

PN-AEJ-102

**REPORT ON NATURAL GAS TARIFF
METHODOLOGY**

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

Final Report

Prepared for:

U.S Agency for International Development
Bureau for Europe and the NIS
Office of Environment, Energy and Urban Development
Energy and Infrastructure Division

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September 7, 1999

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Background

The Georgia Parliament passed legislation entitled "On Changes and Amendments in Some Legislative Acts of Georgia" on 30 April 1999, and President Shevardnadze signed the bill into law two weeks later. As relevant here, the law amended the Electricity Law of 1997 (now named "The Georgian Law on Electricity and Natural Gas) to create a regime of regulation for the supply, transportation, and distribution of natural gas. The law renamed the existing independent regulatory agency the Georgian National *Energy* [formerly *Electric*] Regulatory Commission (GNERC), and authorized GNERC comprehensively to regulate the rates, terms and conditions of natural gas service through a scheme of licenses and tariffs.

The Energy Law authorizes the Commission to issue, and requires those offering service to secure, licenses for natural gas supply, transportation, and distribution. GNERC will not, under the law, directly regulate the price of natural gas, but will regulate the margins of suppliers, and the rates for natural gas transportation and distribution. Thus, GNERC requires a methodology for the calculation of such margins and rates.

Natural Gas Tariff Methodology

GNERC opened for business as the regulator of the electric sector in August 1997, at which time Hagler Bailly, under an earlier energy reform contract with USAID, began providing technical assistance to the commissioners on regulatory matters. Hagler Bailly began with the fundamentals of cost-based ratemaking, and tutored GNERC on rate principles for many months (indeed, the technical assistance on rate matters has never really ended). GNERC achieved a milestone in its progress as a regulator with its July 1998 resolution, "Approval of Electricity Tariff Methodology, Settings Rules and Procedures," by which the Commission adopted both a tariff methodology and rules for ratemaking.

Task Order 4 anticipated that GNERC would be given regulatory authority over natural gas, in requiring (Scope of Work Subtask B.4(ii)) Hagler Bailly to offer technical assistance to GNERC with respect to "the expansion of its authority to regulate new subsectors such as natural gas transmission and distribution". Hagler Bailly began providing such technical assistance in the Fall of 1998, with an initial reconnaissance and subsequent follow-up visits by Helmut Merklein and Dave Nicol of Merklein & Associates (Hagler Bailly's subcontractors). Merklein developed a draft tariff methodology over a period of months, which, when completed, Hagler Bailly translated and transmitted to the GNERC (Attachment A). Hagler Bailly's experts, including local professionals, worked with the Commission both before and after transmittal of the tariff

document to acquaint the Commission with the technical background of the natural gas industry, the differences between electric and gas regulation, and the specifics of natural gas regulation in Georgia.

In June, 1999, GNERC released the draft of its own natural gas tariff methodology ("Natural Gas Tariff Methodology, Setting Rules and Procedures," attached to Hagler Bailly's draft report, dated 5 July 1999). Following comments by Hagler Bailly and World Bank, GNERC released a revised draft of the methodology, which we have attached (Attachment B).

Conclusion

The Commission has based its revised draft natural gas tariff methodology in part on technical assistance provided by Hagler Bailly, in part on recommendations of the World Bank, but mostly on its own methodology for electric tariffs, adopted last year. The Commission's adoption of a final methodology will set the stage for rate regulation of the natural gas sector, and promote the ongoing process of privatization of Georgia natural gas assets.

Attachments

1. "Suggested Methodology for Natural Gas Tariffs in Georgia," Merklein & Associates, June 1999.
2. Revised Draft, "Natural Gas Tariff Methodology, Setting Rules and Procedures," Georgian National Energy Regulatory Commission, June 1999.

ATTACHMENT 1

**SUGGESTED METHODOLOGY FOR
NATURAL GAS TARIFFS IN GEORGIA**

MERKLEIN & ASSOCIATES

JUNE 1999

**SUGGESTED METHODOLOGY
FOR
NATURAL GAS TARIFFS
IN
GEORGIA**

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USAID Contract LAG-I-00-98-0005-00

PREAMBLE

The Georgian National Energy Regulatory Commission ("GNERC" or "Commission"), having been entrusted with regulatory responsibilities in the natural gas sector through the Georgian Law of Electricity and Natural Gas, notes that the natural gas pipeline and distribution systems in Georgia are currently in a state of advanced deterioration. While the Commission's primary mission in the natural gas sector is the protection of Georgian gas consumers from exposure to and abuse of monopolistic market power, GNERC, through its tariff-setting authority, also has an important role to fulfill in restoring the natural gas industry to safe and financially viable operating conditions.

Sizable investments will be needed in the Georgian natural gas pipeline and distribution industry to bring them up to international standards and to expand them to accommodate expected changes in domestic transport and use patterns and in increased transit capacities. The Commission intends to use its regulatory powers to facilitate the rehabilitation of the gas system by revising the tariff methodology currently in use. This revised tariff methodology will be designed to inspire confidence among foreign investors through the use of cost-recovery tariffs that will be objective, transparent, non-political, free from cross-subsidies among different user classes and free from permanent general subsidies to any user class, and by providing strong incentives for new investments in the system. A description of the new methodology is offered as follows.

OBJECTIVE

To develop a tariff methodology that provides sufficient incentives to investors to rehabilitate the natural gas industry in Georgia, while keeping the cost of natural gas to the end-user within their financial means.

COST RECOVERY TARIFFS

The Commission affirms that natural gas pipeline and distribution companies operating within the Republic of Georgia are entitled to the recovery of all reasonable costs that they incur in their operations, through appropriately sized tariffs. The costs to be recovered include all operating and maintenance expenses, cash flows accruing to the owners through depreciation to allow for recovery of their capital investments, all taxes and fees the companies must pay while in pursuit of their activities, short-term and long-term interest obligations, and reasonable rates of return on their equity investments. Recoverable costs are defined as follows.

RECOVERABLE COSTS

A. Operating and Maintenance Costs

Operating and Maintenance Costs ("O&M Costs") include all expenditures made on day-to-day operations. Individual line items in O&M accounts are to be posted in such a way that a distinction can be made between expenses associated with the operation of natural gas transmission and distribution systems and expenses that are incurred in maintaining those systems. The cost definitions that follow are based on the uniform accounting and data collection system currently in use at the Federal Energy Regulatory Commission of the United States Government, a modified version of which is now under review for use in Georgia.

Natural Gas Production Expenses. These are expenses associated with natural gas exploration and production operations. Since neither the pipeline company nor the distribution companies in Georgia are currently engaged such operations, these expenses are not at present applicable.

Natural Gas Storage, Terminalling, and Processing Expenses. Of these, natural gas storage is a significant and growing activity in Georgia. Natural gas storage will be subdivided into underground and other storage operations.

Transmission Expenses. This cost item includes all costs incurred in operating and maintaining transmission systems. Operations Expenses as defined by the Commission include Supervision and Engineering Activities, System Control and Load Dispatching, Communication System Expenses, Compressor Station Expenses (with natural gas fuel costs as a line item for rapid cost adjustments if the need arises), Expenses Associated with Trunk Lines, Measuring and Regulating Stations, and others. The corresponding Maintenance Expense Accounts by and large contain the same sub-accounts to reflect expenditures not directly associated with transmission proper. That includes overhauls of machinery, line repairs, and similar activities. Transmission expenses do not include the replacement of large segments of pipelines, the installation of new compressors, or similar significant replacement or major repair activities. These will be treated as capital outlays that result in appropriate balance sheet adjustments to be discussed separately.

Distribution Expenses. On the operation side, these expenses include Supervision Expenses, Distribution Load Dispatching, Expenses Incurred in Operating the Main and Feeder Lines, Measuring and Regulating Equipment, Residential and Other Meters, Pressure Regulators, Customer Installations, and others. On the maintenance side, similar line items will be established to track expenses covering costs associated with maintaining the equipment used in distribution operations.

Customer Accounts Expenses. This is a major cost item in distribution operations where a company may be serving several hundreds of thousands of residential connections and thousands of commercial and industrial connections, each with its own meter. Supervision Expenses, Meter Reading Expenses, Customer Records and Collection Expenses, and the tracking of Uncollectible Accounts are the major expense items in this account.

Customer Service and Informational Expenses. This account contains costs that pipeline and distribution companies incur in their relations with customers, such as assistance or instruction in the safe use of natural gas, and general customer services.

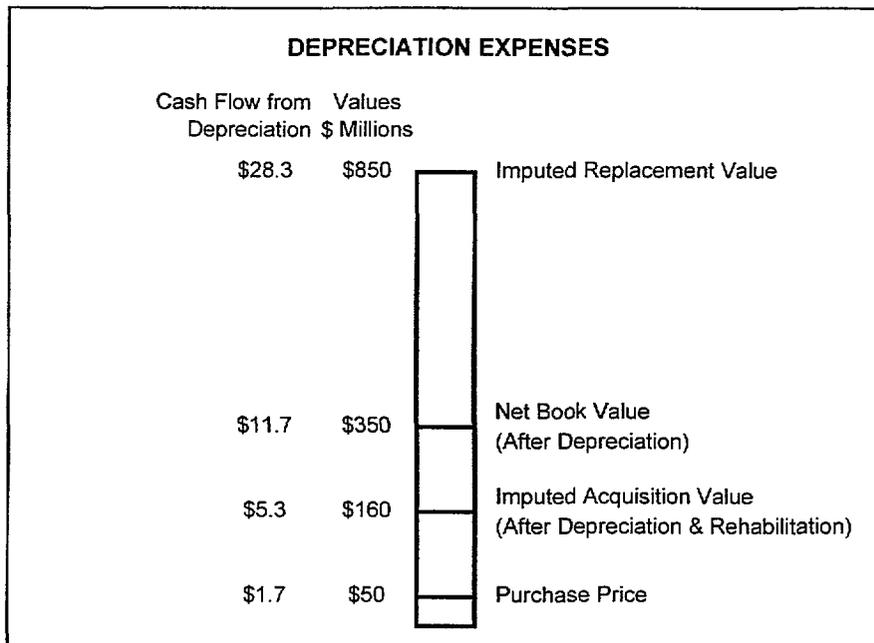
Sales Expenses. This is a major cost item for distribution companies, but of little consequence for a pipeline. The account covers expenses incurred in natural gas delivery activities, including reasonable advertising.

Administrative and General Expenses. This account includes the compensation of executives and other employees, and the costs of supplies and materials used by pipeline and distribution companies that are not directly chargeable to a particular operating function. Included in this account are items such as Administrative Salaries, General Office Supplies and Expenses, Outside Services Employed such as legal services, Property Insurance, Insurance to Cover Injuries and Third-Party Damage Claims, Employee Pension and Benefit Accruals, Regulatory Commission Expenses, and Others.

Reasonable Losses of Natural Gas. The Commission will promulgate reasonable loss standards and it will hold the companies under its jurisdiction responsible for reaching these standards after a few transition years. During these transition years, a schedule of acceptable losses will be published by the Commission which will hold the operating companies financially responsible for any losses beyond the published ceilings.

B. Depreciation Expenses

The Commission will permit the charging of depreciation expenses based on the Imputed Acquisition Value of the system, using a 3.33% annual straight-line depreciation regime. With reference to the graph shown below, the Imputed Acquisition Value of the system is defined as the Imputed Replacement Value minus accumulated depreciation as of the time the new methodology goes into effect (Net Book Value), minus estimated rehabilitation expenses. The values and depreciation figures shown below reflect approximate conditions of the Georgia trunk line system.



To make sure that the cash flow generated through depreciation based on the Imputed Acquisition Value of the system is used for its intended purpose, which is re-investment in the gas delivery system, the Commission directs that two separate categories of depreciation accounts be established. The first account relates to the Imputed Acquisition Value of the system minus the investor's actual Purchase Price. Depreciation associated with this category must be re-invested, and the owner-operator must make a quarterly accounting of his investments to the Commission which reserves the right to audit these accounts. The second account consists of depreciation related to the Purchase Price of the company assets plus any investments made after the acquisition, where the owner-operator is encouraged, but has no legal obligation, to re-invest.

The Commission has the power to set its own rules for depreciation allowances for tariff purposes, irrespective of the depreciation charges that are allowable under Georgian tax laws. For new investments, separate accounts will be set up, by depreciation classification and by year, and new assets coming into production will be depreciated in accordance with rules to be promulgated by the Commission. To the extent practicable, these rules will reflect Georgian tax laws.

C. Taxes

Since all taxes and fees collected by local governments and national authorities are necessary and legitimate costs of operations, they will be included in cost-recovery tariffs.

D. Interest

Interest payments to service short-term loans taken out for the purpose of bridging temporary cash shortages constitute a legitimate operational expense and such interest expenses are included in natural gas cost-recovery tariffs.

Interest on long-term debt for rehabilitation or other long-term investments are also included in cost-recovery tariffs, but not as an operational expense. Long-term interest payments are recovered through the regulatory rate of return which is defined as the weighted average return on equity and debt.

E. Profits

To provide investors a reasonable risk-adjusted return on their investment, such investments made in acquiring gas delivery assets or in rehabilitating the system are legitimate and necessary expenses of doing business and, as such, the profits they generate are included in cost-recovery tariffs. Profits will be allowed on funds actually invested, labeled Purchase Price in the preceding graph.

F. Profit Taxes

The Commission states as a fundamental principle that profits must accrue to investors without any subsequent charges or deductions. In particular, profit taxes will not be deducted from profits in such a way as to reduce them below the allowable return set by the Commission. To make this happen, the investors' before-tax profit will be sized so that the subsequent imposition of profit taxes

leaves the investor's after-tax profit at full value. Thus, if a company's profit base (purchase price) is 100 million Lari, and if the agreed-upon rate of return is 15%, and if Georgia's current profit tax is 20%, the before-tax profit to the investor will be 18.75 million Lari (from $100 * 0.15 / [1.0 - 0.2]$), so that the after-tax profit to the investors will be 15 million Lari (from $18.75 * [1.0 - 0.2]$).

In the event new investments are in part funded through long-term debt, the agreed-upon rate of return will reflect the weighted cost of capital based on the interest rate on the long-term debt and an appropriate rate of return on equity.

G. Value Added Taxes

The Value Added Tax is an add-on tax that will be included in the tariff structure, where it is applied at each stage of operation. The VAT is subject to reimbursement to the gas companies through the cost-recovery mechanism.

OTHER CONSIDERATIONS

In addition to the cost items that are included in cost-recovery tariffs, other considerations have a bearing on tariffs or are important in the determination of tariffs. Exchange rate adjustments, automatic adjustments to changes in the border price of natural gas, the use of consumer groups with different cost-recovery tariffs, the frequency of submission of applications for new tariffs, the handling of transit fees, the establishment of unbundled tariffs for different types of gas delivery activities and other issues need to be considered here.

Exchange Rate Adjustments

In accordance with Georgian law, all cost and revenue calculations must be made using the country's official currency, the Lari, as a unit of account. The Commission recognizes the legitimacy of this procedure, but it notes that, in accordance with international practice, natural gas delivered at the border is denominated in US dollars. Under those circumstances, if the Lari declines in value against the US dollar in any accounting period, with payment due the foreign supplier in US dollars, the end-user tariff will be too low to generate the Laris needed with which to buy the required US dollars to meet the supplier's legitimate claims. Similarly, an increase in the value of the Lari against the US dollar will provide a revenue surplus. To be noted in this context is that the supplier himself faces US dollar obligations in the international gas market.

The Commission directs that an adjustment mechanism be established to facilitate the elimination of cash shortages or surpluses resulting from exchange rate variations. That adjustment will function as follows. The exchange rate at the beginning of any calendar month will be noted, and the exchange rate at the end of the month will be recorded within 2 working days into the next month. The sum of these two rates, divided by two, will be defined as that month's average exchange rate, and the average rate so determined will be used on all billings for the month in question.

By the third working day of each month, orders will be issued from company headquarters that all Lari billings for the preceding month, regardless of the day of the billing cycle, will be based on the newly established average exchange rate. The Commission recognizes that there will be some periods in which end-users will be overcharged and some periods when end-users will be undercharged, but on average, the overcharges and the undercharges will balance out. The

Commission holds that this approach is more efficient and less burdensome to the gas company, and therefore less costly to the end-user, than the use of settlement accounts that would mandate the establishment of large bureaucracies charged with collecting exchange rate data by account and with setting up and implementing laborious reconciliation procedures, not to mention significant delays in settlements.

Adjustments to Gas Price Variations

The setting of border prices in US dollars is not generally under the control of the natural gas importer. In the past, border prices have been based on long-term contracts running for a year or more. Recognizing that short-term contracts and spot prices may become a dominant feature of increasingly competitive gas markets, but also to bridge end-of-contract price adjustments that will only accidentally coincide with the dates when new tariffs are established in accordance with regular tariff proceedings, an automatic price-adjustment clause will be a permanent feature of the new tariff methodology.

Price adjustments function exactly like exchange rate adjustments. Viewed from the Lari perspective, exchange rate variations in the face of constant dollar prices are indistinguishable from dollar price variations under constant exchange rates. Accordingly, the Commission mandates the recording of dollar-denominated import prices in addition to exchange rate variations and it directs that appropriate monthly adjustments be made to reflect the combined effect of exchange rate variations and dollar-denominated price variations.

End-User Tariffs by Consumer Groups

End-user tariffs must be designed to capture cost differentials in delivering natural gas to identifiable consumer groups. While reserving the option of recognizing additional consumer groups in the future, the Commission directs that three different consumer groups be established in Georgia, with identifying criteria to be published later. These three groups are Residential Consumers, Commercial Consumers, and Industrial Consumers.

It is an axiom of gas markets that delivery costs will be lower where few customers take delivery of large volumes of gas. Power plants and other industrial users fall into that category. By contrast, the delivery of small gas volumes to hundreds of thousands of individual residential users is very expensive (especially if the gas is used for cooking only) since this requires an intricate and expensive physical delivery system and a massive accounting system for just a few cubic meters of gas per customer per month. Delivery costs for commercial customers fall somewhere between the two groups under discussion. The Commission holds that cost-recovery tariffs must reflect the cost differential in the various consumer groups and it directs that accounting procedures be put in place that will permit the determination of delivery costs by consumer groups. The Commission also directs that cross-subsidization must not be allowed between different consumer groups.

A study is now under way to determine in operational detail how the cost allocation between different consumer groups is to be effected. That study is scheduled for completion and publication later in the year. In the meantime, the Commission offers the following general allocation principles, subject to Commission review and public hearings.

- The principal allocation factor for O&M expenses by group of customer is the asset base of each group. That asset base consists of specific components of the distribution plant, such as main lines, compression and regulating equipment,

service lines, meters, etc., and of what is called general plant which includes assets used company-wide such as headquarters and general administrative buildings, central computer systems, desk-top computing and other equipment, vehicles not specifically used for defined operations, etc. General plant assets will be allocated to individual consumer groups in proportion to each group's dedicated distribution plant assets.

- Assets related to the use of capacity, such as compression and regulating equipment will be allocated on the basis of daily peak delivery.
- Assets related to the density of customers served will be allocated on the number of customers.
- Depreciation expenses will be allocated on the basis of gross plant.
- Distribution mains and service lines will be allocated in a two-step process on the basis of customer density and peak day delivery.

Having established the allocation mechanism for distribution company assets, the Commission hereby provides the following guiding principles to be used in cost allocations between consumer groups.

- Operating expenses will be allocated on the basis of net plant in service, as determined from the preceding asset allocation. Other cost components to be allocated on that basis include maintenance expenses, depreciation, property taxes and net profits.
- Social taxes will be allocated on the basis of wages or, if unknown, on a surrogate of wages such as O&M costs.
- Value Added Taxes will be allocated on the basis of total revenue requirements net of gas supply expenses.
- Customer accounts operations expenses will be allocated on the basis of the number of customers. This will also be the allocation basis for other customer related expenses such as uncollectible accounts, customer services and informational expenses, and sales expenses.
- Profit taxes will be allocated on the basis of profits allocated to each customer class.
- General and Administrative expenses will be allocated on the basis of total operations expenses.

Tariff Cycles

The Commission believes that tariffs can and eventually should be established for long periods of time, with inflation indices applied to tariffs to keep them in line with rising costs of Georgian domestic prices. The inflation index to be used will be published by the Commission in due time. The Commission is confident that long-term incentive tariffs similar to those in use in the United States and Canada will ultimately create downward pressure on natural gas prices under a system that will permit the sharing of cost savings between gas companies and their customers.

For the moment, however, while the country is going through an uncertain transition period and markets are far from settled, the Commission holds that frequent tariff proceedings are in order and it directs that all gas companies under its jurisdiction prepare annual applications for tariff reviews for the next five years. These frequent tariff proceedings will serve a dual purpose. First, they will get the companies to move quickly from theoretical cost numbers to true historical costs developed in accordance with the uniform accounting and data collection system mentioned earlier, and second,

they will make all participants in the gas industry familiar with what to them is a new and quite possibly a confusing tariff methodology.

Transit Fees

The Commission affirms its intent, as prescribed by law, to assure that gas transit fees remain unregulated and subject to free negotiation between interested parties.

In those cases where a transit line is built and operated as a separate and enclosed entity and no gas enters Georgia for domestic consumption, there is no Georgian gas consumer to be protected from monopolistic pricing activities. Accordingly, there is no tariff and the transportation cost between borders is purely an internal corporate matter. In that case the Commission has no jurisdiction, and transit fees will be negotiated without Commission participation between the host government and the pipeline owners.

In those cases where part of the gas shipped through a transit line is destined for consumption in Georgia, there is legitimate concern that the operator of the pipeline might attempt to shift a disproportionate share of the transmission cost of the combined Georgian and transit gas to the Georgian end-user. The Commission holds that in such a case it does have jurisdiction over the transmission cost of that part of the gas that is destined for consumption in Georgia and it directs that in such cases the pipeline must comply with Commission procedures, including the submission of tariff applications for domestically consumed gas. The Commission will make a determination as to the pipeline tariff for such domestically consumed natural gas. That tariff will include an appropriate share of the pipeline's overall revenue requirement so that the Georgian gas consumers will pay their share of the cost of operating and maintaining the line.

Having set tariffs for gas destined for domestic markets, the Commission has the authority and the obligation to make sure that the pipeline operator extracts an appropriate counterpart contribution to revenue requirements from the transmission of transit gas. If the operator fails to receive adequate revenues for his transportation services or if he does not spend these revenues in properly operating and maintaining the line, the Commission will direct the operator, under the penalty of revoking his license, to take appropriate measures to remedy the deficiency.

Unbundled Tariffs

Different operations within the gas delivery system of Georgia will be subject to different tariffs, each reflecting the costs associated with the particular activity. There will be at least two such unbundled tariffs in Georgia: a pipeline tariff to establish the amounts the pipeline will be permitted to charge for transmission services, and a similar distribution tariff for distribution services. The Commission reserves the right to introduce additional unbundled tariffs at a later point in time, such as, for example, a separate and unbundled gas storage tariff.

Tariffs During Transition Period

To encourage investments while keeping tariffs in manageable proportions, a five-year forward-looking test period will be used in calculating tariffs. For example, the tariff in year 1 will be based on projected revenue requirements for years 1 through 5, divided by projected gas volumes in years 1 through 5. The Commission will also require a 15-year forecast of annual capital additions required to maintain the viability of the existing system.

Data Collection

The Commission will design a uniform, comprehensive and complete data collection system to enable it to collect the operational and financial information it needs to meet its regulatory obligations. All license holders will be required to respond to the Commission's data requests in a timely and comprehensive manner.

ATTACHMENT 2

**NATURAL GAS TARIFF METHODOLOGY,
SETTING RULES AND PROCEDURES**

REVISED DRAFT

GEORGIAN NATIONAL ENERGY REGULATORY COMMISSION

JUNE 1999

Draft

Approved by The Georgian National Energy Regulatory Commission
Resolution # _____, June __, 1999

Natural Gas Tariff Methodology, Setting Rules and Procedures

June, 1999

Introduction

The Georgian National Energy Regulatory Commission ("GNERC") have been entrusted with the function of natural gas regulation according to the Law of Electricity and Natural Gas.

Currently the assets and infrastructure of natural gas industry in Georgia functions in very difficult conditions and at low capacity. Therefore in the transition period to the market principles goal is to protect interests of the customers along with the support of rehabilitation projects in the gas industry. On every stage tariff system developed by the GNERC shall create favorable environment for rehabilitation of natural gas supply, transportation and distribution systems that will encourage not only rehabilitation of the industry but its prospective development. It is equally important to support and encourage privatization in the sector, protect consumers and licensees from the monopolistic prices and create competitive market. Tariffs shall be fair, transparent, non-political and free from subsidies.

Chapter 1 General Provisions

Objective of the Document

1. The objective of this document is to determine rules and methodology for setting natural gas supply, transportation and distribution tariffs according to the Georgian Law on Natural Gas and Electricity.
2. The Tariff Methodology (hereinafter Methodology) takes into account the present organizational, technical, economic and financial situation of the Georgian Natural Gas Sector and insures reflection of economically prudent costs of transportation, distribution and supply of natural gas in tariffs.

Clause 2. Applicability of the Methodology

1. Methodology applies to the natural gas supply, transportation, distribution and consumption spheres. It ensures functioning and development of the natural gas sector according to the market economy principles;
2. Methodology does not apply to the exploration, production, refining and storage of natural gas, relations between natural gas producers and supply licensees, as well as transit of natural gas through the territory of Georgia;

3. Licensees' service areas and applicability of corresponding tariffs is determined by the GNERC.

Clause 3. Definition of Terms

Terms used in present methodology have the following meaning:

- a. "Natural Gas Distribution Network" ("Distribution Network") – Gas supply system of cities and/or residential areas including 1.2 - 0.6 - 0.3 - 0.005 MPa pressure lines;
- b. "Natural Gas Distribution License" ("Distribution License") shall mean a License granted by the Commission to receive natural gas from one or more sources, to operate distribution network and to distribute natural gas within a defined geographic or certain distribution area based on the authorization granted by the supply licensee;
- c. "Natural Gas Distribution Tariff" (Distribution Tariff) – price of service provided by the distribution licensee to the customer;
- d. "Losses of Natural Gas" ("Losses") – difference between received and delivered volumes of gas excluding gas used for own consumption;
- e. "Natural Gas Supply License" ("Supply License") shall mean a License granted to the legal person or individual entrepreneur by the Commission to acquire and/or sell volumes of natural gas to other Natural Gas Supply Licensees or other customers;
- f. "Natural Gas Supply Tariff" (Supply Tariff) – price of service provided by the supply licensee to the customer;
- g. "Natural Gas Consumer" ("Consumer") - legal or natural person, consuming natural gas for its own purposes and is not engaged in natural gas reselling business;
- h. "Natural Gas Transportation License" ("Transportation License") shall mean a License granted by the Commission to operate transportation facilities, receive natural gas from one or more receiving points and to transport natural gas to one or more delivery points;
- i. "Natural Gas Tariffs" ("Tariffs") - price system applied for the settlement for natural gas on each stages of supply, transportation and distribution.
- j. "Natural Gas Transportation Network" ("Transportation Network") shall mean all pipelines, compressor stations, metering stations and other related facilities which are used for transportation of natural gas; operate, or are designed to operate, at or above 1.2 MPa pressure; connect receiving points and delivery points; and are owned or managed, and/or operated by a Transportation Licensee. Transportation network shall include all pipelines and relevant facilities, operating, or designed to operate. At or

above 1.2 Mpa pressure, including compressor stations, metering stations, as indicated in transportation license;

- k. "Tax" - obligatory payment to the budget or special State Funds paid by taxpayer, having an obligatory, non quid-pro-quo, and gratuitous nature;
- l. "Assigned debt" – the debt assigned in the period of state ownership of electricity sector;
- m. "Gas Distribution Station" – complex of gas line facilities designed for reduction of gas pressure, purification, odorizing and accounting of costs prior to delivery to the customers;
- n. "Gas regulatory station" – distribution facility that reduces pressure of gas received from high or medium pressure lines to the medium or low pressure and delivers correspondingly to the medium or low pressure lines;
- o. "Low pressure line" – distribution line of up to 0.005 MPa pressure.
- p. "Value Added Tax" ("VAT") – indirect tax, an obligatory payment to the budget of a portion of the value added in the process of the production and circulation of goods, works, and services on the territory of Georgia, and of a portion of the value of all taxable goods imported onto the territory of Georgia;
- q. "Licensee" - legal or natural person, which holds a license for specific activity during specific period, issued by the Georgian National Energy Regulatory Commission according the Georgian Law on Electricity and Natural Gas;
- r. "Annual Revenue Requirement of the Licensee" - total amount of projected revenue for 12 months, required to cover all service related costs of the licensee and to provide a reasonable profit;
- s. "High Pressure line" – distribution line of 0.3 - 1.2 MPa pressure;
- t. "Profit" - difference between the sales price of the natural gas and the expenses for providing services and sales of the gas.
- u. "Direct Customer" – person receiving natural gas directly from the transportation system and is not a distribution licensee;
- v. "Privatized Company" - enterprise with less than 50 % of the shares owned by the government;
- w. "Regulatory Fee" - fee which shall be paid annually by the natural gas supply, transportation and distribution licensee to cover expenses related to the service provided by the GNERC;

- x. "Metering Station" – point for the metering of gas consumption
- y. "Compressing Station" – line facilities designed for compression of gas;
- z. "Medium Pressure Line" – distribution network line of 0.005 - 0.3 Mpa pressure;
- aa. "Enterprises" - the legal and natural persons established according the Georgian legislation, which are conducting an entrepreneurial activities or are established for this purpose;
- bb. "GNERC" - Georgian National Energy Regulatory Commission

Chapter II

Methodological Basis and the Main Principles of Tariff Setting

Clause 3. Methodological Bases

1. Basis for the development of natural gas tariff methodology is the existing legislation, Georgian Law on Electricity and Natural Gas and Decisions and Resolutions of the GNERC, as well as requirements set forth by the normative acts of the sector.
2. Natural gas tariffs shall be determined on the basis of commercial and competitive interests of supply, transportation, distribution entities and customers. Competitive tariffs shall encourage favorable combination of different sources of energy.
3. The methodology is based on the principle of recovery of costs for natural gas supply, transportation and distribution, interests of financial stabilization and in order to improve the investment environment tariffs shall reflect financing of effective use of operating assets.
4. According to the present methodology natural gas tariffs are determined separately for each licensee. For the purpose of calculating tariff annual revenue requirement is divided by the forecasted volume of gas delivered and reasonable level of losses shall be reflected.
5. In order to determine natural gas supply tariffs, prices paid by the supply licensees shall be taken into account and terms of the contract shall be agreed with the Commission.
6. In case of necessity changes in the methodology or termination of the methodology will be implemented according to the rules set by the GNERC.

4. Main Principles

1. The main principle of the tariff methodology is to increase efficiency in consumption of natural gas, to encourage its use as an alternative fuel, to rehabilitate gas industry and attract local and foreign investments for the purpose of its development, encourage competition.
2. Tariffs established according to this methodology shall:
 - a) Protect consumers from monopolistic prices, especially in those areas of the sector where competition does not exist;
 - b) Provide Licensees with an opportunity to recover their costs and provide a reasonable return on investment;
 - c) Encourage financial stabilization of the licensee that is essential for the increase of efficiency of operations and of infrastructure and improve quality of service provided to the customers;
 - d) Shall be favorable for all categories of customers, shall encourage consumption of natural gas in production processes as well as for residential purposes;
 - e) Give an opportunity to licensees to cover their economically prudent costs including costs related to the regulatory fees;
 - f) None of the customer categories shall receive a discount tariff subsidized by another customer category; Tariffs shall reflect cost differences between different spheres of consumption.
3. Methodology considers actual value of operating fixed assets, that will allow investor to receive reasonable return on invested equity.
4. For calculation of return on assets methodology takes into account risk factor related to the investment. Therefore return on assets shall be higher than corresponding bank interest rate.
5. All decisions, resolutions and other documents of the GNERC, concerning tariff setting are available for public discussion.

Chapter III Cost of Service Components

Clause 5. Recoverable Costs and Taxes

- 1) The cost of supply, transportation and distribution services includes expenses related to the gross revenue, taxes and profit. The GNERC will allow licensees to recover those costs that are actual, legitimate, and prudently incurred.

- 2) Cost of service components are calculated according to the relevant calculation clauses according to the order approved by the Ministry of Finance, which are:
 - a) Commodity (natural gas);
 - b) Spare parts and supplies;
 - c) Measuring and controlling equipment;
 - d) Operating and maintenance expenses including services of third parties (repair and other works);
 - e) Fuel for compressing station;
 - f) Fuel for heating of the buildings and transportation service of the utility;
 - g) Electricity for electrochemical protection of lines;
 - h) Electricity, thermal energy and water for operational needs;
 - i) Salary fund and accruals;
 - j) Maintenance of machinery.
 - k) Depreciation expenses as determined in the Georgian tax code.
 - l) Other expenses including operating lease, loan interest expenses, etc.
 - m) Taxes, including general state and local taxes.

Clause 6. Depreciation expenses

Depreciation expenses allow investors to recover their investments (as opposed to the profit which is the return on investment). Its function is to extend the capital investment. It is a form of expense for reporting and is the source of cash inflows and reinvesting in the system. Depreciation rate is determined in correspondence with the Tax Code of Georgia.

Clause 7. Maintenance Expenses

Methodology specifies that natural gas tariffs shall separately reflect maintenance expenses that will be calculated according to the Georgian Tax Code.

Clause 8. Taxes (other than VAT and Profit Tax)

Natural gas tariffs shall reflect taxes that are determined according to the Tax Code of Georgia.

Clause 9. Debt and Liabilities

1. Interest on short term debt shall be considered in the operational expenses but interest rate shall not exceed 150% of interest rate set on the inter-bank auction of the Georgian National Bank at the moment of issuing the debt. Interest on long term debt shall be included in the expenses similarly as interest on short-term debt.

2. In particular cases terms, rules, and procedures for repayment of debts through the tariffs shall be determined by GNERC.

Clause 10. Return on Assets (Profit)

1. Return on assets (profit) is the reasonable risk corresponding return on investment. Such investments in the natural gas sector shall be considered as legitimate and essential costs and shall be reflected in the tariffs.
2. Return on assets is determined by the GNERC separately for individual licensees.

Clause 11. Profit Tax

Profit tax is the portion of taxable income and is determined according to the Tax Code of Georgia.

During tariff setting it shall be taken into account that after tax profit calculated using revenues and allowable expenses shall comply with the investor's requirements of return on investment.

Clause 12. Value Added Tax

Value Added Tax (VAT) is payable on every stage of delivery of goods, work and services and is included in the Tariff. Amount of VAT to be paid is determined according to the Georgian Tax Code.

Clause 13. Incentive Regulation

1. To improve the efficiency of the gas sector the GNERC is eligible to use appropriate forms of incentive regulation.

Chapter IV Calculation of Natural Gas Tariffs

Clause 14. Unbundled Tariffs

Different operations within the gas system of Georgia shall be subject to different tariffs, each reflecting the costs associated with the particular activity. There shall be at least three such unbundled tariffs in Georgia: tariff for supply of natural gas, tariff for transportation and tariff for distribution. The Commission is authorized to introduce additional unbundled tariff in the future (such as, for example, gas storage tariff).

Clause 15. Supply Tariff

Bases for the calculation of supply tariff is economically reasonable price for the purchase of natural gas plus costs of the licensee including all types of taxes (including customs tax) other than profit and VAT. Aggregate of this amount (cost), return on investment (profit) at determined norms and VAT at the rate determined by Tax Code is divided by the forecasted amount of supply of the natural gas. The result is the supply tariff in Lari/1000 m³.

Clause 16. Natural Gas Transportation Tariff

Calculation of transportation tariff is based on the costs of transportation including all types of taxes other than Profit tax and VAT. Aggregate of this costs plus return on investment and plus VAT is divided then by the forecasted amount of transported natural gas including normative losses. The result is the transportation tariff (lari/1000 m³).

Clause 17. Distribution Tariff

Natural gas distribution tariff is calculated similarly to the transportation tariff. The distribution licensee supplies natural gas to the three groups of customers (industrial customers, public utilities and residential customers). Therefore it is essential to allocate distribution costs to the different groups of customers. This shall be done in proportion with the asset value to the particular group of customers. Assets of the distribution licensee include natural gas lines, gas regulatory stations, communication means, metering stations, administrative building of the head office, computer system, transportation means etc.

Clause 18. Customer Tariffs by Customer Groups

Customer tariff shall reflect full cost of delivering natural gas to the particular group of customers. Currently GNERC determines three groups of customers: industrial, public utility and residential customers. These categories of tariffs reflect cost differences between different groups of customers. GNERC is authorized to prohibit cross subsidies between these categories of tariffs.

Clause 19. Tariff Adjustments

a. Exchange rate adjustments:

According to the Georgian legislation calculation of revenue and expenses shall be conducted in national currency – Lari. But according to the international practice

settlement with foreign countries for supplied natural gas shall be conducted in US dollars. Therefore exchange rate changes would affect natural gas tariffs. For tariff adjustment purposes, the sum of the exchange rate at the working day of the beginning of the month and at the end of the month, divided by two, shall be defined as that month's average exchange rate, and the average rate so determined shall be used on all billings for the month in question.

b. Adjustments to Gas Price Variations

In connection with the changes of import price of natural gas if the variation is considerable (above 20%), it is essential to adjust gas tariffs. In this case tariff adjustment is similar to the import price change.

Clause 20. Tariff Cycle

GNERC gives priority to the long periods of time for tariff cycles, with inflation indices applied to tariffs. However during transition period of economic reforms tariffs will be revised periodically. In this regard gas companies shall provide GNERC with the tariff applications according to the set rules.

Clause 21. Transit Fee

According to the Georgia "Law about Electricity and Natural Gas" gas transit tariff is not subject to the regulation and is determined through negotiation between interested parties. In those cases where part of the gas shipped through a transit line is destined for consumption in Georgia, GNERC does have jurisdiction over the transit cost of that part of the gas that is destined for consumption in Georgia.

GNERC has the authority to make sure that the transport licensee receives an appropriate contribution from the transmission of transit gas. If licensee fails to receive adequate revenues for his transit services and to spend these revenues in properly operating and maintaining the line, GNERC takes appropriate measures.

Clause 22. Data Collection

GNERC will design a uniform and acceptable data collection system to be able to collect the operational and financial information necessary to meet its regulatory obligations. All licensees shall be required to respond to the GNERC's data requests in a timely manner.

Chapter V

Tariff Setting Rules and Procedures

Clause 24. Tariff Setting Conditions and Principles

1. Tariff setting rules and procedures define the necessary requirements, according which all the tariff applications for all categories of customers and gas sector licensees shall be prepared.
2. GNERC sets the tariff according the Georgian Law on Electricity and Natural Gas, existing legislation, present methodology and other legal regulations. These tariffs are obligatory for all licensees and settlement is conducted according to the set rules.
3. For tariff setting purposes all natural gas licensees shall submit a tariff application and all the necessary additional information to the GNERC. An application shall include the following information: name of the applicant, type of service, address, form of ownership, bank requisites (name of the bank, address, account number and code), name of the applicant, telephone.

The application shall be submitted in the form required by GNERC. Following document shall be attached to the application: an audit report on accuracy of the information, technical-economical arguments for requested tariff, annual balance sheet with appropriate attachments.

4. Each tariff application shall be signed by a manager of the enterprise. Licensee is responsible for timely submission of the information. The signer is responsible for the accuracy of submitted information.

Clause 25. Tariff Setting Procedures

1. The GNERC will review submitted tariff application and, within thirty days, either accept the application as submitted, or not or consider it incomplete. In any of these cases licensee is notified in written form.
2. When the GNERC accepts an application as complete, it will give public notice that will give opportunity to all interested parties to get familiar with submitted information during regular business hours and submit comments to the GNERC.
3. Comments on a tariff application may consist of statements of facts, arguments, or evidence. Comments may support or oppose the tariff request. The party submitting the comments shall deliver a copy of the comments to the licensee that requested the tariff. The licensee may respond to the comments within 15 days.

4. The GNERC shall within 3 (three) months, after an application is received, consider it and make one of the following decisions:
 - a. satisfy a request and set a tariff
 - b. postpone the review of application until the information is received
5. If tariff satisfies requirements of the GNERC it shall become effective after 150 days after submission of tariff application.
6. In special cases, the GNERC in agreement with the applicant may postpone a deadline for consideration of the application.
7. The GNERC shall give an advance notice of 10 days to an applicant, concerning the day of request consideration, in order to allow an applicant to attend the meeting.
8. The GNERC in the process of tariff setting accepts comments that are provided as an official information or as a notice made during the hearing.
9. The Licensee, and other interested parties have a right to apply to the GNERC for changing of the GNERC's decision due to the following concerns:
 - a. Inaccuracy of facts and data included in the decision
 - b. Inconsistency of the decision with the existing laws and regulations
 - c. Other extraordinary circumstances
10. The GNERC will within ten days give public notice of the final decision that will enable interested parties to get familiar with the determined tariff. GNERC considers only those comments concerning inconsistency of the decision with the existing laws and regulations.
11. Within six days after public notice GNERC shall consider the request of the licensee and make a decision as follows:
 - a. Approve submitted tariff completely (without changes);
 - b. Consider comments and make corresponding changes in the tariff;
 - c. Deny consideration of the comment;
 - d. In extraordinary cases extend duration of the term for the review.

Clause 26. Tariff Setting Fee

1. Reasonable cost of tariff setting as determined by the GNERC shall be included in tariff. Cost of providing tariff setting service shall be reimbursed by the Licensee.
2. If the Tariff change or a request for reconsideration of a tariff decision is initiated by a customer, a fee for tariff setting shall be paid by a customer, based on the preliminary agreement with the GNERC.
3. Tariff setting fee shall be calculated according to the rule set by the GNERC shall be paid by the licensee within two weeks after a tariff was set.