors.

If we take into account the existing condition of the Georgian Electricity System we can conclude:

- Establishment of the Independent Electricity Regulatory Entity is a vital interest of Georgia.

1.2. Main functions of the Georgian National Electricity Regulatory Commission

The main functions of GNERC are as following:

- a. set the rules and requirements, grant, modify, discontinue and revoke generation, transmission, dispatch, distribution licenses;
- b. set and regulate wholesale and retail tariffs for electricity generation, transmission, dispatch, distribution and consumption;
- c. within its competence, resolve arguments between generation, transmission, dispatch, and distribution Licensees; and between Licensees and consumers;
- d. promote competition within the electricity sector, balance interests of electricity generation, transmission, dispatch and distribution licenses and consumers;
- e. monitor the operation of the Georgian Wholesale Electricity Market;

According the “Georgian Electricity law”, each year the commission shall make annual report regarding its activities and present it to the president, the Parliament, and the Ministry of Fuel and Energy. Copies of the report shall also be made available to the public.

The law granted to the Commission the status of independent entity. Commission is permanent, non-political, legal entity of public justice, which is not subordinated to any other governmental bodies. Commission within its competence issues rules and regulations that are the normative acts within the Electricity sector.

commission is on contractual bases. Due to the financial situation of the Commission the staffing of commission is not accomplished. The table shows the number of staff members and their positions.

Except the above mentioned, the commission also has 8 temporarily staff members, 4 energy specialists, 2 Economists, 1 lawyer and 1 computer specialist. In total 31 employees work at the Commission.

Consultants and Staff Members

No	Staff Members	Position
1	2	3
1.	Roman Ushveridze	Executive Director
2.	Konstantine Bokutchava	Head of administrative Department
3.	Mzia Suknidze	Main Expert in Management Issues
4.	Zoia Gurielidze	Main Expert in Technical Issues
5	Konstantine Tatumashvili	Main Expert in Licensing of Electricity Generation
6.	Genadi Miladze	Main Expert in Legal Issues
7.	Irakli Chomakidze	Main Expert in Direct Consumption of Electricity
8.	Sergo Latsabidze	Main Expert in Economical Issues
9.	Eka Ioseliani	Main Expert in Economical Issues
10.	Lia Tokmajeva	Main Expert in Economical Issues
11.	Nato Kovziridze	Main Expert in Economical Issues
12.	Thea Kvijinadze	Main Expert in Legal issues
13.	Gela Badiashvili	Main Expert in Computers
14.	Tamar Laperashvili	Operator
15.	Mariam Somkiashvili	Main Expert in Accounting Issues
16.	Naira Maisuradze	Secretary
17-20	4 Employees	Junior Staff Members
21-28	8 Employees	Consultants

2.2 Technical Assistance

a) Office and Inventory

Commission has no office of its own and due to this fact it is located at the Institute of Transmission Grid Designing Institute. The Address of Commission is Tbilisi, Georgia, Vekua St#1; Commission has 6 rooms with 130.0 m² of total space, the rooms are not renewed and comfortable and are furnished with old furniture. According the Presidential Decree issued in 1998, the Ministry of State Property Management provided the GNERC with a new office space in the institute of "Sak.Hydro Project", with 1332 m³ of total space (Kazbegi st.#45). Now, the office is under reconstruction and shall be finished by May of 1999.

2) Computers and Communicational Facilities

Donor Agencies provided the Commission with 14 computers and 9 printers, as well as with 19 telephone sets and 4 cellular phones.

3) Transportation

United States Agency for International Development transferred 4 cars, 3 "Volgas" and 1 "Niva" to the Commission.

2.3 Funding

b) License Fee

Clause 19 of the Georgian Electricity Law states, that the main financial source of the Commission is the License Fee. This fee is calculated according the forecast of the Licensee's annual production and is applied to electricity generation, electricity transmission, electricity dispatch and electricity distribution licensees. The License Fee is calculated in a manner to cover the expenses of the Commission during the year.

Regulatory Commission, according clause 42 of the Electricity Law, issued a Decision #3 of November 5, 1997, which sets the rules for calculation of the License Fees. The following formula is used for calculation of the License Fee:

$$F = E \times T \times C$$

When, **F** - is Interim License Fee, Lari;

E - is the forecasted amount of electricity generated, transmitted, dispatched or distributed by the Interim Licensee, kWh;

T - is Tariff set by the Commission for Interim Licensee, Lari/kWh;

C - is Coefficient of the Interim License Fee

a) Interim Generation Licensee:

- Sakenergo Generation Power Plants: - 0.0016;
(Enguri, Vardnili I, II, III, IV)
- Thermal Power Plants: - 0.001;
- Hydro Plants: - 0.002;

b) Interim Transmission and Dispatch Licensee: - 0.0025;

c) Interim Distribution Licensee: - 0.002;

In cases, when the calculated Interim License Fee is less than 250 Lari, the Interim Licensee shall pay fixed License Fee in amount of 250 Lari.

Market and other. The local experts, who are hired with assistance of the International Organizations, have significantly improved the GNERC's performance.

c) Other Sources

In 1998 the GNERC was also funded from the State Budget, which allocated 16 400 Lari for this purpose, but only 10 216 Lari (62.3%) was actually received.

In 1998 GNERC, except above mentioned sources, received a credit from the Ministry of Economy in amount of 56 750 Lari with the annual interest of 20%. By the end of 1998 the whole amount of credit was paid back and partially the interest fee was also covered. GNERC also received 16 700 Lari as a tariff setting fee.

III. Activities of the GNERC during the Reporting Period

3.1 Tariff Setting and Regulation

According to the Electricity Law of Georgia, article 4 one of the main functions of the GNERC is to set and regulate generation, transmission, dispatch and distribution wholesale and retail tariffs.

In this direction Commission carries out intensive work since implementation of correct tariff policy is an important problem for energy sector and for entire Georgian economy and is crucial for successful implementation of economic reforms in the country.

From August 1, 1997 according to the presidential Decree No 389, July 28, 1997 on "Additional Measures for Social Protection of Residents and Stage by Stage transformation to the market system of price formation" purchase price from distribution companies for all categories of customers was set at 4.5 Tetri/kWh.

According to the above stated decree GNERC introduced electricity tariffs for generation, transmission, dispatch and distribution companies by Resolution 4, dated by October 8, 1997.

Individual tariffs were set for all generating plants of Georgia. According to this decision tariff for different hydro plants varied between 0.9 and 2.0 Tetri/kWh and average tariff amounted to 0.98 Tetri/kWh. For thermal plants tariff varied from 4.3 –6 Tetri/kWh. For all generating plants average tariff equaled to 1.80-1.85 Tetri depending on the amount of electricity generated at Tbilisres.

Tariff for electricity supplied by Sakenergo to distribution companies was set for different voltage levels: high voltage (35-110 kV) – 3.1 Tetri/kWh, medium voltage (6-10 kV) – 3.3 Tetri. Average purchase price from Sakenergo equaled to 1.2 Tetri/kWh (except for Tbilisi and Dusheti distribution companies). Tariff for Telasi and Dusheti distribution company was set at 1.4 Tetri/kWh.

Subsequently 41.1% of final tariff (4.5 Tetri/kWh) fell on generation subsector, 30% - on transmission and dispatch and 28.9% on distribution. It shall be noted that such sharing of tariff structure almost corresponds to the experience of developed countries.

For that stage wholesale tariffs for different levels were set according to the least marginal cost principle. According to the Resolution 4, October 8, 1997 GNERC adjusted tariffs for direct large customers, such as Zestaphoni color metal plant, Rustavi chemical, Metallurgic and Cement plants, Metropoliten, Kaspi Cement Plant, Kutaisi Automobile Plant, Georgian Railway, Water Utilities, etc. This reduced total bill for consumed electricity by 20 million Lari per year. This measure did not affect any Licensee. They received payment for the services provided. To our opinion such decision encouraged development of industry in the country.

However it should be noted that least marginal cost principle does not really corresponds to the international principles of tariff setting.

In the market economy electricity tariffs shall be set by the commercial and competitive relationships between producers and consumers of electricity. For this purpose tariffs shall be given flexibility to meet the interests of supply and demand of electricity. As a result decision-making process is improved in regard with consumption and investment. In the environment of liberated prices electricity tariffs will be regulated in relation with renewable sources of energy as well. Cost of electricity and profitability of additional generation will be well reflected in the different periods of the year, according to seasons. This is a complex market model, which requires existence of various entities and market concepts, stable financial system and operations, advanced technologies and high level of communication systems.

By the Presidential Order No 81, March 17, 1998 "On measures for implementation of 1998 program of ESAF and SAC-II" Commission was directed to develop new methodology and rules for tariff setting.

Commission developed new methodology for tariff setting and set new tariffs according to this methodology. It became clear that existing tariff levels even in case of full collection could not cover operating expenses for generation, transmission, dispatch and distribution of electricity, to set aside rehabilitation and future financial development of the sector. This is one of the reasons why the sector operates in emergency conditions. This fact and old tariff system was unacceptable for local and foreign investors that delay attraction of necessary investments in the sector.

Analysis has shown that minimal level of purchase price of electricity for customers at low voltage shall be much higher. It is obvious that rapid increase of electricity tariffs in current situation is impossible, for this purpose Commission developed mechanism for stage by stage increase of tariff by year 2000.

3.2 Elaboration of Tariff Methodology

According to the Presidential Order No 81, March 17, 1998 GNERC was directed to elaborate new tariff methodology.

For implementation of this task Commission with the consultations of international organizations and relevant entities elaborated tariff methodology which is similar to the methodologies examined worldwide. This methodology corresponds to Georgian environment and is based on market economy principles.

Draft of present methodology was sent to the President Chancellery, Parliament, Ministry of Finance, Ministry of Fuel and Energy, as well as different institutions of the sector and large electric enterprises. After consideration of provided comments methodology was approved, was register at the Ministry of Justice of Georgia and became valid from July, 1998.

New tariff methodology conforms with the requirements of the Electricity Law of Georgia and takes into account present technical, economic and financial situation in the Georgian Electricity Sector. Methodology is based on the full cost of service provided and can be applied for setting electricity generation, transmission, dispatch and distribution tariffs.

Tariffs set according to the new methodology:

- Use depreciation based on to the value of fixed assets determined after the revaluation conducted in electric enterprises in 1998.
- Provide Licensees with an opportunity to recover their costs including: market priced fuel costs, operating, current and capital maintenance costs, the principal and interest cost of money borrowed for working capital. The Tariff shall provide a reasonable return on invested equity sufficient to attract financing for the rehabilitation and further development of the sector.
- Encourage financial growth of the licensee by increasing efficiency in operations and management practices and minimizing the cost of providing service.
- Encourage economic efficiency within the electricity sector by reflecting short and long run marginal costs, prognosis of price dynamics and consideration of excess and shortage of energy generation.
- Give an opportunity to licensees to cover their economically prudent.
- Take into account State Policy in regard to discount tariffs, provided that none of the customer categories shall receive a discount tariff subsidized by another customer category.

Before introduction of new tariffs Commission collected and processed data, necessary for the calculation of tariffs form almost every enterprise of the electricity sector.

3.3 Licensing

In order to regulate Licensing of activities within the electricity sector, the GNERC has issued and registered at the Ministry of Justice the Decision #2 "On Approval of the Rules and Requirements for Granting the Interim Licenses". Two seminars have been conducted for the future Licensees, where the requirements of the "Electricity Law", the rules and conditions for granting the interim licenses have been explained, the corresponding documents were distributed among the potential interim licensees.

By January 1, 1999 GNERC has issued 36 generation, 2 Transmission, 1 Dispatch and 63 Distribution Licenses (102 Total). It shall be admitted that several companies within the electricity sector continue operation without License and by this fact are violating requirements of Electricity and other Laws.

In order to facilitate licensing within the electricity sector, GNERC has petitioned the Ministry of Fuel and Energy, Municipality of Tbilisi, the Representatives of the President in Regions in order to facilitate licensing of the energy companies, but no improvements were achieved.

According to the existing legislation, Tax and controlling authorities may impose penalties for unlicensed activities. GNERC has provided these authorities with the list of Companies, which are operating without relevant licenses, but no measures were undertaken.

Several small hydro plants did not receive the Interim Licenses, particularly Igoety HP, Misaktsieli HP, Goresha HP, also distribution companies of Poti, Samtredia, Khoni, Matrivi, Abasha and others.

The Presidential Decree #81 of March 17, 1998 the GNERC was ordered to replace Interim Licenses with Permanent Licenses. For this purpose the GNERC has issued the draft document "On Rules and Conditions for Licensing" and this draft was distributed among interested entities for commenting.

For privatization of Tbilisi Distribution Company "Telasi", GNERC has issued a permanent Distribution and Transmission License.

3.4 The Main Principles for Establishment of the Wholesale Market

The tariff setting within the electricity sector is closely related to establishment of the Georgian Wholesale Electricity Market. According to the Presidential Decree #421 "On Main Principles of the Georgian Wholesale Electricity Market", such market will start functioning from 1999. The purpose of this document is to prepare bases for establishment of the Georgian Wholesale Electricity Market and set a strategy for market rules within the sector.

The wholesale price formation for buyers of the electricity market is based on principle of regulated cost of service. The main goal is the competitive and economically efficient electricity market, to maintain the entire structure of the energy sector, to attract the necessary investment and to develop the relationships among market members, to promote the creation of a stable electric system, and to facilitate more reliable and fair relationships among the Sector's Licensees.

In summer 1998 the Ministry of Fuel and Energy and GNERC, together with the consulting firm "Hagler Bailly", have elaborated "The Main Principles for Establishment of the Wholesale Electricity Market in Georgia" and timetable for its implementation. The both documents were approved by the presidential Decree #421 of July 20, 1998.

With assistance from the GNERC the Interim Executive Board of the Wholesale Market and the Market Rules Committee was established; The General Director of the Wholesale Market was appointed for fixed period of time; The Settlement and Market Funds Managers were contracted.

In addition the drafts of "Market Rules" and "Grid Code" were elaborated, shall be approved by GNERC's, after relevant amendments are made to the Electricity Law.

3.5 Privatization

Privatization within the electricity sector has started in 1994. Since that period 21 small generation plants were privatized, among which Chitakhevi HP is the biggest with 21 MW of installed capacity and 104 million kWh of annual production.

Since 1998 privatization within the electricity sector has expanded. The presidential Decree #403 of July 5, 1998 has set the strategy for privatization of the energy companies within the electricity sector. The Presidential Decree #735 of October 15, 1998 appointed the Chairman of the GNERC as a member of the Permanent Tender Commission for Privatization of the Major Electric Enterprises.

In October 1998 the Ministry of State Property Management together with the Investment Bank "Merrill Lynch" has conducted the International Tender for privatization of "Telasi". The American firm "AES" has won the Tender and two months of negotiations on December 22, 1998 the agreement between the "AES" and the Georgian Government was signed on transfer of 75% of "Telasi" stocks to "AES". GNERC was actively involved in this process.

One of the most important issues of the agreement was gradual increase of the electricity distribution tariff during next 4 years and during long term (10 years). GNERC has very attentively considered the presented calculations and investment program, and agreed on approving of long term tariff for AES.

GNERC was intensively involved in privatization processes during the reporting period. For the purposes of implementation of presidential Decree #403 of July 5, 1998, GNERC continued consultations with the relevant Ministries and Organizations. The objective of these consultations were analysis of the experience gained after privatization of "Telasi", elaboration of separate criteria for each enterprise intended for privatization, determining the conditions of these enterprises, etc.

GNERC believes, that:

1. before privatization of the enterprise, the problem of restructuring of enterprise's receivables and payables shall be resolved.
2. the distribution sub-sector shall be privatized first.

GNERC agrees with the grouping of distribution companies into two packages (East and West Georgia) or by administrative regions since about 70 existing companies can not meet license conditions and at the same time these segregated companies will not attract strategic investors.

3. Privatization of power plants requires more careful study, particularly:
 - a. Future investor in the electricity generation sub-sector shall be assured that he will recover the cost of generating power. This will become possible only after privatization of distribution companies. In other cases it is expected that power producer will sell electricity abroad that will make Georgian customers conditions even more difficult.

- b. The criteria for selecting future investor are to be specified. The idea of grouping generators for privatization purposes is attractive, but on the other hand this will lead to the creation of large monopoly, which is against state antimonopoly strategy.

The issue of attracting average investor to purchase average production capacities shall be considered.

- c. Because of antimonopoly reasons and according to the Electricity Law it will be appropriate to determine the maximum number of shares of generation companies can purchase Distribution Company and visa versa.
- d. Attention shall be paid to the state energy security. For this reason privatization of reservoir hydro plants (Enguri, Jinali, Khrami 1) shall be carefully considered. Also the reservoirs have complex function.
- e. Recently donor countries have provided low interest credits to fund the rehabilitation of power plants. These are Gardabani thermal plant, Vartsikhe hydro plants cascade, Enguri hydro plant, Jinali hydro plant, Lajanuri hydro plant and Khrami II hydro plant. Privatization options of these enterprises shall be discussed in light of convenience for the government: should they be privatized immediately or after their rehabilitation.

Based on the above mentioned privatization strategy of power plants requires additional investigation.

4. Documentation shall be prepared to describe the technical and economic condition of state owned power plants, that is the prerogative of the Ministry of Fuel and Energy and subordinated Entity State Company Sakenergogeneration. (GNERC is aware that this process is under way but is not finished yet.)
5. During negotiation of an agreement for selling 75% of shares of Telasi it appeared that tender conditions had several imperfections and investor was given the possibility to put requirements that disagree with the Georgian legislation. It took time and efforts basically from the Ministry of State Property Management to bring agreement to the satisfactory condition.

According to our opinion investment bank Merrill Lynch shall not have exclusive rights of advising government in privatizing the electricity sector.

It seems reasonable to extend tender committee working group by inviting Georgian energy specialists and professional of the sector.

3.6 Other Functions

One of the main functions of the Commission is to resolve disputes between licensees of the sector, as well as licensees and customers within its competence.

Several legal persons have addressed Commission for resolving disputes, particularly:

1. Court of Lanchkhuti region addressed Commission for preliminary resolution of dispute between Lanchkhuti Distribution Company JSC "Energia" and its customer JSC "Megobroba" on reimbursement of losses.

Customer – factory "Megobroba" demanded 24-hour power supply from the Distribution Company and required payment of penalties for every interruption of supply. Currently distribution company does not have any right or possibility to sign an agreement with the customer since it depends on Sakenergo and on the another hand distribution grid is not prepared to supply JSC "Megobroba" separately. Due to these reasons Commission made decision in favor of Distribution Company.

2. Another dispute addressed to the commission was issue on payment for the water supply to water utilities to the hydro plants located on the irrigation systems.

Commission considered the issue and made decisions within its competence.

3. Commission considered dispute arisen between JSC "Satskhenisi HP" and "Sioni HP". Dispute concerned disconnection of customers of "Sioni HP" by "Satskhenisi HP" and payment of operation and maintenance expenses by "Sioni HP" for the equipment of common use.
4. State companies Sakenergo and Sakenergogeneratsia applied to the Commission for the resolution of dispute concerning sales of electricity. During the reporting period Commission worked on investigation of this issue and making such decision that would conform to the legislation.

During the reporting period Commission had to deal with the issues concerning discounts existing in the country.

According to the Commission's opinion the fact that no source is identified to finance such discounts causes major concern. According to the existing data there are about 20 different types of discounts of the different categories of customers and electricity sector is compelled to subsidize the most part of these discounts. Also state budget of 1998 did not include subsidies for the electricity supplied to Abkhazia and South Osetia.

In the opinion of the Commission not only the list of categories of customers needs to be specified but also the scale of these discounts. In reality families receive such discounts without any limitation of the amount of power and despite the size of family if it consists even only one member subject to the discount. For such families it would be more appropriate to set the limit to the amount of electricity consumed. Customer shall make full payment for the power consumed above this limit.

In our opinion discounts shall be financed either through state or local budget or by the organizations where the customers work.

Above stated proposal was provided to the Ministry of Social Security, Labor and Employment which has sent it to the state chancellery. Final decision regarding this issue was not made during 1998.

IV. Licensing. Rules and Requirements

4.1. Generation

In total 44 power plants operate in the Georgian electricity sphere including:

- JSC owned by the Government – 12 companies;
- Leased Ltd. companies – 3 companies;
- Privatized JSC – 29 companies;

86% of power plants operating in Georgia have interim licenses. Their installed capacity is 99.8% and production is 99.7% of total.

According to 1/01/1999 data total installed capacity of generation licensees in Georgia is 4667 MW. Hydro Plants installed capacity is 2 729 MW or 59.8%, out of this amount 2 729 MW or 59.8% falls on daily regulated hydro plants, 845 MW - on annually regulated plants and 1938 MW or 40.2% - on thermal plants.

In 1989 Georgia's power plants generated maximum electricity 15.8 billion kWh. In recent years, particularly in 1998, production was reduced to 8 062.1 million kWh or half compared with 1989. Consumption has also reduced 2.2 times. Electricity consumption structure has significantly changed. In 1989 industry was the main consumer of electricity, when in 1998 the residential customers have consumed the biggest portion of electricity (42.7%). In 1989 industrial customers consumed 8 312.1 million kWh, what equaled to 46.2% of total Georgia's total consumption. In comparison, in 1998 industrial customers consumed only 800.4 million kWh (10%), or 10.4 times less than in 1989.

As it was mentioned above, 8.1 billion kWh were generated in Georgia during 1998, which is 889.9 million kWh or 11.5% more than in 1997. Portion of electricity generated in Georgia made 99.2% of country's total consumption. Hydro Plants generated 6.4 billion kWh or 79% of total generation in Georgia, and thermal power plants generated 1.7 billion kWh or 21%.

It shall also be noticed, that Georgia is facing big deficit of electricity and electricity supply to customers is frequently curtailed, despite the fact, that the consumption from industrial customers is minimum. The main reason is significant reduction of operational capacities of the generating plants. The total operational capacity of generating plants did not exceed 1500 MW.

There are several reasons for reduced operational capacity:

- Units #1,2,5,6,7 at Gardabani Thermal Power Plant (TPP) are not in operative conditions;
- All four generating units at Dzevruly HP damaged;
- Water channel at Vardnili-1 HP is destroyed;
- Tunnel at Jinvali HP is partially damaged and it reduces efficiency of the plant significantly; and many other reasons.

It shall also be noticed, that due to shortage of water in 1998, electricity generation was reduced by 692.6 million kWh.

Several Electricity Generation Licensees, according the rules and requirements of Licenses, are conducting repairing and maintenance activities; particularly:

Old and damaged electric cables have been replaced at units #1 and #2 of Enguri HP. Unit #3 also requires similar repair. It is necessary to replace already depreciated equipment at all units of Enguri HP.

The situation is similar in case of other generation licensees. It is important to mention, that these activities are undertaken after accidents and damages occur, and the quality of these actions does not satisfy requirements of the Electricity Sector's Technical and Safety Standards and Rules.

As a result of above said two accidents happened, one at Gardabani Thermal Power Plant and at Enguri HP, which paralyzed Georgia's electric system.

One of the main reasons for violation of the rules and terms for licensing, are poor financial conditions of Licensees. One of the examples would be Enguri HP, which in 1998 received only 4% (950 thousand Lari) of total price for generated electricity instead of 27 million Lari.

For the purpose of preparation for the Fall-Winter period of 1998-1999 the key issue is the water accumulation in reservoirs of big Hydro Plants, Enguri HP, Khrami 1 HP, Jinali HP, Shaori HP and Dzevrula HP.

It shall be admitted, that reservoir of Enguri HP was filled up by the beginning of August, but accident at unit #9 of Gardabani TPP, delay in launching of units # 10 and 4, also unreliable operation of units #3 and 8, has dramatically changed the regime of operation of the entire system.

Water level at Enguri HP, Khrami 1 HP, Jinali HP, Shaori HP and Dzevrula HP in the first half of January had reduced to the target level of end of March.

The operation of "Sakenergo Generation" (which holds generation License for management right of Enguri and Vardnili HP) and the Dispatch Licensee, in 1998 was unsatisfactory, due to failure of water accumulation at Enguri HP, which seriously has damaged equipment of the plant.

The License fee from Generation Licensees for the period of 1998 equaled to 53 951 Lari or 20.2% of total amount to be paid.

It shall be noticed, that only 8 generation Licensees (small Hydro) or 21.1%, have paid total amount of License Fees and it equaled to 2 986 Lari or 1.1% of the total amount to be paid by the Generation Licensees. "Sakenergo Generation", which hold the generation license for Enguri HP and Vardnili HP have paid only 22.9% of the total amount of License fees to be paid by these Plants.

One of the reasons for not payment of License Fees, would be poor performance of State Company "Sakenergo", which is the only wholesale seller and buyer of electricity and can not provide timely payment to the generation plants.

Due to this fact, the Regulatory Commission made a decision, which allows the generation plants to sell the limited amount of electricity (15-20%) through the direct contracts. This enables the generation plants to timely receive at least part of the payments. This decision had a very positive impact over the electricity sector.

4.2. Transmission-Dispatch

Four enterprises are conducting electricity transmission business in Georgia:

- JSC "Sak-Russ Energo", which operates high voltage transmission grid (500 kV with total length 572 km; 330 kV – 21 km; 220 kV – 12 km.
- State Company "Electricity Transmission", which operates transmission lines 35 – 110 – 220 kV with total length 5 584 km, 35 – 110 – 220 kW power substations with total capacity 12 644 MW.
- JSC "AES-Telasi", which operates transmission lines 35-110 kV with total length 415 km and 35 – 110 kW power substations with total capacity 1 572 MW.
- JSC "Dusheti" which operates transmission lines 35-110 kV with total length 220 km and 35 – 110 kW power substations with total capacity 79 MW.

The total amount of electricity transmitted by these transmission companies in 1998 equals to 8.1 billion kWh.

Only three transmission companies or 75% are holding transmission license. The total amount of electricity transmitted by the Licenses transmission enterprise equals to 99.1% of total transmitted electricity.

The Transmission Licensees have done some repairs in order to comply with the Rules and Terms of Licensing, but several times the transmission lines came out of order. All the transmission lines still require repair and some parts of the line shall be immediately replaced.

The dispatching of the Georgian Electric system is dispatched by the State Company "Sakenergo", which has received the Dispatch License in October 22, 1998.

The State Company "Sakenergo" conducts Dispatching of the system from the central dispatching center in Tbilisi and its affiliates in Zaestaponi, Gurjaani, Meskheta, Racha, Senaki, Shida Kartli, Telavi, Guria, Kvemo Kartli, Adjara and Zugdidi.

In 1998 the dispatching of the Georgian electricity system was conducted according the energy balance, which preliminary was agreed with the Generation, Transmission and Distribution Licensees and the Direct Consumers. In the first half of the year the system was more or less stable. The big part of the works related to preparation for the 1998-1999 fall-winter period was accomplished; The water reservoirs at the main Hydro Plants were filled up.

After the fire at Gardabani Thermal Power Plant which seriously damaged the unit #9, also launching of units #4 and 10 and unreliable operation of units #3 and 8 cause a major misbalance between demand and generation. This relevantly caused reduction in water levels

The most important issue is former State Company "Telasi", which was permanently violating the Rules and Terms for Licensing, particularly:

- In 1998 this company has paid only 16 026 Lari or only 20% instead of the annual License Fee of 79 072 Lari. So by the January 1, 1999 the remaining Fee to be paid by "AES-Telasi" equaled to 63 272 Lari.

Generally it shall be admitted, that violation of the Rules and Terms of Licensing, as well as other normative acts has become a "serious decease" of the energy companies engaged in the electricity sector.

One of the solutions of this problem could be the Presidential Decree #403 dated by July 5, 1998, which approves the strategy for privatization of the enterprises within Georgia's electricity sector. One of the best examples in this respect could be privatization of "Telasi". Only after grouping of the Distribution Companies, they will be able to comply with all the requirements of the Rules and Terms of Licensing and other obligatory documents. Another example could be again "AES-Telasi", which has paid a debt in couple of million dollars, which they have "inherited" from old "Telasi".

One of the best solutions for overcoming the existing crisis would be privatization of electric enterprises, according the State Strategy for Privatization of Electric Enterprises and the Electricity Law.

The former State Company "Telasi" has been successfully privatized and other enterprises are also intended for privatization after relevant organizational and financial documents are prepared. In this respect it is decided that the Distribution Companies shall be grouped into four groups: "Telasi" (already privatized), Eastern Georgian Distribution Company, Western Georgian Distribution Company and Adjara Distribution Company.

This process is not only necessary, but it urgently shall be accomplished, because Municipalities, to which actually are the Distribution Companies subordinated, can not properly manage these companies and personnel. Due to this fact there are equipment is damaged just due to improper utilization and also several accidents happened which caused humans' death.

As a conclusion, it shall be admitted, that the GNERC sees solution of these problems only in grouping of the Distribution Companies and their further privatization, otherwise from August 1, 1999 they operation will be illegal, as far as the period of Interim Licenses expire that day. GNERC also believes, that granting permanent licenses to these companies is very doubtful, cause almost none of the Companies comply with the requirement set by the Commission and particularly with the Rules and Terms for Licensing.

V. Annexes

List of Decrees and Resolutions Passed by GNERC

#	Number of Decrees and Resolutions	Date of Decrees and Resolutions	Title Of Decrees And Resolutions
1997			
a. Decrees			
1	1	6.10.97	On The Decree, Activities And Time Limits Of GNERC
2	2	5.11.97	On Rules And Conditions Of Interim Licenses
3	3	5.11.97	On Terms Of Granting Interim Licenses In 1997-1998
4	4	8.10.97	On Tariffs In Force In The Power Sector
b. Resolutions			
5	1	8.09.97	On Terms Of Granting Interim Licenses Of Generation, Transmission. Dispatching And Distribution Of Power
6	2	8.09.97	On Interim License Fee In 1997-1998
7	3	24.10.97	On Extension Of Interim License Granting Term
8	4	25.11.97	On Electric Power And Thermal Power Tariffs For "Tbilisi Electric Central" JSC
9	5	4.12.97	On Tariffs Of Power Consumed By Poti "Tskalkanali"
10	6	4.12.97	On Extension Of Interim License Granting Term
11	7	16.12.97	On Whole Sale Power Tariffs For "Rustavi Metallurgic Plant" JSC
12	8	23.12.97	On Granting Of Interim Licenses
13	9	25.12.97	On Temporal Rule For Whole Sale Power Tariff Calculation For 110-35 And 6-10-0.4 Kv Consumers
14	10	25.12.97	On Approval Of Temporal Rules And Conditions For Power Tariff Setting
1998			
a. Decrees			
15	1	8.04.98	On Approval Of Temporal Rules And Conditions For Power Tariff Setting
16	2	8.04.98	On Making Amendments To The Decree #4 On Tariffs In Force In The Power Sector Dated October 8, 1997 Passed By GNERC
17	3	1.07.98	On Power Tariff Methodology Setting Rules And Procedures

			"Metropoliten"
43	23	22.04.98	On Setting Of The Whole Sale Power Tariff For Metechi JSC
44	24	6.05.98	On Granting Interim Licenses
45	25	6.05.98	On Power Realization Under Direct Agreement By "Rioni HP" JSC To Kutaisi "Tsiskvili" JSC
46	26	6.05.98	On Setting Of The Wholesale Power Purchase Tariff For Kutaisi "Litophon Plant" JSC
47	27	6.05.98	On Making Amendments To Resolutions #14, 15, 16 By GNERC Dated March 24, 1998
48	28	6.05.98	On Extension Of Interim License Granting Term For "Gldanienergo HP"
49	29	6.05.98	On Reimbursement Of Water Supply Costs Supplied To Power Stations Located On Irrigation Systems Of Melioration And Water Utility Department
50	30	6.05.98	On Power Purchase Tariffs For Pump Station Of Kutaisi Water Utility
51	31	6.05.98	On Making Agreement Between The State Company "Sakenergo Generation" And "Transcaucauspedotor Europe-Asia" Ltd.
52	32	6.05.98	On Granting Interim Licenses
53	33	6.05.98	On Elaboration Of New Methodology, Setting Rules And Procedure For Power Tariffs
54	34	6.05.98	On Cancellation Of Interim License For Power Distribution Granted To "Pinazauri" Ltd.
55	35	8.05.98	On Granting Interim License To The State Company "Electricity Transmission"
56	36	27.05.98	An Making Additions To Resolution #7 Dated February 3, 1998
57	37	10.06.98	On Granting Interim Licenses
58	38	10.06.98	On Agreements On Power Realization Made By Production Licensees
59	39	1.07.98	On Methodology, Setting Rules And Procedure For Power Tariffs
60	40	1.06.98	An Making Amendments To Resolution #2 Dated January 20, 1998 Passed By GNERC
61	41	14.07.98	On Temporal Tariffs For Power Transmission, Dispatching And Realization
62	42	17.07.98	On Granting Interim Licenses
63	43	17.07.98	On The Agreement Made Between "Sakenergo Generation" And Closed Company "Ross"
64	44	17.07.98	On The Agreement Made Between

			"Sakenergo Generation" And Poti Port And Reimbursement Of Costs Incurred By "Vanda" Ltd. For Repairing Of "Vartsihe HP" Unit #6
65	45	17.07.98	On Setting Power Purchase Tariffs For Tbilisi "Metropolitan" For Non-Consumer Purposes
66	46	6.08.98	On Implementation Of Main Principles For Establishment Of Georgian Electricity Market By GNERC
67	47	12.08.98	On Granting License To "Tbiltskalkanali" Ltd.
68	48	12.08.98	On Granting Licenses
69	49	12.08.98	On Modification Of "Sioni HP" Ltd. License
70	50	12.08.98	On Modification Of "Martkopi HP" Ltd. License
71	51	12.08.98	On Modification Of "Kabali HP" Ltd. License
72	52	26.08.98	On Setting Of Wholesale Power Purchase Tariff For "Tbilisi Centrolit" JSC
73	53	26.08.98	On Transfer Ownership On 35-110 Kv Current Power Network To "Telasi" JSC And Its Privatization
74	54	7.09.98	On Approval Of Members Of Temporal Executive Committee Of The Georgian Electricity Market And The Committee For Elaboration On Market Rules
75	56	30.09.98	On Granting Licenses
76	57	30.09.98	On Modification Of "Vani" License
77	58	21.10.98	On Encouragement Activities For Creation Of Georgian Electricity Market

78	59	21.10.98	On Modification Of Interim License Of "Jineri"
79	60	22.10.98	On Making Amendments To Resolution #54 Dated September 7, 1998 Passed By GNERC
80	61	22.10.98	On Granting Interim License For Dispatching To "Sakenergo"
81	62	23.10.98	On Activation Of Tiered Tariffs In Power Sector
82	63	23.10.98	On Recalculation Of Tariffs On Power Supply And Purchase For Tbilisi "Metropoliten"
83	64	30.10.98	On Making Amendments To Direct Power Selling Agreements Of "Sakenergo Generation" And Resolutions #5, 15, 31, 44, 54 Passed By GNERC
84	65	18.11.98	On Making Amendments To Resolution #18 Dated March 24, 1998 Passed By GNERC (Hulo, Keda, Shuahevi)
85	66	18.11.98	On Setting Of The Wholesale Power Purchase Tariff For Hashuri "Gorgota" JSC
86	67	18.11.98	On Setting Of The Wholesale Power Purchase Tariff For "Rustavi Cement Plant" JSC
87	68	18.11.98	On Setting Of The Wholesale Power Purchase Tariff For Gori "Lani" JSC
88	69	18.11.98	On Making Amendments To Resolution #3 Dated January 30, 1998 Of GNERC On Setting Of The Wholesale Power Purchase Tariff For Kutaisi "Car Factory" JSC
89	70	25.11.98	On Cancellation Of Resolution #40 Dated July 1, 1998 By GNERC And Making Amendments To Resolution #2 Dated January 20, 1998
90	71	25.11.98	On Setting Of The Wholesale Power Purchase Tariff For "Maharobeli" Ltd.
91	72	25.11.98	On Setting Of The Wholesale Power Purchase Tariff For "Samegobro" Ltd.
92	73	25.11.98	On Setting Of The Wholesale Power Purchase Tariff For Kutaisi "Electrician" JSC
93	74	14.12.98	On Setting Of The Wholesale Power Purchase Tariff For Rustavi "Chemical Plant" JSC
94	75	14.12.98	On Setting Of The Wholesale Power Purchase Tariff For Kutaisi Furniture Plant "Iveria" JSC
95	76	14.12.98	On Setting Of The Wholesale Power Purchase Tariff For Hashuri "Ministara" JSC
96	77	14.12.98	On Drawing Up A Draft Agreement On Selling-Purchase Of 75% Of "Telasi" Shares

97	78	23.12.98	On Making Agreement With "Bimo" Ltd.
98	79	23.12.98	On Approval Of 1999 Budget And Structure Of GNERC
99	80	23.12.98	On Granting Licenses
100	81	24.12.98	On Setting Of The Wholesale Power Purchase Tariff For "Imereti" JSC
101	82	28.12.98	On Granting Licenses For Power Transmission And Distribution To "Telasi" JSC

Approved by
Resolution #1 dated January 6, 1999
by GNERC

Cost Accounting of GNERC for 1998 (Actual)

/Lari/

#	Description	1998	Per Quarters			
			I	II	III	IV
1.	balance at 01.01.1998	220	220	77751	115508	125625
2.	Total Income including:	310515	98439	77822	52955	81299
2.1.	License fee	226849	33438	67124	50196	76091
2.2.	Budget Financing	10216	2251	3193	2149	2623
2.3.	Credit	56750	56750	-	-	-
2.4.	Other Income	16700	6000	7505	610	2585
3.	Expense Including	268596	20908	40065	42838	164785
3.1.	Salaries	75551	13913	15632	18930	27076
3.2.	Accrual Salaries	22088	4271	4799	5812	7206
3.3.	Operational Expenses	10618	703	1748	2630	5537
3.4.	Purchase of tangible means	7568	-	7183	-	385
3.5.	Office rental	5000	-	600	3800	600
3.6.	Vehicle maintenance	7701	-	1534	2008	4159
3.7.	Travel expenses	15142	-	908	6454	7780
3.8.	Communication expenses	6711	941	1356	2301	2113
3.9.	Credit percent	2838	-	2838	-	-
3.10.	Credit recovery	56750	-	-	-	56750
3.11.	Security expenses	1800	-	1800	-	-
3.12.	Representative expenses	1615	114	450	756	295
3.13.	Other expenses	4829	966	1217	147	2499
3.14.	Office maintenance, including	49787	-	-	-	49787
3.14.1.	Materials	26595	-	480	-	26115
4.	Balance	42139	77751	115508	125625	42139

List of Licensees

Generation

#	Title of Licensee	Date of Granting of the License	License Number
<u>1997</u>			
I. Production			
1	Jinvali HP Ltd.	1997 23 December	1\01
2	Kabalhesi HP Ltd.	1997 23 December	1\02
3	Riceula HP Ltd.	1997 23 December	1\03
4	Martkopi HP Ltd.	1997 23 December	1\04
5	Chitahevi HP Ltd.	1997 23 December	1\05
6	Tetrihevi HP Ltd.	1997 23 December	1\06
7	Sioni HP Ltd.	1997 23 December	1\07
8	Ortachala HP Ltd.	1997 23 December	1\08
9	Shaori HP JSC.	1997 23 December	1\09
10	"Tbo El. Central" JSC	1997 23 December	1\10
II. Distribution			
1	Kvareli "Energy" JSC	1997 23 December	3\01
2	Hobi "Energy" JSC	1997 23 December	3\02
3	Haragauli "Electron" JSC	1997 23 December	3\03
4	Gori "Gori Energy" JSC	1997 23 December	3\04
5	"Pinezauri" Ltd.	1997 23 December	3\05
6	"Chkorotsku Energy" Ltd.	1997 23 December	3\06
7	"Ahmeta Energy" JSC	1997 23 December	3\07
#	Title of the Licensee	Date of Granting of the License	License Number
III. Transmission			
1	"Sakrusenergo" JSC	1997 23 December	2\01

<u>1998</u>			
I. Production			
11	Alazanhesi HP JSC	1998 17 February	1\11
12	Engury HP (State Enterprise)	1998 17 February	1\12
13	Vardnili HP (State Enterprise)	1998 17 February	1\13
14	Satshenisi HP Ltd.	1998 17 February	1\14
15	Kahareti HP Ltd.	1998 17 February	1\15
16	Hertvisi HP Ltd.	1998 17 February	1\16
17	Zahesi HP Ltd.	1998 17 February	1\17
18	Rioni HP Ltd.	1998 8 April	1\18
19	Dzevrula HP Ltd.	1998 8 April	1\19
20	Bjuja HP Ltd.	1998 8 April	1\20
21	Shida Kartli HP Ltd.	1998 8 April	1\21
22	Hrami I HP Ltd.	1998 8 April	1\22
23	Hrami II HP Ltd.	1998 6 May	1\23
24	Lajanuri HP Ltd.	1998 10 June	1\24
25	Gumathesi HP Ltd.	1998 10 June	1\25
26	Vartsihe HP Ltd.	1998 10 June	1\26
27	Chkorotsku HP Ltd.	1998 10 June	1\27
28	"Tbilsresi" HP Ltd.	1998 17 July	1\28
29	Atshesi (State Enterprise)	1998 12 August	1\29
30	Dashbash HP Ltd.	1998 12 August	1\30
31	Tbiltskalkanali (Tetrihevi HP)	1998 12 August	1\31
32	Skuri HP Ltd.	1998 30 September	1\32
33	Abhesi HP Ltd.	1998 30 September	1\33
34	Machahela (State Enterprise)	1998 30 September	1\34
35	Kinkisha HP Ltd.	1998 30 September	1\35
36	Achihesi HP Ltd.	1998 30 September	1\36

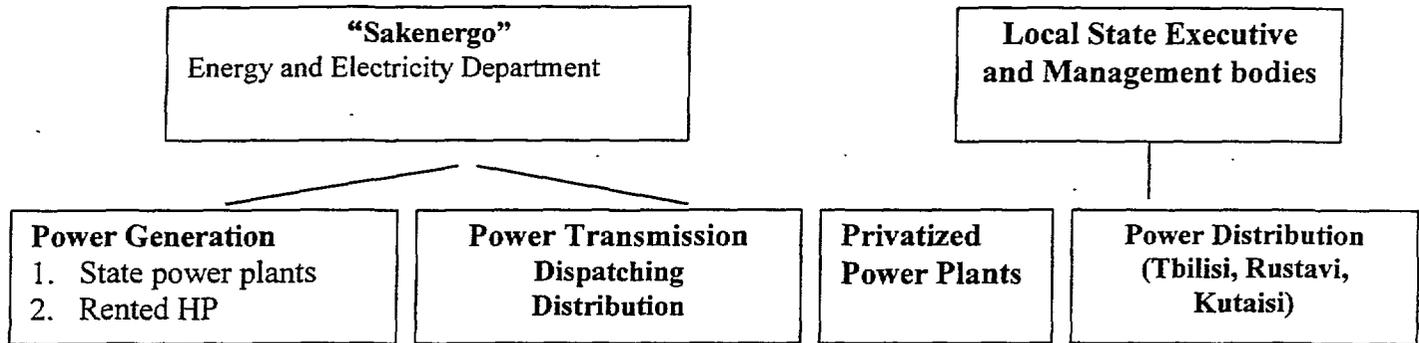
#	Title of Licensee	Date of Granting of the License	License Number
II. Distribution			
8	Keda (state enterprise)	1998 17 February	3\08
9	Shuahevi (state enterprise)	1998 17 February	3\09
10	"Bimo" Ltd.	1998 17 February	3\10
11	Signagi "Elmega" JSC	1998 17 February	3\11
12	Batumi (state enterprise)	1998 17 February	3\12
13	Rustavi "Rustavmsheni" JSC	1998 17 February	3\13
14	Kelasi "Kelasi" JSC	1998 17 February	3\14
15	Senaki "Energy" JSC	1998 17 February	3\15
16	Agricultural Institute	1998 10 March	3\16
17	Rustavi "Relasi" JSC	1998 8 April	3\17
18	Vani "Velasi" JSC	1998 8 April	3\18
19	Hulo (state enterprise)	1998 8 April	3\19
20	"Zugdidi Energy Co." JSC	1998 8 April	3\20
21	Lanchhuti "Energy" JSC	1998 8 April	3\21
22	Dusheti "Energy Dusheti" JSC	1998 8 April	3\22
23	Telavi "TelavEnergy" JSC	1998 8 April	3\23
24	Terjola "Halcedoni" JSC	1998 8 April	3\24
25	"Tsalenjiha Energy" JSC	1998 8 April	3\25
26	Terjola "Terj. Elexs." JSC	1998 8 April	3\26
27	Lagodehi "Lagodehi Energy" JSC	1998 8 April	3\27
28	Vani "Zeindari" JSC	1998 8 April	3\28
29	Zestaponi "Zes. Elexs." JSC	1998 6 May	3\29
30	Gardabani "Energy Service" JSC	1998 6 May	3\30
31	Sagarejo "Energy" Ltd.	1998 6 May	3\31
32	"Ahalcihe Energy" JSC	1998 10 June	3\32
33	Hashuri "Hashuri Energy" JSC	1998 10 June	3\33
34	Marneuli "Mar. Elexs." JSC	1998 10 June	3\34
35	Bolnisi (state enterprise)	1998 10 June	3\35
36	Ksani "Energy" Ltd.	1998 10 June	3\36
37	Chiatura "Chiat. Elexs." JSC	1998 10 June	3\37
38	Tianeti "Energy Service" JSC	1998 10 June	3\38
39	Borjomi "El. Company Borjomi" JSC	1998 10 June	3\39
40	Mtheta "Energy Progress" JSC	1998 10 June	3\40
41	Private entrepreneur Teneish.	1998 10 June	3\41

42	"Telasi" JSC	1998 1 July	3\42
43	Kaspi "Kaspi Energy" JSC	1998 1 July	3\43

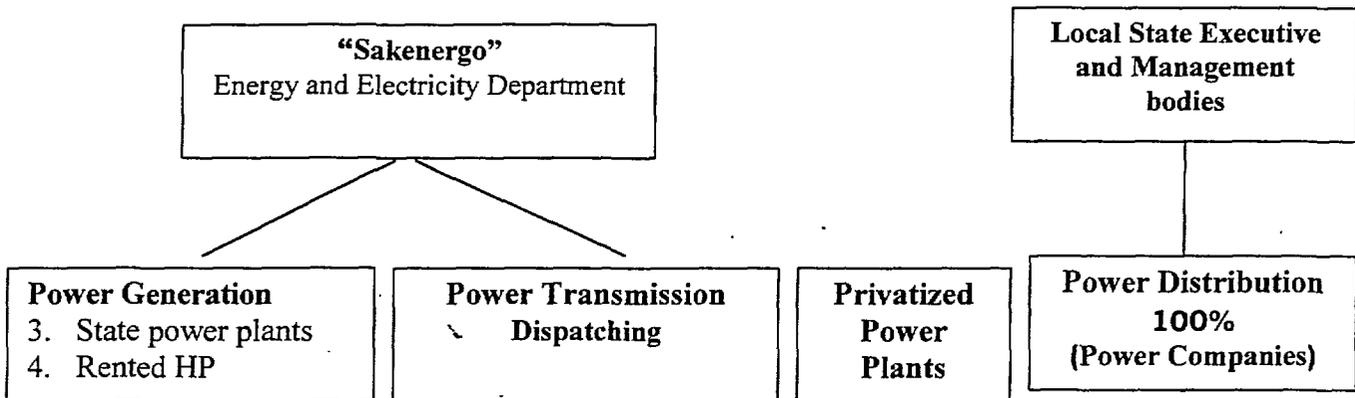
#	Title of Licensee	Date of Granting of the License	License Number
44	Gurjaani "Electron" JSC	1998 1 July	3\44
45	Oni "Electron" JSC	1998 1 July	3\45
46	Sachhere "Sachhere Electron" JSC	1998 10 June	3\46
47	Tkibuli "Tems" JSC	1998 1 July	3\47
48	Dmanisi "Dmanisi Elexs." JSC	1998 1 July	3\48
49	Chohatauri "Chelasi" JSC	1998 17 July	3\49
50	Tbilisi subway	1998 17 July	3\50
51	Tskaltubo "Progress" Ltd.	1998 12 August	3\51
52	Mtsheta "Sinatle" JSC	1998 30 September	3\52
53	Poti Port JSC	1998 30 September	3\53
54	Helvachauri (state enterprise)	1998 30 September	3\54
55	Kaxbegi "El. Energy Kazbegi" JSC	1998 30 September	3\55
56	Sagarejo "El. network" JSC	1998 30 September	3\56
57	Adigeni "Mnatobi" JSC	1998 30 September	3\57
58	Aspindza "Aspindza Energy" JSC	1998 30 September	3\58
59	Tkibuli "Orpiri" JSC	1998 30 September	3\59
60	Hashuri "Gorgota" JSC	1998 18 noemberi	3\60
61	Kareli "Kareli Energy" JSC	1998 23 December	3\61
62	Tetrtskaro "Sinatle" JSC	1998 23 December	3\62
63	Ahalgori (state eneterprise)	1998 23 December	3\63
III. Transmission			
1	"Electric Transmission" state company	1998 8 May	2\02
2	"Sakrusenergo" JSC	1997 23 December	2\01
IV. Dispatching			
1	"Sakenergo" state company	1998 22 October	4\01

Restructuring of Georgian Electricity Sector 1994-98.

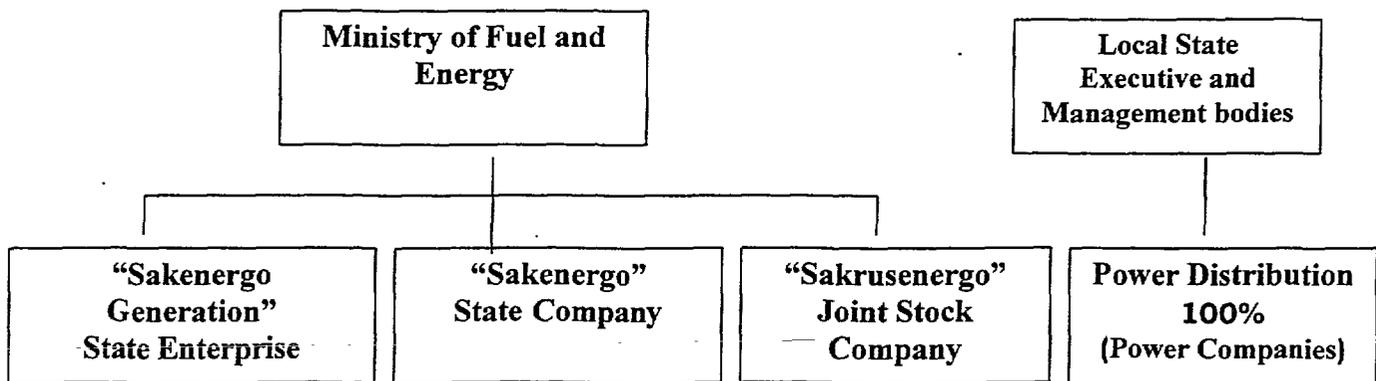
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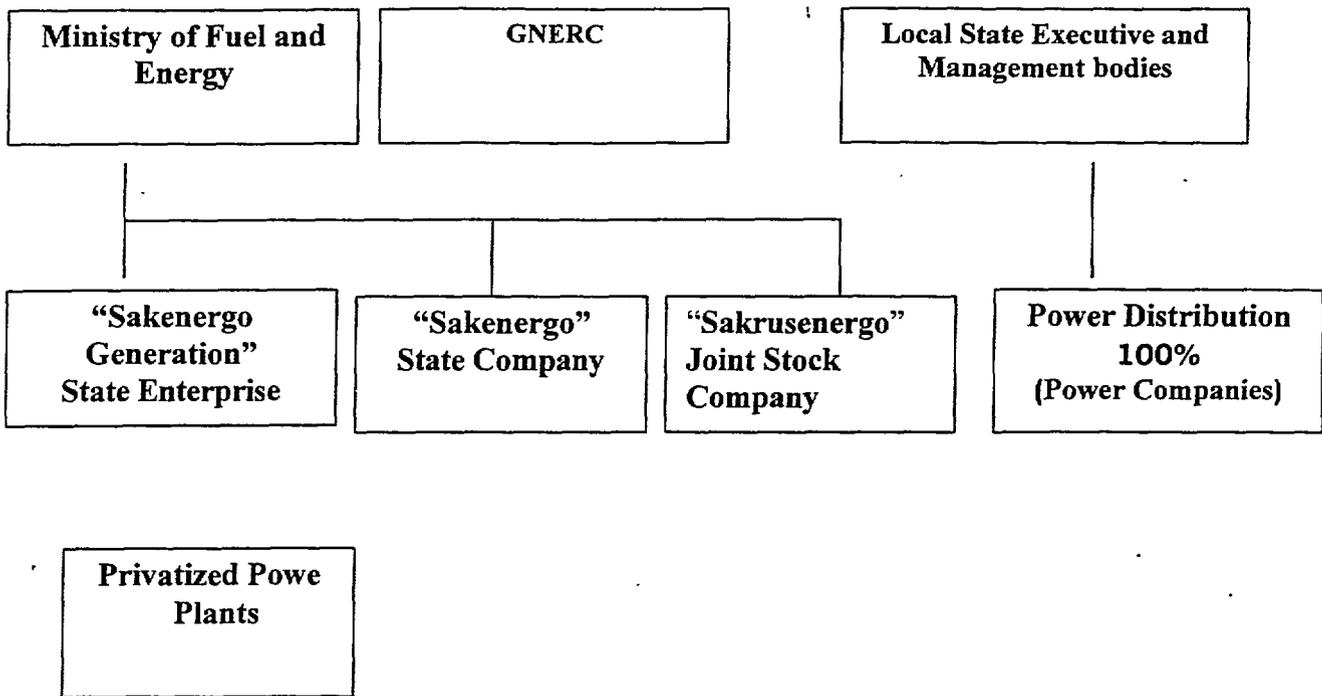
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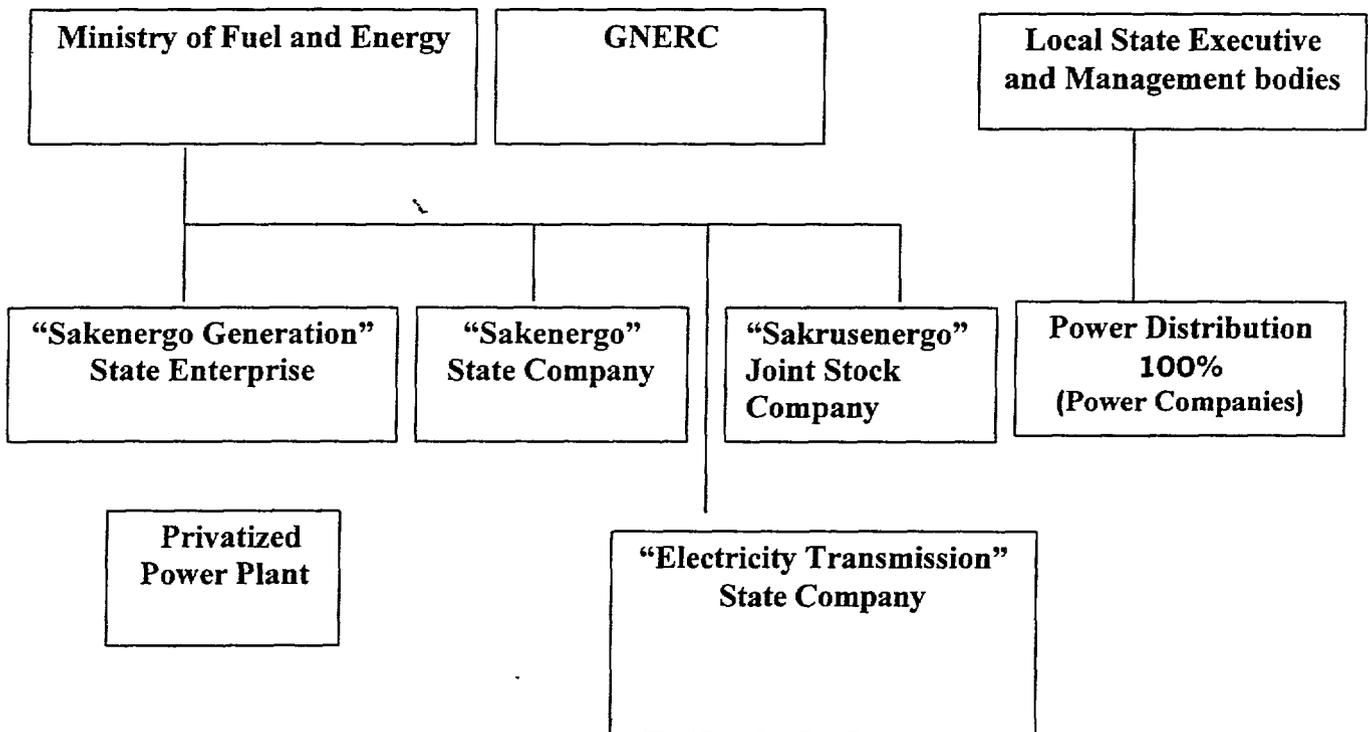
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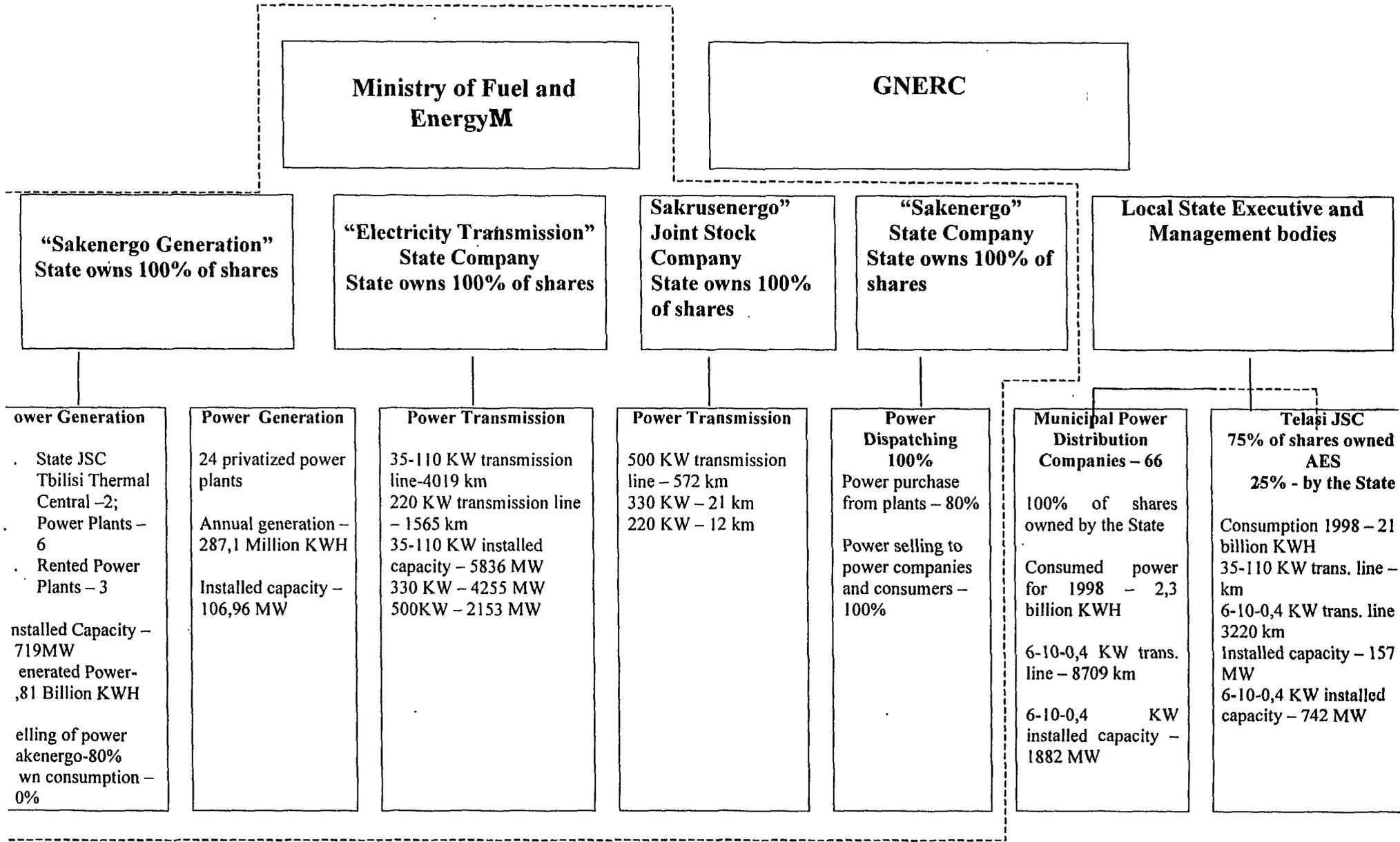
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1998



Georgian Energy Sector



38

Appendix 5.17

Electricity Consumed by Regions and Industrial Companies of Georgia in 1998

Name of the Region	Electricity		Over-consumption		Average Capacity	% from Georgian consumption
	Limit	Actual	thousand kWh	%	MW	%
Tbilisi	2059070	2414335	355265	17.3	275.6	30.3
Imereti region	743948	903228	159281	21.4	103.1	11.3
Kutaisi	363698	402246	38548	10.6	45.9	
Tskaltubo reg.	47906	83666	35760	74.6	9.6	
Khoni reg.	14815	16242	1427	9.6	1.9	
Bagdati reg.	9867	22053	12187	123.5	2.5	
Tkibuli	33197	49556	16359	49.3	5.7	
Vani reg.	19019	19252	233	1.2	2.2	
Samtredia reg.	85174	96668	11494	13.5	11.0	
Zestaphoni reg.	51052	49430	-1623	-3.2	5.6	
Terjola	17174	30348	13174	76.7	2.2	
Kharagauli	36977	64475	27198	74.4	7.4	
Sachkhere	11564	12323	759	6.6	1.4	
Chiatura	53505	37969	-15535	-29.0	4.3	
Adjara	365677	358108	-7569	-2.1	40.9	4.5
Batumi	246724	200658	-46067	-18.7	22.9	
Kobuleti	33350	63768	30418	91.2	7.3	
Khelvachauri	31475	58068	26593	84.5	6.6	
Khulo	20607	9587	-11020	-53.5	1.1	
Shuakhevi	14017	7696	-6321	-45.1	0.9	
Keda	19505	13522	-5983	-30.7	1.5	
Guria reg.	75450	79543	4093	5.4	9.1	1.0
Ozurgeti reg.	41330	46983	5653	13.7	5.4	
Lanchkhuti reg.	24427	26508	2081	8.5	3.0	
Chokhatauri reg.	9694	9310	-384	-4.0	1.1	
Samegrelo-Zemo Svaneti	357261	417233	59972	16.8	47.6	5.2
Zugdidi reg.	134803	189375	54573	40.5	21.6	
Tsalenjikha reg.	44773	40717	-4056	-9.1	4.6	
Jvari	4636	5327	691	14.9	0.6	
Enguri arc dam	12612	10362	-2249	-17.8	1.2	

Chkhorotsku reg.	14921	11705	-3216	-21.6	1.3	
Mestia reg.	16344	-12488	-3856	-23.6	1.4	
Senaki reg.	55276	58488	3212	5.8	6.7	
Abasha reg.	14754	10876	-3878	-26.3	1.2	
Martvili reg.	12294	10612	-1681	-13.7	1.2	
Khobi reg.	14067	12419	-1648	-11.7	1.4	
Poti	45394	55225	9831	21.7	6.3	
Racha, Kvemo Svaneti	27698	33160	5462	19.7	3.8	0.4
Ambrolauri reg.	7824	8957	1133	14.5	1.0	
Oni reg.	5138	6710	1573	30.6	0.8	
Tsageri reg.	9850	9535	-315	-3.2	1.1	
Lentekhi reg.	4887	7958	3071	62.9	0.9	
Shida Kartli	197617	217260	19643	9.9	24.8	2.7
Gori reg.	97199	103008	5809	6.0	11.8	
Khashuri reg.	42132	47483	5350	12.7	5.4	
Kareli reg.	21239	22188	949	4.5	2.5	
Kaspi reg.	37048	32582	-4466	-12.1	3.7	
Meskheri reg.	102605	104196	1591	1.6	11.9	1.3
Akhalsikhe reg.	26255	29588	3333	12.7	3.4	
Akhalkalaki reg.	18436	16198	-2238	-12.1	1.8	
Ninotsminda reg.	6786	6366	-420	-6.2	0.7	
Aspindza reg.	3449	2393	-1057	-30.6	0.3	
Adigeni reg.	8774	7373	-1401	-16.0	0.8	
Borjomi reg.	38906	42278	3373	8.7	4.8	
Mtskheta-Tianeti	252352	289120	36769	14.6	33.0	3.6
Mtskheta reg.	53217	71542	18325	34.4	8.2	
Dusheti, Mleta, Fasanauri, Gudauri	49877	61461	11584	23.2	7.0	
Aragvikeoba Water channel	134091	140229	6138	4.6	16.0	
Khazbegi reg.	5424	6285	861	15.9	0.7	
Tianeti reg.	4990	3539	-1451	-29.1	0.4	
Akhalgori reg.	4753	5805	1052	22.1	0.7	
Kvemo Kartli	330052	379417	49365	15.0	43.3	4.8
Rustavi	136411	128250	-8161	-6.0	14.6	
Gardabani reg.	62847	104715	41868	66.6	12.0	
Marneuli	51182	68036	16855	32.9	7.8	
Bolnisi reg.	18373	18675	302	1.6	2.1	
Dmanisi reg.	6935	7856	922	13.3	0.9	

Tsalka reg.	9483	12418	2935	30.9	1.4	
Tetritskaro reg.	14728	14156	-572	-3.9	1.6	
Kakheti reg.	166413	144272	-22141	-13.3	16.5	1.8
Gurjaani reg.	35774	35860	86	0.2	4.1	
Signagi reg.	17902	17290	-613	-3.4	2.0	
Dedoplistkaro reg.	18363	15784	-2579	-14.0	1.8	
Sagaredjo	18847	21510	2663	14.1	2.5	
Telavi reg.	31598	24277	-7320	-23.2	2.8	
Akhmeta reg.	14207	7877	-6330	-44.6	0.9	
Kvareli reg.	13531	8453	-5078	-37.5	1.0	
Lagodekhi reg.	16191	13221	-2971	-18.3	1,5	
Azoti	158376	146716	-11660	-7.4	16.7	1.8
Kimbochko	7344	1458	-5886	-80.1	0.2	0.0
Rustavi Metalurjic Plant	89622	88352	-1270	-1.4	10.1	1.1
Zestaphoni Color Metal Plant	1183524	333761	-849763	-71.8	38.1	4.2
Rustavi Cement	28186	26615	-1571	-5.6	3.0	0.3
JSC Madneuli	30093	25311	-4783	-15.9	2.9	0.3
Abkhazia	736385	797288	60903	8.3	91.0	10.0
from Russia	0	0				
Samachablo	20480	101445	80966	395.3	11.6	1.3
from Russia	0	0				
Consumption by enterpeises	6152135	6885508	733372	11.9	786.0	86.0
Energy System	753680	1076060	322381	42.8	122.8	13.5
Georgia's consumption	7058577	7961568	90291	12.8	908.9	100.0