PUBLIC UTILITIES COMMISSION

The PUC aims to ensure that regulated operators offer efficient service to consumers at a reasonable cost without compromising their financial and operational integrity.



ANNUAL REPORT 2020



This report contains the Thirtieth Annual Report for the Public Utilities Commission Guyana.





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PUBLIC UTILITIES C O M M I S S I O N







The PUC is a corporate body which was established by the Public Utilities Commission Act No. 26 of 1990. This Act was repealed by Act No. 10 of 1999 and a number of subsequent amendments were promulgated throughout the life of this Act. This facilitated the regulating of the Electricity, Water and Telecoms sectors in the State of Guyana. On October 5, 2020 the Public Utilities Commission Act No. 10 of 1999 was repealed and the Public Utilities Commission Act No. 19 of 2016 was made effective. This Act incorporated a number of previous amendments and made the requisite changes in line with the liberalization of the telecommunications sector in October of 2020.

The regulated service providers are currently the Guyana Power and Light Inc. (GP&L), the Guyana Water Inc. (GWI), the Guyana Telephone and Telegraph Company Limited (GT&T) and U-Mobile (Cellular) Inc. (Digicel). The liberalization of the telecommunications sector saw a new entrant to the sector namely, E-Networks Inc. which was brought under the Commission's purview in October 2020.

The legal framework allows for the appointments of a Chairman and four Commissioners. The following Members comprise the Commission: -

- Ms. Dela Britton Chairman
- Mr. Rajendra Bisessar Member
- Dr. Leyland Lucas Member
- Ms. Verlyn Klass Member

MISSION

To ensure that regulated utilities offer efficient service to consumers at a reasonable cost without compromising their financial and operational integrity.

VISION

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

Functions of the Commission

- To act in a regulatory, investigatory, advisory and enforcement capacity.
- To review and approve Development and Expansion plans.
- To establish, monitor and review rates.
- To conduct investigations into the standards of service of the service providers.
- To facilitate interconnection and access between or amongst service providers.

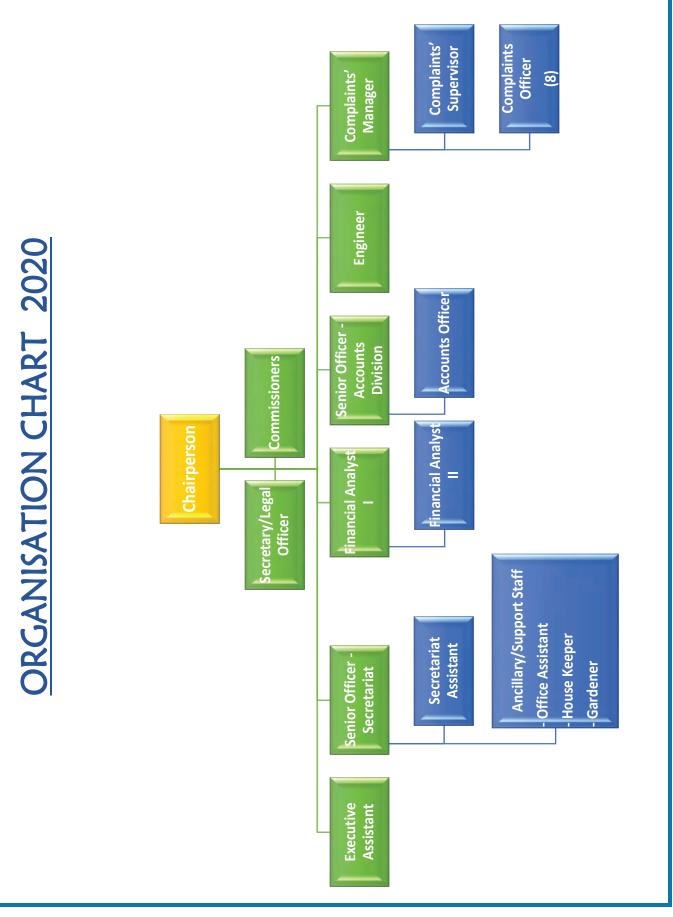
Editorial Board

Mrs. Anuradha Mohabir-Singh – Senior Officer/Editor

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Staff of PUC



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Chairperson and Board of Commissioners 2020



Ms. Dela A Britton



From the desk of **The Chairperson**



he year 2020 began with great promise for PUC Guyana.

We had firmly set our agenda for extending our reach; continued preparation for liberalization and all things regulatory with emphasis on an outward facing approach to engage our stakeholders.

After an extensive feasibility study and successful collaborative discussions with the Town Council of Anna Regina and Essequibo Chamber of Commerce, the Commission opened its 4th Office in B's Mall in Anna Regina, in February 2020.

Our continued roll out of pop-up shops and other Public Relations exercises were all derailed with the onset of the global pandemic COVID-19.

Like the rest of the world, armed with the requisite Personal Protective Equipment, PUC immediately transitioned to work from home in an effort to protect our staff and stakeholders. Our virtual private network proved invaluable – allowing us to seamlessly continue our operations.

Social media became the vanguard for our operations. There was a spike in the use of our online complaints' portal, and we saw an immediate increase in traffic via our Facebook page.

In a show of co-operation with the Utilities under our purview, we employed our social media platforms for the benefit of the utilities to disseminate their notices of office closures, payment arrangements and options regarding alternative contact information, reaching a

wider audience which proved effective as there was minimal confusion or in person queries.

Conducting statutory meetings and stakeholder meetings over our specially designed Zoom platform became the new normal.

Additionally, despite the setbacks caused by the COVID-19 pandemic, the Commission electronically conducted its business of engaging with relevant stakeholders, reviewing and issuing directives, and monitoring utilities.

Continued Preparatory Sessions on pricing and the pending Liberalization of the Telecommunication Sector were held during the months of March, April, and September 2020.

In July 2020, at the request of GPL, officials from PUC met with GPL Officials where the impressive Integrated Utilities Service Model Pilot was introduced. This initiative seeks to promote Renewable Energy and Energy Efficiency which will in turn bring significant changes to the Energy landscape by affording consumers the ability to procure renewable energy and seek the necessary financial assistance.

In July 2020, the Commission approved GPL's Power Purchase Agreement with MCG Investment Inc. which

allowed the company to purchase excess electricity in order to re-sell to consumers. At the time of this writing, the Commission will not be in a position to report on any successes or lessons learnt but will be able to do so in its next Annual Report.

In September 2020, the Commission accepted the report of the Consultant who was selected to examine the Cost Allocation Model (CAM) of GT&T. The main thrust of the consultancy was to ascertain its accuracy and consistency. The Commission now must engage key personnel in the development of a Cost Methodology Framework which in part will inform the roll out of our pricing regime.

The findings of the CAM Report will greatly assist in the identification and definition of research markets as we move towards a Price Cap Regime. A key component of the report is the recommendation that the Commission and GT&T collaborate on the development of an improved Cost Model.

The statutory obligation to conduct a Public Hearing into the Operating Standards and Performance Targets (OSPT) of GPL in March of every year was deferred to September 17, 2020. We take pride in the fact that this Hearing was the first virtual Public Hearing of its kind in the Caribbean.

After careful deliberation of GPL's presentations, the Commission took into consideration the resources available, including the impact of combating a global pandemic to the Company and determined that notwithstanding that fact that the Company had failed to attain its targets, it was not prudent to issue a monetary penalty against GPL for the year under review. The Company's failure to meet certain targets was mitigated as the failed targets were not excessive and the impact on the consumers was not unduly burdensome.

In September 2020, GT&T made an application to vary the Order on paper bills which Application was refused by the PUC. This application is now engaging the attention of the court and as such it is not proper to further comment.

In October 2020, PUC issued Order 1 of 2020 on GT&T's application to vary Order 2 of 2019 and Order 2 of 2020 on GPL's Operating Standards and Performance Targets for 2019.

In the Water Sector towards the end of 2020, the collection rate on its billed sales stood at 80% for the Guyana Water Inc. While it was expected to achieve 96%, however upon the forensic review of its metering statistics, there has been no discernible improvement since PUC's Order 2 of 2018 became effective. The Commission is aware of the impediments caused by the COVID-19 pandemic on the company's operations and continues to monitor their performance in all aspects.

The date of October 5th, 2020 heralded the long-awaited Liberalization of the Telecommunication Sector with the issuance of Licenses to Telecommunication Undertakings namely GT&T, Digicel and the new player E-Networks Inc. Liberalization seeks to promote competition and greater transparency.

Our intensive preparatory work on the Liberalization front led to the Commission's relative ease in transition into the new regime as we immediately had the ability to grapple with a myriad of new regulatory issues such as interconnection and access which entailed examination of Reference Interconnection Offers. In January 2021, it is hoped that we will continue to monitor the sectors, advance the discussions on pricing regime, and collaborate with the telecoms undertakings.

Our ability to strengthen capacity building was severely hampered by the COVID-19, but with the advent of Liberalization, PUC intends to engage the services of at least 3 Experts to ensure proper implementation of the Regulation and continued sustainability of our mandate.

A high point of the year under review was the celebration on the 1st of October, 2020 of PUC's 30th Anniversary as an independent regulatory entity. Although traditional expressions of the marking of this milestone were thwarted by the pandemic, PUC used the opportunity to engage in a series of social media engagements. The Prime Minister of Guyana, the Honourable Brigadier (ret'd) Mark Phillips, graciously agreed to issue congratulatory message in the print media on our behalf highlighting our achievements which include our impressive 172 Orders; the floor and ceiling rates set in 2007 for the cellular services which marked the entrance of the new international operator –Digicel and our continued engagement with all consumers and utilities.

A notable highlight during the year in review was the Commission's hosting of the Organization of Caribbean Utility Regulators (OOCUR) Virtual Symposium, on December 1st and 3rd 2020, under the theme 'Forging the path in a post COVID-19 Era'. This symposium saw participation from approximately 108 attendees regionally and internationally. The keynote address was delivered by the Honourable Prime Minister of Guyana – Brigadier (ret'd) Mark Phillips and it was well received.

Our successes throughout 2020 were due in large measure to our ability to ensure that PUC's vision, mission, and independence was achieved whilst safeguarding the interests of all stakeholders.

In closing, I wish to acknowledge the hard work and dedication of the Editorial Committee of the Annual Report without whom the production of this report would not be a reality.

Finally, I wish to acknowledge and express my profound gratitude to my Colleagues, the Commissioners of PUC, and the staff of PUC collectively. We are committed to providing sound regulatory decisions in the best interests of Guyana. We look forward to expanding our reach and adding value to all our stakeholders as our multinational support networks continue to evolve during this transformational phase of PUC Guyana.

April 2021.



Engineering Division

he Engineering Division plays an integral role in the operations of the Commission. The Division has technical oversight for the various sectors under the Commission's purview. A key function of the Division is to monitor regulatory trends, make relevant recommendations to the Commission and to engage the Complaints' Division in the fair resolution of technical matters.

The Division is tasked with the responsibility of reviewing the service providers' development and expansion programs with emphasis on the examination of their reporting obligations as it relates to technical submissions. Additionally, the Division is the driver for the monitoring and reporting component of the Quality of Service of the operators.

THE TELECOMMUNICATIONS SECTOR

Product Development Programme

In accordance with the Public Utilities Act 1999, provision is made for the Guyana Telephone and Telegraph Company Limited (GT&T), to submit for the approval of the Commission any program for development and expansion of facilities or services.

The Company in its 2020 New Product Development Programme included ongoing projects from previous years. On June 17, 2020, the Company presented to the Commission its program for the year 2020. These included increased capacity of Gigabyte Passive Optical Network (GPON) in existing areas; Broadband Spanning Tree Protocol (STP) replacement for network voice core stability; upgrade of subsea network to facilitate ongoing internet growth; and the acquisition of specialised tools for construction and network repairs formed part of the intended program.

Key projects for this reporting year included:

- The expansion of the Gigabyte Passive Optical Network (GPON), this facilitates the Fibre to the Home (Blaze) service, and it is anticipated that there will be installation in the areas of Parkia in Region three (3); Providence and Diamond/Grove in Region four (4) and Corriverton and Number 63 Village in Region six (6).
- The installation of a microwave redundancy network link in the south of Linden located in region ten (10) will allow for telecommunication services, network linking this area. This allows for continuous connectivity should there be a disruption in the existing network link from central Linden and the outward areas of southern Linden.

The Commission approved GT&T's programme on the 25th July, 2020. The company is commended for its continued expansion and improvements to its infrastructure and network. The GPON's internet service when compared to the Digital Subscriber Line (DSL) internet service (which is operated over existing copper lines) is now capable of transmitting bandwidth at faster speeds and allows for a higher bandwidth allocation.

Orders 2 of 2017 and 4 of 2017

Orders 2 of 2017 and 4 of 2017 were issued by the Commission and its genesis is in an application for an increase in tariffs for landline services. The latter Order requires the Guyana Telephone and Telegraph Company Limited (GT&T) with effect from August 1, 2017, to complete the installation of no less than 350 landline services per quarter. A review of the three (3) years since the issuance of the Order revealed that the Company has complied with the main components of the Orders as it relates to rollout of landlines.

		2019		Nov	2019 Jan Total		2020	Νον		
	Feb - Apr	May - Jul	Aug - Oct	2019 - Jan 2020		Feb - Apr	May - Jul	Aug - Oct	2020 - Jan 2021	Total
Applications Received	2,000	2,354	591	1,689	6,634	1,909	2,256	2,473	1,987	8,625
Services Installed	1691	740	319	281	3,031	240	204	152	226	822
Remainder	309	1,614	272	1,408	3,603	1,669	2,052	2,321	1,761	7,803

The table below shows the 2019 – 2020 installation numbers.

Table: Shows the Total Applications Received and Installed Land Line Services.

In the year 2019, the Company had installed in excess of 350 landlines per quarter, however, the year 2020 showed a decline by 41 % of the mandated 350 land lines per quarter. This decline may be attributed to the impact of COVID-19 restrictions on the company's inability to install and perform any in-person services. The table further shows that for period February 2020 to January 2021, there were 8,625 applications for the 2020 period and only 822 landline services were installed. For the same period in the year 2019, 3,031 landlines were installed.

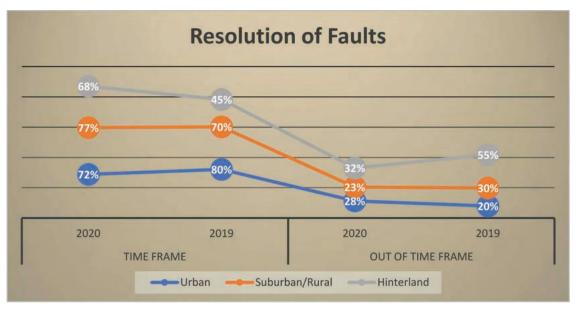
However, it is expected that in 2021 the company should meet its targets if the COVID-19 pandemic abates.

Resolution of Faults

Order 4 of 2017 dictates the time frames within which GT&T is required to rectify all received fault reports on its landline infrastructure. The Order directed that the company should rectify all faults or complaints within the following timeframes:

- Urban Areas (townships): 5 working days
- Suburban/rural Areas: 8 working days
- Hinterland Areas: 20 working days

The Company is further required under the Order to submit reports to the Commission on a quarterly basis, and report on the type of faults and the time periods expended to rectify consumers' faults on the wireline infrastructure.



Graph: showing the timeframe for remedying landline faults

The graph shows the timeframes for the resolution of reported fixed line faults in 2020 with comparative information for the year 2019.

In 2020, 72% of the complaints received in the urban areas were resolved, 77% for the rural areas and 68% for the hinterland regions. This may have resulted in a less than stellar performance, however, there was a noticeable improvement when compared to the year 2019. As noted earlier, the Commission is cognizant of the stringent precautionary measures which were implemented early in 2020 in order to combat the spread of the COVID-19 pandemic. These measures may have hindered the timely resolution of faults especially in the rural and hinterland areas.

Fault Category

The chart below indicates that 68% of the faults identified represent dial tone issues. The other fault categories include crossed lines and the inability to obtain dial tone. The miscellaneous faults category includes faulty jacks, defective instruments and broken wires. This represents approximately 13% of the faults reported during the reporting year.

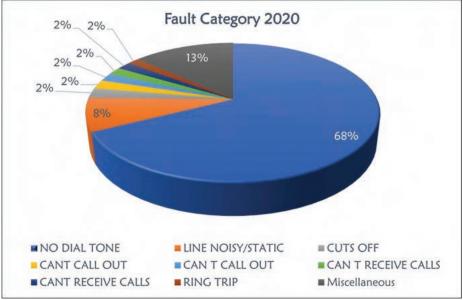


Chart: showing the Categories of Land Line Faults

The Commission is of the view that notwithstanding the stipulated time-frames as set out in Order 4 of 2017, minor faults such as defective handset and module cords at the consumer end may be remedied in a shorter time-frame.

Liberalization

On the 5th of October 2020 the telecommunications sector was liberalised paving the way for an open competitive sector which is anticipated to be attractive to new market entrants and investors whilst preserving the operations of the current sector incumbents Guyana Telephone and Telegraph (GT&T) and Digicel. A new provider E-Networks Inc., known for their cable television offerings has been licenced to provide telecommunications services.

New Licences were issued to the three operators and, GT&T has been declared to be the dominant operator of its land line services and jointly dominant with Digicel as it relates to mobile services.

The Commission expects that in addition to the creation of a competitive environment, liberalization is projected to offer consumers access to quality voice services, price reduction, improved telecommunications infrastructure and the implementation of number portability. Consumers will expect that with the implementation of number portability, they will have the seamless ability to migrate network operator to another and retain their existing number. The legal framework for liberalisation enlarged the Commission's role. Under the regime, the PUC has oversight for Consumer Protection, Pricing, Interconnection and Access and Competition.

Quality of Service

The Telecommunications (Consumer Protection) Regulations 2020 include Schedules which set out the Quality of Service (QoS) standards for fixed and mobile public telecommunications services which the Operators are statutorily mandated to achieve. The stipulated parameters have a twofold function that is to serve as a benchmark to monitor the operators, which monitoring will inform the Commission on trends and other activities of the operators and secondly, the parameters engender compliance on the part of the operators. The parameters include (this list is not intended to be exhaustive) the supply time for installations, resolution of billing complaints and calls set up - that is the time frame for the calling party to receive a ring indication. The operators are required to publish on their websites their standards. A further feature includes the reporting requirements for quarterly and annual periods. The Commission is then required to review the performance of the operators against the standards.

Where the Commission detects non-compliance of the Quality of Service standards, the Commission is empowered to issue an order prescribing the time within which the provider is required to remedy and achieve the particular standards and such order may also include monetary penalties.

The Commission looks forward to the receipt of the first submissions from the operators in April 2021. This will inform the structures of the telecommunication monitoring component of the Commission's mandate. It is hoped that this concentrated scrutiny and monitoring of the sector will be the impetus for improved services and ultimately benefit the end users.

The COVID-19 pandemic catapulted the expansion of virtual platforms as the 'go to' platforms for entertainment, meetings and virtual learning. The liberalized sector is expected to see the Telecommunication operators offering attractive services and rates to facilitate the critical and necessary expansion for internet access for communication purposes.

In anticipation of liberalization, the Commission has conducted a number of training sessions and it looks forward to this new paradigm shift in the sector.

THE ELECTRICITY SECTOR

Operating Standard & Performance Targets (OSPT)

The Guyana Power and Light Inc (GPL) is mandated under the October 2010 Amendments to its Licence to report on its Operating Standards and Performance Targets (OSPT) on a quarterly and an annual basis for the preceding year. The standards and targets set are approved by the subject Minister in the Company's five-year Development and Expansion Programme.

The Engineering Division is tasked with the preliminary review of the technical standards as it relates to the following:

- 1. Customer Interruption in the categories (i) System Average Interruption Frequency Index (SAIFI) and (ii) System Average Interruption Duration Index (SAIDI).
- 2. Voltage Regulations
- 3. System Losses
- 4. Average Availability

1. Customer Interruption

Customer interruption is measured in two parts: (i) the SAIFI index is commonly used as an indicator by all power utilities to calculate the number of outages a customer will experience, and (ii) the SAIDI index is commonly used as a reliability indicator by power utilities to calculate the number of customers who may experience a power outage.

Generally power outages do not only inconvenience users of the service but may also lead to customers investing in alternative sources of electricity which can be to the financial detrimental of the provider. Some industrial consumers for instance, have elected to migrate from the company's distribution grid to self-generation.

Distribution grid is referred to as the final section of any power generating electrical grid which distributes electrical power safely to homes, industry, and other end users.

Self-generation of electrical power allows consumers or an entity to produce electricity by utilizing privately owned devices in order to meet some or all its electrical energy needs.

The table below outlines the company's targets and preliminary achievements for the year 2020.

STANDARD	TARGET	ACTUAL	
System Average Interruption Frequency Index (time)	65	99	
System Average Interruption Duration Index (hours)	75	81	

The company, in both instances has failed to achieve the targets set for 2020, however when compared to the year 2019, there has seen marked improvement in both standards, which were recorded at 115 for the SAIFI and 88 hours for SAIDI.

The determinants which may have contributed to GPL's failure to meet the targets of both standards at the end of the reporting year include:

- Three major shutdowns of the Demerara Berbice Interconnection System (DBIS), which adversely affected consumers residing within the counties of Demerara and Berbice and the East Bank of Essequibo.
- Planned and unplanned maintenance of network infrastructure. The planned maintenance is where the company schedules period when maintenance is to be conducted, whereas unplanned maintenance are emergency unscheduled major repairs of rectification to the network infrastructure.
- The lack of redundancy on the company's transmission network which would have affected the seamless supply of service. The lack of redundancy of the network infrastructure which are parallel networks, will in turn cause consumers to experience outages in areas which are not part of the maintenance schedule.

2. Voltage Regulations

From the inception of the company's reporting on its OSPT, GPL has maintained that it is difficult to report on the level of voltage received by each consumer and it has elected to report on the number of voltage complaints which were resolved within a 30-day period. For the year 2020, the Commission has noted that the company on an average has resolved approximately 98% of voltage complaints within the stipulated timeframe of 30-days which is commendable as the Company has had similar indices for the years 2019 and 2020.

During its presentation of the 2020 OSPT to the Commission and the public, the company indicated that it intends to implement on its the infrastructure platform, the Supervisory Control and Data Acquisition (SCADA) software for the current Advance Metering Infrastructure (AMI) which will be configured to provide connectivity for the direct monitoring of individual consumers voltage level.

The remote monitoring by GPL of the voltage supply to its consumers will greatly aid the company's ability to identify sections of the network which may experience voltage issues which will allow for speedy resolution and rectification.

3. System Losses

System loss which is power generated and distributed for sale by GPL for which no revenue is garnered impacts heavily on the company's financial profile. These losses comprise of two components (i) technical losses, and (ii) non-technical (commercial) losses. GPL is required to report on both components.

Technical losses are as a result of power leakages through the company's transmission and distribution network, while non-technical (commercial) losses may be attributed to electricity theft and defective meters at the consumer's end.

The table below outlines the company's target and preliminary achievements for system losses for the year 2020.

TARGET	ACTUAL		
12.3	14		
11	11.85		
23.9	25.85		
	12.3 11		

From the year 2011, the Company has shown incremental decreases in system losses. At the end of 2020 the period under review when compared to 2019, the system losses for the company stood at 25.85%, as compared to 27.8% for the year 2019. The decreases in both the technical and non-technical losses may be attributed to the implementation of Public Utility Upgrade Programme (PUUP), which was funded by the International Development Bank (IDB) and the Japan International Cooperation Agency (JICA).

The PUUP projects which commenced in 2017 allowed the Company to embarked on the improvements and upgrades to its transmission and distribution network. The PUUP program aims to strengthen the Company's management capabilities, its operational efficiency and the rehabilitation of its infrastructure investments for loss reduction. The Commission is optimistic that the continuous improvements to the network's infrastructure would impact positively on the further reduction of technical losses.

In addition to the upgrade of the networks, the company under the PUUP project has rolled out its Advance Metering Infrastructure (AMI) Meters in areas such as Better Hope, Success, La Bonne Intention, La Grange, Vergenogen, Tuschen and other areas. This has contributed to the reduction of the non-technical losses to the company. The Commission is hopeful that the company will treat the meter rollout as a priority as it caters for the reduction of non-technical losses and aids in the regulation of voltage at the consumers' end.

4. Average Availability

Average availability is the performance target which is in place to measure the company's generation capacity at any given time in order to ensure that its generating plants are producing at an efficient rate and that the company

has the capacity to meet its demand for electricity, especially during its peak hours (the period when the majority of consumers are utilizing electricity). 80% of generated power is the ambitious target set for average availability for distribution at any given time.

A review of the company's quarterly reports shows that for the year 2020 there was an average availability of 87%, which is an improvement of 3% when compared to the previous year. In 2019 the company's submarine cable which connects its Vreed-en-Hoop generating plant to the Kingston generating plant was damaged and this may have contributed to achieving 84% of average availability in that year. GPL is to be complimented for maintaining this target since the inception of its reporting to the Commission

For the reporting year 2020, the set standards and targets were derived from the company's 2016 to 2020 approved Development and Expansion Programme. In its preliminary review of the OSPT, the Commission is cognizant that these standards were set in 2015 and may not have had the benefit of incorporating recent developments in the sector. The company in the month of March of 2021, will present, at a public hearing, their actual achievements of the OSPT and their reason(s) if any, for shortcomings to the Commission.

Development of the Electricity Sector in 2020

The company in March 2020 signed an Engineering, Procurement and Construction (EPC) contract with Wartsila for a 46.5 MW dual-fuel power plant. This power plant will be stationed at the Garden of Eden power plant. It is anticipated that this project will boost the reliability of the electricity section and will support integration of renewable sources into the grid.

In an effort to increase the company's generation availability and to alleviate some of the burden off the company's aged generating assets, the company in August 2020 entered into a Power Purchase Agreement with MCG Investment Inc. (Giftland) to purchase the excess power generated by MCG for distribution through its grid to consumers.

The Commission commends these initiatives by the company, and it has noted that despite the constraints, the company has continued to innovate in an effort to be in sync with modern technologies and to improve on its delivery of service to consumers.

THE WATER SECTOR

The Guyana Water Inc. came under the Commission's purview by virtue of amendment to the PUC Act in 2002. The Commission by Order 26 of 2003 is tasked with the setting and regulation of rates for the water company, the enforcement of service quality and resolutions of consumers complaints.

Paragraph 14 of the Licence allows for the supply of water and sewage services and advisory services for public purposes. GWI is also required to achieve service standards as set out in Schedule 2 and meet the World Health Organization (WHO) bacteriological standards for coastal and hinterland water supplies. The company is required to submit to the Commission on a quarterly basis, its report on the level of its quality of water supplied to its consumers.

The Engineering Division is mandated to review the quarterly submissions to determine whether it is compliant with the standards as set out by the WHO and to ensure that consumers are receiving water which is potable and further to review the company's infrastructural and expansion programmes.

Development and Expansion

The company's strategic plan for 2017-2021 articulates the vision of the company in its efforts to achieve access to clean, safe and potable water in keeping with the 2030 Sustainable Development Goals, Goal 6 which speaks to clean water and sanitation for all. To achieve this, the company has projected that by the year 2020:

- 1. 100% of its consumers will be supplied with water on a 24-hr basis
- 2. 81% of the coastal villages will have access to water
- 3. 85% of the coastal villages will have access to treated water

The company in its development and expansion programmes have separated the hinterland regions from the coastal regions and in its strategic plan for 2017-2021, the company indicated that by 2020, 80% of the Hinterland populace should have access to potable water.

The company has indicated its yearly reduction targets of non-revenue water. Non-revenue water is mainly caused by leakage in the transmission pipelines and the general wastage of water. A significant contributing factor to nonrevenue water is unmetered consumers.

The 2017-2021 Strategic Plan reported that GWI completed three treatment plants in the Uitvlugt, Diamond and Eccles area, which serve approximately 5000 households. However, the company did not attain the targets set for metering of consumers and by the end of 2020 it had approximately 48% of unmetered consumers in its database. The company also reported that it fell short of achieving its roll out of its planned 24-hours continuous supply of water.

The Commission is optimistic for the Company's development in 2021 that is reflected in its Strategic Plan for the year 2022-2025 that the company will attain its objectives as set out in its 2017-2021 Strategic Plan. Whilst adhering to the obligations under its Licence as it relates to the quality of water provided to consumers.

Water Quality Standards

Section 14 of the Guyana Water Inc.'s (GWI) Licence sets out the applicable indicators for the standards to be met by GWI. As stated earlier, Section 14 states that Licencee shall meet the World Health Organisation (WHO) prescribed bacteriological standards for coastal water and hinterland water supplies.

The water quality standards as set out by the WHO outlines the acceptable level of pH, turbidity, iron, aluminium, colour, and chlorine contents to be present in water after any treatment process and the company is required to submit a quarterly report to the Commission to ensure compliance with the levels required.

The table below indicates the acceptable WHO quality levels.

	рН	Turbidity	Iron	Al (mg/l)	Colour	Chlorine
WHO		(NTU)	(mg/l)		(TCU)	(mg/l)
Values	6.5 - 8.0	≤ 5.0	< 3.0	≤ 0.2	< 15	5.0

Reviewing GWI's water quality standards and it was noted that GWI managed to achieve the requisite standards in eleven (11) treatment plants in region two (2) in the area of Lima located on the Essequibo Coast. Region three (3) in the area of Pouderoyen, Uitvlugt and Vergenoegen, all located on the western coastline of the Demerara River. Region five (5) Cotton Tree located at the West Berbice, Region six (6) New Amsterdam, No. 56, Port Mourant, Queenstown, Sheet Anchor all located on the Eastern side of the Berbice river. Region seven (7) Bartica Essequibo is a town located on the left bank of the Essequibo River, however, the company failed to achieve same in eight (8) treatment plants located in regions four (4) Shelter Belt located in central Georgetown, Covent Garden, Eccles, Friendship and Grove all located on Eastern bank of the Demerara river and ten (10) LPC, McKenzie and West Watooka all located on the southern part of Guyana.

The following represents the view of GWI treatment facilities for the year 2020:

Region 4

Target	6.5 - 8.0	≤ 5.0	< 0.5
Treatment Facility	Ph	Turbidity (NTU)	Iron (mg/l)
Shelter Belt	4.4	6.7	0.7
Covent Garden	6.6	48.0	4.1
Eccles	6.7	13.0	1.8
Friendship	6.5	26.3	1.5
Grove	6.7	7.0	1.1

The above table illustrates the water quality information for Region four (4) treatment facilities at Shelter Belt, Covent Garden, Eccles, Friendship and Grove. At the Shelter belt treatment plant, the pH level was below the limits, whereas the turbidity and iron levels were above that of the WHO levels. The Covent Garden, Eccles, Friendship and Grove indicate turbidity and iron content levels which did not match the requirements of WHO.

Region	10

Target	6.5 - 8.0	≤ 5.0
Treatment Facility	рН	Turbidity (NTU)
LPC	4.0	9.7
McKenzie	4.3	5.5
West Watooka	4.4	5.8

Table showing Treatment Plants that did not achieve WHO water quality levels

The Region 10 treatment facilities show that pH and turbidity levels at those plants are not within the WHO requirement.

Treatment plans in general, set a higher standard for water quality and the roll out of treatment plants continued during the year under review. It was commendable that in areas such as Uitvlugt, Diamond and Eccles, water infrastructure serving 5000 households were completed in the year 2020 despite the disruptive intervention of the Covid 19 pandemic. As the data submitted by GWI has illustrated their treatment facilities continue to be affected by abnormal levels of pH, turbidity and iron when compared to the WHO standards. Disinfection is the most critical method used to treat water for consumption purposes, however, it must be noted that the quality of water should not be compromised by the lack of disinfectants, flushing of network pipes and the shock treatment to contaminated wells.

Treatment facilities source water from wells which are older than twenty (20) years and the internal chamber walls which are now rusted may cause the iron content in these wells to rise above the allowable level of less than 3.0 milligram per litre (mg/l). Breaching of internal chambers may also result in the entrance of clay material into the wells. Those factors compounded by poor filtration may cause the turbidity levels to become uncontrollable. The company may apply coagulation-flocculation a treatment process where the contaminant within the water becomes unsettled which is then physically removed by filtration process.

Observations on the quality of water

A review of the data submitted by the company illustrates that their treatment facilities continue to be affected by abnormal levels of pH, turbidity, and iron contents, especially when benchmarked against the WHO standards. A point to note is that the company's infrastructure is aged and as such the internal chamber walls may in some instances be rusted and breached, leading to the elevated iron content and foreign materials in the wells. At the treatment level, these factors coupled with poor filtrations, and the non-flushing of pipelines may be part of the company's inability to meet WHOs standards.

Metering

By virtue of Order 2 of 2018, the company was mandated as a condition of its rates increase, by 2020 to meter at least thirty-seven thousand (37,000) of its consumers.

An examination of the reports emanating from GWI has shown that the company's roll out of meters for the year 2020 was not in keeping with the conditions as granted in the Order and the Commission expects that renewed efforts will be made to meet the relevant meter installation targets. It is expected that for the reporting year of 2021 the company will install at least 14.000 meters which will greatly aid in the Company's effort to reduce the effects of nonrevenue water.

Water is the basic resource for guaranteeing the life of all living beings on the planet. Access to water, sanitation and hygiene is a fundamental right and yet people throughout the world are battling daily against extreme circumstances for these basic services.

The metering of unmetered consumers will play a great part in the company's revenue collection which may be directed towards infrastructure development and creation of new treatment facilities, which will in turn lead to improved water quality and access.



Finance Division

he Finance Division is tasked with the responsibility of analysing financial statements, data, and trends. This Division serves in an advisory capacity to the Commission on matters of rates and other issues connected with and incidental to rate setting or any others which would enhance the work of the Commission.

ELECTRICITY SECTOR

The Guyana Power & Light Inc was incorporated as a private limited company in 1999 under the Electricity Sector Reform Act 1999 of Guyana. The company operates under an exclusive license granted to it by the Government of Guyana to generate, transmit and distribute electricity for sale to consumers within selected areas in the country. This license precludes the company from serving areas where they are existing public suppliers of electricity at the time the licence was granted to the company and to any area that the Minister grants a licence to a public supplier to generate and distribute electricity to thereafter.

Prior to October 2019, the Electricity Sector Reform Act of 1999 made provision for an Independent Power Producer, an entity which is involved in the production of electricity, to connect and sell electricity to the national grid. In 2019, under the hand of the then Minister David Patterson, an Order was issued to amend the Electricity Sector Reform Act of 1999 to allow the Guyana Power & Light Inc. to connect to its distribution grid, consumers who are self-generating electricity from renewable or fossil fuel sources for resale to the company's consumer base.

In 2020, the Company signaled its intention to the Commission to enter into a Power Purchase Agreement with MCG Investments Inc. (Giftland) which will allow them to purchase excess electricity for resale to the utility company consumers. The Commission after reviewing the technical and financial terms and conditions of the Power Purchase Agreement, issued to GPL its approval for the company to enter into the agreement with MCG Investments Inc.

OVERVIEW OF THE ELECTRICITY SECTOR FOR 2020 ORDER 1 OF 2020

Operating Standards and Performance Targets:

On the 4th of October 2010, GPL's license was expanded to include the Operating Standards and Performance Targets (OSPT). There are eight service standards with pre-determined targets which GPL is expected to achieve and report to the Commission. The Commission is mandated to publicly report on GPL'S performance no later than March 30th in each calendar year as it relates to the previous year's performance with respect to the OSPT standards listed below.

1. Customer Interruption (System Average Interruption Frequency Index (SAIFI) & System Average interruption Duration Index (SAIDI))

- 2. Voltage Regulation
- 3. Meter Readings
- 4. Issuing of Bills
- 5. Accounts Receivable
- 6. Accounts Payable
- 7. System Losses
- 8. Average Availability

Should the Commission find 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 on the company in an amount which should not exceed 25% of the total value of the dividends payable to the company's shareholder(s) for such calendar year.

The COVID-19 pandemic prevented the usual statutory review by the stipulated timeline of 30th March; however, the Operating Standards and Performance Targets Hearing was held on September 17, 2020, via the Commission's Zoom platform.

GPL's reported achievement of each standard for 2019 is as follows:

1. Customer Interruptions:

		TARGET	ACTUAL
System Average Interruption Frequency Index (SAIFI)	No.	68	104
System Average Interruption Duration Index (SAIDI)	Hrs.	80	104

The company explained that the Demerara-Berbice Interconnected System (DBIS) had experienced a number of shutdowns during the year, and this coupled with the company's inability to provide electricity during the maintenance of its transmission system were the main reasons attributable to the company for not achieving the targets set for both standards.

2. Voltage Regulations: The quality or level of voltage delivered to consumers by the company through its network, is crucial in ensuring that consumers' appliances are not damaged and electrical fires are prevented thereby eliminating the liability to the company.

The company is required to report annually on the level of voltage supplied to each consumer in adhering to the OSPT set for Voltage Regulation. The company, however, has continuously indicated that it is difficult to measure, monitor and report on this standard. As an alternative it elected to report on the length of time to rectify consumers' complaints as it relates to voltage fluctuations. GPL has committed to rectifying and fix 100% of the voltage complaints it receives within the 30-day period. For the year 2020, the Company reported that 94% of its voltage complaints were rectified within the 30-day timeframe.

3. Meter Reading: For the reporting year of 2019, GPL was required to read 97% of meters for maximum demand consumers and 90% of meters for non-maximum demand consumers.

The standards with respect to both were not achieved. For non-maximum demand consumers, only 89% of the meters were read and as it relates to maximum demand consumers, 91% of the meters were read. In its presentation, the Company explained that with respect to the non-maximum demand consumers, it had experienced delays in the transmission of information in its consumers database of consumers who had received the changeout meters for the Public Utility Upgrade Program (PUUP).

The rationale for the failure to attain this target to the maximum demand consumers was attributed to the occasional failure of the hand-held devices which were equipped to read the data stored with radio frequencies. In some instances, several meters were found to be defective.

4. Issuing of Bills: GPL is required to issue maximum demand bills within 7 (seven) days, and non-maximum demand bills within 10 (ten) days, after the meters have been read. GPL has reported that on average, maximum demand bills were issued within 5 (five) days, and non-maximum demand bills within 9 (nine) days after the meters were read. The targets set with respect to both categories of consumers were met.

5. Accounts Payable: This standard commits GPL to pay its creditors within 26 days. GPL reported that an average of 21 days is necessary to satisfy its indebtedness with its creditors. The standard was achieved.

6. Accounts Receivable: The accounts receivable standard commits GPL to a 30-days cash collection cycle. GPL provided the Commission with two credit periods. The first was the actual credit period and the second was the credit period had the Guyana Water Inc, met its billing obligations in a timely manner. GPL reported that their cash collection cycle under review was 92 days. The standard was, therefore not met.

However, the company indicated that the cash collection cycle excluding Guyana Water Inc. was 31days, which if considered, is marginally above the set standard.

7. System Losses: This standard sets system losses at 25.7% of dispatched power for 2019. For the reporting period system losses were 27.6% of dispatched power. The standard was therefore not met. The company indicated that by error or oversight on the company's part, a flaw was detected in its reporting of system losses for 2018. The figures reported in 2018 at the OSPT Hearing, which was 27.7% were lower than that which were actually achieved. However, notwithstanding its inability to meet the target for system losses in 2019, the Company reported that it was lower than what was obtained in 2018.

Successes as proffered by the company which resulted in a reduction of losses for the previous year included:

- The upgrade to approximately 300 kilometers of low and medium voltage lines on the transmission system.
- The installation of a resilient secure network to combat electricity diversion.
- The replacement of over 32,000 meters with the AMI meters under the Public Utility Upgrade Program (PUUP).

8. Average Availability: For the year 2019, GPL was required to achieve an average generation availability of 80%. The company reported that average generation availability was 84%. The standard was therefore met.

At the time of our deliberations, the Commission was cognizant that the targets which were set in the approved 2016 Development & Expansion plan was based on the company's projected improvements to its infrastructure for that five-year period. This plan was not updated on the required annual basis and as such any glitches or changes over the years were not taken into consideration. In arriving at its decision, the Commission took the foregoing into account including the lacuna in the information as well as the available resources to the company.

The Commission having considered that the impact on the failure to meet some of these targets was not excessive and not burdensome on the consumers, determined that it will not levy a penalty on the company for its inability to achieve the set Operating Standards and Performance Target.

DIVISION'S COMMENTS REGARDING GPL'S SYSTEM LOSSES

System losses comprise of technical losses, which are electricity losses through the transmission network, and commercial losses, which is as a result of theft of electricity. The system losses have been declining gradually over the years; however, this remains a significant cost and burden to the company. This gradual decline may be attributable to the company's commitment to the improvement of its distribution and transmission systems and to the rollout of the Advance Metering Infrastructure (AMI) meters. The installation of the AMI meters may have been instrumental in the reduction of commercial losses at the consumer level at the end of the fourth quarter in 2020, where it was noted that the company had recorded approximately a 1.74% reduction in system losses.

FINAL RETURN CERTIFICATE (FRC)

The Guyana Power and Light Inc. is mandated by the First Schedule of the Licence to Supply Electricity for Public Purposes granted to the company by the Government of Guyana to prepare and submit to the Commission by the 30th of April of each year its Final Return Certification (FRC). The Company, submitted to the Commission its FRC for

the year 2020, which sets out the results of the company's financial operation for the year 2019. The Final Return Certificate is prepared and audited by an independent accounting firm and submitted to the Commission for its approval. The document provides detailed information on the profits which the company is entitled to earn, based on the formula as set out in the license. The company's allowable rate of return is guaranteed, and if in the course of any financial year, the rate of return is not met, the company is required to increase its rates in accordance with the licence granted.

For the year 2019, the Final Return Certificate showed a surplus in earnings of approximately \$2.613 billion, signaling that the company has had a projected decrease in tariffs in 2020. However, the company elected to transfer this surplus as a notional expense to its Revenue Forgone Account (RFA). This transfer is permissible under Section 12 of the First Schedule of the Electricity Sector Reform Act.

The company's Interim Return Certificate submission in January 2021, showed that the company in the year 2020, earn a surplus of \$5.7 billion.

NON-SUBMISSION OF DEVELOPMENT AND EXPANSION PROGRAM

The Commission at page 18 of its 2019 Annual Report, had stated that GPL had failed to submit to the Commission its five-year Development and Expansion (D & E) Program for the periods 2019-2023 and 2020-2024. Section 17(b) of GPL's licence mandates that same be submitted within 60 days prior to the end of each financial year.

Again, there was no submission in 2020. The non-receipt of the D&E Programs has hampered the internal analysis which the Commission must conduct in order to:

- Derive GPL's operating and performance targets,
- Examine and analyze projected capital expansion programs,
- Examine projected maintenance programs for execution in the report year.

TELECOMMUNICATIONS SECTOR

The Guyana Telephone & Telephone Company Limited (GT&T) was granted a licence by the Government of Guyana in 1990 which had afforded the company a monopoly on the landline services and international gateway in Guyana. However, no provision was made in the licence for monopoly operations of mobile voice services. In 2007, with the entry of Digicel in the Guyana market, competition herald in high quality of services and countrywide expansion within the mobile sector.

On October 5, 2020, with the enforcement of the Telecommunication Act of 2016 and the automatic termination of GT&T's monopoly designation, the telecommunication sector has entered an era of new possibilities with liberalization.

The Government of Guyana has granted new licenses to Guyana Telephone & Telegraph Company Limited & U-Mobile (Cellular) Inc. and the issuance of a licence to E-Networks Inc., has expanded the Commission's regulatory reach.

The liberalization of the telecoms sector has heralded in an open and competitive sector which will be enhanced with improved and extended services and the possibility of an offering of lower rates. It is anticipated that with the migration of a pricing regulatory methodology from a rate of return regime to a price cap regime will lead to greater efficiency in the sector.

OVERVIEW OF THE TELECOMMUNICATION SECTOR 2020

The COVID-19 Pandemic has transformed the manner in which business is conducted, moving from a face-to-face interaction to online communication. Connectivity and access to the internet has become a necessity not only in Guyana but worldwide. The telecoms sector has played a vital role in this transition in its provision of an efficient and reliable internet service which is necessary to facilitate the new normal.

Order No. 2 of 2020

In May 2019, the Commission received a complaint from a subscriber which stated that the Guyana Telephone & Telegraph Company Limited, had unilaterally changed his tax invoice without prior notification for the landline service. The Complainant indicated that the change resulted in the exclusion of the substantive billing information which was contained in previous bills. Order No. 2 of 2019 sets out the decision which directed that GT&T is required to dispatch a detailed paper bill to all of its consumers unless notified by the customer that there is a preference for a detailed electronic format.

By way of letter dated 24th June 2020, the Guyana Telephone & Telegraph Company Limited (GT&T), invoking the provisions of Section 77 of the PUC Act No. 29 of 1999, requested that the Commission reviews and vary its decision on Order 2 of 2019. The Commission granted GT&T's request and entered into a public hearing on August 19th, 2020.

The Commission after considering all submissions determined that it would refuse the application to vary Order 2 of 2019 since the version of summarized paper bill as delivered to customers lacked sufficient detail to qualify as a proper bill.

Mobile Services

Where the facility of internet is unavailable, subscribers are required to purchase mobile data for the access to the internet via their mobile devices.

The advent of the internet and the emergence of mobile devices have become the optimum technological device for the mode of connectivity and communication. The Global System for Mobile Communication in its State of Mobile Internet Connectivity 2020 publication indicated that approximately 49% of the world's population has access to the internet through mobile devices.

In Guyana, the mobile phones have become the main facilitator of Over-the-Top (OTT) applications, such as WhatsApp and Facetime, and as a consequence, this has resulted in a steady decline of mobile minutes of use year on year in Guyana. In 2020, mobile minutes fell by approximately six million minutes or 1% when compared to 2019. The mobile operators continued to offer free promotional minutes, GT&T with "its free after two" and Digicel's "free after 3 for 15 minutes".

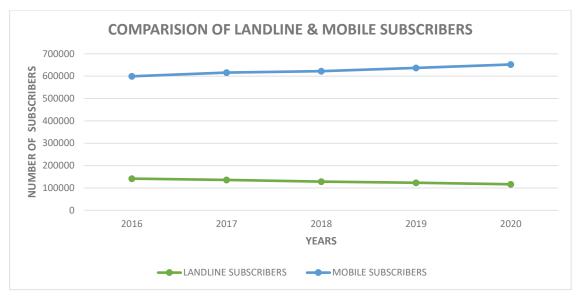
During the reporting year, the combined sales of megabytes (MBs) by GT&T and Digicel have increased by approximately 30%, from approximately 5.8 billion megabytes in 2019 to 7.5 billion megabytes in 2020. This increase in the sale of mobile data may be attributed to the increase in demand for internet services which saw an exponential increase in traffic.

When compared to 2019 there was an increase of approximately 2% at the end of 2020 in active handset use by both operators. Both companies continue to declare that their services extend to approximately 95% of area coverage within Guyana.

Landline Services

The Commission has noted that the number of subscribers to the landline services continues to decline each year and 2020 was no exception. The year 2020 saw a further decline from 122,890 in 2019 to 116,440 in 2020, representing a decrease of 4%. Perhaps the landline quality of service, migration and less emphasis on voice calls were the contributing factors to this decline. The advent of liberalization has increased scrutiny of the quality-of-service offering by the companies. Quality of Service parameters in the Telecommunications (Consumer Protection) Regulations 2020 sets out in detail our mandate. It remains to be seen whether the forces of competition may result in improved quality of service for landline customers.

The Commission is cognizant that the costs to sustain both a landline service and a mobile service may be burdensome to subscribers and therefore, subscribers may elect to retain a mobile service at the expense of traditional landline service.

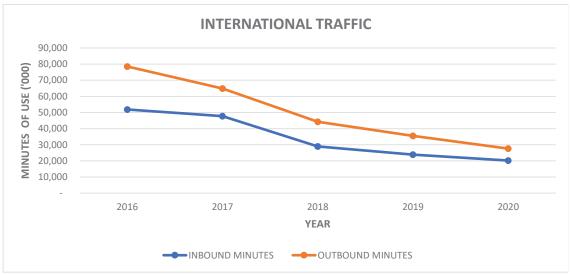


Graph showing a trend of the movement in landline subscribers compared to mobile subscribers from the years 2016 to 2020.

The Commission has taken note of the decline in minutes of use of approximately 11% over the previous year 2019, from approximately 405 million to 362 million. The increased number of mobile subscribers coupled with the access to Over-the-Top Technology and SMS may be a result for the decline of landline subscribers' services. It must be noted that business establishments continue to be prominent users of the landline services and since the national guidelines for COVID-19 Pandemic mandated those businesses shut their doors in 2020, this may have also contributed to the decline of landline minutes of use.

International Calls

In 2020, the steady decline in minutes of use on both inbound and outbound networks year on year endures. As stated earlier the evolution of the internet and data use has resulted in the use of technologies such as Over-the-Top (OTT) to become a primary use for communicating. In addition, the offshoot of COVID 19 has contributed to these technologies to become the leading means for conference and person to person calls through platforms such as the Skype, Zoom, WhatsApp and Facetime. This has been the main contributory factor to the yearly decline in international minutes. The graph below illustrates the trends of international minutes for the last five years.



Movements in international minutes, for the years, 2016 to 2020

The minutes of use on the international gateway from the year 2016 declined by 61% of inbound calls and 72% for outbound calls by the end of 2020. In 2020, inbound minutes declined by 13% when compared to 2019, or by approximately 3.1 million minutes of use; and outbound minutes fell by 18% when compared to 2019, or by approximately 1.7 million minutes of use.

Internet Services

Digital Subscriber Line (DSL)

The Digital Subscriber Line is an internet access which is facilitated by the wireline infrastructure, and it was the first type of technology to offer high speed internet access and wireless internet access in Guyana. The introduction of the Giga-Byte Passive Optical Network (GPON) for the period 2017 to 2019, saw a decline in the subscriber numbers for DSL service. However, the DSL subscribers at the end of December 2020 amounted to 50,368, which represents an increase in the subscriber base when compared to 2019 which was 49,576. The increase in the subscriber number may be attributable to the demand for access tothe internet in 2020.

Giga-Byte Passive Optical Network (GPON)

In 2020 the company continued its rollout of its Fiber to the Home (FTTH) internet service using the Giga-Bye Passive Optical Network (GPON) technology. As of 31st December 2020, the subscriber base for GPON increased by 21% when compared to 2019, which amounted to 29,392 subscribers at the end of the year.

In January 2020, GT&T increased the installation and relocation costs for its GPON services, from \$15,000 to \$20,000 and \$7,500 to \$10,000, respectively. The Commission cannot definitively conclude that the increase in the installation cost has served as a dissuasion to new applicants for this service. However, in March 2020 the company at the onset of COVID-19 Pandemic for a period of five weeks, 20th March to 30th April 2020, had offered free installation to its DSL subscribers who were desirous of upgrading their internet services to the GPON technology.

WATER SECTOR

The Guyana Water Inc. is responsible for providing potable water to more than 75% of the households in Guyana which includes the outlying and hinterland regions. On average GWI produces approximately 165 million cubic meters of water annually for resale to its consumers. The main revenue stream of the company is from the sales of water and monies received from its sewerage consumers.

The company from its inception is the recipient of significant funding from the Government of Guyana and International Donor Agencies. Funding is fundamental to aid the company's expansion programs and the improvement to its infrastructure which is an ongoing exercise to extend it services to unserved areas, which would in turn satisfy the requirements of The United Nation Sustainability Goal #6 – which mandates Clean Water and Sanitation for all.

OVERVIEW OF THE WATER SECTOR

Operating Results

The Commission in an attempt to aid in improving the company's operational and financial efficacies by virtue of Order 2 of 2018, had stipulated that as a prerequisite to the granting of an increase in tariffs the company is required to make incremental improvements to its certain aspects of its operations. The company was required to reduce its Non-Revenue Water by specified percentages each year; improve on its revenue collections and implement a robust metering system to meter all consumers. The Commission is optimistic that should the foregoing initiatives be adhered to the company would be properly positioned to sustain its operations on its own and eliminate the need for the annual Government of Guyana subventions.

Non-revenue Water

The Commission in Order 2 of 2018, had mandated that GWI reduced its non-Revenue water over a seventeenyear timeframe to 15%. Non-Revenue water is water which is produced for which no revenue is received by the

company. At the end of 2020, there should have been a decrease of 4 % in its non-revenue water. Whilst it is difficult to ascertain the percentage of decrease at this early stage it is contended that the continuous metering of unmetered consumers and the maintenance and upgrades of the company's distribution network would eventually bring the non-revenue water to an acceptable level.

Revenue Collections

By virtue of the Order 2 of 2018, the company was projected to collect at least 96% of its billed sales. The company's collection rate improved year on year and by the end of 2020 stood at approximately 80% indicating that the target as set by the Commission did not materialize. The Commission is cognizant that the setbacks caused by COVID-19 pandemic, and that this may have been a contributory factor to company's inability to reach this target.

Water Metering

The Commission by Order 2 of 2018 had stipulated that GWI, during the period 1st October 2018 to 31st December should have metered 37,000 of its unmetered consumers. At the end of 2018, the Company had a total of 92,905 metered consumers and 85,376 unmetered consumers. As of December 2020, the company's metered and unmetered consumers were recorded at 88,690 and 85,473 respectively, which may indicate that since 2018, there has been no marked improvements in this regard. The Commission therefore wishes to urge GWI to make a serious effort in its metering drive which may in turn prove beneficial to the company as:

- Metering will ensure that GWI is in a position to determine the quantity of water consumed by its entire consumer base.
- Metering will ensure that GWI is in a position to develop accurate statistics based on consumption and by extension detailed management reports, which are necessary for decision making purposes.
- A fully metered system should in theory, significantly reduce apparent losses and the company will have a near exact determination of its real losses.
- Full metering is likely to increase the company's revenue, and this will result in a more discerning consumer as it relates to water conservation.

CONCLUSION

Utilities provide essential services to a country and remain integral to human development. Sustained annual investments over the years by each of the utilities will inevitably lead to universal access to their services. The pillar of the new era in the telecommunication sector will ensure connectivity and access to telecommunications for all Guyana through a Universal Service Fund which will aid in the rollout of services in unserved areas and in areas where the costs of rolling out such services are too high for a telecommunication operator to sustain.

The Commission remains concerned that system losses and non-revenue water continues to plague both the Guyana Power & Light Inc. and the Guyana Water Inc. respectively. These losses translate to billions of dollars annually for both companies. It is commendable however that both companies over the years have implemented mechanisms to mitigate losses.

The Commission especially commends the initiatives by the service providers during COVID-19 especially the measures relating to the allocation of data to the essential workers; the increased data cap for the Essequibo Coast to facilitate online schooling, the extended payment periods, and the considerations to relax the strictures to penalize consumers of both power and water utilities for non-payments.



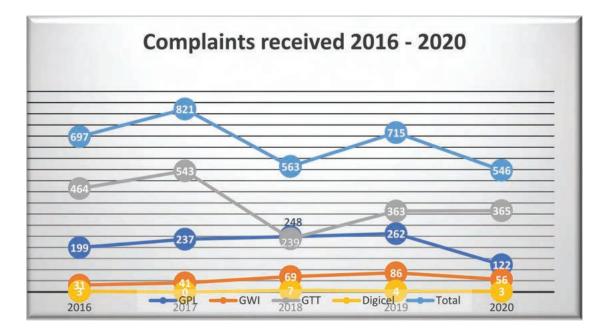
Complaints Division

Overview

The Complaints Division is responsible for resolving complaints between consumers and their regulated service providers along with organising the consumer awareness activities of the Public Utilities Commission (PUC).

In February 2020, the Commission established its fourth office in Essequibo. This is in keeping with our strategic plan to ensure that consumers at every corner of Guyana have access to our services which include the filing of complaints against their regulated service providers. This Office, which is staffed with two officers, works in collaboration with the Commission's offices in Georgetown, Berbice and Linden to ensure that consumer interests are protected, and the general mandate of the Commission is fulfilled.

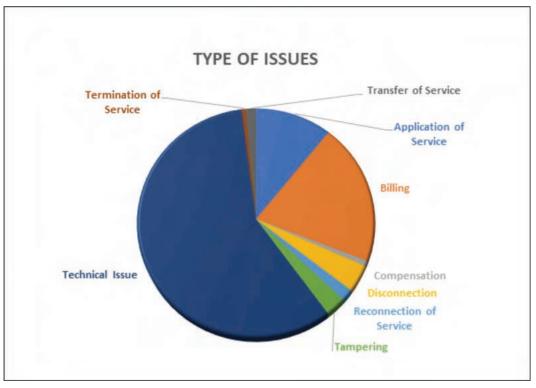
This section highlights the complaints received and resolved during the reported period by the Complaints Division.



Complaints Received

During the reporting year, 546 complaints were received by the Commission (see chart above). 22% of these complaints were filed against GP&L; 10% against GWI, 67% against GT&T and 0.6% against Digicel. There was a marked reduction in the number of complaints received during the reporting period (January – December 2020) when compared to the number of complaints received during the previous reporting period (January – December 2020). This may be attributed partially to the reduction in the number of investigations conducted by the service providers, the extended period for payments of bills and the decision made by the service providers not to disconnect consumers' services during April to September 2020 at the onset of the COVID-19 pandemic.

The number of complaints received against each utility was generally reduced. It was noted that there was a 53% decrease in complaints received against GP&L and a 35% decrease in those received from GWI. Complaints against Digicel were reduced by 25%.



ISSUES REPORTED

Technical issues represented 58% of complaints filed with the Commission in 2020 whilst billing issues represented 20%; application for service 11%; the remaining 11% represents claims of wrongful disconnection, tampering; reconnection of service, transfer of service, compensation for damage to equipment and issues with the request for the termination of service.

TELECOMMUNICATIONS

During the period under review the Commission has received 365 complaints from consumers of GT&T. 355 of these complaints were unresolved issues relating to the fixed internet and telephone services, whilst 10 were related to issues with the mobile services.

50% (272) of the total number of complaints received in 2020 (546) were against GT&T for technical problems with the services. The main concern raised by these consumers was the time taken to resolve the issue; repeated issues with their services and tickets being closed before their services have been fully restored.

The number of complaints received against GT&T for technical issues over the past five years (2016-2020) represents more than 48% of the total number of complaints received during that period.

11% (41) of the 365 complaints received from consumers who filed their complaint against GT&T, were for matters regarding their applications for service. The main concerns raised by these consumers during our interaction was the

length of time to install the services, and the need to resubmit information upon each status enquiry. It is to be noted that only 10 of the 365 complaints received against GT&T were for issues relating to the mobile service.

3 complaints were received against Digicel (Guyana) for issues regarding their mobile services.

Complaints received from consumers from the regulated telecommunication service providers for issues regarding their mobile services (13) continue to be relatively low. This may be attributed to the fact that consumers are satisfied with the service, or that the service providers are internally efficient in resolving the consumer issues to their satisfaction.

ELECTRICITY

There was a 53% decrease in complaints received against GPL (from 262 in 2019 to 122 in 2020).

During the year 2020 there was a marked reduction in complaints received regarding the tampering and bypass of meters (from 106 in 2019 to 14 in 2020). This may have been as a result of the Company's decision to suspend investigations.

At the onset of the corona virus pandemic in March 2020, the company informed that all disconnections, field investigations, meter readings and some categories of installations were suspended. As these services became available the company offered to consumers payment plans in order to liquidate their balances. During this period consumers who had visited the Commission were primarily concerned with issues related to estimated billings and the accurate functioning of their meters.

The Commission worked with the utility company, and consumers who raised their queries with the Commission, to ensure that the consumers understand the invoices received where billings are accurate and where an adjustment is required, the necessary adjustments made on their accounts. The matters regarding meter tests were expedited when GP&L lifted its suspension of field investigations in May of 2020.

In January 2020, the Commission had a meeting with GP&L officials in an attempt to resolve matters which were previously received in 2019. Some 20 matters were discussed, and 17 matters were resolved. Further investigations were conducted on the remaining 3. However, all subsequent meetings for the year 2020 were cancelled as a result of COVID-19 protocols.

WATER

Billing, technical and application for service issues were the overwhelming reasons for filing a complaint with the Commission against GWI in 2020. These matters amounted to approximately 80% (billing 33.9%, technical 28.6% and application for service 17.9%) of the complaints filed against GWI in 2020. Reviewing the 19 billing issues which were brought before the Commission, it was noted that consumers were not liquidating the full balance on their accounts which resulted in their services being disconnected. Consumers also sought adjustment for amounts due based on estimated readings or leakage at the meter.

10 GWI consumers filed complaints as it related to the delay in processing applications for service. The 16 technical issues include the water pressure received; water quality; leakage; water not being received and meter accuracy.

Complaints by Regions

Issues		Regions							
isues	#2	#3	#4	#5	#6	#10	Total		
Allegation of Tampering	0	4	8	1	2		15		
Application for New Service		6	18	10	23	2	59		
Billing Issues	6	14	81	2	5	1	109		
Claims of Compensation			4				4		
Claims of Wrongful Disconnection	3	3	11		4		21		
Reconnection of Service			3		6		9		
Technical Issues	6	14	85	28	179	6	318		
Termination of Service			3				3		
Transfer of Service		1	3	1	3		8		
Total	15	42	216	42	222	9	546		

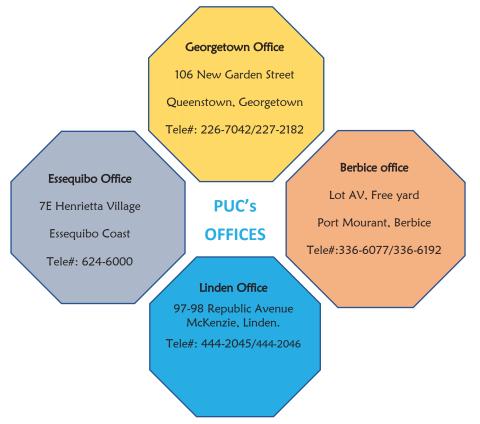
Approximately 80% of all complaints received were from Regions 4 & 6 (Demerara Mahaica and East Berbice Corentyne). For over 7 years the Commission's Georgetown and Berbice offices conducted extensive public awareness exercises in these areas which may be the reasons for the higher number of complaints received. 15% of complaints received were from Regions 3 and 5 (Essequibo Islands West Demerara and Demerara Mahaica). These regions are in relatively close proximity to the Commission's established operating centers at 106 New Garden Street, Queenstown, Georgetown and Lot AV Free Yard, Port Mourant Berbice. Only 4% of the complaints received were received from Regions 2 and 10. Linden and Essequibo office have been established less than two years and the Commission intends to increase its public relations drive in these regions.

The Commission in February 2020 opened its fourth office in Henrietta Village at the Barakat's Mall at Lot 7E Henrietta Village, Essequibo Coast. As of December 31, 2020, 12 of the 15 complaints received from consumers in this region were received by our Essequibo office. All complaints received by our Essequibo office have been resolved.

Methods of Filing Complaints

Consumers who are desirous of filing their unresolved complaints with the Commission are encouraged to contact the Commission by means of any of the methods identified below.

- Via E-mail at complaints@pucguyana.com
- Via the Commission's website at www.pucguyana.com
- Post or hand delivered letter of complaint to the Commission.
- Visit or call to our offices:



We made the decision to accept visits to our offices by appointment only. Strict COVID-19 guidelines were established in accordance with the National Policy to ensure that our employees and consumers are safe.

The reduction of complaints filed by visiting the Commission's office fell from 57% in 2019 to 17% in 2020. This is as a direct result of the Commission's decision to suspend 'in person' filing of complaints. The Commission public relations efforts and social media presence have also impacted on the number of consumers visiting our offices. Complaints filed electronically (Website/electronically filing/Facebook) have increased from 10% in 2019 to 19.6% in 2020 and those filed via the telephone have also increased from 25% in 2019 to 51.7% in 2020. Complaints filed by posting letters to the Commission have increased from 8% in 2019 to 11.7% in 2020.

	<u>GPL</u>	<u>GPL</u>			<u>GTT</u>			<u>GWI</u>			DIGICEL			Total
	G/Town	B/ce	Essequibo	G/town	B/ce	Linden	Essequibo	G/town	B/ce	Linden	Essequibo	G/town	B/ce	
In favor of consumer	18	3	0	81	191	5	1	18	13	1	1	1	1	334
In favor of utility	40	0	1	16	0	1	2	6	0	0	3	1	0	70
Complaints rejected/No action taken	1	0	0	1	0	0	0	0	0	0	0	0	0	2
Complaints withdraw	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Enquiries	4	0	0	0	0	0	0	2	0	0	0	0	0	6
Total resolved 2020	64	3	1	98	191	6	3	26	13	1	4	2	1	413
Received in 2020 and are unresolved	48	4	2	28	39	0	1	10	0	1	0	0	0	133
Unresolved from Prior years	44	38	-	38	7	0		14	3	1	-	0	0	145
Total unresolved as of December 31, 2020	92	42	2	66	46	0	1	24	3	2	0	0	0	278

In 2020, four hundred and thirteen (413) matters, representing 75.6% of the 546 matters received, were resolved.

Of the 413 resolved matters, 81% (334) were resolved in the complainants' favor whilst 17% (70) were resolved in the utilities' favor. The remaining 2% represents 6 matters for which the complainants approached the Commission prior to engaging their service providers on the issue(s) and 3 complaints which were either rejected or withdrawn.

Credits Awarded

Credits amounting to \$3,275,780.00 were awarded to the accounts of consumers who filed their complaints with the Commission during the period under review. However, credits totalling \$40,223,968.00 were awarded to consumers accounts during the period January 1 – December 31, 2020. This quantum includes settlements pending from previous years.

The credits awarded represented adjustments based on incorrect billing of the account; breach of standards; rebates, and compensation for damage to equipment and appliances.

Below represents the credits and rebates received from the respective service providers for complaints filed during the reviewed period.

Utilities	Georgetown office	Berbice office	Linden office	Essequibo Office	Total
DIGICEL	\$	\$ -	\$		\$0.00
GPL	\$509,170.00	\$0.00	\$		\$509,170.00
GT&T	\$632,855.83	\$2,028,587.81	\$63,837.38		\$2,725,281.02
GWI	\$26,738.00	\$	\$14,591.00		\$41,329.00
TOTAL	\$1,168,763.83	\$2,028,587.81	\$78,428.38	\$0.00	\$3,275,780.02

Public Relations

The general aim of the public relations campaigns of the Commission is to inform and educate consumers of the regulated service providers on their rights and responsibilities and the general role of the Public Utilities Commission.

The COVID-19 pandemic has severely hampered our projects and plans for public awareness activities in 2020. PUC like other agencies, resorted to alternative virtual public relations exercises.

In 2020, the Commission conducted two Town hall meetings via Zoom with media personalities with a wide reach. Our meetings received over 13,000 views. We discussed the work of the Commission and informed consumers of our operations during the pandemic. Discussions were held on the complaints procedure and information to assist consumers to resolve their pending matters was provided.

Through the medium of our social media presence and our website, we informed and updated consumers on the work of the Commission. We continue to broadcast our advertisement on television and radio which reaches consumers along the coast of Guyana.

Our Facebook page Public Utilities Commission Guyana and our new website www.pucguyana.com was launched in 2020. We intend to use these platforms and others to achieve our goal to reach every consumer at every corner of Guyana.

Liberalization and Consumer Protection

In October of 2020, a new Telecommunications Act and accompanying regulations were made effective. These regulations together with new licences issued to the operators have marked the end of the era of a monopolized telecommunications sector in Guyana.

Liberalization of the telecommunications sector allows consumers to have a choice of carrier of its services which will generate competition and increase or expand the sector as the number of licensed operators increase. There is an expectation that there will be increased access to telephone and internet services and an improved quality of service.

The Telecommunications (Consumer Protection) Regulations 2020 was made effective on the 23rd of October 2020. In brief, it sets out the objectives as they pertain to the protection of users of telecommunications services and

networks in Guyana; provide for the confidentiality of Information; establish minimum quality of service which are to be met by the service providers along with the principles governing the resolution of consumers complaints and the obligations of service providers to consumers.

This regulation also highlights new areas for the reporting of information to the Commission which will assist the Commission in ensuring that the telecommunications service providers offer the quality of service that is expected.

CONCLUSION

Despite the challenges presented by COVID-19 in 2020, the Complaints' Division successfully resolved 76% of complaints filed.

Our Virtual Private Network (VPN) allowed our staff to operate from home in order to ensure that consumers' complaints were filed, investigated and resolved in a timely manner.

A highlight of the Commission's workplan was the opening of our fourth office on the Essequibo Coast which now provides easier access to consumers on the Essequibo Coast and surrounding areas. The Commission commissioned this office on the 12th of February 2020.

An area of concern highlighted by consumers is the timeframe by utilities to respond to their queries. This delay ultimately results in loss of resources to consumers.

In 2021 the Commission intends to place greater emphasis on raising the bar on its customer service and customer satisfaction.

The Commission will continue its work with all stakeholders to sustain the validity of the service providers and ensure that consumers are protected.





Accounts Division

FINANCIAL REVIEW - 2020

As the Commission and the world grappled with the effects of the COVID-19 pandemic, the Commission rose to the challenge and effectively managed its financial resources and carried out its functions in keeping with its strategic plan.

Like all other entities the Commission was forced to adapt to the new norm of doing business. Technologies and the internet became a vital commodity during this period and with the Online Banking platform, QuickBooks and Microsoft 365 the Division transitioned seamlessly to a remote working environment. The Microsoft 365 platform and the successful implementation of the ZOOM business solutions allowed for the collaboration and communication between the different divisions of the Commission.

The Commission received its funding from assessment fees levied on utilities under its purview in keeping with Section 64 of the Public Utilities Commission Act No. 10 of 1999. Assessments fees were utilized to fund employment cost, public awareness activities, utilities charges, professional fees and other expenses during the year, a deficit of \$36,915,031 was recorded for the year under review. The safety of our staff was a primary priority, and thus a budgetary allocation was made to ensure that they were provided with personal protective equipment and cleaning supplies to combat the COVID 19 pandemic. Additionally, an internet allowance was provided to facilitate an effective remote working environment.

Assessment fees payable to the Commission from its inception, were based on a fixed percentage as stipulated in the Act. However, this methodology has now changed with the liberalization of the Telecommunication Sector with the enforcement of the Telecommunications Act of 2016 in October 2020 and the repeal of the Public Utilities Act

No. 10 of 1999. The Commission is now mandated by the Public Utilities Commission Act 2016 No 19. of 2016, to calculate assessment fees payable to the Commission by the regulated service providers.

The following are the unaudited financial statements for the year ended December 31, 2020.

PUBLIC UTILITIES COMMISSION Statement of Financial Position

As at December 31, 2020

	2020	2019
	G\$	G\$
Assets		
Non-Current Assets		
Property/Plant/Equipment	110,295,769	114,931,552
Total Non-Current Assets	110,295,769	114,931,552
Current Assets		
Receivables	211,306	1,164,327
Prepayments	277,464	256,516
Cash and Cash Equivalents	294,200,433	326,598,833
Fotal Current Assets	294,689,203	328,019,676
FOTAL ASSETS	404,984,972	442,951,228
EQUITY AND LIABILITIES		
EQUITY		
Retained Earnings	394,498,732	430,311,263
Revaluation Reserves	10,361,800	10,361,800
Total Equity	404,860,532	440,673,063
Current Liabilities		
Payables	-	384,317
Accruals	124,440	1,893,848
Total Current Liabilities	124,440	2,278,165
FOTAL EQUITY AND LIABILITIES	404,984,972	442,951,228

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PUBLIC UTILITIES COMMISSION Statement of Profit and Loss For the year ended December 31, 2020

	2020	2019
	G\$	G\$
Income		
Assessment Fees	150,000,000	150,000,000
Other Income		-
Interest Earned	7,762,300	9,254,931
Total Income	157,762,300	159,254,931
Expenses		
Employment Cost	143,135,146	139,116,839
Training Conference and		
Official Visits	126,000	5,727,655
Administration Expenses	30,015,094	22,563,300
Utility Charges	4,658,544	4,189,868
Legal Fees	-	300,000
Security Charges	5,004,144	4,718,574
Rent Charges	2,460,000	1,700,000
Repairs and Maintenance	1,843,077	1,539,317
Bank Charges	132,650	282,800
Depreciation	7,070,988	8,938,320
Rate and Taxes	231,688	234,624
Total Expenses	194,677,331	189,311,297
Net Deficit	(36,915,031)	(30,056,366)

PUBLIC UTILITIES COMMISSION Statement of Changes in Equity For the year ended December 31, 2020

	Retained Earnings	Revaluation Surplus	Total Accumulated Fund
	G\$	G \$	G\$
Balance as at January 1, 2019	460,431,147	286,320	460,717,467
Prior Year Adjustments	(63,518)	75,480	11,962
Revaluation Gain	-	10,000,000	10,000,000
Net Deficit for the period	(30,056,366)	-	(30,056,366)
Balance as of December 31, 2019	430,311,263	10,361,800	440,673,063
	G\$	G\$	G\$
Balance as at January 1, 2020	430,311,263	10,361,800	440,673,063
Adjustments	1,102,500	-	1,102,500
Net Deficit for the period	(36,915,031)	-	(36,915,031)

394,498,732

10,361,800

Balance as of December 31, 2020

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PUBLIC UTILITIES COMMISSION Statement of Cash Flows For the year ended December 31, 2020

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	2020 G\$	2019 G\$
Cash Flow from Operating Activities		
Net Deficit	(36,915,031)	(30,056,366)
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	7,070,988	8,938,320
(Increase)/decrease in accounts receivable	953,021	(435,184)
Increase/(decrease) in accounts payables	(384,317)	384,317
(Increase)/decrease prepayments	(20,948)	17,238
Increase/(decrease) in accruals	(666,908)	(8,225)
Net cash and cash equivalents from operating activities	(29,963,195)	(21,159,900)
Cash flows from Investing Activities		
Purchase of equipment	(1,995,205)	(1,380,133)
Purchase of furniture	(440,000)	(787,005)
Net cash used in investing activities	(2,435,205)	(2,167,138)
Net increase/(decrease) in cash and cash equivalents	(32,398,400)	(23,327,038)
Cash and cash equivalents at beginning of period	326,598,833	349,925,871
Cash and cash equivalents at end of period	294,200,433	326,598,833



The Commission

he PUC Act No. 18 of 2016 defined 'public utility' as any person (including the lessee, trustee, receiver or liquidator of such person) who or which owns facilities used to provide, or provides the following services:

- 1. the production, generation, storage, transmission, sale, delivery, furnishing or supplying, directly or indirectly, to or for the public, of electricity.
- 2. any other service specified by the Minister by order, being any of the following services: -
- (carriage of passengers, in motor buses or hire cars;
- airport and airline services;
- carriage of goods for hire or reward by goods vehicles;
- lighterage or cargo handling;
- dockage, wharfage or related cargo services; and
- water supply services, except retail deliveries; and
- sewerage services

The Telecommunications Act No. 19 of 2016 defined 'telecommunications undertaking' as any operator, service provider or any other person whose activities are subject to this Act.

The Public Utilities and Telecommunications Undertaking currently under the purview of the Commission are:

- Guyana Telephone & Telegraph Co. Ltd. (GT&T) From 1990.
- Guyana Power & Light Inc (GPL). From 1999
- Guyana Water Inc (GWI). From 2003

- U-Mobile (Cellular) Inc. (Digicel) From 2007
- E-Networks Inc. -from 2020

Filing a Complaint

Any consumer who has a complaint against any public utility or telecommunications undertaking should engage with the service provider prior to approaching the Commission. If not satisfied, that consumer may file a complaint with the Commission who will advocate on the consumers' behalf, with the particular utility or telecoms undertaking.

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.

HELP DESK - Monday - Thursday: 8:00 - 16:30 hrs. Friday: 8:00 - 15:30 hrs.

GEORGETOWN OFFICE: Lot 106, New Garden Street, Queenstown, Georgetown Telephone - 592-226-7042 or 592-227- 2182 Fax - 592-227-3534

BERBICE OFFICE: Lot AV, Free Yard, Port Mourant, Corentyne, Berbice Telephone - 592- 336-6077 or 592-336-6192 Fax - 592-336-6077

LINDEN OFFICE: Lot 97-98 Republic Avenue, Mackenzie, Linden. Telephone - 592-444-2045 or 592-444-2046

ESSEQUIBO OFFICE: Lot 7 E Henrietta Village, Essequibo Coast Telephone - 592-624-6000

- WEBSITE www.pucguyana.com
- **EMAIL** complaints@pucguyana.com info@pucguyana.com
- FACEBOOK www.facebook.com/pucguyana

PUC Website

The Commission in the latter part of 2019 introduced a new website – **www.pucguyana.com** to the public. This new user-friendly website allows for online filing of complaints, access to updated information on the work of the Commission and other events, including public hearings. It could be navigated to obtain information regarding:

- 1. The Complaints' Procedure.
- 2. Rules for Determining Consumers' Complaints.
- 3. Presentations.
- 4. Publications.
- 5. Notices, presentations, publications, notices and documents pertaining to Public Hearings.
- 6. Complaints' monthly reports from January 2011 to December 2018.
- 7. Annual Reports from 1991 to 2018.
- 8. PUC Orders as delivered.









GEORGETOWN OFFICE: Lot 106, New Garden Street, Queenstown, Georgetown Telephone- 592-226-7042 or 592-227- 2182 Fax- 592-227-3534

BERBICE OFFICE:

Lot AV, Free Yard, Port Mourant, Corentyne, Berbice Telephone-592- 336-6077 or 592-336-6192 Fax- 592-336-6077 LINDEN OFFICE: Lot 97-98 Republic Avenue, Mackenzie, Linden. Telephone - 592-444-2045 or 592-444-2046 ESSEQUIBO OFFICE: Lot 7 E Henrietta Village, Essequibo Coast Telephone - 592-624-6000

Web: www.pucguyana.com Email:complaints@pucguyana.com