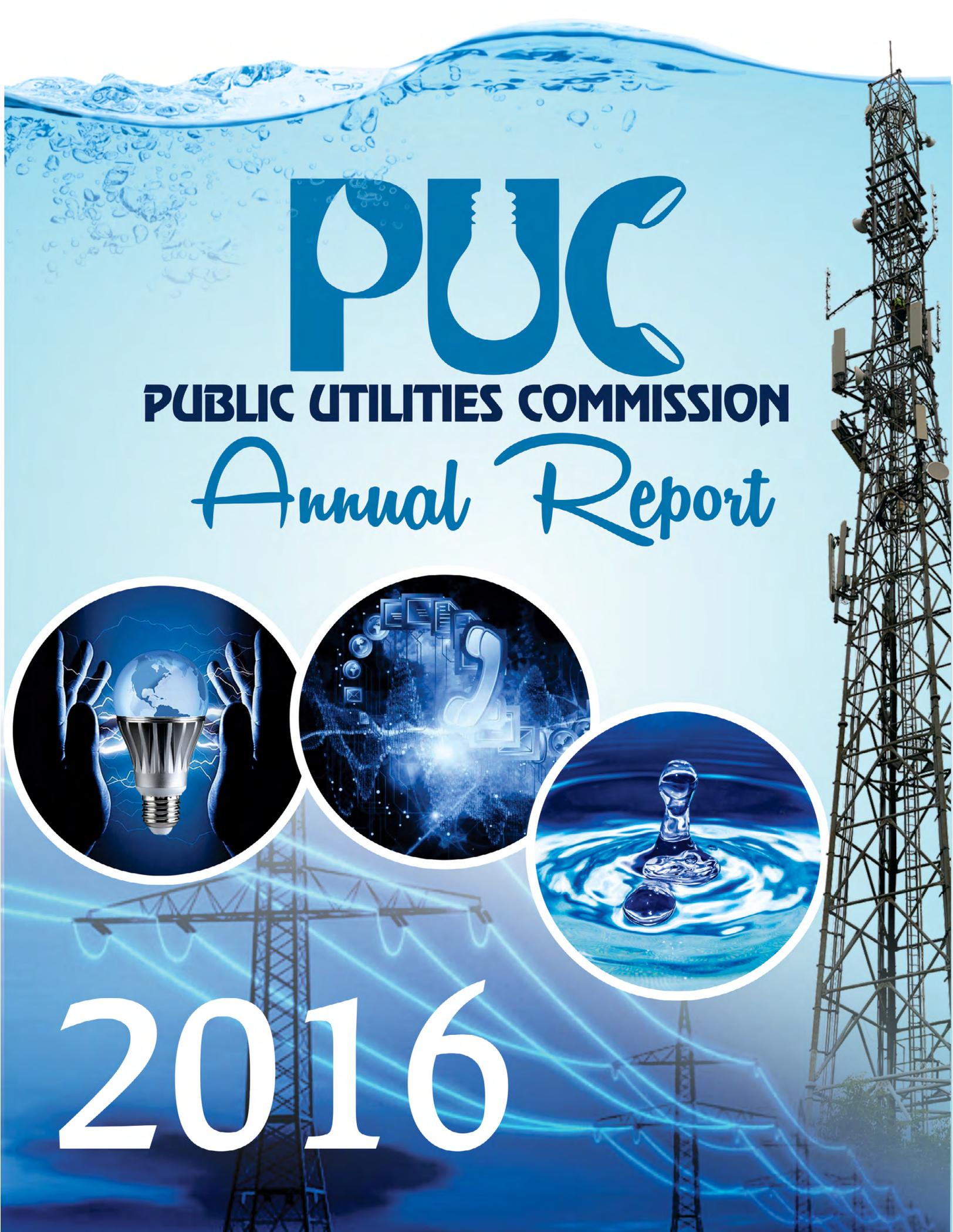


PUC

PUBLIC UTILITIES COMMISSION

Annual Report



2016

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CHAIRMAN'S STATEMENT

Justice Prem Persaud (ret'd), CCH



Justice Prem Persaud (ret'd), CCH

I am pleased to present the Commission's 2016 annual Report in which I propose to set out facts, which may be considered interesting for those who have a flair for records historical in the Regulatory field.

The Commission is a body corporate established by legislation, and performs regulatory, investigatory, enforcement and such other functions conferred on it by the legislation. This authority was really the requirement identified in the agreement between **the Government of Guyana and Atlantic Tele-Network**, particulars of which appear in this report. The agreement was to establish an independent statutory authority to regulate the operations of companies or other persons engaged in providing telecommunication services operating in this country, with a view to securing compliance with the relevant laws and to protecting the interests of persons

making use of such services, referred to as subscribers. The Authority (Commission) will be empowered to determine questions as to the reasonableness of the rates charged or to be charged by GTT for services rendered by it and the decisions of the authority will be binding on GTT. (Articles 6.7: 6.8 of the Agreement dated 18th June, 1990 refer.)

The Government introduced legislation in terms of the agreement and also took the opportunity to legislate for other utilities referred to as the PUBLIC UTILITIES COMMISSION ACT and numbered No. 26 of 1990. This Act applied, with effect from its commencement, to every public utility engaged in (a) providing any service in the production, generation, storage, transmission, sale, delivery, furnishing or supplying electricity directly or indirectly to or for the public, (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, cable television, telecom service providers, internet and other telecom network service providers, radio common carriers or cellular mobile providers or any other method of transmission offered to the public or offered as common carriage in the future: And, in due course, subject to the policy of the Government of the day, any other service specified by the Minister by order, being any of the following,

to wit, Carriage of passengers in motor buses or hire car: Airport and airline services: Carriage of goods for hire or reward by goods vehicle: Lighterage or Cargo handling: Dockage, Wharfage or related cargo services, and Water supply services, except retail deliveries.

The Act also provides for the Commission to be a body corporate which shall consist of a Chairman and four other members to be appointed by the Minister from among persons appearing (to the Minister) to be of high character and integrity and to be qualified as having extensive and relevant professional expertise in trade, finance, economics, law, accounting engineering or business management or extensive experience in matters relevant to the functions of the Commission. When the Commission was first constituted the Chairman was appointed for a period of three years, with the other members being appointed on a staggered basis for between one and two years. Any subsequent appointment or re-appointment of the Chairman and members shall be for three years.

The appointment on a staggered basis was undoubtedly catered for smooth transition of members to allow for continuity, and for a quorum of at least three members inclusive of the Chairman to be always in place.

The first Chairman appointed was Mr. JOSEPH TYNDALL, A.A., C.C.H: followed by Mr. PAMADATH J. MENNON, A.A., then the current Chairman Justice (ret'd) PREM PERSAUD, C.C.H. Over the years eleven Commissioners were appointed (not collectively), but all on a part-time basis. The Chairmen were all full-time appointees.

Members of the Commission are, of course, subject to the provisions of the Act, and in the exercise and discharge of their functions, shall not be subject to the direction or control of any person or authority. In the exercise of such functions the Commission shall have the power to initiate and conduct investigation into the operations and standards of service of any public utility. And the Commission shall also act in an advisory capacity of the Minister in such matters concerning public utilities as are referred to it by the Minister.

Prior to the incorporation of the **Guyana Telephone and Telegraph Company (GTT)** there was the Guyana Telecommunication Corporation which was wholly owned by the Government by Order No. 11 of 1967, and continued under the Public Corporations Act 1988 – Act No 21 of 1988. In due course, on June 18, 1990 by an agreement between **the Government and Atlantic Tele-network Inc (ATN)** of the USA, the Government agreed to transfer to ATN and ATN agreed to purchase from the Government shares representing eighty percent (80%) of the issued share capital of GTT, a private limited company to be incorporated by the Government and shall take over the business, assets and liabilities of the Guyana Telecommunication Corporation, a public corporation wholly owned by the Government. The government eventually sold the remainder 20% of the shares to a Chinese Company.

The agreement also provided for the establishment of an Independent Statutory Authority to regulate the operations of companies or persons engaged in providing telecommunication services and operating in Guyana. The GTT was granted a licence to provide or undertake certain services throughout the licensed area, for example, public telephone, radio telephone (except private radio telephone systems), pay station

telephone services, national and international voice and data transmission (among some defined services), and the licence shall be an exclusive one for a period of twenty years, which at the option of GTT and subject to the provisions of the agreement be renewable on an exclusive basis for a further period of twenty years. (In 2010 GTT did exercise the option and the licence was renewed for a further period of 20 years). GTT is also entitled, in terms of the agreement, in determining the rates to be charged to the subscribers, a minimum rate of return of 15% on capital dedicated to public use. That rate is not guaranteed – it is only an entitlement - since GTT has obligations to consumers in terms of the agreement.

Still on the Telecommunication issue, we had CEL*STAR GUYANA with interests in France, which opened its doors in February 2001. This company was granted a licence to operate, but we soon suspected that the intention was to trade with it. In 2007 the operators transferred their interests to DIGICEL which has been and is still doing a good service providing for the needs of the consumers. The Company offered competition to GTT and tends to control the market – their operations are primarily concerned with mobile services. GTT has the monopoly for the land line and international traffic. All international traffic ought to go through GTT's infrastructure but various efforts have been in play to by-pass them and offer cheaper rates well below the PUC approved rates.

Another licence was granted to a company – CTL –. That Company operated for a short period of time but underperformed, and its licence was not renewed.

ELECTRICITY

Electricity generation in this country had been a patchwork provided by a few entities, and in the early years Georgetown was powered by the **International Power Company of Canada (IPC)**. **Alcan** and **Reynolds** of Canada (**Bauxite industry companies**) provided power in the upper Berbice area and New Amsterdam and they were powered by Independent Power Producers with an installed capacity of 3.7 megawatts. At that time, the company's operations were not continuous and customers received only a few hours of electricity each day.

In 1925 IPC sold its assets to a company - **The Demerara Electric Company (DEC)** - and maintained the steam power station at Kingston, Georgetown. It had an installed capacity of 3.75 megawatts (MW) and was operating for only a few hours per day. In 1960 the **BG Electric Company (BGEC)** purchased as a going concern the assets of DEC. Three steam powered 10 megawatts stations were acquired and a new era of electricity expansion began. Following independence in May 1966 the BGEC was nationalised and the Guyana Electricity Corporation (GEC) was established. This was a public corporation solely owned by the Government. It may have been for the first time that a Guyanese of humble origin was appointed Chairman of the Board of Directors.

On the 1st October 1999 the government, at the behest of the International lending agencies, agreed to transfer the undertaking to the Electricity State Board of Ireland (ESBI). This Board agreed to purchase from

the Government shares of 50% plus one of the issued share capital of the Guyana Power Company (GPL), a public company which was incorporated by the Government and which took over most of the assets and some of the liabilities of the then GEC, a public corporation that was solely owned by the Government.

The company's licence tied it to deliverables, the most important of which was a reduction of system losses, which at that time was approximately 36-38 percent. By the end of 2001, it became apparent to the Commission that GPL seemed unable to reduce the losses, which had grown under its watch to 42%.

We (The Public Utilities Commission) held a public hearing that afforded GPL the opportunity to explain the reasons for the upsurge in the losses. In its judgment, the utility showed no resolve in achieving the agreed target and we imposed a penalty of \$1.368 billion for this infraction. The penalty was based on the formula calculated by the Commission on what would have been the savings in kilowatt-hours to the consumers had the target been achieved. GPL considered that the fine would have had serious implications in its quest to borrow funds from financial institutions. ESBI as a result took a decision to sell its shares to Government for one dollar and left. Since then the company (GPL) has remained wholly owned by the Government.

WATER and SEWERAGE

Prior to 2002 consumers were supplied with water and other related services by two separate agencies, namely GEORGETOWN SEWERAGE AND WATER COMMISSION (GS&WC), and the GUYANA WATER AUTHORITY (GWA). GWA's responsibilities were the supply and maintenance of the water in certain rural areas, whereas GW&SC supplied the greater Georgetown areas with water and sewerage services. GUYWA was not responsible for the supply of water for the nuclear housing areas attached to the sugar estates since the SUGAR INDUSTRY LABOUR WELFARE FUND COMMITTEE (SILWFC) was the agency charged with the responsibility for the supply and maintenance of water in those areas.

The Government thought that one agency or authority was more desirable and as a consequence, in terms of the Companies Act 1991, it introduced the WATER & SEWERAGE ACT No 5 of 2002 which by virtue of Section 90 thereof, the GUYANA WATER INC was constituted as a public company limited by shares. A licence was granted to it that specified it supplies water, sewerage services and advisory services for public purposes in the **authorised areas**. The authorised areas consisted of the Republic of Guyana including territorial waters and lands and structures lying thereon, **but shall not include certain areas or communities** (set out hereunder), until such time as the assets within these areas or communities are transferred to GWI by order of the Minister. Those areas referred to above were:-

Ocean View and Zeeburg, West Coast, Demerara, and Kwakwani, Berbice River.

Ocean View and Zeeburg were supplied by systems operated by the SILWF Committee, and Kwakwani by the Mining Company.

It meant, in effect, that the GS&WC and GUYWA were merged as GWI Inc. and this new Company assumed responsibility for the ownership, management, control, protection and conservation of water resources, the provision of safe water, sewerage services and advisory services and the regulation thereof and for matters incidental thereto or connected therewith.

In or about 2002 International Donor Agencies had agreed to provide loans for the recapitalisation of GWI, and SEVERN TRENT an English company, put together a team of qualified personnel to manage the company. As was the case with GPL, the new management was given deliverables and time frames in which each was to be achieved. Two of the most important deliverables were (a) Reduction of non-revenue water, and (b) Achieving on an incremental basis the delivery of potable water that confirms to World Health Organisation Standards.

Neither deliverable was achieved and the contract was terminated, mainly for non-performance. After their departure the management of GWI became fully Guyanese, but the issues that led to the departure of the Management Team continue to be a bugbear for the current management of the Company.

GENERAL and CURRENT

IT MAY NOT BE GENERALLY KNOWN that the Public Utilities Commission is not a Budget Agency, meaning that we are not financially dependent on the Ministry of Finance in the operating and discharging of our several obligations and responsibilities. Our income is assessments made on the Utility Companies under our purview. Members of staff of the Auditor General Office conduct yearly audits, and we have had clean reports throughout the years, the last being for year 2015. The 2016 audit will be completed shortly.

The Commission was originally housed in the eastern lower flat of Parliament Building, directly under the State Assembly. We removed therefrom in 2002 when the premises were to be converted to offices for Parliamentarians, we were told. We searched for many a day and eventually rented a building immediately east of the Mosque in Church Street, Queenstown, Georgetown. That building was and is still owned by the Mosque.

We felt the need for our own premises, and we saved funds from time to time from the income we were getting as assessment fees. In 2014 we purchased our present property in which we are comfortably housed. The transport (or title) for same is in the name of the Public Utilities Commission. We are headquartered at lot 106 New Garden Street, Queenstown, Georgetown.

In 2012, we established a branch office on the Corentyne. We were receiving many complaints and enquiries from that region and we considered it necessary to set up offices there. We have in our employ two charming young ladies, and they are doing a fine job. You can review their contribution submitted in our attached Reports.

We are in discussion with residents and officials in the expectation of setting up another branch office on the Essequibo Coast. In due course, shortly we expect, to achieve this undertaking.

We have our monthly Statutory Meetings and I acknowledge the effort and work of the Commissioners, which have contributed to a smooth and efficient running of the Commission.

I wish to acknowledge with very deep satisfaction the work of all members of staff who by their dedication and understanding of their responsibility, nay, duty, not only to the Utility Companies but to the consumers and members of the public who long for and are entitled to efficient services at reasonable costs. As you peruse the several reports contained in this publication you will see the nature and quality of work done by staff.

I say to them all, continue to serve our people who depend on you in their hour of need and you will be blessed.

INTRODUCTION

The Public Utilities Commission (PUC) is pleased to present its twenty-fifth Annual Report in compliance with Section 85 of the PUC Act, Act No. 10 of 1999, which informs of our activities and other related matters during the year.

The PUC is a body corporate, which was established by the Act that was passed into law on the 1st of October, 1990. This Act was amended from time to time to give effect to evolving issues as they impact on the Commission and the utilities under our purview.

The PUC Act allows for the appointments of a Chairman and four Commissioners. The following members comprised the Commission in 2016:

- Justice Prem Persaud, CCH - Chairman
- Mr. Maurice Solomon - Member
- Ms Dela Britton - Member
- Mr. Rajendra Bisessar - Member
- Mr. Badrie Persaud - Member (up to September 30, 2016)



MISSION

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

VISION

- ✓ To create an environment of universal access to services in the public sector, and a high quality of service, 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 policies.
- ✓ To provide a fair environment for the provision of safe and adequate service for consumers at reasonable costs, and ensuring the financial integrity of the providers.
- ✓ To investigate and resolve in a timely manner complaints filed 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. It also has the power to initiate and conduct investigations into the operations and standards of service of any public utility under its purview.
- ✓ While it is not involved in matters of policy, it shall act in an advisory capacity to the subject Minister in such matters concerning public utilities as are referred to it by the Minister.
- ✓ In the exercise and discharge of its functions the Commission shall not be subject to the direction or control of any person or authority.

PUBLIC UTILITIES

A 'public utility' is defined as any person who or which owns facilities used to provide, or provides the following services:-

- (a) Electricity and energy related matters.
- (b) Telephone, telecom services, cellular/mobile.
- (c) Water and sewerage services.

The public utilities currently under the purview of the Commission are:

- Guyana Telephone & Telegraph Co. Ltd. (GTT) - From 1990
- Guyana Power & Light Inc (GPL) - From 1999
- Guyana Water Inc (GWI) - From 2003
- U-Mobile (Cellular) Inc. (Digicel) - From 2007

Filing a Complaint

Any consumer who has a complaint against any utility company should engage with the service provider prior to approaching the Commission. If not satisfied, a complaint could then be filed with the Commission who will act on his/her behalf.

Complaints may be submitted to:

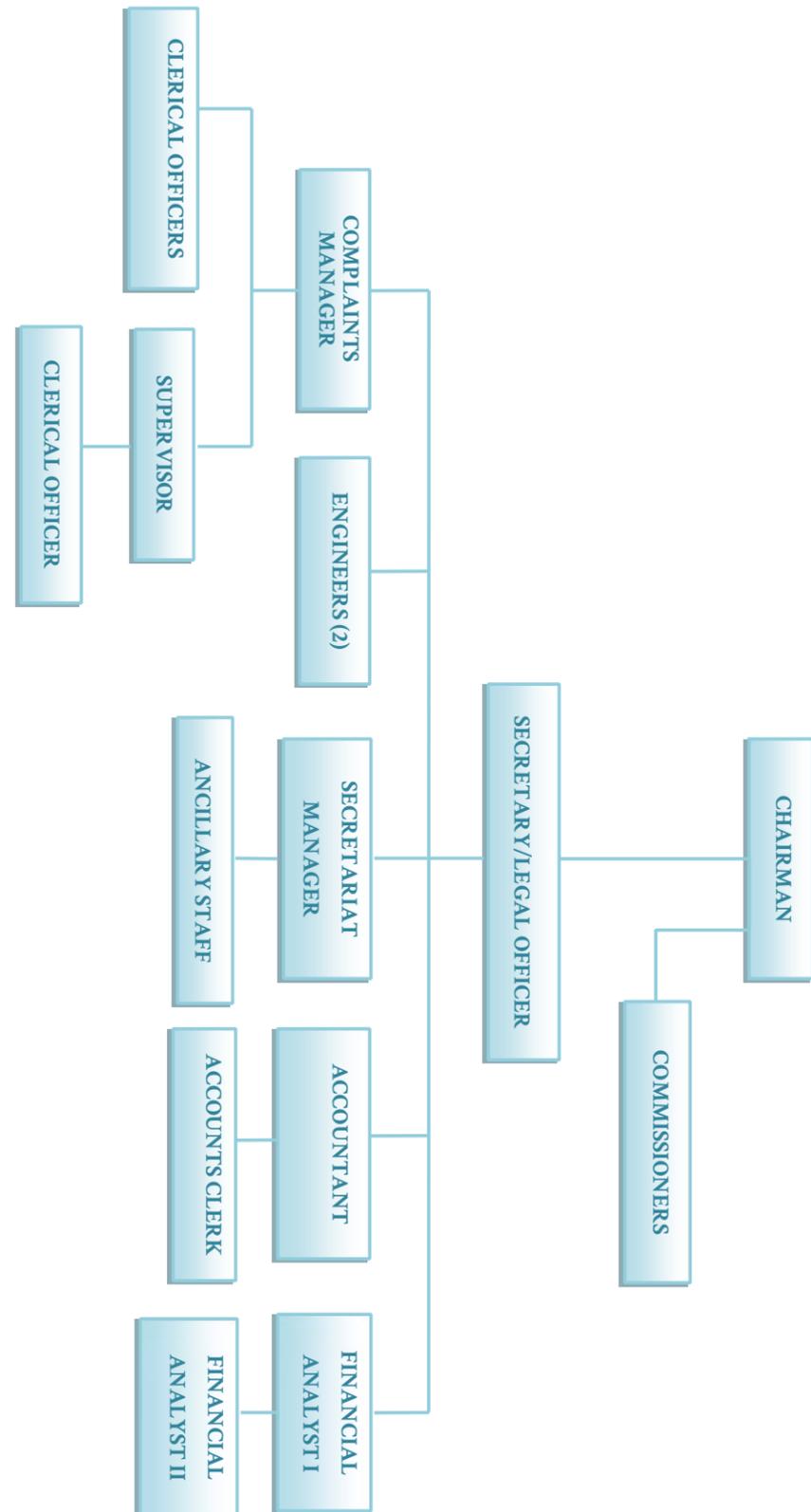
GEORGETOWN OFFICE:

- POST/VISIT - P.O.B. 1081 /Lot 106, New Garden Street, Queenstown, Georgetown
- FAX - 592-227-3534
- TELEPHONE - 592-226-7042/227-2182
- WEBSITE - www.puc.org.gy
- HELP DESK - **Monday – Thursday: 8:00 – 16:30 hrs.**
Friday: 8:00 – 15:30 hrs.

BERBICE OFFICE:

- Public Utilities Commission,
- Lot AV, Free Yard, Port Mourant,
- Corentyne, Berbice
- Tel/Fax: 592-336-6077

ORGANISATIONAL CHART 2016



PUC Website

The PUC's website which was launched in 2009 is continuously being updated. The Complaints Procedure, Rules for Determining Consumers' Complaints, presentations, publications, notices and documents pertaining to Public Hearings, Complaints' monthly reports from the January 2011, Annual Reports from 1991 and all of the PUC's Orders issued over the years can be accessed on the website. Of interest, since the year 2014 audio recordings of hearings have been placed on the website.

The website may be used to file a complaint, and has contact details for the PUC, links to the utilities under its purview, as well as links to other regulatory bodies throughout the Caribbean.

Complainants are advised to provide all relevant information/documentation in support of their complaints, including any response from the utility company when filing a complaint with the PUC.

Staff Development

In 2016 staff members were trained in several areas of interest regarding the work of the Commission. These sessions gave the staff an opportunity for personal and professional development. The capacity of the Commission has been bolstered considerably with our on-going training programs. Members are required to duly share their knowledge gained through external training sessions with other staff members.

Internal Training:

May 31	Rate Of Return and Rate Base –PUC Financial Analyst II, Ms Yogwattie Sookram (Facilitator)
May 31	4G (Fourth Generation) –PUC Engineer, Mr. Nikita Somwaru (Facilitator)
June 15	Configuration in Meter Box – PUC Engineer, Mr. Nikita Somwaru (Facilitator)
June 16	Electrical Safety Awareness –PUC Engineer, Mr. Nikita Somwaru (Facilitator)
Oct. 11	What Contributes To GPL's Commercial Losses? –PUC Engineer Mr. Nikita Somwaru (Facilitator)

External Training:

Feb. 8 & 9	Strengthen Regulatory and Market Regimes in the CARICOM Single Market and Economy (CSME) – hosted by the Ministry of Business, Consumer Affairs Division, Georgetown.
Mar. 17	Capacity Building within the CARIFORUM in Support of the CARIFORUM-EU Economic Partnership Agreement – hosted by the Guyana Competition and Consumer Affairs Commission.
Mar. 17	Workshop on Competition Law and Policy – hosted by the CARICOM Competition Commission.
Apr. 29	Workshop on Spectrum Management ¹ – hosted by the Ministry of Public Telecommunications with support from the Federal Communications Commission (FCC).
Apr. 11-15	Monitoring and Evaluation Workshop – hosted by the Ministry of Finance.
May 16-20	Competition Law and Policy (Level II) – hosted by CARIFORUM-EU-Suriname.
Jun. 6	GEA's Energy Efficiency Workshop – in collaboration with the Latin American and Caribbean Efficiency Programme.
Jun. 13-24	PURC/World Bank International Training Program – Florida, USA.
Jul. 14-15	Broadband Caribbean Forum 2016 – Supporting Life in the 21st Century – organized by the Commonwealth Telecommunications Organisation (CTO) and hosted by the Telecommunications Authority of Trinidad and Tobago.
Aug. 10	Meter Base Standards & Quality - hosted by Power-Lite Products Ltd. and Milbank Manufacturing Company.
Aug. 30-31	National Workshop on Energy Efficiency – hosted by the Guyana Energy Agency with support from the Latin American Energy Organisation (OLADE).
Oct. 17-21	Capacity Building in the Areas of Competition, Public Procurement and Customs and Trade Facilitation – hosted by CARIFORUM-EU.
Oct. 26-28	14 th OOCUR Conference/Training - Montego Bay, Jamaica.
Oct. 3-Nov 13	Comprehensive Regulatory Impact Analysis – on-line course hosted by the Public Utility Research Center (PURC) – Florida, USA.
Nov. 08-10	Workshop/Presentation on Acro-Norte Interconnection - hosted by the Guyana Energy Agency with support from the American Development Bank.
Nov. 11	Parliamentary Forum on Anti-Corruption - hosted by the National Assembly of the Parliament of the Co-operative Republic of Guyana and the Commonwealth Parliamentary Association of the United Kingdom.
Nov. 23	CARICOM Energy Month Workshop on Webinar: Pricing 11: My Electricity Bill - hosted by OOCUR in collaboration with CARICOM.

Awards

As is traditional, the Commission's annual staff recognition and awards ceremony was held on Friday, 30th December, 2016. The Commission generally recognises outstanding staff projects, punctuality, mode of dress, general helpfulness, and this being the 25th year of the Commission's existence, staff were required to prepare and submit a short in-house video-graphic presentation on an aspect of the Commission's service. This year also the Commission for the first time recognised staff for long service. The persons listed below received awards for their years of service to the Commission:

Long Service:

1. *Eslyn Herbert* - 20 years
2. *Vidiahar Persaud* - 11 years
3. *Moorsalene Sankar* - 10 years
4. *Vashtie Roopdeo* - 8 years



Ms. Eslyn Herbert, Clerical Officer - Long Service Awardee

Projects:

- 1st Prize** - Anuradha Mohabir and Sindamanie Veerasammy
Topic: Electromagnetic Radiation in Cellular Phones and its effects on Human Health.
- 2nd Prize** - Elroy Halley, Mark Gobin and Yogawattie Sookram
Topic: Commercial Losses – A Guyana Case Study.
- 3rd Prize** - Nikita Somwaru and Destra Bourne
Topic: Reducing Technical and Non-Technical Losses in the Power Sector.

In house Video - Graphic Advertisement

Topic: "OhhLawd Fed Up Wid GPL" (1st Prize)
Duration: 1:50
Cast: Nikita Somwaru, Vashtie Roopdeo, Errol Jodhan and Devika Nandranie

Topic: Introduction to PUC and its functions
Duration: 3:47
Cast: Elroy Halley, Yogawattie Sookram and Mark Gobin

Topic: Voice over Script/Infomercial
Duration: 2:15
Cast: Anuradha Mohabir, Destra Bourne and Eslyn Herbert

Topic: Script/Infomercial
Duration: 57 seconds
Cast: Sindamanie Veerasammy and Monique Welch

OBITUARY



The Late Ms. Bhagwandai Nandranie

It is with regret that we record the sudden death of Ms .Bhagwandai Nandranie (Devika), who passed away on August 7, 2016.

Ms. Nandranie commenced her employment with the Commission as Complaints' Clerk within the Complaints Division in 2005 and in 2006 was promoted to the position of supervisor. She assumed duty as Complaints' Manager in 2008 and became the Manager of the Secretariat in 2010.

Her work in the Secretariat involved interface with key utility players, members of the public, staff members and other critical stakeholders. She was responsible for formatting the monthly and annual reports, some aspects of public relations and was primarily responsible for the Registry and aspects of administration and human resources management.

Devika's tour with the Commission ended suddenly and prematurely and she will be greatly missed. The words of Robert Frost in his poem "Reluctance" ring familiar:

*Out through the fields and the woods
And over the walls I have wended
I have climbed the hills of view
And looked at the world, and descended.
I have come by the highway home,
And lo, it is ended.*

COMPLAINTS DIVISION

Georgetown

Overview

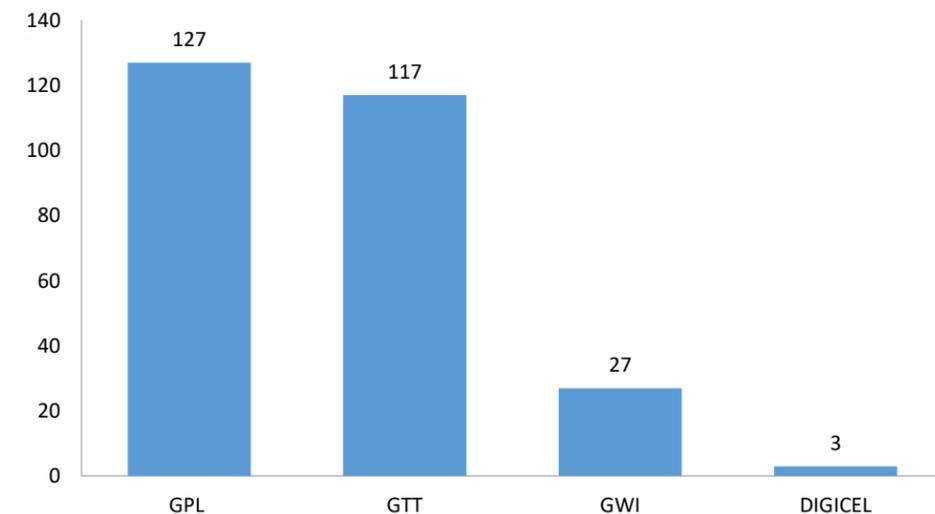
The Complaints' Division continued with its programme in 2016 to assist in the resolution of disputes between consumers and utility service providers.

The Division's public relation drive to expand the reach of the Commission has been moderately successful.

Complaints Received

At the end of December 2016, the number of complaints received by the Georgetown office was 274.

The chart below shows the complaints received for each of the utilities.



43% of the complaints received against GPL were for meter tampering/bypass. 20% represented Technical complaints and 17% represented billing issues. The remaining 20% were for application for service, compensation and tariff issues, disconnection and change of tenancy.

The complaints received from GTT followed the same trend as the previous year. 88% of all complaints received from the company were technical.

It was reported by GTT that the Fixed Wireless Access System that provides services to Essequibo, La Grange and parts of West Coast Berbice has become dysfunctional, with the result that there is an impairment of service to these areas. This has been so for some time now. The company has advised that they will be introducing a new data service (LTE) on the Essequibo Coast during the first quarter of 2017. However, they have been unable to give a timeframe when voice service to the affected customers in other areas would be restored. Many consumers are without their landline service, and GTT appears insensitive to the plight of consumers in these areas.

GTT has been issuing appeals to the public to report issues of vandalism of their landline network to the company. They noted that repairs can be costly, time consuming, and will invariably result in a number of customers being unable to access their services. The Commission joins in this plea.

The number of complaints received by the Commission against GWI in 2016 was 27. Most of the complaints related to perceived incorrect billings.

The table below sets out the type of complaints received by the Georgetown office for 2016 comparing the figures with the year 2015.

Issues	GPL 2015	GPL 2016	GTT 2015	GTT 2016	GWI 2015	GWI 2016	DIGICEL 2015	DIGICEL 2016	Total 2015	Total 2016
Application for New Service	6	12	4	5	1	1	0	0	11	18
Billing Issues	12	21	2	6	8	14	3	2	25	43
Change of Tenancy	4	2	0	0	0	0	0	0	4	2
Claims for Compensation	4	2	0	0	0	0	0	0	4	2
Claims for Wrongful Disconnection	8	8	0	2	1	3	0	0	9	13
Allegations of Tampering	43	55	0	0	0	0	0	0	43	55
Tariff Issues	0	2	0	0	0	0	0	0	0	2
Technical Issues	12	25	38	103	1	9	1	1	52	138
Transfer of Service	0	0	1	1	0	0	0	0	1	1
Total	89	127	45	117	11	27	4	3	149	274

We found that generally, complaints filed over the years with respect to mobile services are few and the resolution rate with respect to these complaints is commendable.

Complaints by Regions

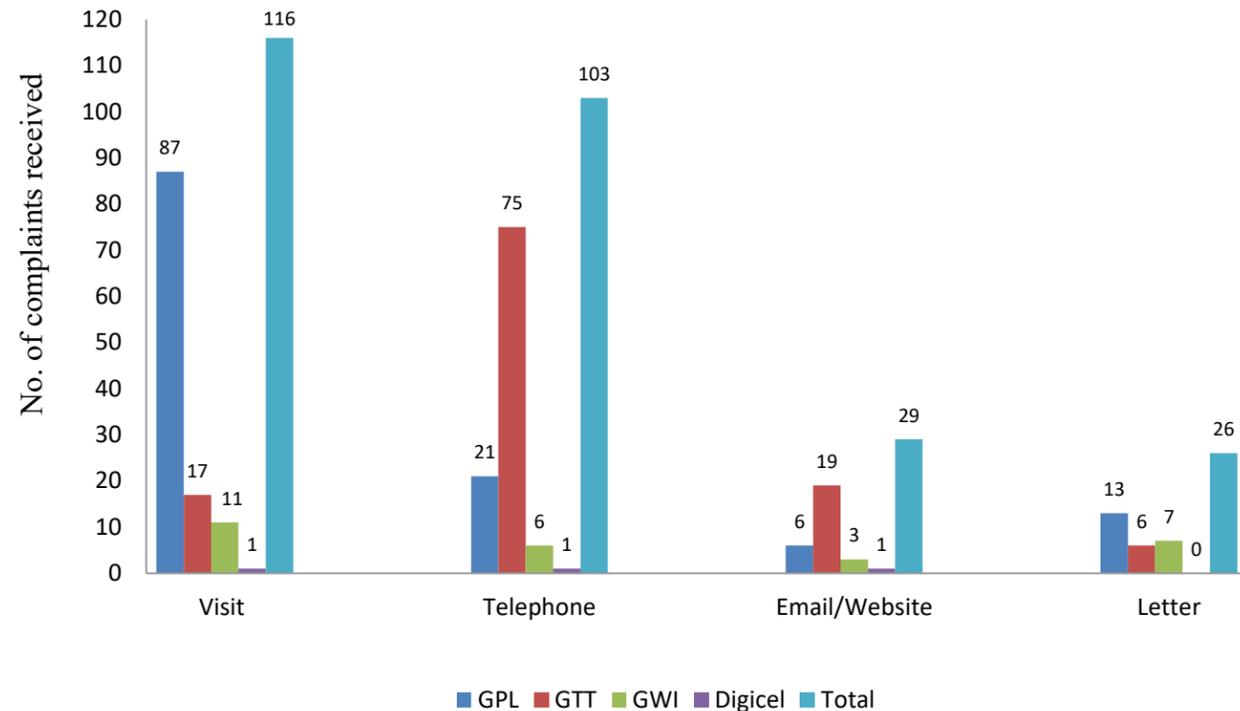
The further away the Regions are from the Commission's operating centre the fewer are the complaints received. However, this year saw an increase of complaints received from Region 2, when compared with the previous year. This may have been a result of PUC's publicity campaign and sensitization in this region that was undertaken during the year.

Issue	UTILITY	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	TOTAL
Application for New Service	GPL	1	2	6	2	-	1	12
	GTT	-	-	4	1	-	-	5
	GWI	-	-	-	1	-	-	1
Sub total		1	2	10	4	0	1	18
Billing Issues	GPL	1	6	14	-	-	-	21
	GTT	-	-	5	-	1	-	6
	GWI	-	2	12	-	-	-	14
	Digicel	-	-	2	-	-	-	2
Sub total		1	8	33	0	1	0	43
Change of Tenancy	GPL	-	-	2	-	-	-	2
Claims of Compensation	GPL	-	-	2	-	-	-	2
	GPL	-	1	6	1	-	-	8
Claims of Wrongful Disconnection	GTT	-	-	2	-	-	-	2
	GWI	-	1	1	-	1	-	3
Sub total		0	2	9	1	1	0	13
Allegation of Tampering	GPL	-	21	31	2	1	-	55
Tariff Issues	GPL	-	-	2	-	-	-	2
	GPL	1	5	19	1	-	-	26
Technical Issues	GTT	16	9	71	5	1	-	102
	GWI	-	-	9	-	-	-	9
	Digicel	-	-	1	-	-	-	1
	Sub total		17	14	100	6	1	0
Transfer of Service	Gtt	-	-	1	-	-	-	1
Total		19	47	190	13	4	1	274

Channels

Although there are various means by which complaints may be filed with the Commission, visiting the Complaints' Division and speaking to a representative appears to be the popular means for filing a complaint against all the utilities. GTT is an exception. Approximately 75% of all complaints filed against GTT were via the telephone.

The chart below shows the channels through which complaints were recorded.



Complaints Resolved by Utilities

The table below shows complaints resolved by utilities as at December 2016:

	GPL	GTT	GWI	DIGICEL	Total
In favour of consumer	49	80	14	1	144
In favour of utility	34	11	5	2	52
Complaints rejected/No action taken	2	1	1	0	4
Complaints withdrawn	0	0	0	0	0
Unresolved at Dec 31, 2016	42	25	7	0	74
Total	127	117	27	3	274

Credits Awarded

For 2016 the Commission secured credits and rebates in the value of \$3,939,370 on consumers' behalf. The credits and rebates secured are as follows:

GPL	\$3,274,464
GWI	\$127,116
GTT	\$537,790
DIGICEL	\$0

Moreover, a total of \$8,862,351 in credits was received by consumers during the year which included settlements that were pending from the previous year.

Public Awareness Exercises

The Commission conducted public awareness exercises and school education programmes as part of its publicity campaign. During those exercises, consumers were advised of the role of the PUC with respect to issues they may have with their service providers. Tips on energy conservation were given to consumers. It is customary that during our outreaches PUC brochures are distributed. There were also radio and television programmes where various topics inclusive of the role of the PUC, consumers' rights and responsibilities, energy saving tips were discussed. Staff of the PUC was interviewed by MTV Channel 14 on a number of occasions and these sessions were aired during the evening news casts.

The Commission notes that its interaction with students is productive as the opportunity is not lost in emphasising the work of the Commission and its role with respect to operators and consumers.



Giftland Mall - May 21



NCN VOG - April 15

Conclusion

2016 was a fair year for the Complaints' Division (Georgetown office) with 73% of all complaints received against the utilities resolved and 27% remaining to be finalised.

For 2017 the Commission will be actively pursuing the unresolved complaints, together with new matters, and hopes to achieve a higher resolution rate in 2017.

The Commission through its awareness activities in 2017 will continue to work assiduously to ensure that consumers are aware of the opportunities to voice their dissatisfaction with the services provided and how to obtain redress. We are anticipating an increase in our public awareness programmes for 2017.

Berbice

Overview

The Complaints' Division – Berbice Branch which was established in 2012 continues to be steadfast in its mandate to ensure that complaints filed are dealt with professionally. This year has been challenging with an unprecedented number of complaints filed with the Commission. The resolution rate has been commendable.

The public relation drive continued. There were visits to various communities to encourage persons to utilize the services offered by the Commission. This has been successful.

Complaints Received

The office received a total of 422 complaints for the year which are detailed below:

Utilities	No. Of Complaints
GTT	347
GPL	71
GWJ	4
DIGICEL	0
TOTAL	422

As at December 31, 2016, 88.4% of the complaints received at the Berbice Office were resolved. Based on the resolution of some of the complaints, consumers were awarded credits/rebates from the utilities amounting to \$4,424,600.00.

Following is a break-down of credits/rebates as per utility:

GPL \$3,409,585.00

GTT \$1,015,015.00

Complaints Resolved by Utilities

Of the 347 complaints received against GTT, 328 were resolved, and nineteen 19 are at varying stages in the investigative process. 41 of the 71 complaints against GPL were resolved while 30 remained unresolved. 4 complaints were received for GWJ which have all been resolved.

The table below illustrates the resolution rate of the complaints received for the specific utilities. It also illustrates the number of complaints that are pending outside of the set time frame.

Resolution Rate for Complaints

Utility	Resolved within 21 Days	Resolved Within 50 Days	Resolved Within 120 Days	Resolved After 120 days	Total Resolved	Pending over 120 Days
GTT	82	160	80	6	328	2
GPL	8	5	10	18	41	19
GWJ	4	0	0	0	4	0
Total	94	165	90	24	373	21

The table below shows resolution in favour of consumers/utilities:

	GTT	GPL	GWJ	Total
In Favour of Consumers	324	24	4	352
In Favour of Utility	4	17	0	21
Complaints Rejected	0	0	0	0
Complaints Withdraw	0	0	0	0
Total	328	41	4	373

Guyana Telephone & Telegraph Co. Ltd (GTT)

The number of complaints received for GTT in 2016 increased by approximately 40% when compared to the previous year. These complaints while mainly from the Port Mourant area spanned almost the entire coast, including West Berbice. It is to be noted that a number of these were repeat complainants, with technical issues being the majority.

The 347 complaints filed with respect to this utility are categorized below.

Complaints Category	Amount
Technical Issues	325
Application of Service	9
Transfer of Service	8
Disconnection	5
Total	347

Guyana Power & Light Inc

Seventy one complaints were received against the Guyana Power and Light Inc., an increase of 51% over the previous year. Of the 71 complaints received, 50 were with respect to allegations of tampering.

Guyana Water Inc.

Four complaints were received against this company. 2 were billing issues, one was for an application for service and the other was technical in nature. These complaints were resolved very expeditiously and commendations are in order for the GWI's Chesney Office.

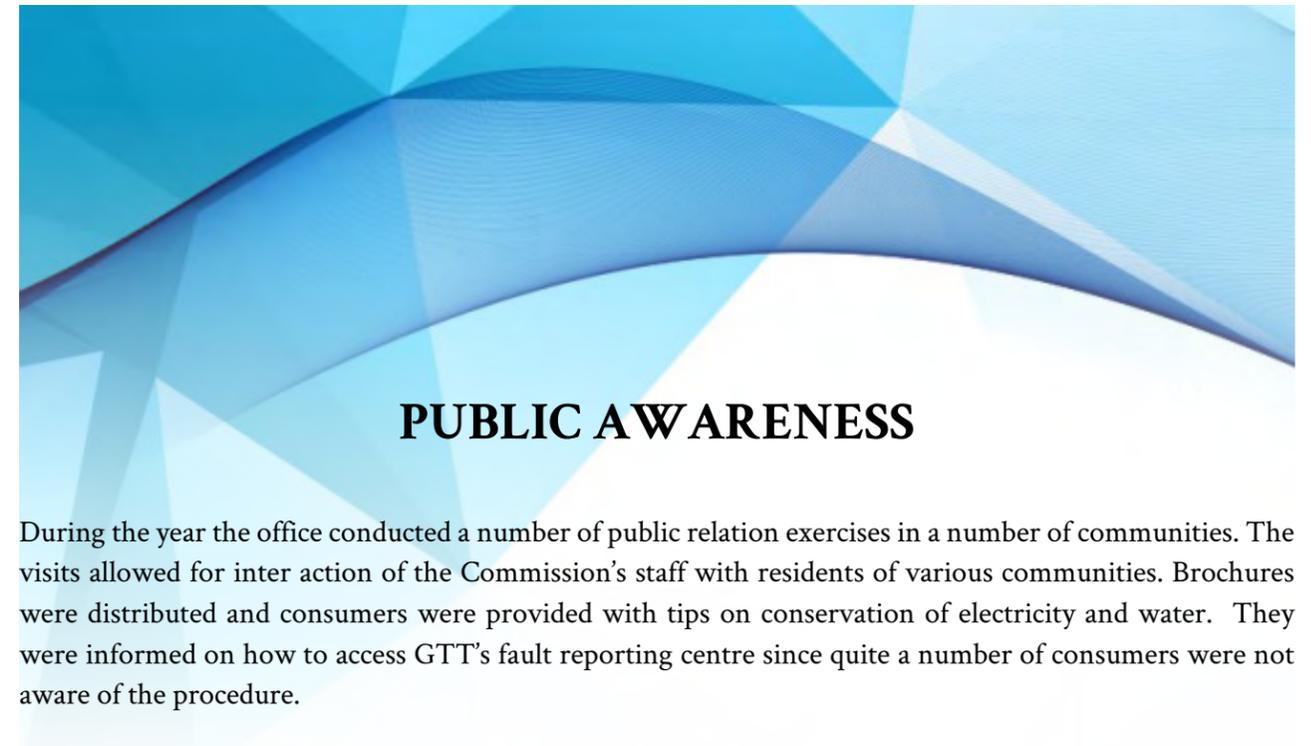
Complaints by Regions

Complaints received from Regions' Nos. 5 & 6 are listed below:

Regions	GPL	GTT	GWI	Total
No. 5	11	35	0	46
No. 6	60	312	4	376
Total	71	347	4	422

Mode of Filing Complaints

Utilities	Visit	Telephone
GTT	114	233
GPL	57	14
GWI	2	2
TOTAL	173	249



PUBLIC AWARENESS

During the year the office conducted a number of public relation exercises in a number of communities. The visits allowed for inter action of the Commission's staff with residents of various communities. Brochures were distributed and consumers were provided with tips on conservation of electricity and water. They were informed on how to access GTT's fault reporting centre since quite a number of consumers were not aware of the procedure.

The following areas were visited by Staff members during 2016:

1. Rose Hall Town Market - February
2. Manchester Village, Corentyne - March
3. Warren #19 Village, Corentyne - April
4. #51 Village, Corentyne - May
5. Fort Ordinance Canje - June
6. #36 Village, Corentyne - July
7. Chesney Village, Corentyne - August
8. Canefield Village East Canje - September
9. Stanleytown New Amsterdam - October

It is to be noted that in February 2016 a thirty second infomercial commenced airing on three major channels in Regions 5 and 6. These advertisements gave short and basic information about the PUC, its mandate and where the Berbice office is located. This was partially responsible for the larger number of complaints received, since 112 of the complainants who filed indicated that they knew of the office from the advertisements.

Additionally, Ms. Monique Welch - Supervisor along with staff members of PUC Head Office participated in a three (3) day Public Awareness Program in Essequibo from June 09, 2016 to June 11, 2016. This included television appearances, visits to the Anna Regina Multilateral School and Town Council, Anna Regina Market, Cotton-Field Secondary School, Essequibo Chamber of Commerce, Charity Secondary School, Charity Neighbourhood Democratic Council, Suddie Hospital, Parika Market and the Supernaam area.

RCA TV Channel 8 – Essequibo, June 6 – Members of Staff of PUC



Development

Staff members of the Berbice office participated in training sessions and workshops which were beneficial to staff enhancement. Listed below are the programs in which staff members participated:

- 4G
- Configuration of Meter
- What Contributes to GPL Commercial Loss
- Rate of Return and Rate Base

Ms. Monique Welch was also part of the delegation to Jamaica for the Organization of Caribbean Utility Regulators (OOCUR) 14th Annual Conference held from October 26, 2016 to October 28, 2016 where the theme was: "Regulation: Creating a Spectrum of Opportunities in the Caribbean."

Conclusion

Overall this year was successful; the Berbice office succeeded in resolving 88.4% of the complaints received against the utilities. The unresolved complaints will be pursued vigorously in 2017 so as to bring closure to these outstanding matters.

The Division will also continue its public awareness drive in 2017 to ensure that consumers can ventilate the issues and concerns they have with respect to the services provided.



ENGINEERING DIVISION

The Engineering Division responds to technical challenges faced by consumers in all three utilities. The analysis of technical issues that relate to consumers' complaints forms a major component of the work of the Division. It is also tasked with monitoring and reporting on utility standards and other issues relating to the work of the Commission.

The Electricity Sector

The Guyana Power & Light Inc. (GPL) is examined annually on their Operating Standards & Performance Targets. The PUC is required to conduct these annual reviews, via a public hearing, not later than the 30th March for the preceding year.

Four of the eight standards, which were reported on by the Engineering Division, are briefly discussed below.

1. Customer Interruptions

- (i) System Average Interruption Frequency Index (SAIFI)

$$\text{SAIFI} = \frac{\text{Total Number of Customer Interruptions}}{\text{Total Customers Served}}$$

The target set for 2016 was 75; meaning that on average a consumer should expect no more than 75 outages for 2016. At the end of 2016, the average number of outages per customer was 118. This means that GPL failed to meet this target.

In recent years, GPL has not been achieving the set standard. While the Commission accepted some of GPL's reasons for not meeting their targets in past years, the company is expected to be more attentive to factors within its control.

(ii) System Average Interruption Duration Index (SAIDI)

$$\text{SAIDI} = \frac{\text{Total Customer Hours of Interruptions}}{\text{Total Customers Served}}$$

The target set for 2016 was 90 hours; meaning that on average a consumer should expect no more than 90 hours of outages in 2016. At the end of 2016, the average duration of outages per customer was 125.8 hours. The target was not met.

In 2015, GPL met the index set at 95 hours with an average interruption duration index of 91 hours. The company's performance deteriorated when compared with previous years. GPL explained that the failure of the underwater cable connecting the Kingston and Vreed-En-Hoop power plants was the reason why both standards were not met.

2. Voltage Regulation

This standard requires GPL to maintain $\pm 5\%$ of nominal voltage in stable conditions and $\pm 10\%$ of nominal voltage after system disturbances.

GPL, however, claimed that it is difficult to monitor the voltage delivered to each customer. While the Commission did not accept that the intention was to monitor the voltage supplied to each customer, it took into consideration that when this standard was introduced as a performance indicator, the status of the company's transmission and distribution networks may not have allowed it to measure this standard.

The Commission expects that as the transmission and distribution networks are upgraded to acceptable levels, there will be a tangible effort for GPL to monitor and ensure that the correct voltage is supplied to its customers.

3. Losses

Losses were set at 28.6% for 2016. Technical losses were estimated at 13.1% and non-technical losses at 15.5%. At the end of 2016 the total combined losses were 29.2%. Technical losses were 13.0% and non-technical losses 16.2%. The company therefore did not meet the standard set for 2016.

One of the reasons cited for not meeting the target for non-technical losses was the company's metering programme, which did not commence in 2016 as scheduled.

Losses and the cost that attends them are significant. It is time for the company to get its act together and work assiduously in reducing the losses.

4. Average Availability

The average availability is based on the ratio of declared capacity and available hours to installed capacity and hours in the period. The target for 2016 was 80% and at the end of 2016 average availability was 84%. The target was met. The achievement of the target is a positive for the company since it is an indication that the reliability of its power stations is improving.

The Telecommunications Sector

4G in Guyana

In May 2016, both Digicel and GTT launched their Fourth Generation (4G) services in Georgetown and surrounding areas. The implementation was phased with plans for upgrades into other areas at a later date. Our investigations revealed however, that neither of the companies was supplying a service consistent with the expectations of a 4G service.

Both providers have promised improved services by the end of 2016 and the Commission expects that the utilities would provide what they had contracted to deliver.

Increase in Landline Faults

The Commission recorded an exponential increase in complaints over landline telephone faults over the years. These issues were mostly related to "no dial tone" and were considered technical in nature. The majority of complaints were received from Regions 4 and 6. There were also small numbers of complaints received from Regions 2, 3, 5, 7 and 10.

These complaints have engaged the attention of the Commission after customers had already exhausted their attempts to have the utility restore their services in a timely manner.

In 2014, the Commission received 111 complaints that were considered technical in nature. In 2015 this rose by 61.3% to 179. At the end of 2016 there was an increase from 2015 by 138.6% that resulted in 427 complaints on technical issues.

Of the 427 complaints received in 2016, a random sampling of 20 complaints showed that 16 days was the shortest time taken to repair a service while 95 days was the longest time. The average time to resolve the 20 complaints was 42.5 days with 6 of them taking more than 50 days to repair.

The exponential increase in landline complaints seems to suggest that the landline infrastructure is fast becoming dysfunctional. Indeed the perception is that GTT is ignoring this aspect of its obligations but placing more emphasis on their mobile network and international markets.

The integrity of the landline network varies not only by geographic location, but by area codes as well. Using GTT's Internet Eligibility on its website, we were able to determine the location of areas that are more upgraded than others. Effectively what this means is that GTT cannot offer a uniform internet service throughout its service area. This very often results in consumers being unable to obtain a service with the desired speed. It should be noted that GTT offers an internet service with the choice of three speeds. The services together with their speeds are described as "Gold" (up to 10 Mbps), "Silver" (up to 5 Mbps) and "Bronze" (up to 1.5 Mbps).

The reason in offering different DSL Service Plans within an exchange may be due primarily to line degradation. A customer's choice of internet speed would therefore be restricted by what the system can provide in specific areas and the higher levels of throughput can only be realised in the more upgraded areas. GTT should seek to upgrade the line plants so that all customers can freely choose the service of their choice.

The Water Sector

The issue of the use of Antinfek™10H by Guyana Water Inc. (GWI) which was highlighted in the press engaged the Commission's attention. The active component in this product is PolyhexamethyleneBiguanide Hydrochloride (PHMB) which has not been convincingly established as a safe treatment for potable water.

On becoming aware of GWI's purported use of this chemical for treating water, the Commission immediately issued a cease order to the utility. In an effort to justify its use of the chemical GWI provided a copy of a paper titled "PolyhexamethyleneBiguanide Hydrochloride: Features and Application", by Bassam H.Mashat.

In its investigation the Commission found that the said paper referred to the use of the chemical for the disinfection of animal drinking water and was not convinced that it was approved for treating drinking water intended for humans.

Research at the website of the National Center for Biotechnology Information (NCBI) at the U.S. National Library of Medicine also revealed that there were regulatory concerns with regard to the safety of PHMB in humans for water treatment. An assessment of the safety of this chemical in Sprague-Dawley rats had found that the integrity of the major organs was compromised, especially at high doses, suggesting that there were implications for the use of PHMB in treating water to make it potable. It also seemed that long-term effects of PHMB are yet to be determined.

While GWI claimed that the chemical was only used for flushing pipelines, reports in the media suggested otherwise. An article indicated that the Operations Director of GWI reported at a meeting that the Diamond well, which is situated on the East Bank of Demerara, was dosed with Antinfek for about a month until he learnt that GWI did not have the capacity to test for the chemical while it was in use.

Water produced and distributed by GWI is expected to meet World Health Organisation (WHO) standards and the Commission expects that any chemical considered for treating drinking water should at least be recognized by the WHO.

Checks with local regulatory agencies did not support the claim that the chemical was considered a safe treatment for potable water. In the premises, the Commission determined that its cease order will remain in place.

Water Quality

GWI seems to be facing challenges with water quality and is not meeting some of the WHO parameters. For instance, surface water after treatment from some facilities are not within expected pH levels, while the colour of water from some well water facilities exceed 15 Hazens.

GWI had expressed concerns over the adverse side effects caused by the use of chlorine for water disinfection. It was however observed that the chlorine residual in a number of the final water delivered at some of the facilities was less than 1 mg/l. At some facilities in Linden it was less than 3 mg/l. At the point of delivery the minimum chlorine residual should be 0.2 mg/l, while the WHO health-based guideline value is 5 mg/l chlorine in drinking water. With coliform present in water with low chlorine residual, GWI should be more concerned about the risks of the coliform to consumers, rather than the side effects of low chlorine residuals.



FINANCE DIVISION

Guyana Water Incorporated

The performance of the Guyana Water Incorporated (GWI) for 2016 continues to disappoint. Significant non-revenue losses, continuing operating deficits and the perennial problem of inadequate collections relative to the size of the company's debtors are major factors that characterized the company's poor performance.

Non-Revenue Water:

Non-revenue water has been the company's nemesis for a number of years. While the loss cannot be definitively measured, it is generally thought to be about 50%. This means that 50% of the water produced yields no revenue to the company. Previous programs by the company to reduce non-revenue water have met with little success.

A point of disquiet to the Commission is the average dollar billed to consumers for each cubic meter of water produced.

GWI's current tariff rates range from about \$60 to \$110 per cubic meter with a weighted average of approximately \$75 per cubic meter. The fact that GWI's average billing per cubic meter of water produced is approximately \$30 shows the impact non-revenue water has on the company's operations. This statistic is disturbing. We believe that it is time for the company and the shareholder to draw up a strategic plan to begin to address this matter with the objective of bringing the loss to an acceptable level. The cost of non-revenue water to the company and by extension to the nation runs into hundreds of millions of dollars annually.

Application for New Rates:

In October 2012, GWI applied to the Commission for a harmonization of tariffs. The intent was to significantly increase the revenue flows to the company to better position the company to achieve its development plans. Following a public hearing and an extensive review by the Commission thereafter, GWI's application was approved with minor changes. The approved increased rates are set out in Order No. 2 of 2013 and may be viewed on the PUC's website www.puc.org.gy.

GWI has failed to implement the increases approved by the PUC. During 2016 it sought the Commission's approval to set aside Order 2 of 2013; and to allow the company to reapply for an alternative tariff structure that in its opinion would better serve the interest of the company. The Commission agreed to GWI's request.

It was the intent that the tariff filing would be timely, giving the Commission the space it needs to follow through on its statutory requirements to conduct a public hearing. GWI is yet to make an application to the Commission.

Water Meters

At the end of 2016, approximately half of GWI's consumers were metered, meaning that the water they consume is measured and paid for. The unmetered consumers pay a fixed monthly charge irrespective of their quantum of consumption.

Unmetered tariffs are set premised on the assumption that each service will consume a predetermined amount of water per billing period. It is the perception both by the Commission and GWI that unmetered consumers use much more water than the estimates set by the company. The advantages of having all consumers metered are:

- GWI will be able to determine the quantity of water used by its entire consumer base
- GWI will be better prepared to develop accurate statistics based on consumption and by extension proper management reports that are necessary for decision making purposes.
- A fully metered system should in theory significantly reduce apparent losses that would enable the company to determine its real losses. This would be useful to the company in planning its approach to address real losses.
- Full metering is likely to increase the company's revenue and force water conservation on those consumers who were previously un-metered.

Attempts in the past to maintain sustained programs for the metering of all consumers have failed to deliver. We wish to emphasize, once again, the importance of universal metering and the benefits that will accrue to the company.

Collections:

GWl continues the trend of not collecting its billings in a timely manner, in spite of numerous outreaches to collect outstanding sums due to the company. It is however encouraging to note that the company's collection in 2016 was higher than in 2015. This is a positive. We trust that this would be the norm in the foreseeable future. The inability to collect outstanding amounts due, in a timely manner limits liquidity and by extension constrains the company from effectively funding programs that are likely to improve quality of service to consumers.

Impact of GWl's Inefficiencies on Consumers:

Utilities, by their very nature, are integral to the development of a nation and play a key role in human development. It follows therefore that utilities should be efficiently managed.

Over the years the suspect nature of the company's potable water and the unreliability of its service have forced consumers to purchase bottled water and to erect overhead tanks to harvest water for domestic use. It may not be an unreasonable assumption that the sale of bottled water throughout the country might be greater than revenues collected from GWl's sale of water to its consumer base.

These expenditures have no doubt placed an added financial burden on consumers taking away some of their disposable income that could have been better spent on alternatives that would have resulted in improvements to their quality of life.

General

Since 2003, GWl, in addition to subventions received from the Government of Guyana for operational activities has also been the recipient of funding from the Government and other International Donor Agencies for its capital expansion programs. The sum of these funding during this period is approximately \$26 billion. To the company's credit there have been improvements in the expansion of services and the company's quality of service is gradually improving. However, with an asset base of approximately \$26 billion, GWl needs to begin to earn a return on its investment so as to maintain the integrity of its capital infrastructure going forward. GWl has the potential at its current level of production to earn a fair return on its investment. It needs, however, to come to terms with its non - revenue water, its collections and tariff rationalization.

Guyana Power & Light Inc

For the second successive year the Guyana Power and Light Inc. (GPL) has recorded impressive returns from its operations. Regrettably however, system losses in terms of megawatt hours generated have increased by 6% over the previous year. The shortage of meters during the year has not only placed hardships and inconveniences on consumers, but raises questions on the ability of management to be proactive and to plan ahead.

GPL's Financial Results

The international price of oil is a significant factor that determines GPL's operating cost. Steep reduction in global oil prices in the latter half of 2014 that continued through most of 2016 resulted in the company's profits being significantly greater than its approved rate of return in 2015 and 2016.

In our previous report we noted that a resurgence of oil prices was unlikely to hit the heights it once did, but that the current low prices will prove un-sustainable in the long run and that oil prices will increase sometime in the future. At the end of 2016 the acquisition cost of the price of a barrel of oil was approximately twice the price it was at the beginning of the year. This, coupled with fuel rebates in 2015 and 2016 and a tariff reduction in 2016, is likely to reduce profits below the rate of return threshold in 2017 unless the company reviews its tariff structure and its fuel rebate/ surcharge mechanism.

Increase in Fuel Rebate

As a result of a reduction in the price of oil and consistent with the fuel rebate mechanism that is reviewed each quarter, the company filed an application to the Commission requesting a 5% fuel rebate, across all tariff categories effective from the March 2016 billing cycle. The application was approved by the Commission.

Reduction in Tariffs

In response to a fall in the price of oil and a perception that the company's earnings will be significantly above the allowable rate of return for 2016, the company filed an application with the Commission requesting a 5% reduction in the then existing tariff rates, across all tariff categories from the March 2016 billing cycle. This application was approved by the Commission.

Operating Standards and Performance Targets (OSPT)

On the 4th of October 2010, GPL's license was expanded to include Operating Standards and Performance Targets.

There are eight service standards with predetermined targets that GPL is expected to achieve. If the Commission finds that the company has failed to meet its operating standards and performance targets as

provided for in its Development and Expansion Plan it may impose monetary penalties upon the company in an amount not to exceed 25% of the total value of the dividends payable to the company's shareholder(s) for such calendar year. This is in accordance with the license and applicable law. The Commission is mandated to publicly report on GPL's performance not later than April 30th in each calendar year on the previous year's performance. In March 2017, the Commission held a public hearing and the company reported on its performance for 2016. Based on the findings, the PUC issued Order 1 of 2017. The Order is posted on the PUC's website and may be accessed at www.puc.org.gy.

Although the Commission concluded its report by noting that the performance of the company with respect to the standards was satisfactory it expressed reservation that not enough was being done to reduce system losses to an acceptable level and in its decision noted that:

The Commission in reviewing the company's performance took into consideration the resources available to the company during the period under review as well as other factors that may have had an impact on the company's overall performance. We found the company's efforts creditable, but for system losses. Although the standard was marginally not met, our earlier comments indicate that with greater commitment, the loss could have been lower than the previous year. Given the weight that should be attached to this standard an under par performance casts a shadow on the overall performance of the OSPT. Having regard to all we have heard and noted and taking into consideration the explanations offered by the officials of GPL we do not think it appropriate at this time to make any award of monetary penalty on the Company. Their failure to meet certain targets as adumbrated was mitigated by the fact that they were not excessive and the impact on consumers was not inordinately burdensome. We do not, however, wish for it to be held as a precedent for the current performance of the Company, but we expect our comments herein will excite their interest and obligation owed to the public at large, to pull up the traditional socks and get on with the business of fulfilling their mandate in providing a safe service at reasonable prices.

System losses

GPL's efforts in reducing system losses continue to disappoint. System losses and the cost that attends it continue to be a burden on the company and on the national economy. As oil prices are likely to be higher in 2017, it can be anticipated that that the cost of system losses to the company will be significantly higher than it was in 2016.

Of concern to the Commission is the length of time it is taking for the company to put programs in place to reduce losses.

Following a decision by an International Donor Agency to finance the installation of a significant number of AMI meters to replace the current installed electromagnetic meters a pilot project conducted in 2013 in selected areas in Georgetown confirmed that consumer theft was wide spread and that the program when completed is likely to significantly ameliorate GPL's consumer losses. At the end of 2016 the program is yet

to commence.

In GPL's 2016-2020 Development and Expansion Work Plan, the company projected that in 2016, 12,000 AMI Smart Meters will replace a like amount of electro-magnetic meters that is easily susceptible to tampering. There were no installations of AMI meters in 2016, the company seemingly being unable to commence the program. The Commission wishes to emphasize once again that a robust meter replacement program is key to the reduction of commercial losses.

Unavailability of Electric Meters

During the year GPL experienced a stock out of electric meters. This led to considerable hardships and inconveniences to consumers waiting for a new service and for consumers who require a meter replacement for continuity of service. We find it unacceptable that this situation was allowed to develop and to continue for such an extended period. The company cannot escape responsibility for this and they should be aware that it reflects negatively on their ability to effectively manage.

TELECOMMUNICATION SECTOR

Telecoms Reform Sector Act

The Telecoms Reform Bill was passed and assented to by the President. The Act will become operative, the day the subject minister signs an Order, effectively bringing it into operation. The Act seeks to end Gtt's monopoly on landline and international traffic, and both the Government and GTT are in negotiations, seeking an amicable settlement to the termination of its monopoly.

Guyana Telephone and Telegraph's Tariff Application

On the 1st July 2014 the Guyana Telephone and Telegraph Company limited (GTT) made an application to the Commission for tariff increases for a number of its landline services, a net reduction in outbound rates and the introduction of tariffs for directory services and E1 lines. In its application GTT used the audited financial statement for the year ended 2011 as its test year. The test year showed that the profit earned in that year was below the 15% threshold on capital dedicated to public use. The Company's position was that GTT agreement entitles the company to a return of not less than 15% on capital dedicated to public use, hence the filing. The varying increases/ decreases applied for in its filing were anticipated to take the company's earnings to the 15% threshold on the capital dedicated to public use. A number of hearings were held and after a careful consideration of the facts presented by GTT, the Commission rejected the application in its entirety. GTT has challenged the Commission's Order (Order 1 of 2015 which may be viewed on the Commission's website at puc.org.gy) and has taken the matter to the Court of Appeal. The company has since withdrawn the appeal and has requested that the Commission review the Order under Section 77 of the PUC Act. The Commission has agreed to GTT's request and has since held two hearings in 2016 with an aim of bringing the matter to a conclusion. The matter remains pending at the end of 2016 and is likely to be concluded sometime in 2017.

Investment in the Telecoms Sector

Investment in the Telecoms Sector continues to be positive. The result of this is that the operations of the two major service providers continue to extend outwards and currently approximately ninety percent of citizens have access to a service using either landline or mobile cellular. Both companies are continuing to move closer to achieving universal service.

Services

There has been an overall decline in minutes of use of voice in 2016 when compared to 2015. This decline may be attributable to Over the Top (OTT) applications that have become increasingly popular and is expected to continue to expand over the fixed network in the foreseeable future.

Mobile

At the end of 2016 the number of active mobile phones in service was 599,467, an increase of approximately 46,000 handsets over the previous year. The penetration rate based on a population of 775,000 has increased from 71% at the end of 2015 to 80% at the end of 2016. Despite this increase, mobile minutes of use in 2016 when compared to 2015 fell by approximately 4.5 %. A feature of both major service providers is the promotional minutes offered to consumers when a number of paid calls are made on any given day on their network. This promotion no doubt is intended to act as an inducement to increase the minutes of use on each of the respective networks. In 2016 the number of promotional minutes fell by approximately 13% over the previous year.

Landline

At the end of 2016 the number of active services was 141,595. There were 154,057 landlines in 2015. The number of consumers using landline services declined by approximately 8% year on year. This, coupled with the fact that minutes of use in 2016 fell by approximately 14% over the previous year suggests that the future of the copper access network is uncertain. It now appears that the copper network would in time be replaced with fibre network.

Inbound calls

Inbound international traffic originating from foreign countries to Guyana fell in 2016 by approximately 19% when compared to the previous year. The reduction in minutes is not necessarily indicative of a decline in international traffic, but rather, is likely due to a number of emerging technologies that allow for the bypass of GTT's international gateway.

Outbound International

Outbound international minutes (i.e. calls originating from Guyana to overseas destinations) decreased by approximately 23% year on year. Over the years this segment of GTT's operation has been challenged by calls made through Voice over Internet Protocol at a fraction of PUC's approved outbound rates. Outbound rates were last approved by the Commission in 2002 and these rates are simply no longer competitive given the emerging technologies that are now widely used throughout the country. As a result GTT has applied to the Commission for a reduction in outbound rates with the intent of recapturing a part of its lost market. The application is currently engaging the attention of the Commission. We have overtime reported that Voice over Internet Protocol (internet cafes) operate unregulated. They pay no corporate or value added taxes to the Guyana Revenue Authority. We believe that steps should be taken to have this regulated.

Short Messaging Services (SMS)

Short messaging Service (text messages) is beginning to lose the appeal it once had. In 2016 SMS fell by

approximately 27% year on year and this decline looks set to continue into the foreseeable future. We attribute this decline to the now popular usage of applications on smart phones which facilitate short messages, voice notes, instant carriage/transfer of videos and photographs. As a result SMS services like the landline services are likely to become less attractive with the passage of time.

Internet and Data Services

Internet and data services continue to expand year on year. One reason for this growth is the attraction Over the Top (OTT) applications offer to consumers. We envisage that growth in this sector will be robust in the coming years.

Over The Top Applications

An Over-the-Top (OTT) application is an app that permits the use of services via the internet in a manner that allows for the bypassing of the traditional way that these services were originally facilitated, delivered and billed.

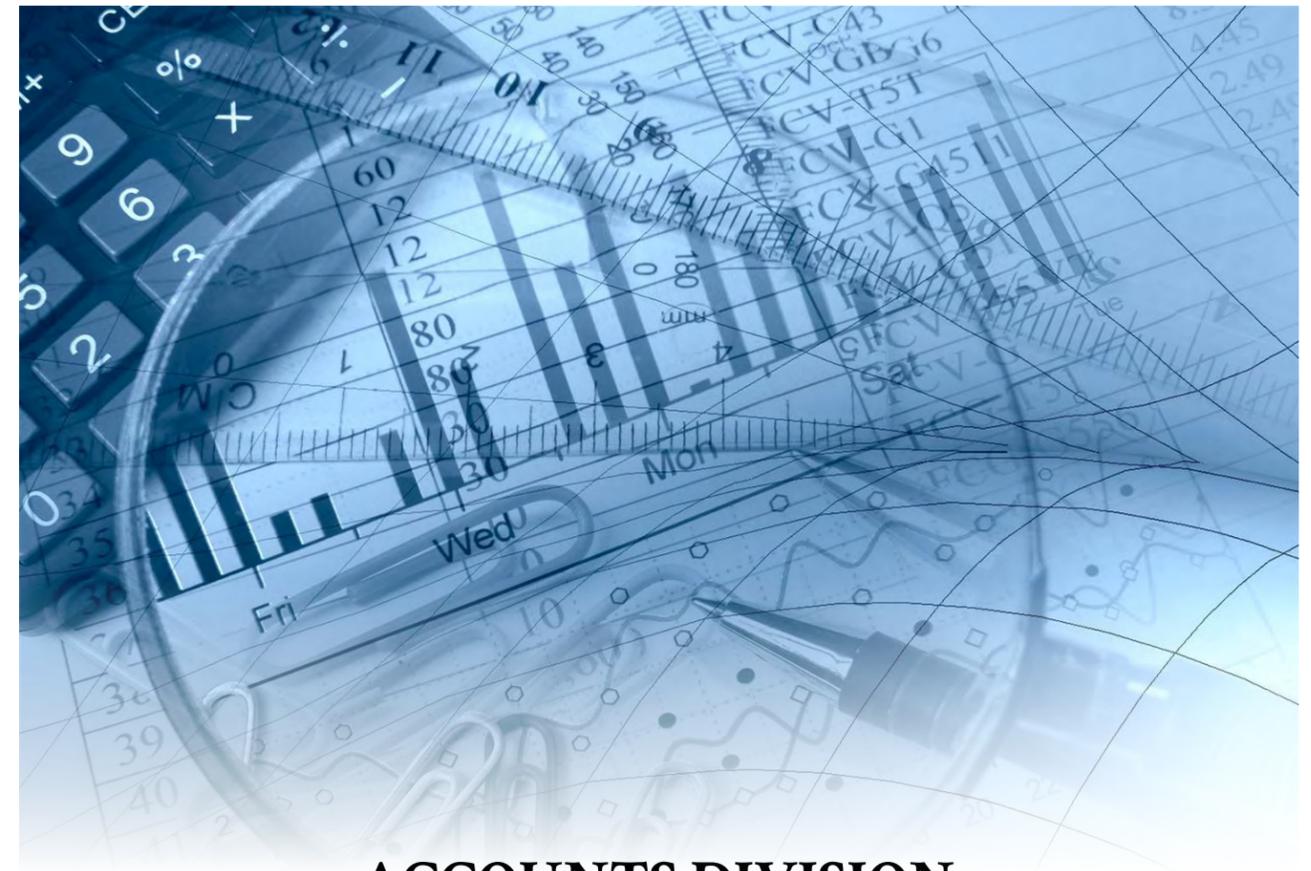
There is no denying that the use of apps through the internet have become very popular. Currently the daily minutes of use in Guyana from these apps are significant. These apps are almost always cheaper to use than the charges made by the established telecoms providers in providing matching services. As the internet market expands, it can be envisaged that OTT will continue to grow exponentially. OTT operations have been the nemesis of the established service providers, but in today's world of changing technology and innovation, telecommunication providers would simply have to adapt to the reality of these changes. A consolation to the telecoms providers is that since internet or data is a prerequisite for OTT services, the telecoms providers can anticipate growth in the provision of internet and data going forward.

Reduction of minutes of use in 2016 therefore, is not indicative of a contraction of telecoms services, but rather is as a result of the use of OTT apps and these minutes are likely to grow over time.

Conclusion

Utilities provide essential services to a country and are central to human development. Sustained annual investments over the years by each of the utilities are inevitably leading to universal services of their products. This is a positive. It is also incumbent that the price for services set by the Commission is affordable to consumers while at the same time allowing a fair return for the service provider .

Over the years we have been reporting that system losses and non revenue water losses are at unacceptable levels and the cost that attends these are burdensome to the consumers who in the final analysis bear the cost for these inefficiencies. Since these losses translate to billions of dollars annually we suggest that they be addressed with the seriousness they deserve. Reducing losses and improving efficiency would translate to lower tariffs which would be to the benefit of all concerned.



ACCOUNTS DIVISION

Financial Operation

The Commission recorded another successful financial year, effectively managing its financial resources and was able to generate a surplus of fourteen million, seven hundred and seventy-one thousand, nine hundred and seventy-six dollars (\$14,771,976). The Commission receives annual funding through assessment fees levied on utilities under its purview, totaling one hundred and fifty million dollars (\$150,000,000). The Accounts' Division ensured that monies were expended properly to enable the Commission to continue with its mission "to ensure that regulated utilities offer an efficient service to consumers at a reasonable cost".

Members of the Accounts Division were exposed to various training programs throughout the year. These trainings were not specific to finance only, but also covered varying fields of regulatory practices. The intent being to improve skill levels that in time would allow for capacity building within the Commission.

At the beginning of the year Mr. Mark Gobin was hired as Accounts' Clerk and has proven to be an asset to the Commission His employment allows for the proper segregation of accounting duties.

The following is the unaudited financial statements for the year ending December 31, 2016.

PUBLIC UTILITIES COMMISSION
Statement of Financial Position
As at 31 December, 2016

	2016	2015
	G\$	G\$
Assets		
Non-Current Assets		
Property/Plant/Equipment	123,181,965	131,360,564
Total Non-Current Assets	123,181,965	131,360,564
Current Assets		
Receivables	-	15,731
Prepayments	558,313	720,976
Cash and Cash Equivalents	360,867,904	339,213,876
Total Current Assets	361,426,217	339,950,583
TOTAL ASSETS	484,608,182	471,311,147
EQUITY AND LIABILITIES		
EQUITY		
Retained Earnings	483,160,506	468,188,057
Revaluation Reserves	286,320	-
Total Equity	483,446,826	468,188,057
Current Liabilities		
Payables	62,103	2,487,533
Accruals	1,099,253	635,557
Total Current Liabilities	1,161,356	3,123,090
TOTAL EQUITY AND LIABILITIES	484,608,182	471,311,147

Statement of Comprehensive Income
For the year ended 31 December, 2016

	2016	2015
	G\$	G\$
Income		
Gains on sale of Non Current Assets	-	738,730
Assessment Fees	150,000,000	150,000,000
Other Income	-	1,001,003
Interest Earned	10,341,961	10,363,423
Total Income	160,341,961	162,103,156
Expenses		
Employment Cost	106,661,307	86,881,003
Training Conference & Official Visits	11,499,602	631,350
Administration Expenses	9,037,025	5,202,652
Utility Charges	1,922,903	1,706,493
Security Charges	3,919,016	3,922,776
Rent Charges	958,320	943,800
Repairs and Maintenance	1,811,906	3,242,189
Bank Charges	146,950	70,810
Depreciation	9,009,329	8,731,498
Rate and Taxes	474,734	29,400
Total Expenses	145,441,092	111,361,971
Net Surplus	14,900,869	50,741,185

PUBLIC UTILITIES COMMISSION
Statement of Changes in Equity
For the year ended 31 December, 2016

	Retained Earnings	Revaluation Surplus	Total Accumulated Fund
	G\$	G\$	G\$
Balance as at 1 January, 2015	416,966,872	480,000	417,446,872
Net Surplus for the period	50,741,185	-	50,741,185
Transfer to Retained Earnings	480,000	(480,000)	-
Balance as of 31 December, 2015	<u><u>468,188,057</u></u>	<u><u>-</u></u>	<u><u>468,188,057</u></u>
	G\$	G\$	G\$
Balance as at 1 January, 2016	468,188,057	-	468,188,057
Net Surplus for the period	14,900,869	357,900	15,258,769
Transfer to Retained Earnings	71,580	(71,580)	-
Balance as of 31 December, 2016	<u><u>483,160,506</u></u>	<u><u>286,320</u></u>	<u><u>483,446,826</u></u>



PUBLIC UTILITIES COMMISSION

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