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Final Report

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BACKGROUND

During the Soviet era, Georgia's power system was integrated with those of Armenia and Azerbaijan in a transcaucasus network, which in turn was linked to the vast USSR grid. Electricity supply in Georgia itself was in the hands of a vertically integrated, non-commercial government monopoly called *Sakenergo*. Since the breakup of the Soviet Union, Georgia has had to rely mainly on its hydro electric production because a lack of financial resources has severely curtailed the importation of natural gas for use in thermal generating units. Moreover, internal political problems with the Abkhazia region accompanied by armed conflict have threatened the availability of the largest single source of hydro energy in the country, the Inguri station, which straddles the border between Georgia and its Abkhazian province.

These political and financial problems contributed to an overall deterioration in the capability of the power system to supply the nation. This deterioration was made worse by a lack of maintenance, misuse of equipment, and overloading of the distribution network by households trying to replace cutoff gas supplies with electric heaters and stoves. Of the country's original 4 882 MW of installed generating capacity, less than 700 MW were available for service at the beginning of 1996. This compared to an estimated unconstrained annual peak of near 1700 MW, itself reduced dramatically from earlier levels by Georgia's collapsed economy.

Parallel with the deterioration of service capability, a critical problem of non-payment developed. In early 1996 barely 4% of the amounts billed were being paid by residential customers. While industrial users were obliged to pay more regularly the average for all customers at the beginning of 1996 was less than 25% and only a portion of this was cash. The non-payment problem was having a devastating impact on the power sector's operating and financial results, in spite of the gradual increase in tariff levels since 1991.

USAID's original emphasis in power sector assistance was on the humanitarian provision of fuel oil to replace gas for power generation and on the supply of critical chemicals for treating water used in boilers. However, from the beginning it was clear that permanent solutions to Georgia's power problems would require major institutional reform. To provide technical assistance for this reform, Delivery Order 14 was developed.

This delivery order was comprised of five tasks (1) Restructuring, (2) Legal/Regulatory Reform, (3) Commercialization, (4) Privatization/Independent Private Power Promotion, and, (5) Improved Fuel Supply Enterprises. A description of each of the tasks is provided below. For each there is also a summary of the results obtained, a list of deliverables and a description of other work activities carried out as part of the delivery order. An exhibit is provided at the end of this report summarizing the key events, deliverables, timing and accomplishments associated with each task.

RESTRUCTURING

The primary objective of this task was to assist the Government of Georgia with the unbundling its electric power sector into generation, transmission, and distribution sub-sectors consisting of multiple enterprises able to operate in a market environment and attract capital. Task activities undertaken included reviewing, characterizing and critiquing the Georgian Power Sector as it existed in 1995 prior to restructuring, assisting the Government of Georgia in the creation of a high level Committee on Restructuring of the Power Sector and presenting to that committee proposals for unbundling and restructuring the sector, explaining the concept of independent regulation and advising the government on how a regulatory commission should be organized, and preparing a draft presidential decree to initiate the restructuring process.

Major Results

A first major result of this task was convincing Georgian President Edward Shevardnadze to establish a Committee on Restructuring of the Power Sector consisting of representatives of the sector, key government ministries, energy institutes and consumers. This body, with support provided under this task, examined numerous models for power sector restructuring including examples from Central and Latin America, Eastern Europe, the United Kingdom and the US. As part of this support, a draft presidential decree was prepared outlining a restructuring program calling for enactment of an Electricity Law. This law would define the legal basis for a reformed power sector and specify the unbundling of generation, transmission and distribution. The draft decree also limited government's role to policy formulation for the sector and recommended creation of an independent regulatory commission. This draft was adopted by the committee and sent to the government that issued it as Presidential Decree #437, "About Restructuring of the Power Sector".

As a result of Decree #437, generation and transmission were unbundled with the division of Sakenergo into Sakenergo Generatsia and Sakenergo (now the name of only the transmission enterprise). Multiple enterprises were created in the generating sub-sector with Sakenergo Generatsia acting as a holding company in anticipation of eventual privatization. Sakenergo was divided into transmission and dispatch functions. Distribution had earlier been separated from Sakenergo and turned over to some 66 municipal enterprises. With assistance provided under the task, a plan for corporatization of the newly created enterprises as Joint Stock Companies (JSC's) as well as a privatization plan were developed by the Georgian Ministry of State Property and the Ministry of Fuels and Energy.

Deliverables Required by the Delivery Order

1) Georgia Power Sector Reform Work Plan

This initial work plan was prepared based on preliminary discussions with and presentations to the Committee on Power Sector Restructuring

2) Georgia Power Sector Restructuring Implementation Plan-A Strategy & Work Plan for Achieving Reform and Privatization

Upon adoption by the Government of Georgia of the recommendations of the Committee on Power Sector Restructuring, a formal approach to the reform process became possible. That approach was outlined by Hagler Bailly in this restructuring and privatization implementation plan.

3) Power Sector Restructuring Status Assessment

This report summarized the progress made in restructuring the power sector through the term of DO 14 and outlined the essential steps remaining to be taken to complete the transformation of the Georgian power sector into a commercialized and ultimately privatized, market based entity.

Other Task Activities

- A report entitled *Characterization of Georgia's Power Sector* was prepared describing the state of the power industry as of late 1995 and identifying the major problems besetting it.
- A report on *International Power Sector Restructuring Experience With an Emphasis on Changes in the Distribution Sub-Sector* and supporting presentations were given to the Committee on Power Sector Restructuring.
- A study tour of US regulatory commissions was conducted for high level industry, government and parliamentary officials in April 1996 to introduce them to the concept of independent regulation of the electric power sector. During the tour, members of the Georgian delegation also met with representatives of banking and legal firms active in international power sector investing to learn the expectations of investors in this area.

- In April 1996 a 2-day seminar was organized in conjunction with the World Bank for a broad range of power sector officials to review restructuring proposals and to elicit their views on the subject
- In support of the draft presidential decree on restructuring, a Program Implementation Report was prepared for the Office of the President outlining steps to be taken to put the reforms into effect

LEGAL/REGULATORY REFORM

The primary objective of this task was to develop the necessary decrees, legislation and regulations to allow (1) creation of separate generation, transmission and distribution sub-sectors with multiple enterprises in the generation and distribution segments of the industry, (2) formation of an independent Georgian National Electricity Regulatory Commission, and (3) private ownership and investment in the power sector

Major Results

The major accomplishment of the Legal/Regulatory Reform task was the passage of the Electricity Law in June 1997. Key among its provisions were those creating and structuring the Georgian National Electricity Regulatory Commission (GNERC). This 3-person agency, patterned after an American regulatory body, has introduced the concept of independent regulation to Georgia. Commissioners are appointed by the President for staggered 6-year terms. The GNERC, which is financed by annual license fees paid by the enterprises it regulates, has completed licensing of entities accounting for more than 95% of the electricity supplied in Georgia. It has adopted tariff methodologies and principles for wholesale market rules as called for by Decree #437 and World Bank loan conditionalities and has proceeded with the step by step adjustment of tariffs towards economic levels. As growth in its resources permits, the GNERC expects to expand its staff from 18 in mid 1998 to an eventual total of 50.

Among other important provisions of the 1997 Electricity Law is the explicit separation of government from the day to day management and regulation of the sector with its role limited to the kinds of policy making activities traditional to a Ministry of Energy in a market economy. Other key provisions define the licensable functions that can be performed by entities in the power sector and impose limits on the extent to which a licensee in one unbundled sub-sector, e.g. generation, can own or control an enterprise in another sub-sector, e.g. distribution.

Deliverables Required by the Delivery Order

1) Procurement List for Subtask B – Legal and Regulatory Reform

As part of the task responsibilities, computer, communication and office equipment was procured for the GNERC based on USAID standards and bidding procedures. Training in use of computers was also provided and arrangements made for the commissioners to receive lessons in the English language.

2) Regulatory Policy Papers

- a Information Gathering, Information Management, & Access to Information for the Independent Regulator
- b The Use of U S Administrative Law Concepts in Georgia
- c Retail Customer Disconnections

This series of policy papers was prepared by Hagler Bailly staff based on information collected from US regulatory agencies and on work done by Hagler Bailly consultant, Dr Robert Johnston, former Chairman of the Arkansas Public Service Commission.

3) Model Licenses for Generation, Transmission and Distribution

Model licenses for the three major power sub-sectors were prepared for the GNERC based on concepts employed in the US and which have also been introduced in other NIS regions.

4) Tariff Methodology and Training Materials

A detailed tariff setting methodology was prepared for the GNERC and presented to the Commission and its staff in a series of workshops. Supporting materials were also provided along with background information on the subject of tariffs from the US and selected emerging economies.

5) Report on Regulatory Enforcement Procedures

As part of its advisory support for the GNERC, Hagler Bailly staff provided information and evaluations of various regulatory enforcement measures.

6) Report on Georgian National Regulatory Commission's Annual Report

The Electricity Law governing the Georgian power sector requires that the GNERC make annual reports on its operations to the parliament and government. Hagler Bailly advised

the Commission on the outline of such annual reports, the first formalized, public version of which will appear in early 1999

7) Implementation Plan for New Trading Arrangements

Hagler Bailly consultant, Mck Shean, prepared a detailed, three-phase plan for implementing a wholesale power market in Georgia. When in effect, the final phase of this plan will call for a fully competitive bulk power market.

8) Electricity Pricing in Georgia

A report on *Electricity Pricing in Georgia: Proposed Methodology for the Market Reform Program in 1998* was prepared by Hagler Bailly. Companion reports on the *Georgian Wholesale Electricity Market*, a *Wholesale Pricing Proposal*, and a *Price Methodology Transition Plan* were also submitted to the GNERC to assist the commission in development of its tariff methodologies and market rules.

9) Status Assessment of the Legal and Regulatory Framework of the Georgian Power Sector

This report summarized the progress to date in creating a legal and regulatory regime featuring independent regulation and a restructured power industry.

Other Task Activities

- Examples of energy and electricity legislation from other transitional economies were provided to the Ministry of Fuels and Energy and the Georgian parliament during drafting of the Electricity Law.
- While working with the legal staff of the Ministry of Fuels and Energy and representatives of the World Bank, some 18 drafts of an electricity law were prepared until all parties involved were in agreement on a version to be submitted to the Georgian Parliament.
- Model generation, transmission and distribution licenses were the subject of a seminar presented for the GNERC.
- Hagler Bailly assisted the Regulatory Commission in preparing plans for its organization, staffing, and operating procedures.

- Hagler Bailly arranged the participation of the GNERC commissioners in the Conference of NIS Regulators held in Budapest in November 1997 and the participation of one commissioner in a follow up seminar on licensing, also held in Budapest in June 1998
- In July 1998, three day-long seminars on Market Rules were held separately for managers of generation, distribution and transmission and dispatch enterprises
- A study tour of US regulatory commissions was conducted for the GNERC commissioners and one staff member in July 1998. Visits were paid to the Federal Energy Regulatory Commission, the Georgia Public Service Commission, the Virginia Commerce Commission, the New York Public Service Commission, and the New York Power Pool

COMMERCIALIZATION

The primary objective of this task was to strengthen the commercial operation of the new power sector enterprises by working with them and the Georgian National Electricity Regulatory Commission to (1) create legally separate corporate entities, (2) develop workable contractual relations between them, (3) introduce effective financial and accounting systems, (4) institute modern metering, billing and collection systems, and (5) ensure that tariffs are sufficient to cover cost and attract investment

Major Result

With the issuance of Presidential Decree #437, the corporatization of unbundled entities in the sub-sectors began. Individual generating stations including the Gardabani thermal power plant were corporatized, their charters filed with the appropriate courts, and equity shares issued, to be held by Sakenergogeneratsia until privatization. The only exception to this corporatization was the Inguri hydro plant which operates in an area of great political uncertainty. Sakenergo was made a state commercial enterprise, but is not slated for privatization in the near future and thus not made a JSC. Most of the distribution enterprises have been chartered as JSC's with municipalities holding the shares in anticipation of eventual privatization.

Outstanding debts of the power sector were allocated among the newly created enterprises as a result of a plan prepared under the Commercialization task by Hagler Bailly working in concert with Kantor, a World Bank contractor. Hagler Bailly subcontractors Price Waterhouse and Carana Corporation prepared a Chart of Accounts (COA) for use by the GNERC as a basis for standardizing financial reporting by the regulated enterprises. This COA allows accumulation of cost data suitable for cost based rate making and permits comparisons between different enterprises. Carana Corporation has also prepared a plan for implementing International Accounting Standards (IAS) in the Georgian power sector. This plan was elaborated in cooperation with another USAID contractor, Sibley International, which is coordinating accounting reform throughout the Georgian economy.

To address the non-payment problem, Hagler Bailly established a Commercialization Demonstration Pilot Project in the industrial city of Rustavi. By relocating meters outside customer premises, separating meter reading, billing and collection functions, enforcing non payment cutoff policies and offering the customer markedly improved service, the Rustavi project has successfully demonstrated that collection rates can be effectively raised from less than 25% to over 95%. From an initial test population of nearly 4 000 customers, the project is being expanded to over 10, 000 which represents ¼ of those served by the Rustavi municipal distribution enterprise.

Responding to the arguments for meter relocation advanced by Hagler Bailly, the Government of Georgia issued Decree #105 in February 1998 which, among other things, instructed Georgian distribution enterprises to relocate all meters outside customer premises by the end of 1998.

To lay the basis for cost based tariff making, the GNERC instituted procedures for data collection from entities under its jurisdiction based on questionnaires designed in cooperation with Hagler Bailly.

Deliverables Required by the Delivery Order

1) Distribution Sub-Sector Commercialization Pilot Project

After reviewing several possible sites, Hagler Bailly selected the distribution enterprise in the industrial city of Rustavi as a vehicle for a pilot metering, billing and collection project. The demonstration involved approximately 4 000 residential customers and included meter replacement and relocation. Check meters were installed on the project feeders and Georgian staff was trained in modern customer accounting procedures. Improved supply was provided and cut off for non-payment was instituted.

2) Environmental Assessment for Electric Distribution Commercialization Pilot Project

Upon selecting a project site, assessments were made of the safety conditions in the associated substations and repairs made where necessary. Illegal connections were identified and removed.

3) Procurement List for Commercialization Pilot Project

Meters, computers, office equipment and communication facilities necessary to carry out the demonstration project were identified and bids solicited according to USAID procedures.

4) Republic of Georgia Accounting Manual for Electric Companies

As a subcontractor to Hagler Bailly, Carana Corporation prepared an electric sector Chart of Accounts and companion Accounting Manual for use by the GNERC and the entities it regulates.

5) Georgia Power Sector Commercialization Status Assessment

This report summarizes the progress made to date in demonstrating procedures to deal with the customer non-payment problem and in addressing the task of introducing international accounting standards into the Georgian power sector.

Other Task Activities

- To assist the Ministry of State Property in the chartering of power sector entities, Hagler Bailly prepared draft model corporate charters for generation and distribution enterprises.
- Training seminars on the Chart of Accounts were conducted for GNERC staff and licensee accountants using the Manual for the Chart of Accounts prepared by Carana. A seminar on the subject of IAS implementation was also conducted by Carana for power sector accountants.
- A customer accounting software package from the United States was translated into Georgian and adapted for use by the Rustavi Commercialization Demonstration project. Contracts were signed with Georgian electrical contractors to relocate meters from apartments to secure areas on building landings and in basements. Work was also carried out to render some badly deteriorated substations safe and effective for use in the project.

- Computer equipment was procured and Georgian staff trained to operate the billing function in the Rustavi project. Check meters were obtained to measure the quantities of electricity supplied on the feeders providing the project test areas with power. This allowed comparison between the total consumption as measured by customer meters and the energy supplied by Sakenergo transmission and thus allowed an accurate measure of the losses experienced, both technical and commercial.
- The director of the Georgian staff assembled by Hagler Bailly to carry out the day to day operation of the Rustavi project participated in a seminar on billing and collection problems in NIS countries sponsored by USAID in Kiev in March 1998.
- Tours of the Rustavi project were conducted for officials of other Georgian distribution enterprises interested in improving collections.

PRIVATIZATION/INDEPENDENT PRIVATE POWER PROMOTION

The primary objective of this task was to improve economic efficiency within the power industry by assisting the Georgian government in (1) transferring asset ownership and management to the private sector in order to raise needed capital and (2) introducing competition in the wholesale power market through the creation of independent private power producers.

Major Results

As instructed by the decree on restructuring, a plan for privatization was prepared by the Ministry of State Property in collaboration with the Ministry of Fuels and Energy. The initial plan called for generating JSC's to be the first offered for privatization with 49% of the shares to be sold at public auction or given to employees. The remaining 51% were to remain in government hands until a strategic investor could be found. Hagler Bailly and the World Bank both argued against this approach, noting that privatization of distribution first was essential to addressing the non payment problem and that improved collections would render the generating assets more valuable. Also, shares should be first offered to strategic investors, with only the minimum percentage required by Georgian privatization legislation being reserved for distribution to employees. These arguments were further reinforced by explanations of why an investment banking advisor should be retained to ensure that the privatization program was compatible with investor expectations and received the widest possible attention.

Accepting these arguments, the Georgian government revised the power sector privatization plan and announced that Telasi, the distribution enterprise serving Tbilisi would be first offered to strategic investors. Proposals were solicited from a number of world class investment banking firms. As a result, Merrill Lynch was selected to be the government's advisor. An 18 month schedule for privatizing all eligible distribution and generation assets was established, beginning in March 1998.

Deliverables Required by the Delivery Order

1) Electricity Sector Privatization Goals, Strategy, and Schedule

Based on the progress made as of mid 1997 in the restructuring and corporatization of the Georgian power sector, this plan laid out a strategy calling for privatization of distribution before generation and engagement of an investment banking firm to assist the Georgian government in identifying potential strategic investors.

2) The Georgian Power Sector: A Strategy and Work Plan for Achieving Reform and Privatization

Prepared after the selection of Merrill Lynch as the investment banking advisor, this report updated the plan for pursuing privatization, focusing on Telasi, the distribution enterprise serving Tbilisi, as the first entity to be put up for tender.

Other Task Activities

- Numerous seminars and meetings with government officials were conducted on the subject of valuation of electric utility enterprises. Success was achieved in eventually convincing the officials involved in the privatization process that strategic investors would use discounted cash flow methodologies in arriving at the amounts they would be willing to pay for a given enterprise or group of enterprises.
- *A Preliminary Assessment of Distribution Sector for Privatization* was prepared by Hagler Bailly to gauge the extent of rehabilitation investment needed and to estimate the value of the distribution sub-sector under varying assumptions about tariff increases, collections improvements and investors' required returns. Also prepared was a report proposing combination of the 66 distribution enterprises into 3 groupings for eventual privatization. Entitled *Grouping of Distribution Companies for Privatization*, the report and its recommendations were endorsed by Merrill Lynch.
- A report entitled *Power Sector Privatization Relationship Management Strategy for the Georgian Government* was submitted by Hagler Bailly to the Ministry of State.

Property outlining the functions of an investment banking adviser and explaining why engaging such an adviser would be valuable in the privatization process

- Hagler Bailly and its subcontractor Price Waterhouse collaborated with Merrill Lynch and its consortium partners, Kantor and KPMG, in the preparation of an information memorandum for use in presenting Telasi to international investors. The memorandum relied heavily on the distribution assessment and grouping studies made by Hagler Bailly.
- Briefings on the Georgian power situation were conducted for potential investors brought to Georgia on due diligence missions by Merrill Lynch. These briefings included tours of the Rustavi Commercialization Demonstration project.

IMPROVED FUEL SUPPLY ENTERPRISES

The primary objective of this Task was to support the operations of the power sector by working with the fuel supply subsectors (oil, natural gas, coal, geothermal, etc.) as needed to develop appropriate national policies, legislation, corporate structures, commercial operations, and private ownership to ensure that the necessary fuels for power generation are provided effectively.

Major Results

Hagler Bailly subcontractor Carana Corporation has completed audit scopings for each of the major energy enterprises in Georgia. These will be used to define audits meant to reveal the financial and operational viability of the entities responsible for energy supply in the country and should be useful in deciding where and if technical assistance can be meaningfully extended to them.

Through periodic evaluations of the power supply outlook in Georgia, Hagler Bailly has provided valuable input to the USAID mission's planning for humanitarian and other assistance.

Deliverables Required by the Delivery Order

1) Scoping Study for Financial Evaluation of Energy Enterprises

Conducted by Carana Corporation, this study outlined the problems and prospects associated with conducting meaningful financial audits of the major energy supply enterprises in Georgia

2) Assessment of Policies and Reform in the Fuel Supply Sub-Sectors

This assessment by Hagler Bailly staff focused on the need for effective and stable policies in the fuel supply sub-sectors, especially in the areas of petroleum legislation and natural gas regulation

3) Policy Assessment of the Georgian Fuels Sector for Electricity Generation

The need for consistent and transparent procedures for procuring and financing fuel supplies for thermal power generation is the focus of this policy assessment paper. Reliance on donor support for power station fuel each winter is not a viable strategy and highlights the need to solve the non payment problem in order that the power sector can generate sufficient funds on its own to finance fuel purchases

Other Task Activities

- A memorandum evaluating the ability of Sakenergo Generatsia to finance its fuel requirements for the winter of 1998-99 was prepared by Hagler Bailly
- Report forms were developed for the Ministry of Fuels and Energy to supply monthly data to USAID on the production, consumption, trade, and transit of energy
- Periodic briefings on the outlook for electricity supply were given at the request of USAID to the monthly meeting of Non Governmental Organizations in Georgia and to The US Embassy's Business Roundtable

SUMMARY

Since mid-1995, the Georgian electric power sector has undergone a dramatic transformation. With the creation of a high level committee on restructuring and the issuance of its recommendations in the form of Presidential Decree # 437, a process was initiated that has led to all of the reforms targeted by Delivery Order 14 being well on the way to realization. Throughout this process, Hagler Bailly Consulting has provided guidance to Georgian government and power industry officials that has resulted in the former non commercial state run monopoly being restructured into an unbundled, corporatized and independently regulated industry set for privatization in a market environment.

Recommendations made by the Committee on Restructuring of the Power Sector, established by Georgian President Edward Shevardnadze on the advice of USAID and Hagler Bailly, called for enactment of an Electricity Law which defined the legal basis for a reformed power sector and specified the unbundling of generation, transmission and distribution. Multiple commercial enterprises have been created in each of these sub-sectors and plans for privatization prepared. Newly created enterprises have been corporatized and converted to Joint Stock Companies. Corporate charters for each have been filed and the appropriate stock issued, which will be held by government until privatization. An independent regulatory commission has been established and government's involvement in the sector limited to policy formation.

Under the legal/regulatory reform task an Electricity Law was adopted by the Georgian Parliament in June of 1997. An important and immediate result of the law's passage was the formal creation of the Georgian National Electricity Regulatory Commission (GNERC) in August of 1997. After only 10 months as a permanent body, the GNERC had assembled a staff of 18 economists, engineers, and lawyers. It has adopted rules and procedures for its operations and licensed the new enterprises under its jurisdiction. The Commission has developed Tariff Methodologies and Principles for Wholesale Market Rules meant to provide the structure for a competitive wholesale power market in Georgia. Data necessary for cost-based tariff setting are being collected from each licensee and the essential process of adjusting tariffs toward economic levels has begun.

The commercialization task has seen the adoption of a Chart of Accounts by the GNERC, the initial steps taken to implement international accounting standards, and training programs in these subjects begun for power sector accountants. Modern metering, billing and collection procedures have been demonstrated on a large scale through the Rustavi Commercialization Demonstration project with significant results proving that the non-payment problem can be addressed successfully.

Work on the privatization task has resulted in the Ministry of State Property adopting a privatization program which calls for rationalization and privatization of the distribution

offered to strategic investors. To carry out the privatization plan, the Georgian government has selected as its advisor the investment banking firm of Merrill Lynch which has presented the Telası system to international investors with the goal of completing a final tender in the 4th quarter of 1998.

Finally, activities under the improved fuel supply enterprises task have resulted in the scoping of audits of all major Georgian energy enterprises. Monthly reporting of data on energy production, consumption, and trade has been established and ongoing efforts initiated to improve the quality and completeness of these reports. Regular evaluations of the power supply outlook have been provided to the USAID mission in Georgia for consideration in planning its programs, including those involving humanitarian assistance.

Delivery Order 14 has made a decisive contribution to the power sector reform now underway in Georgia. While this process will require many years before it can be declared complete, the accomplishments to date compare well with those achieved elsewhere in the NIS. A solid base has been laid for further success. The attached exhibit outlines quarterly progress in the implementation of each of the project tasks.

APPENDIX A
EXHIBIT OF THE SUMMARY OF QUARTERLY DELIVERABLES AND
EVENTS

Exhibit
Summary of Quarterly Deliverables and Events
Associated with Project Tasks

Task	Quarterly Events	Quarterly Deliverables/Outputs	Other Highlights
Task 1 Restructuring	4Q/95 – High level Committee on Restructuring of the Power Sector formed by Presidential decree	2 nd Q/95-Memorandum of Understanding between USAID and Government of Georgia (GoG) to undertake restructuring	3rdQ/95 Joint Hagler Bailly World Bank Mission to Tbilisi to gather information on power sector situation in Georgia
	1stQ/96 B1 weekly meetings of the Restructuring Committee	4thQ/95-Released Hagler Bailly report on International Power Sector Restructuring Experience With an Emphasis on Changes in the Distribution Sector	4thQ/95 Hagler Bailly conducted seminars/workshops on restructuring experience in other countries Presentation to the Restructuring Committee by British expert on the UK s restructuring experience
	2ndQ/96 World Bank sponsored seminar on Power Sector Restructuring in Georgia Presentations by Hagler Bailly on restructuring and regulation Presentations by TACIS consultants on restructuring	1stQ/96 Released Hagler Bailly report Characterization of Georgia s Power Sector	1stQ/95 Hagler Bailly presentation on The Georgian Power Sector in Transition A Strategy for Restructuring and Privatization
	3rdQ/96 Issuance of Presidential Decree # 437 About Restructuring of the Power Sector	2ndQ/96-Draft decree on restructuring the Georgian power sector and supporting Program for Implementation prepared	2ndQ/96 Hagler Bailly presentation to the Restructuring Committee Reform Strategy Implementation Steps and Legal Action for Georgian Power Sector Restructuring and Privatization
	4thQ/96 Unbundling of Sakenergo into Sakenergo Generatisia and Sakenego (transmission)	3rdQ/96 Hagler Bailly Report Georgia Power Sector Reform Work Plan	2ndQ/96 Hagler Bailly presentation to World Bank seminar Power Sector Restructuring and Privatization International Experience
	4thQ/96-Corporatization of individual power plants under Sakenergo Generatisia as Joint Stock Companies and Sakenergo as state commercial enterprise		4 th Q/96-Initial reconnaissance of Regional Transmission and Distribution Subsectors carried out by Hagler Bailly Working memorandum prepared

Exhibit
Summary of Quarterly Deliverables and Events
Associated with Project Tasks

Task	Quarterly Events	Quarterly Deliverables/Outputs	Other Highlights
Task 1 Restructuring	1stQ/98 Separation of Sakenergo into Sakenergo Transmission and Sakenergo Dispatch	<p>3rdQ/96 Power Sector Reform in Georgia A Brief Status Report</p> <p>3rdQ/96 Hagler Bailly report on Reorganization of Sakenergo Generation</p> <p>3rdQ/96-Status Report on Reform in the Georgian Power Sector</p> <p>4thQ/96 Debt Restructuring for the Georgia Power Sector</p> <p>2ndQ/97 Mid-Year Summary Assessment Report The Georgian Electricity Sector in Transition</p> <p>2ndQ/97 Characterization of Georgia s Power Sector (Revised)</p> <p>2nd Q/98-Status Report on Reform in the Georgian Power Sector</p> <p>3rdQ/98 Hagler Bailly Report Georgia Power Sector Restructuring Plan A Strategy & Work Plan for Achieving Reform Privatization</p> <p>3rdQ/98 Hagler Bailly Report Power Sector Restructuring Status Assessment</p>	<p>1stQ/97 Briefing for Ms G Donnelly Director of USAID Caucasus Mission on Reform in the Electric Power Sector of Georgia</p> <p>2ndQ/97 Presentation on Reform in the Electric Power Sector of Georgia given to the US Embassy s Business Roundtable</p> <p>3rd Q/97 Presentation on Reform in the Electric Power Sector of Georgia given to meeting of Non Governmental Organizations operating in Georgia</p> <p>3rdQ/98-Briefing for Dr Frederick Machmer new Director of USAID Caucasus on power sector reform in Georgia</p>

Exhibit
Summary of Quarterly Deliverables and Events
Associated with Project Tasks

Task 2 Legal/ Regulatory Reform	Quarterly Events	Quarterly Deliverables/Outputs	Other Highlights
	<p>3rdQ/96 Temporary regulatory commission attached to the Ministry of Economy established by decree until passage of Electricity Law</p>	<p>4thQ/96-Model Charters for Corporatization prepared by Hagler Bailly</p>	<p>4thQ/95 Hagler Bailly presentation to Restructuring Committee on Independent Power Sector Regulation</p>
	<p>2nd Q/97 Completed draft of Electricity Law submitted to Parliament Hearings held by Committee on Economic Sectors</p>	<p>4thQ/96 Hagler Bailly prepared Market Functioning Rules and the Structure of SakTrans</p>	<p>2ndQ/96 Hagler Bailly conducted study tour of US regulatory agencies by delegation of high level officials from the Georgian parliament government and power sector</p>
	<p>2ndQ/97 Electricity Law adopted by Parliament on June 25</p>	<p>4thQ/95 3rdQ/97 Translations of various articles and extracts from books on regulation and competition in electricity supply Translation of Arkansas Law on Electricity Regulatory Commission</p>	<p>4thQ/96-Presentation on Power Sector Reform and the Role of the (temporary) Georgian Electricity Regulatory Commission</p>
	<p>3rdQ/97-Georgian National Electricity Regulatory Commission (GNERC) officially created as a result of Electricity Law passage Replaced temporary commission attached to Ministry of Economy</p>	<p>4thQ/95 4thQ/97 Various working memoranda on topics of regulation</p>	<p>1stQ/97 Presentation to the temporary commission on Financial Planning in the American Electricity Supply Industry</p> <p>1stQ/97- Hagler Bailly seminar for government officials on Tariff Methodologies</p>
	<p>3rdQ/97 As required by the Electricity Law GNERC began issuing licenses to power sector enterprises under its jurisdiction and began collecting license fees</p>	<p>4thQ/96 1stQ/97 Preparation of multiple drafts of Electricity Law by Hagler Bailly in cooperation with the Ministry of Fuels and Energy and the World Bank</p>	<p>2ndQ/97-Seminar for GNERC and power sector officials on Model Generation Transmission and Distribution Licenses</p>
	<p>4thQ 97 GNERC raised tariffs for all classes of service to 4 5 Tetri per kWh</p>	<p>1stQ/98-Report by Hagler Bailly on Electricity Pricing in Georgia</p>	<p>4thQ/97 GNERC participated in Hagler Bailly sponsored seminars for NIS regulators in Kiev and Budapest</p>
		<p>1stQ/98 Wholesale Pricing Proposal and a Price Methodology Transition Plan by MK Shean</p>	<p>4thQ/97 Presentation to the GNERC on A Wholesale Georgian Electricity Market</p>
			<p>4thQ/97-Seminar for GNERC and sector officials on the Calculation of Transmission Tariffs in Georgia</p> <p>2ndQ/98 GNERC commissioner participated in Hagler Bailly sponsored seminar on licensing for NIS regulators in Budapest</p>
			<p>3rdQ/98 Seminars on Market Rules for separate groups of generation transmission and dispatch and distribution enterprise officials</p>

Exhibit
Summary of Quarterly Deliverables and Events
Associated with Project Tasks

Task	Quarterly Events	Quarterly Deliverables/Outputs	Other Highlights
Task 2 Legal/ Regulatory Reform	<p>2ndQ/98 GNERC adopted Tariff Methodologies and Principles of Market Rules</p> <p>3rd Q/98 GNERC raised tariffs for all classes of service to 6 Tetri per kWh</p>	<p>1stQ/98-Hagler Bailly report on Electricity Pricing in Georgia Proposed Methodology for the Market Reform Program in 1998</p> <p>2ndQ/98-Hagler Bailly Report on ' Tariff Setting for the Georgian Electricity Sector</p> <p>2ndQ/98 Market Rules Position Papers # 1 through 5 by MK Shean</p> <p>3rdQ/98 Procurement List for Sub Task B</p> <p>3rdQ/98 Electricity Pricing in Georgia</p> <p>3rdQ/98 Model Licenses for Generation Transmission and Distribution</p> <p>3rdQ/98 Implementation Plan for New Trading Arrangements</p> <p>3rdQ/98 Regulatory Policy Papers</p> <p>-Information Gathering Information Management and Access to Information for the Independent Regulator The Use of U S Administrative Law Concepts in Georgia Retail Customer Disconnections</p>	<p>3rdQ/98 GNERC commissioners made a study tour of American regulatory agencies Visits were made to the Federal Energy Regulatory Commission Georgia Public Service Commission Virginia Corporation Commission the New York Power Pool and the New York Public ServiceCommission</p>

Exhibit
Summary of Quarterly Deliverables and Events
Associated with Project Tasks

Task	Quarterly Events	Quarterly Deliverables/Outputs	Other Highlights
Task 2 Legal and Regulatory Reform		3rdQ/98-Report on Regulatory Enforcement Procedures 3rdQ/98 Report on GNERC s Annual Report 3rdQ/98 Hagler Bailly s Status Assessment of the Legal and Regulatory Framework of the Georgian Power Sector	

Exhibit
Summary of Quarterly Deliverables and Events
Associated with Project Tasks

Task	Quarterly Events	Quarterly Deliverables/Outputs	Other Highlights
Task 3 Commercialization	<p>1stQ/98 Public meeting held in Rustavi municipal building with city council to kick off pilot project Strong endorsement from USAID representative present</p> <p>2ndQ/98 Georgian manager of pilot project made a presentation at a seminar on billing and collection in NIS countries held in Kiev A strong interest was shown by other NIS representatives in the Rustavi project</p> <p>1stQ/98 Contracts let for work to relocate meters of 1700 residential customers in Rustavi as first step in demonstration project Check meters procured and customer accounting program translated into Georgian Georgian staff assembled to handle metering billing and collection</p> <p>1stQ/98 Presidential Decree requiring that all meters be relocated outside of customers premises by year-end 1998</p> <p>2ndQ/98 First billing cycle data collected from pilot project Results showed increase in cash collections from 10% to over 75% when hours of service expanded and cutoff for non payment enforced</p> <p>3rdQ/98 Second stage of Rustavi project begun adding 1900 customers to test population</p>	<p>4thQ/97-Report on Commercial Reform of Electric Distribution Companies</p> <p>3rdQ/98- Distribution Subsector Commercialization Pilot Project</p> <p>3rdQ/98-Plan for Implementation of International Accounting Standards (IAS) in the Power Sector completed by Carana Corporation</p> <p>3rdQ/98 Procurement List for Sub-Task C</p> <p>3rdQ/98- Republic of Georgia Accounting Manual for Electric Companies by Carana Corporation</p> <p>3rdQ/98- Environmental Assessment for Electric Distribution Commercialization Pilot Project</p> <p>3rdQ/98- Georgia Power Sector Commercialization Status Assessment</p>	<p>3rdQ/98 USAID and Ministry of Fuel and Energy sign codicil to Memorandum of Understanding on Humanitarian Gas which calls for the GoG to spend money equivalent to value of humanitarian gas supplied and not used for power generation to expand Rustavi project An estimated 6500 additional customers will be added over 5 months</p> <p>3rdQ/98 Seminar on Chart of Accounts presented for GNERC and power sector accountants by Carana Corporation</p> <p>3rdQ/98 Presentation by Carana Corporation to GNERC and power sector officials on the plan for implementing IAS</p>

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Exhibit
Summary of Quarterly Deliverables and Events
Associated with Project Tasks

Task	Quarterly Events	Quarterly Deliverables/Outputs	Other Highlights
Task 4 Privatization	<p>3rdQ/96 Ministry of State Property prepared initial privatization plan calling for privatization of generation first</p> <p>3rdQ/97 Ministry of State Property issued revised privatization plan calling for privatization of distribution first with Telasi the enterprise serving Tbilisi to be the first property sold</p> <p>4thQ/97 Ministry of State Property issued RFP for a financial advisor to act on Georgia's behalf in privatizing power sector assets</p> <p>1stQ/98 Merrill Lynch selected by GoG as financial advisor</p> <p>2ndQ/98 Information Memorandum on Telasi circulated to strategic investors by Merrill Lynch</p> <p>3rdQ/98 Hagler Bailly gave due diligence briefing on Telasi to the American strategic investor AES including tour of Rustavi commercialization demonstration project</p>	<p>1stQ/96 Hagler Bailly report A Strategy and Work Plan for Achieving Reform and Privatization</p> <p>1stQ/96 Report on Privatization Options for the Power Industry</p> <p>1stQ/97-Hagler Bailly prepared 184 page compilation of Background Information on Georgia Power Sector Privatization</p> <p>2ndQ/97 Series of Memoranda on Privatization of Electricity Sector Assets</p> <p>2ndQ/97 Memeorandum on Generation Plant Asset Valuation</p> <p>2ndQ/97 Hagler Bailly Proposed Asset Valuation Methodology for Distribution and Generation Asset Privatization</p> <p>2ndQ/97- Electricity Sector Privatization Goals Strategy and Schedule</p> <p>3rdQ/97-Hagler Bailly report on Privatization Strategy for Georgia</p>	<p>3rdQ/97-Price Waterhouse began work on privatization requirements</p> <p>2ndQ/98 Hagler Bailly and Price Waterhouse collaborated with Kantor and KPMG to produce Information Memorandum on Telasi for use by Merrill Lynch</p>

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Exhibit
Summary of Quarterly Deliverables and Events
Associated with Project Tasks

Task	Quarterly Events	Quarterly Deliverables/Outputs	Other Highlights
Task 4 Privatization		<p>3rdQ/97 Hagler Bailly report on Preliminary Assessment of Distribution Sector for Privatization</p> <p>3rdQ/97-Hagler Bailly report Critical Evaluation of Ministry of State Property Management s Proposed Temporary Methodology of Company Selling Price Estimation</p> <p>4thQ/97 Hagler Bailly report on Grouping of Distribution Companies for Privatization</p> <p>1stQ/98- The Georgia Power Sectpr A Strategy and Work Plan for Achhieving Reform and Privatization</p> <p>1stQ/98 Hagler Bailly memorandum to Ministry of State Property on Valuation Methodology Used by Georgian Power Sector Strategic Investor</p> <p>1stQ/98 Hagler Bailly memorandum on Georgia Power Sector Privatization Attracting Serious Investors</p> <p>2ndQ/98 Price Waterhouse Final Report</p>	

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Exhibit
Summary of Quarterly Deliverables and Events
Associated with Project Tasks

Task	Quarterly Events	Quarterly Deliverables/Outputs	Other Highlights
Task 5 Improved Fuel Supply Enterprises	1stQ/98-Memorandum of Understanding signed by USAID and GoG covering the humanitarian supply of \$5 million of natural gas for use in Gardabani power plant	1stQ/97-3rdQ/98 Periodic memoranda on Power Supply Outlook 3rdQ/98- Scoping Study for Financial Evaluation of Energy Enterprises by Carana Corporation 3rdQ/98 Assessment of Policies & Reform in the Fuel Supply Subsectors 3rdQ/98-Memorandum on Sakenergo Generatsia s Prospects for Financing Gardabani s Winter Fuel Requirements 3rdQ/98 Policy Assessment of the Georgian Fuels Sector for Electricity Generation	2ndQ/98 Ministry of Fuel and Energy began issuing monthly reports on the production consumption transit and trade in energy based on questionnaires designed with the assistance of Hagler Bailly 1stQ/97-3rdQ/98 At the request of USAID Hagler Bailly made periodic presentations on the status of power sector reform and the power supply outlook to meeting , of non-governmental organizations operating in Georgia and to the US Embassy s Business Roundtables