



Public Utilities Commission Annual Report



2009

FROM THE DESK OF THE CHAIRMAN

Justice Prem Persaud CCH (ret'd)



The year 2009 has been a challenging but successful one for the Commission. We have had reasons to be pleased that we are acquiring a reputation as a competent and independent regulatory body which holds the scales evenly between the utility companies under our purview and consumers.

The hallmark of an effective organization is its ability to identify and develop clear, concise and shared principles which guide its conduct as well as its relationships with the outer society. We are extremely proud of the set of defined values and best practices on regulation—albeit, hemmed in by statutory constraints - within which we operate.

In our society, gaining notoriety for criticizing, in the name of freedom of expression and of free speech, anything that appears pro-something or the other, without any regard to the truth, is given great publicity. So let me set out the guiding factor in the performance of our duties. We invite all and sundry to discuss and scrutinize our work and we look forward to any meaningful discussions on the topics within our portfolio.

- ✚ We exhibit the highest performance behaviour with respect to morals, ethics and integrity.*
- ✚ We consult with all stakeholders in an open and transparent manner and seek to enable them to understand our decision-making process.*
- ✚ We are free from external pressures where decision-making is concerned—and maintain our independence from all stakeholders.*
- ✚ Being responsible to the public for our actions.*

 *Using resources as efficiently and effectively as possible.*

We have had varying levels of success in our operations, but the telecommunications sector has performed relatively well by delivering lower rates to consumers—more innovative packages, cutting edge technologies, and greater responsiveness of the service providers to consumers. A contributory factor is that there is competition in this industry.

The statutory framework in the electricity sector provides very limited room for us to deal effectively with certain aspects of their operations. We are inhibited in the setting of standards or the rates which are set by the licence and the legislation. Despite these setbacks, however, we found ways to force management to rethink certain policies and we have been able to bring relief to many a customer.

We must confess, however, our embarrassment when it is brought to our attention of the substantial number of meter tampering and stealing of electricity. Because of the loss of income to the power company from these criminal acts, the rates which consumers are called upon to pay are still high, and it is in the interest of all to assist in the arrest of this practice by bringing to the notice of the appropriate authority when they see this egregious system in operation.

The water sector is also a monopoly like the power company, but it is making a great effort within its capacity to supply water to all areas.

A critical function of the Commission is the requirement to ensure that consumers' complaints are dealt with relatively quickly and fairly. There have been some challenges in this area and it arose from what appears to be an increase in the number and nature of the complaints received. A vital factor responsible for this also is the apparent reluctance of some senior officers of the utility companies, especially in the electricity sector, to respond to complaints or requests from the Commission in a timely fashion.

There seems to be the perception that the service being a monopoly, the public will have to await their pleasure.

The reports and details of the work performed during the year in review are attached hereto, and these will give one the understanding of how we do our work, and the success we have achieved.

The staff has found itself continually in interesting and invariably exciting situations and has been called upon to respond to many challenges demanding intellectual insights and integrity. We have responded well, but it could not have been achieved without the continued dedication of our staff, who is a fine group of regulatory officials that may, perhaps, be the envy of other public servants.

INTRODUCTION

The Public Utilities Commission is pleased to present its Nineteenth Annual Report, in accordance with Section 85 of the PUC Act, Act No. 10 of 1999.

This Report will serve to inform of the PUC's activities during the year 2009, and our resolve at all times to maintain the integrity of the utilities and the interest of consumers.

The Commission is a body corporate established by virtue of the Public Utilities Commission Act No. 26 of 1990 which came into effect on the 1st October, 1990. This Act was amended in 1991, 1994 and in 1999. The Commission is at present operating under Act No. 10 of 1999 which came into force on the 1st October 1999.

The Commission presently consists of a Chairman, who is a full time official, and three other Commissioners, who are appointed and serve on a part-time basis. There is provision (Section 5 of the Act) for the appointment of four Commissioners, but the Commission does not at this time see the need for the appointment of a fourth Commissioner.

The present composition of the Commission is as follows:

- Justice Prem Persaud CCH - Chairman
- Mr. Badrie Persaud - Member
- Mr. John Caesar - Member
- Mr. Maurice Solomon - Member

Commissioners:



Badrie Persaud



John Caesar



Maurice Solomon

The Public Utilities Commission

Mission

- To ensure that regulated utilities offer an efficient service to consumers at a reasonable cost.

Vision

- To create an environment in which there is universal access to service in the public sector, as well as a high quality of service which are cost effective and beneficial to all stakeholders.

Objectives

- To establish and enforce rules and procedures for the regulation of public utilities, commensurate with internationally accepted regulatory standards.
- To promote and regulate the efficient long-term provision of utility services for national development consistent with Government policy.
- To provide a fair environment conducive to business interest, investment in the public utilities sector, and the interest of consumers.
- To investigate and seek to resolve in a timely manner complaints filed with the Commission against any public utility.
- To carry out its functions in a fair, transparent and independent manner.

Functions

- The functions of the Commission are regulatory, investigatory, enforcement and such others as conferred on it by the Act. The Commission also has the power to initiate and conduct investigations into the operations and standards of service of any public utility under its purview.

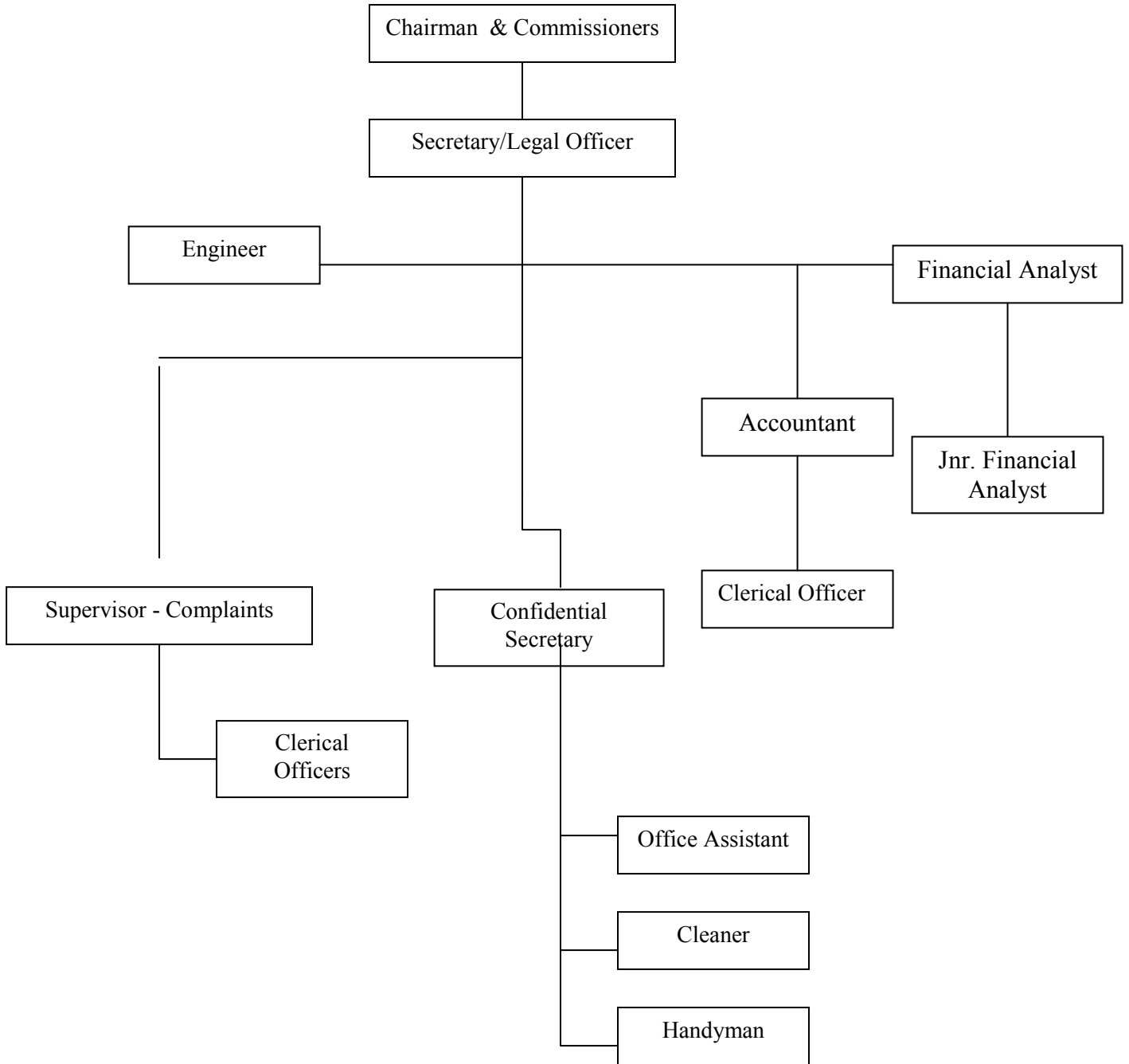
- The Commission does not issue licences for the operation of any utility. This is the responsibility of the Office of the President in the case of telecommunication, Office of the Prime Minister in the case of electricity, and the Minister of Housing and Water in the case of water and sewerage services.

- The Commission is not involved in the administration of the frequency management or spectrum allocation in the telecommunications sector. This is the mandate of the National Frequency Management Unit.

- The Public Utilities Commission is not involved in policy matters, but may be called upon to act in an advisory capacity to the Ministers responsible for utilities on such matters concerning the utilities as are referred to it by the relevant Ministers.

PUBLIC UTILITIES COMMISSION

Organisation Chart



Public Utilities

The Act defines 'Public Utilities' as any person who or which owns facilities used to provide, or provides, the following services:-

- (a) The production, generation, storage, transmission, sale, delivery, furnishing or supplying, directly or indirectly, to or for the public, of electricity.

However, any person who provides a service only to himself or his employees or tenants, where such service is not resold to or used by others, shall not be deemed to be a public utility.

- (b) The conveyance or transmission of oral, written, digital or any other form of messages or communications by telephone, wireless telephony, telegraphy; or wireless telegraphy, satellites, cable television, telecom service providers, pay telephone service providers, telecom resellers, internet and other telecom network service providers, radio common carriers or cellular mobile providers or any other method of transmission, currently offered to the public or offered as common carriage in the future.

The Minister may, by Order, place any of the following services under the purview of the Commission, that is to say:

- (i) carriage of passengers, in motor buses or hire cars;
- (ii) airport and airline services;
- (iii) carriage of goods for hire or reward by goods vehicles;
- (iv) lighterage or cargo handling;
- (v) dockage, wharfage or related cargo services;
- (vi) water supply services, except retail deliveries.

The public utilities under the purview of the Commission are:

- **Telecommunication Services**
- **Electricity, since the inception of the PUC Act 1990; and**
- **In 2003 by Order No. 26/ 2003, Water and Sewerage Services.**

OVERVIEW

Vidiahar Ian Persaud – Attorney-at-Law/Corporate Secretary



Telecommunications Sector

SMS Cross Network Texting

In the telecommunications sector there have been continuous issues that have kept the Commission particularly busy in the year 2009. Despite the general contentious nature of the two operators GT&T and Digicel, there were some amicable settlements of disputes which were beneficial to all consumers. In this particular instance, Digicel had formally lodged a complaint with the PUC in April of 2009 requesting that GT&T be ordered under Section 36 of the PUC Act to enable the interconnection of Short Messaging Services (SMS). The parties eventually agreed in May of that year to facilitate this service between networks, that is mobile subscribers on both networks were able to text each other as from June, 2009.

Projects: GT&T's Submarine Cable

The GT&T indicated that it had entered into a US\$60 Million joint venture with Telesur (Suriname) to fund an underwater submarine fibre optic cable to supplement the Americas II cable, with the intention to offer faster bandwidth services to consumers in Guyana, and also having regard to the constant disruption of the Americas II cable. The Commission requested information on this project particularly the company's business plan, technical and financial information. The Commission also noted that such a venture would also fall within the context of the development and expansion programme of the company for which expressed approval would have had to be granted. However, the company indicated that its business plan had not been finalized. They noted that their planned cable system was an extension of the company's commitment to provide telecommunications services to meet current and future demands and that their development was to reduce dependence on the Americas II cable system, and that internal financing was to be used for its portion of the project. The company requested a meeting

with Commission in June 2009 and at that meeting, briefed the Commission of the venture.

Fibre Optic Disruption

On June 11, 2009 there was a severe disruption of the voice and data services for a period of approximately four hours. The PUC issued a press release advising that the significant disruptions to both local and international voice traffic and data were severely disrupted. It also noted that these disruptions were not isolated but there were a number of disruptions in 2008 and five disruptions in the first half of 2009. The Commission indicated that if there were repeated interruptions in the service that the Commission may have to recommend to the licencing authority that other providers be issued with licences allowing for international connectivity. This did not go down well with the company which through its lawyers wrote to the PUC objecting to the press release.

GT&T's Application – Promotion

The Commission on an application from GT&T granted approval for that company to introduce a three-month promotion to offer all users of GT&T's outbound international service inclusive of all mobile subscribers, significant discounts on the international outgoing. This promotion was based on a number of plans. It took effect from January 1, 2009. Digicel objected to this promotion, arguing, that among other issues, that it would enable the GT&T to gain commercial and or strategic advantage over Digicel, in the context of the parties on-going discussions on a new interconnection agreement. The Commission, however, differed with their opinion, noting that the promotion will be monitored and GT&T has been requested to supply reports on the progress of the promotion, when the PUC will be in a position to ascertain whether undue advantage would have been given to GT&T.

Interconnection Dispute

Digicel filed a complaint with the PUC in relation to interconnection rates and other matters on June 9, 2009. However, GT&T obtained an injunction against the PUC prohibiting the PUC from dealing with the complaint in any way. Digicel subsequently

withdrew its complaint opting instead for direct bilateral negotiations with GT&T on this matter.

Order 1 of 2009¹

In May of 2008 GT&T filed an application seeking to introduce a new service called NEXUS which the company claimed will allow subscribers/consumers who are desirous of having a prepaid service to manage their credits from a single prepaid account in such a manner that these credits may be utilized from wire line and mobile calls. The Commission, however, did not approve this new offering of the company for a number of reasons, including the fact that despite requests for specific information touching on costs and financing in this venture, the company failed to submit same.

Order 2 of 2009²

By Order 3 of 2003 the Commission had approved rates for international satellite phones. It was noted that these charges were fixed by using the hubbing charges existing at the time. The company in 2009 applied to the PUC for an increase in the rates noting that the termination rates had increased and also that satellite calls had now increased. And while the company had been carrying those losses initially because the satellite calls had now increased exponentially it was now resulting in financial losses to the company which the company could no longer ignore. The company stated that it placed no mark-ups on these calls and that it was requesting an increase to take into consideration these charges and 5% on those charges. The Commission did not approve the 5% but fixed the charges at \$565.00 per minute (off-peak) and \$594.50 (peak).

The Electricity Sector

Order 3 of 2002³

The Office of the Prime Minister (OPM) wrote the Commission in March of 2009 requesting information on the status of Order 3 of 2002. In brief the Commission advised

¹ Appendix A

² Appendix B

³ Appendix C

that the PUC had held on its own motion a Public Hearing in March, 2002 to consider GPL's maintenance of its property and equipment and its impact on consumer services; the losses in the electrical system, and the outages and load shedding occurring within the system, in terms of Section 25 of the Public Utilities Commission Act.

To backtrack a little, GPL was granted a licence effective from October 1, 1999 with respect to the activities and services, to wit, generation of electricity which was a non-exclusive licence for 25 years, and with respect to the transmission, distribution, storage, furnishing, sale and the purchase of electricity (such purchase to be in accordance with power purchase agreements between GPL and Independent Power Producers – IPP's), the supply, erection, maintenance, repair removal, replacement and operation of meters, electric lines and other electric apparatus, installation and facilities necessary to carry out the Activities and services authorized by the licence: GPL had employed a management team, the CDC/ESBI

The Licence covered the whole country with the exception of Linden, and any other area in which a secondary supplier may be licensed to operate.

The Commission at its inquiry found that when GPL took over the electricity sector losses were at 40%, and it had undertaken that they would reduce the commercial and technical losses by year 2005 to 16%. The reductions for years 2000, 2001, 2002, 2003 and 2004 should be 34%, 29%, 24%, 20% and 16% respectively. The Commission found that at the end of 2001 the losses exceeded the target by 9.3%, which, however, GPL admitted. The management team did not deliver. The Commission found that GPL had breached Section 25 of the PUC Act and as a consequence Section 26 of the Act was triggered by which the Commission made certain Orders. The finding in effect was that as a consequence of the losses not being reduced the consumers suffered losses.

Based on the figures the Commission found that the total losses to all consumers was \$1,368,284,000.00 which was calculated to be \$4.70 per kWh based on 288,861,672 kWh sold to them. The Commission further ordered that GPL will be at liberty to pay the

compensation (\$4.70 per kWh) for the number of kWh which each consumer consumes with effect from the billing period 1st October 2002 until the amount of \$1,368,284,000.00 is fully discharged.

GPL filed an appeal against the Commission's Order, and that appeal is in limbo before the Court of Appeal.

The power company in year 2009 applied to the Commission seeking a review of the Order 3 of 2002 and the Commission invited the company along with the consumers representatives to hear same and make a determination. At the hearing GPL explained that they have not yet complied with the Order to pay the consumers (a fact of which the commission was fully aware). GPL urged that over the years they had not sought an increase in the rates as a result of increase in the price of fuel, to which they are entitled in terms of the licence issued to them. And over the years they had foregone in excess of twenty billion dollars, by which consumers benefitted. He explained further that the Order is still shown in their books as a liability year after year and donor agencies are reluctant to offer funding for a Policy Based Loan they wish to undertake.

He explained further that the Amelia Falls Hydro Project is on the slates and likely to cost approximately US\$600.million; and that the Chinese Development Bank is likely to offer assistance and to contribute \$3.00 for each \$1.00 the IDB grants to the utility.

Mr. Patrick Dial represented the Guyana Consumers Association and lent support to GPL's application. He offered his view that the Corporation is undergoing much difficulties and his Association is hoping that if the Commission grants the order which GPL is seeking it will accrue to the benefit of consumers who will most likely be offered better services. He expressed the hope that the consumers will not be saddled with an increase in rates.

The Commission gave serious and mature consideration to GPL's application and ordered that the Order No 3/2002 will be recalled and discharged. Mr. Dindyal, Chief

Executive Officer of GPL undertook to withdraw the appeal filed and to discontinue those proceedings.

Power Outages

In May 2009, the Commission wrote the power company concerning a spate of unpredictable and sporadic power outages that the consumers in Georgetown were experiencing. The Commission recognized that the company was under some amount of pressure to have the situation regularized, but indicated that there were no notices of these scheduled outages and urged the company to have the situation remedied. The company responded that while its generation capacity had been at 66MW the peak demand was at 69MW and as such the unscheduled outages were a result of these generation shortfalls. This situation was made worse given its maintenance activities during the periods March and April. The company indicated that there was a published load shedding guide, but this had to be revised as the demand was beyond initial projections. Efforts were being made to increase the generation capacity of the company with the return of the 16 MW base-load at Garden-of-Eden, among other initiatives.

Fuel Surcharges/Rebates January 2006-June 2009

The company in October 2009 advised that it was not applying for a tariff increase and was willing to forgo the revenues of approximately \$2.9 billion for the quarter ending September 2009. They noted that the company could have applied for the fuel surcharges since January 2006 due to increase cost in fuel charges, and had they done so the tariffs would have increased by \$32.23.

Guyana Water Inc

Disconnections

The year began with numerous complaints by consumers pertaining to disconnection of their water service due to allegations that they have been placed on the wrong tariff bands, and were being requested to visit the GWI offices, pay a reconnection fee and to be back billed for three years. The Commission took strong objection to the measures

being implemented by GWI and wrote the company on this matter; threatening to go public should the company persist.

GWI Application for Tariff review

The company GWI subsequently wrote the Commission seeking to consolidate the tariff bands under which the company's rates were scheduled. In their correspondence they also requested an approval of rates for 'security deposits', 'fixed charge' and 'monthly consumption charge.' The Commission requested that the company be guided by Sections 32 to 46 in dealing with an application for rates.

The Commission further wrote the company requesting among other information the economic cost for the production of a cubic meter of water at the current levels; projected reduction of non-revenue water for the years 2009-2011; the company's three year plan for the metering of unmetered residential consumers. The company subsequently responded by letter dated February 11, 2009, and submitted on February 25, 2009 their application for tariff review. Among other proposals were the commencement of billing unmetered consumers on a quarterly basis, the approval of a security deposit, to have a built-in fixed charge and a number of new categories and tariffs. This application was however withdrawn on April 22, 2009 by the utility company.

Notice on Advisory from GWI

It was brought to the Commission's attention that the bottled waters producers were protesting a hike in tariffs which amounted to \$400.00 per meter cube, along with a security deposit. The PUC wrote the producers noting that metered consumers shall be billed at \$100.80 per cubic meter of water consumed as reflected by the meters, and noting the contents of its Order No. 5 of 2006. This letter was copied to the Chief Executive Officer of GWI. The company subsequently wrote the Commission indicating that the PUC had not approved rates with respect to water vendors and that GWI is under no obligation either by the Act or in terms of its licence to provide water for the purpose of resale. However, the PUC stated that while it was in agreement that the Commission did not make an order with respect to what should be charged to water vendors, it

however, noted that all rates to be charged for the supply of water shall be in accordance with rates fixed by the PUC.

FINANCE DEPARTMENT REPORT – 2009

Moorsalene Sankar – Financial Analyst



Guyana Power and Light

There are a number of positives that GPL can report on for the financial year ended 2009. The positives are:

- A return to significant profitability after years of losses and or approximate break even results.
- The acquisition of three Wartsilla 7.8 megawatt base load stations financed through the Petro Caribe fund that should now enable GPL to meet its peak demand. This should ameliorate the widespread outages that have plagued the nation in the latter half of 2009.
- The imminent approval of a USD40 million loan from the EXIM Bank of China that will be used to upgrade the transmission infrastructure of the company.
- The installation of prepaid meters for a trial study on its suitability and effectiveness. If proved successful it will be an effective tool in the uphill struggle against commercial theft.

The return to profitability is mainly attributable to a fall in the acquisition cost of fuel which began in late 2008 after peaking to record levels during mid 2008. For 2009 GPL sales remain flat when compared to 2008 which may suggest that consumers are becoming more energy conscious and are conserving on electricity. The cost of electricity remains high relative to the wage structure that obtains throughout the country and it remains doubtful whether the corporation will experience strong growth in the foreseeable future unless there is robust growth in the national economy. A recent report by the World Bank reported that as much as 125,000 persons may be existing on \$400 a day, suggests that a sizeable section of the population may not be able to afford the cost

for this service and this may invariably leads to questionable practices by this group of consumers.

The acquisition of the new Wartsilla stations by GPL will be beneficial to both the service provider and the consumers. The operation of these new stations should ease the incidence of power outages that have been plaguing the nation during the latter half of the year. The company would now be in a position to retire some of its inefficient high speed diesel sets resulting in a significant saving in fuel as a result of a favourable fuel mix. It would also be able to make redundant those employees associated with the operations of these diesel stations. The result of these measures will be greater profitability for the company.

Over the years GPL has been upgrading its generation capacity but because of financial constraints was unable to upgrade its transmission system concomitant with its generation installation. As a result, some lines in the system are reaching or have reached their thermal limits. This restricts the efficient transmission of the additional power in a safe and efficient manner through the lines. The Company through the Guyana Government has successfully negotiated a loan from the EXIM Bank of China for approximately \$40 million that will be used to upgrade the transmission system. When the rehabilitation of the transmission system is completed it is anticipated that consumers will enjoy an improved quality of service while at the same time the technical losses of the company will be reduced by a few percentage points.

During the year the company introduced for the first time prepaid meters. These are new to Guyana and both the company and the consumers are in uncharted waters with respect to its effectiveness.

It was the intended policy of GPL to replace all existing post paid meters with prepaid meters. However GPL was informed by it legal department that a contractual relationship exists between GPL and the consumers and that GPL cannot unilaterally alter the existing contract and replace it with a new contract that is intended to incorporate the prepaid

meters. The company's new policy is to introduce the prepaid meters to first time consumers while trying to persuade existing consumers to make the switch from post paid to prepaid metering. It is too early to evaluate the success of this project but it is intended to be used as a major vehicle in the uphill struggle to reduce system losses.

System Losses

In our previous report the Commission was cautiously optimistic that the GPL was beginning to come to terms with the perennial problem of its system losses. Unfortunately the Commission is not impressed with GPL's performance in attempting to reduce these losses which continue to remain at unacceptably high levels.

Guyana Power & Light Development & Expansion Programme: (2009-2013)

As in its previous five year rolling Development and Expansion Plans GPL has set itself ambitious targets, the achievement of which is contingent on debt capital from various sources. The non-materialization of these funding in previous plans has resulted in significant under-performance of past Development and Expansion Programmes. The current 2009-2013 D&E plan continues this trend.

Guyana Water Inc:

The Guyana Water Inc. continues to be a source of worry to the Public Utilities Commission. Indexes that measure non revenue water, metering, billing and cash collections that are central to a well run utility, remained at an unacceptable level.

Non Revenue Water

Non revenue water is defined as water produced by the company for which no revenue will be received. Non revenue water (NRW) is water that has been produced and is "lost" before it reaches the customer. Losses can be real losses (through leaks, sometimes also referred to as physical losses) or apparent losses (for example through theft or metering inaccuracies).

GWI is unable to measure definitively its non revenue water but it is generally thought to be in excess of 50% of dispatched water by the utility to its customers. The major reason why GWI is unable to measure its non revenue water accurately is because 70% of its consumer base is un-metered. It is generally thought that unmetered consumers who pay a flat tariff regardless of the volume of water consumed have little incentive to conserve water and may be consuming but not paying the full economic cost for millions of cubic meters used by this class of customers. It is for this reason that GWI will urgently need to meter all consumers. In their three year turnaround plan GWI has budgeted to reduce NRW by 5% for each of the three years commencing from 2008. A new division was set up and staff strength agreed on. Its terms of reference were to ultimately achieve the targets set in the plan. Unfortunately the company has experienced some hiccups in getting the Division off the ground and it is unlikely that the target reduction of 5% will be met.

It is difficult to definitively determine the cost benefits and increased sales that are likely to accrue to the company as a result of a five percent reduction in non revenue water. Various financial models suggest varying figures at this initial stage but all fall in the range of between \$300 million to \$450 million annually. Given the huge savings that are likely to accrue to the company if non revenue losses are reduced it is imperative that the company pursue this segment of its operations with commitment.

Metering

At the end of 2009 a substantial number of GWI customers were un-metered. In its development metering plan GWI is projected to meter a significant number of this class of consumers. The Commission will like to place on record its endorsement of GWI's plan and hopes that that the company will work assiduously to accomplish their target.

The advantages in having all of the consumers metered are:

- GWI will be better able to measure its non revenue water since it will know both its metered sales and its production.
- It will facilitate rate fixing and block tariffs since the consumption patterns of both the residential and industrial and commercial consumers will be known.

- It may reduce demand since the once un-metered consumers that once used water indiscriminately may begin to conserve.
- It may allow for the company to better plan its distribution system.
- In the medium term it may even lead to a reduction in tariffs once the non revenue water is brought down to manageable proportions.
- It may reduce the non revenue water loss.

Collections

This has been a perennial problem with the water company. GWI has demonstrated over the years an inability to collect its billings. GWI collection rates over the last three years averages 60 %. Currently the collection rates of the other two utilities, the Guyana Power and Light and the Guyana Telephone and telegraph Co. Ltd are above 95%. GWI has estimated its current outstanding receivables at about six billion dollars and overtime has made several efforts to collect same. Unfortunately, it has never been successful in its endeavours and the current average debt per consumer now stands at approximately \$40,000.00. This average figure does not on the surface appear realistic and it may be an idea for GWI to rationalize its consumer base to determine how much of the consumer ledger is in fact collectible and make every effort to collect same.

The Commission wishes to state quite unequivocally that timely collections of moneys due to the company is central to improved governance within the organization and incremental improvements in the quality of service to consumers. Further, the subsidies paid by the Government to the utility to meet its operating expenses mean that all consumers receive a subsidy including those that would not in normal circumstances qualify for a subsidy. The PUC remains concerned about the present state of collections and wishes to impress on GWI that it pursue its collections with purpose.

Financial Governance

Since the inception of the GWI Inc. in 2002 their financial statements have been heavily qualified and in one instance the auditors had issued a disclaimer of their financial statements. At the time of the preparation of this report we are yet to receive the audited financial statement of GWI for 2009. As a result we are unable to offer a report on the financial operating efficiency of the utility in 2009.

What the Commission can posit is that GWI badly needs a tariff increase. GWI claims that even if it collected all of its billings it will still not be enough for the utility to effectively and efficiently manage the company. This is a valid observation by the company. That there is need for a tariff review for GWI is irrefutable. The last tariff review was in 2005 and at that time there was recognition that the increase would not have been adequate to meet the operating needs of the company. The PUC may not be averse to favourably consider a rate increase once GWI makes a filing. What the PUC will insist on however, is that benchmarks are agreed on and that systems are in place with respect to cash collections, metering and billings in a timely manner.

Telecommunication Sector:

The telecommunication sector remained buoyant during the year under review as the two major service providers continue to demonstrate a positive outlook and confidence in the future. This was evident in the drive to expand services and the fierce competition to gain market share.

Mobile Segment

Mobile subscription continues to increase with an estimated 550,000 (five hundred and fifty thousand) active services at the end of 2009. Using a population figure of 765,000 it reflects a penetration rate of approximately 70%. However, it should be noted that there is the likelihood of multiple subscriptions per person.

Competition in the mobile market is very intensive. However, competition is based mainly on non priced factors such as a variety of promotions. The retail prices for cellular service have remained fixed during the year. It should also be noted that cellular rates fixed by the service providers are at about 75% of the PUC's approved ceiling rate which is \$32 per minute billed per second.

Fixed line

GT&T continues to be the only operator of fixed lines phones in Guyana. At the end of 2009 there were approximately 147,000 active landline phones in service. Using a

population figure of 765,000 it reflects a penetration rate of approximately 19% (Nineteen percent).

Internet Services

Internet services may have increased marginally in 2009. The Commission is having some difficulty in sourcing information from some of the Internet Service Providers with respect to number of active services in force. The Commission is however, of the opinion that the penetration rate or density for the country is low.

In 2009 GT&T announced that in partnership with Telsur of Suriname they will be laying a submarine cable that will originate in Trinidad and terminate in Suriname. GT&T has indicated that the cable will be used in the first instance to transfer data and sometime in the future may be used to transmit voice.

The activation of the cable will significantly increase bandwidth. Currently the Guyana standard of 256 kbps that is considered broadband will be significantly increased. GT&T in profiling the cable stated, *“The capabilities of the new submarine cable project in delivering telecommunications services to Guyana is vast. Upon completion the system will deliver 10 Gbit/s of fully protected capacity to Guyana. This equates to over 250,000 simultaneous high quality international telephone conversations or the equivalent of over 4,000 combined DSL connections to the USA each at 2Mb”*. What this translates to is uninterrupted internet service for the citizens of the country. The country will be free for the first time on its dependency on the “Americas 2” cable which has a history of failures. When these failures occur it disrupts the internet service and restricts Guyana’s contact with the rest of the world.

With increased bandwidth, GT&T has indicated that this will benefit consumers at no additional cost as they are anticipating an upsurge in demand for internet service. That anticipation should be tempered by the fact that for internet services to grow exponentially the acquisition of computers must also be concomitant. Given the somewhat heavy cash outlay to acquire a computer, together with the cost for the internet

service, it remains doubtful that GT&T may experience the anticipated robust growth in the foreseeable future.

The views and opinions expressed in this report are the Finance Division's, and do not in any way bind or commit the Commission.

COMPLAINTS' REPORT – 2009

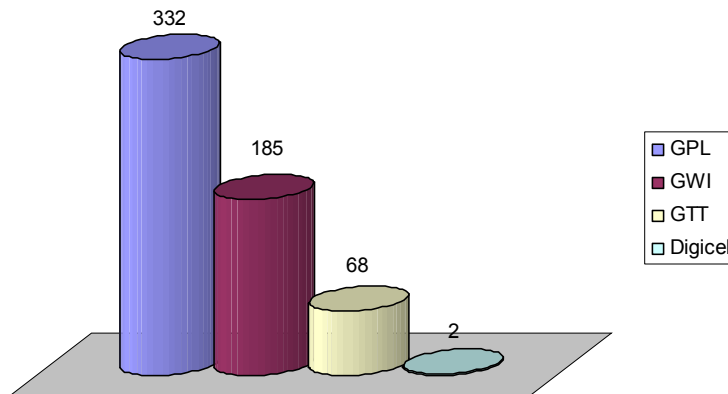
Devika Nandranie – Supervisor, Consumer Affairs



Overview

The Consumer Affairs Department of the PUC continued with its mandate in 2009, among other functions, to resolve disputes between consumers and the regulated utilities—namely, the Guyana Power & Light Inc., the Guyana Water Inc., the Guyana Telephone & Telegraph Co. Ltd., and U-Mobile (Cellular) Inc., which is Digicel (Guyana).

The Department received a total of 623 complaints in 2009. There was a decline of approximately 3% when compared to 2008. This decline was related to the electricity and telecommunication sectors. Complaints lodged against GWI have shown a steady increase from 2004.



Complaints received against the regulated utilities for 2009

Miscellaneous matters remained constant for the years 2008 and 2009 at approximately 5.8% of the complaints received for those periods. These are complaints that were lodged with the utility in question by consumers and copied to the PUC—to appraise the Commission of the issues under query.

As at December 2009 the Commission secured credits/rebates of \$3.9 million for the year on behalf of customers from the regulated utilities.

In pursuit of its public education/awareness campaign, the Commission established a booth at Guyexpo 2009 which, from all indications, was well received. This was in addition to its scheduled public relation roster which included Outreach, Awareness and Schools' Education Programmes.

The Guyana Power and Light Inc

According to reports received there was not much improvement in GPL's customer relations during the year in review. Consumers continued to be bedeviled by inefficiencies and unprofessionalism which were said to be perpetrated not only by subordinates but by the managerial staff as well.

The majority of complaints received for 2009 related to the electricity sector. The following table illustrates the various categories of complaints received and the resolution rate (70%) as at December 31, 2009.

Complaint Category	Amount Received	Amount Resolved	Percentage decrease when compared to 2008	Percentage increase when compared to 2008
Allegation of Tampering	27	24	54%	
Application for Service	13	7	54%	
Billing Query	162	108	25%	
Capital Contribution	1	1	Remained constant	
Change of Tenancy	21	19	19%	
Compensation	7	5		28%
Disconnection	45	33		32%
Tariff Issue	12	10	14%	
Technical Issue	44	25		33%
SUB TOTAL	332	232		
<i>Misc. matters</i>	<u>20</u>			
GRAND TOTAL	<u>352</u>			

Miscellaneous matters are complaints lodged with the utility and copied to the PUC

GPL Complaints by Categories for 2009

As the table above indicates, certain categories of complaints against the GPL have reduced while some areas have seen an increase when compared to 2008.

As at December 31, 2009 consumers' accounts were debited with approximately \$34.1 million for reasons associated with unlawful interference, defective meter, under estimation, etc.

Credits received for the aforesaid period amounted \$1.9 million based on a 60% resolution rate.

The PUC's complaints' resolution process was again hampered by GPL's slow response rate. One of the conditions contained in its License is that GPL is required to respond within 28 days to any complaint filed by the PUC. However, the company continues to deviate from this condition and as a result, complainants are frustrated at the prolonged waiting period and the Commission is stymied in its complaints' resolution process. To expedite the resolution process, the PUC had initiated regular face-to-face meetings but this appeared to have no effect because complaint issues discussed, for instance, in May 2008 were still to be resolved in December 2009.

During the latter half of 2009 there was a spate of power outages which GPL claimed was caused by a short fall in power generation due to an increase in demand as well as old and broken down power structures. The outages were a major concern for consumers and businesses alike because of the impending holiday season and all its implications for cold storage, decorations, festivities—and the necessity for a constant and reliable electricity supply for which such an occasion demands. The situation, however, improved during Christmas because the company commissioned a new generation plant in Kingston, Georgetown, which provided a reliable 21 megawatts of power.

There was a great deal of talk from the power company concerning its new Customer Information System (CIS) and its Prepaid Metering System.

The CIS is scheduled for implementation within the first quarter of 2010. The new system is said to be state-of-the-art technology in terms of providing customer information at the company's "finger tips". The company opined that the current customer database is "archaic" and cannot handle customer information efficiently in terms of capacity/storage /speed. Previously a customer would receive his/her bill almost two months after the period of consumption. The CIS is considered to have the capability to shorten the period in which a customer is billed as well as to fast track applications for new services and change of tenancies, etc.

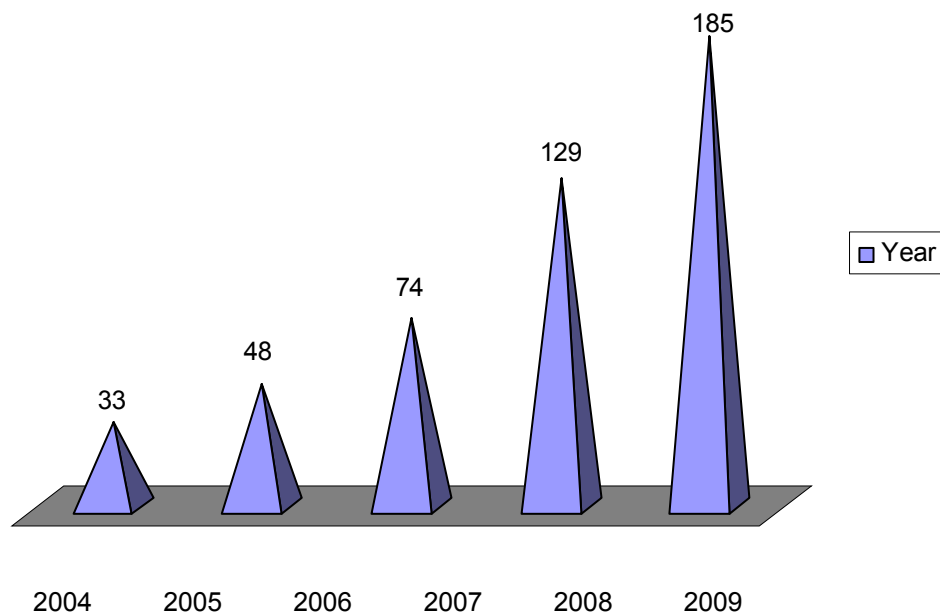
The prepaid metering system was also introduced during the year in review. According to the power company, this system is geared towards conservation of electricity as well to thwart stealing to a certain extent since it would be difficult to eradicate theft completely. Customers would be in a better position to conserve since the "user interface" which is part of the system would indicate the amount of kilowatt hours (kWh) remaining which would prompt customers to reduce usage until they are able to replenish—by maybe switching off the television set, lights, etc. Purchasing kWh is somewhat like buying a prepaid phone card where you enter a set of digits into the system. The system is designed to inform you when the "credit" is about to finish, in which case you will recharge.

Due to widespread electricity theft by businesses GPL continued to install the ITRON meters on business premises. They are used to deter/curb the unlawful interference with the company's installations (stealing) by businesses. They are read using a hand-held computerized reading device—more commonly referred to as the "swipe technology". The reader merely passes by the meter, points the device and the reading is recorded. No contact has to be made with the meter. It is described as a "hands off" approach in transferring the recorded data to the customer database—meaning that it does not require the meter reading/consumption it recorded to be imputed manually in the company's

customer database which still is the norm in the majority of cases where the Itron meters are not used—for instance, on residences and small commercial entities..

Guyana Water Inc

There has been an increasing number of complaints against GWI through the years 2004 to 2009—as the following graph illustrates.



As with the previous years, the majority of the complaints against GWI related to billing queries such as estimated consumption and previous balances and the lengthy period the GWI takes to make the necessary corrections for over-billing of customers' accounts.

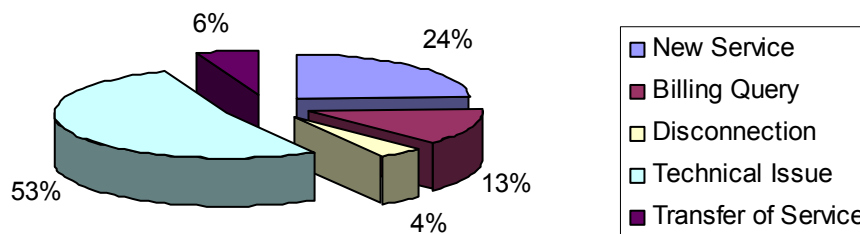
Estimated consumption was a sore point in 2008 and this continued to be a contentious issue in 2009. Many customers' consumption was estimated for prolonged periods despite actual readings taken by meter readers. This issue had a more profound effect on customers who were overbilled and who had to wait until corrections were vetted by a special committee before the credit adjustments can be made to the billing system and this committee did not meet regularly.

Customers also continued to have problems deciphering the information on the bills issued by GWI. The Commission again in 2009 indicated to GWI that customers are having difficulties interpreting their billing information and that the company should try to make the bills more customer-friendly.

The response rate for complaints filed with GWI had improved slightly in 2009. The Commission was able to secure rebates of \$1.9 million on behalf of customers for 2009 based on the 78% resolution rate to complaints filed with the water sector.

Guyana Telephone & Telegraph Co. Ltd

The Commission received 67 complaints against GT&T for 2009—a decline of approximately 9% from 2008. At December 31, 2009 GT&T’s response rate was very good (84%). This rate was slightly down by 13% when compared to 2008 (95%).



GT&T Complaints by Categories for 2009

Technical issues and applications for wire line service were the prevailing complaints in 2009.

Consumers are desirous of having the wire line service because of its reliability and the fact that it remains a cheaper alternative to the cellular service. The provision of this service is said to hinge on the availability of switches in certain areas. It is also hindered by the fact that certain areas are not fully regularized although they may have been inhabited for many years.

In 2009 GT&T continued to experience setbacks with vandalism of phone cables which caused disruptions in service to hundreds of subscribers. These cables were apparently destroyed for their copper content and GT&T had appealed to the general public for assistance in combating this problem.

Billing complaints generated a mere \$1,392.00 in rebates from GT&T at December 31, 2009.

PUC Public Awareness Campaign

The Commission continued with its public awareness campaigns from previous years in the form of Consumer Awareness, Consumer Outreach and Schools' Education Programme. Representatives were invited from all of the regulated utilities to participate in these programmes. The programmes were successful in terms of not only accomplishing the basic objective of creating an awareness of the PUC—but highlighting the problems consumers are experiencing in the various communities.

The PUC also made its presence felt by establishing a booth at the Guyana National Exhibition at the Sophia Exhibition Complex in 2009.

The following is a list of the places the PUC visited in 2009 in its bid to reach out to consumers and potential consumers.

Consumer Awareness Roster - 2009

- Stabroek Market – January
- Muneshwar’s Store, Georgetown: – March
- Woodlands Hospital, Georgetown:May
- Bourda Market, Georgetown:..... July
- Lusignan Market, E.C. Demerara..... September
- Shell Gas Station (New Market Street, Georgetown)..... November

Consumers Outreach Roster – 2009

- Helena’s Primary School, Mahaica, E.C. Demerara:February
- Soesdyke Primary School, E.B. Demerara:..... April

Schools’ Education Roster – 2009

- Brickdam Secondary, Georgetown:..... September
- ISA Islamic School, Georgetown:..... November

Guyana National Exhibition – September 2009

Staff Training

Staff members participated in the 7th Annual Conference of the Organisation of Caribbean Utility Regulators (OOCUR) which was held at the Grafton Beach Hotel, in Tobago.

ENGINEERING DEPARTMENT – 2009

Shankar Singh – Engineer



The Engineer, who joined the Public Utilities Commission from the second quarter of 2009, concentrated initially on outstanding GPL consumer complaints, which were technical in nature and previously filed with the utility. Some were in gridlock and technical analyses did pave the way for paths to resolution.

A few of those matters can be recalled quite vividly. There was one case where a customer was billed for large amounts over a five-month period. Our analysis showed that it was not possible for the customer to consume the amounts billed by GPL. Calculating the maximum amps from the kWh billed for each of those five months for 24 hours per day, each day of the month, resulted in 13.5 – 40.0 Amps. It seemed highly unlikely that the customer's 10-Amp meter could have sustained such measurements continuously for five months and still have a measurement accuracy of 99.3% when verified by GPL's Bird Dog Plus Analyzer a few years later.

In another matter, a customer reported that when a new tenant in the bottom flat of her apartment building got his service, her consumption escalated. GPL investigated and discovered that their crew had apparently connected the line side of the new tenant's meter to the load side of the complainant's meter, and instead of crediting the customer's account, GPL advised her that her consumption will be monitored to see if a credit was warranted. Our analysis showed that when the new tenant's consumption was subtracted from the complainant's consumption, her consumption was consistent to what it was prior to the new tenant's service and returned to normal after the anomaly was corrected. However, GPL had already billed both the new tenant and the complainant for the new tenant's consumption and advised the complainant that her account will not be adjusted.

GPL kWh Estimates and Justification

GPL usually estimates consumers in situations where electricity meters are under-recording, and when there has been unauthorized interference of meters which prevents them from accurately recording the energy supplied.

Many times the estimates appear to be unreasonable and unjustified. Despite the Hon. Prime Minister's letter to GPL, dated October 5, 2007, on Debit and Credit Adjustments, there appears to be insufficient adherence to his instruction, which is required to justify estimates.

The Prime Minister had instructed that, "*Where debit or credit adjustments are applied to customers' bills GPL will provide such customers with a written explanation/justification and a detailed statement showing how the amount was computed. Such explanation must accompany the bill or must be mailed to the customer within five (5) working days following the bill issue date.*" This Commission is not aware of any customer, which has a GPL matter before the PUC and received a bill in 2009 with a debit charge, which was followed by any detailed statement of the debit within five working days of the bill issue date. The PUC is of the view that that the Hon. Prime Minister's instruction is not complied by GPL.

At times GPL attached an estimate sheet, without any details of the computation, to some of their responses to our requests for the detailed statements. Some of the estimates for consumption of appliances also appear to be unreasonable and unjustified. For example, according to the said estimate sheet, a consumer with a Compact Fluorescent Lamp is estimated to consume more electricity than a consumer with a 20-watt fluorescent lamp. A water pump is estimated to be used for more than 2½ hrs daily while the average household is alleged to use a typical electric sewing machine from Courts for at least 4½ hrs every day.

In 2010 the Commission plans to renew its efforts to have GPL comply with the Hon. Minister's directive and to have GPL come up with estimates that are considered to be reasonable for both the consumer and the utility.

Pre-paid Meters

The Commission is very pleased with GPL's implementation of the pre-paid metering system and is cognizant of efforts to promote it, which include several catchy jingles on the radio. The Commission believes that the pre-paid meters will have a positive impact in GPL's efforts to not only increase its revenue for the same amount of generation, but will also provide some relief for GPL's overloaded feeders, which the utility often complains about. Some consumers will have no choice but to reduce their consumption in an effort manage their energy consumption more efficiently for a reduction in electricity costs.

This was noteworthy to be mentioned since in page 49 of the PUC's Annual Report of 2006, the then Engineer reported that pre-paid meters were discussed with GPL officials. However, at that time it was indicated that such meters were not practical for Guyana.

Frequency change from 50 Hz to 60 Hz in some sections of Georgetown

In the latter part of 2009, GPL embarked on an exercise to convert the supply frequency in some sections of Georgetown from 50 Hz to 60 Hz. This conversion should ultimately result in a reduction in system losses from its frequency converter.

In addressing the issue of the frequency mismatch between the 50 Hz meters and the 60 Hz supply, the CEO was reported in the Stabroek News of September 28, 2009, as saying that, "*If I have a 50 Hz meter and a 60 Hz supply, the meter tends to under-record*". Our research however, had revealed otherwise. Errors would be introduced when an induction meter, which is used at a frequency different from that of the circuit on which it was designed to operate, is used at power factors other than unity. The meter may either over record or under record, depending upon whether it was designed for a higher or lower frequency than that of the circuit on which it operates and depending on whether

the current is lagging or leading. The effect of a frequency above normal will be to make the meter over record on lagging currents. Therefore, for typical consumer loads which can be mostly inductive in nature, this would be the expected effect on the meter if it was designed for 50 Hz and the supply frequency is 60 Hz. A frequency below normal will cause the meter to under record on lagging currents. Again for inductive loads, a 60 Hz meter on a 50 Hz supply will tend to under record on lagging currents.

This was also substantiated by the Final Report of the *Consulting Services for Evaluation and Prioritisation of Loss Reduction Investments* under the *Guyana Unserved Areas Electrification Programme*, which was done by Power Planning Associates Ltd. Page 23 states, “*Many customers’ installations in the Georgetown area which operate on the 50 Hz system have 60 Hz meters installed. The meter manufacturer (ABB) states that in general these meters are operating outside their design parameters and will (unless they are designed specifically to be independent of frequency) tend to run slow.*”

The CEO’s comment in the Stabroek News’ article could have been correct for currents at leading power factor. However, his load would have had to be capacitive in nature and this would contravene Section 7.3 (d) of GPL’s Standard Terms & Conditions for Electric Services which says, “*The customer shall not operate at a leading power factor ...*”.

It was thought that the over-recording of a 50 Hz meter on a 60 Hz supply should not result in a significant increase in consumption. The PUC intends to monitor GPL’s replacement of the frequency mismatched meters for subsequent replacement by GPL.

The Itron Sentinel Electronic Meter

GPL now uses the Itron meter for many commercial and industrial services. Unlike the analogue meters which were usually installed within “hand reach”, this meter is now pole mounted and thus reduces the incidents of theft.

Issues sometimes arise when some consumers experience meter change to the Itron meter and these include multiplier issues and access to meter number and readings. The matter

was discussed at one of the PUC/GPL meetings on consumers' issues where the PUC suggested that the following recommendations be adopted for the Itron services:

- i. Customers should be allowed to verify the specifications of their metering transformers (CTs and PTs). This is usually attached to the measurement transformers which are located in the meter box.
- ii. Customers should be asked to sign a document (with a copy provided to the customer) to acknowledge the following data when such meters are installed.
 - (a) Meter number.
 - (b) Specifications of the Current Transformers and Potential Transformers (if any).
- iii. Some arrangement should be made where customers can access or acknowledge their monthly meter readings.

In another matter before the PUC, GPL replaced an analogue meter with an Itron meter for a customer on industrial tariff around September 2007. Due to a programming error, the Itron meter could not provide monthly readings to bill the customer. As a consequence, the customer was estimated for approximately one year with energy charges that averaged about \$1,765,777 per month, which were consistent with the consumption from previous years with the analogue meter. So for about one year neither GPL nor the customer had access to the actual consumption, while it took GPL the same amount of time to figure out the problem.

After resolving the problem a year later the customer then received a bill with an energy charge of \$15,598,055.00 for the 12th month and was told that GPL underestimated the consumption for the previous 11 months.

This electronic meter will no doubt benefit the utility tremendously by reducing the incidents of electricity theft. However, GPL should make these installations more “customer friendly” and avoid situations where customers will receive estimated bills for more than “*a reasonable minimum*”.

In-service measurement accuracy verification of Electricity Meters

With the acquisition of the Bird Dog Plus Analyzers, GPL is now better equipped to perform credible verification of the measurement accuracy of electricity meters.

The 5000 and 6000 Bird Dog Plus Analyzers are microprocessor-based digital instruments that are specially designed for in-service testing of metering installations in the field with percentage accuracy of 0.2%. The results from these instruments can provide good guidance on the performance of meters and can also assist the Commission in ensuring that both the consumer and the utility gets a fair deal for matters that involve credits or debits due to the over-recording or under-recording of meters.

The Commission is however, cognizant that the Bird Dog Plus Analyzer, with all accessories and probes, is calibrated at the factory as a total system and expects that the system will only be used with the accessories provided and in the manner prescribed by the manufacturer. The PUC further expects that each system used by GPL will be recalibrated once every 2 years, as recommended by the manufacturer, if credibility of the results is to be considered.

GWI’s Tariff Consolidation

A tariff consolidation proposal, which was subsequently withdrawn, was made by GWI. The proposed tariff structure was an attempt to consolidate the current 30 odd bands into fewer bands, with adjustments to accommodate fixed charges which the current tariff structure does not have. The current tariff needs to be restructured to include fixed charges and to reduce the number of bands it contains. It is felt that this can be achieved without any significant, if any, increase in tariffs.

PUC FINANCIAL REVIEW – 2009

Orin Edghill – Accountant



At the time of writing this report the audit of our financial statements for the year 2009 was underway. It is hoped that this will be completed expeditiously.

With the launching of U-Mobile Inc (Digicel) there has been rapid expansion of cellular services offered to the general public. This expansion has had a positive impact on the Commission's finances since its income is directly related to the revenue of the utility companies in the telecommunications sector. The Commission has however, been prudent in the management of its finances, which has also had a positive impact on the net financial position as well.

However, with this prudence has come cancellation of planned expansion in Regions 3, 5 and 6. The Commission will however, have to face this cost sometime in the near future as this is pivotal to providing an adequate service to the consumer and to dealing with the changing landscape. As new technologies/services emerge its necessary for the Commission to equip itself to better perform its mandate.

As per the Commission's strategic plan it's hoped that the necessary expansion work and skill development will take place in 2010/2011. These changes will come at a cost and it's hoped recent changes that boost our finances will go a large way towards funding them.

The following are our un-audited financial statements for the year ended December 31, 2009.