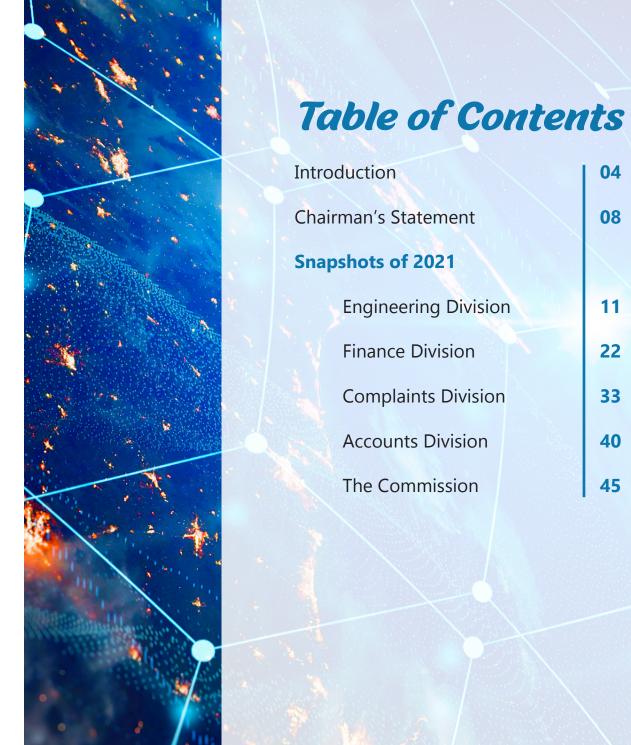


2021 ANNUAL REPORT

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



ANNUAL REPORT 2021





Introduction

he Public Utilities Commission (PUC) is a corporate body which was established by the Public Utilities Commission Act No. 26 of 1990. The Commission commenced its operations at the Parliament Buildings in Georgetown, with a staffing of transferred public servants from the then Ministry of Public Utilities. The first Chairman of the Commission, Mr. Joseph Tyndall, was appointed on March 14, 1991, together with the four (4) part-time members.

The PUC Act of 1990 was subsequently repealed by the Public Utilities Commission Act No. 10 of 1999, which was promulgated primarily to facilitate the reforms of the electricity sector, bringing into effect the Electricity Sector Reform Act No. 11 of 1999.

In 2003, in addition to the telecommunications and electricity sectors, the Commission commenced regulating the water sector. By that year also, the Commission had moved to its rented premises at Lot 198 Church Street, Queenstown Georgetown, eventually securing its own office at Lot 106 New Garden Street, Queenstown, Georgetown in 2014, where it is currently headquartered.

The Public Utilities Commission Act No. 10 of 1999 was repealed by the Public Utilities Commission Act No. 19 of 2016, which was made effective on October 5, 2020. The Act incorporated a number of previous amendments and made the requisite changes in line with the liberalization of the telecommunications sector, which also saw the issuance of new licences and the promulgation of the Telecommunications Act No. 18 of 2016 along with a raft of related regulations.

The Commission's regulatory reach has been further expanded with the issuance of a licence by the Government of Guyana to a new entrant in the telecommunications sector E-Networks Inc.

The public utilities and telecommunications undertakings currently under the statutory oversight of the Commission are:

- Guyana Telephone & Telegraph Co. Ltd. (GTT)
- Guyana Power & Light Inc (GPL).
- Guyana Water Inc (GWI).
- U-Mobile (Cellular) Inc. (Digicel)
- E-Networks Inc.

The composition of the Commission in accordance with the PUC Act allows for the appointment of a Chairman and four Commissioners. The following are the current Members of the Commission: -

Ms. Dela Britton
 Mr. Rajendra Bisessar
 Dr. Leyland Lucas
 Ms. Verlyn Klass
 Dr. Nanda K. Gopaul
 Chairman
 Member
 Member
 Member

The Commission, in addition to its Members, comprises of a Complaints Division, Accounts Division, Engineering Division, Finance Division, and the Secretariat in order to effectively carry out its mandate. Along with its headquarters in Georgetown, the Commission has further extended its reach to consumers via its branch offices in Berbice, Linden, and Essequibo.

4

Mission

To ensure that regulated utilities offer efficient services 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 monitor and conduct investigations into the standards of service of the service providers.
- To review and approve interconnection and access agreements of the service providers.

Editorial Board

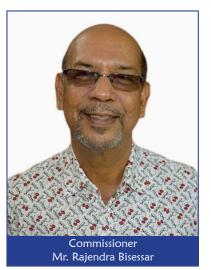
Mrs. Anuradha Mohabir-Singh – Senior Officer, Secretariat

Acknowledgements
Staff of PUC

Essequibo Office-Complaints' Officer Linden Office -Complaints' Office 2021 CHART Commissioners Engineer ORGANISATION Chairman **Accounts Clerk** Senior Officer -Accounts Division Legal Officer Financial Analyst II Financial Analyst I Clerical Officer

Chairperson and Commissioners 2021













n 2021, the COVID-19 Global Pandemic continued unabated. As a consequence, the PUC, like so many other agencies, was forced to retool its operations to rise to this new normal.

In January 2021, the Commission paid a courtesy visit to the Prime Minister, Honorable Mark Phillips, who serves as the subject Minister with responsibilities for Energy, Electricity, and Telecommunications. Our inperson discourse afforded us the opportunity to discuss PUC's 2021 roadmap, which encompassed the various modes of Regulatory Oversight; Robust Monitoring; Regulatory Evaluation; Stakeholder Engagement, and Capacity Building. As an indication of his commitment to the Commission, the Prime Minister facilitated an engagement with Junior Minister, Honourable Kwame McCoy, who holds the portfolio of Minister within the office of the Prime Minister with responsibility for Public Affairs. Fruitful discussions were held on our collaborative measures to prioritize the work of the Commission via the Department of Public Information (DPI) and other governmental media.

During the year under review, PUC continued its usual monitoring of the Telecommunications Sector. Our Linden office now serves as the nerve center for tracking and the analysis of all trends, rates, promotions, and changes in the sectors and to ensure strict compliance with the Consumer Protection Regulations 2020.

The liberalization of the Telecommunications Sector in Guyana heralded the arrival of a new provider, E-Networks Inc. into the telecommunications market, bringing the number of operators to three. E-Networks Inc. is a locally owned telecommunications provider which offers internet and television services to consumers.

Introductory meetings were held with the company on a number of regulatory policies and procedural issues.

Like all things liberalization, the negotiations of the Reference Interconnect Offers (RIO) presented a different and new realm for PUC as it brought together the talents of our Finance, Engineering, and Legal Divisions and, as a dynamic unit, dissected the offers and provided the proper guidance to operators. An RIO is a proposal that creates the terms and conditions inclusive of rates and mode of connection for which a service provider (usually the dominant service provider) will allow the interconnection of another service provider to its network. This document is intended to attract and facilitate new entrants into the telecommunications sector. As is statutorily required, all dominant operators are mandated to submit a draft RIO to the Commission for its review and approval. On February 16, 2021, the Commission approved the duly presented RIOs of the dominant operators- GTT and Digicel.

Number Portability is another key component of liberalization that is intended to fuel competition. This concept seeks to afford leverage to a consumer to switch service providers whilst retaining the telephone number from its previous service provider.

In anticipation of an Order from the Prime Minister to initiate Number Portability, which was eventually issued on

PUC ANNUAL REPORT 2021

July 1, 2021, the Commission had held several consultations with its sister regulators: the Office of Utilities Regulation (OUR), Jamaica, The Eastern Caribbean Telecommunication Authority (ECTEL), Organization of Caribbean Utility Regulators (OOCUR) and Telecommunications Authority of Trinidad and Tobago (TATT). In the spirit of regulatory cooperation, all entities readily provided invaluable insight and knowledge exchange tools on their respective journeys to the implementation of Number Portability.

The Commission has the primary responsibility for the proper oversight of the Number Portability process and its implementation. In order to streamline this process, the Commission established its Number Portability Working Group (NPWG) which is headed by Commissioner Verlyn Klass and comprises all the Telecommunications Service Providers and the Telecommunications Agency. The collaborative magic of the Regulators and Operators saw the compilation of the Request for Proposals (RFP). This document was issued on October 28, 2021. At the time of publication of this report, the selected bidder was identified, and negotiations are ongoing.

The Electricity Sector comes under the purview of the Commission and as such the Commission is statutorily required to hold Public Hearings into the monitoring of the Guyana Power and Light Inc. (GPL). The Operating Standards and Performance Targets (OSPT) hearing was duly convened on March 30, 2021. The OSPT serves as the benchmark for the Commission and GPL to properly evaluate the company's performance during the reporting year. GPL, through presentations by its representatives which included the CEO and Director of Customer Services, made the case for GPL's quality of service and other related matters. In arriving at its decision, the Commission took into account the impact of the COVID-19 pandemic on the company's resources which had hampered the company's ability to achieve its targets. Additionally, the Commission highlighted the company's improved efforts with respect to the issuance of bills, accounts payable, and average availability. After careful deliberations, the Commission determined that the company's failure to achieve its targets did not warrant the imposition of a monetary penalty as the numerical differential of the respective targets was not overwhelming. However, we urged GPL to redouble its efforts in the area of quality of service.

In September 2021, GPL commissioned its upgraded substation at Canefield, Canje in East Berbice Corentyne. The facility is now monitored remotely and provides a reliable supply of power to residents in the surrounding areas. The Prime Minister in his feature address noted that the aim of the Government of Guyana "is to provide an additional 400 megawatts of newly installed capacity for residential and commercial – industrial users. Amongst the transformative infrastructural works in the pipeline include the completion of the Amelia Falls Hydro project, moving towards clean, reliable, affordable power supply; investments in solar and wind systems for off-grid areas and developing microgrids for large hinterland villages; the expansion of the Hinterland Electrification Programme and urgent action to improve the national grid with regard to both transmission and distribution".

In February 2021, the approved national budgetary allocations granted a reduction in the water tariffs. On April 13, 2021, Guyana Water Incorporated (GWI) applied to the Commission for its approval to reduce the water tariff by 5%. On April 28, 2021, during the Public Hearing, the Commission voiced its concern about the financial impact which the consequential reduction of the water tariff may have on the company. GWI, however, assured the Commission of its long-term ability to recoup lost revenues through its operational and infrastructural plans as the company had received commitments from the various funding agencies and the Government of Guyana to realize an enhanced cost-effective position.

In light of GWI's robust statements, the Commission unanimously approved a 5% decrease in water tariffs and we cautioned that this decrease was granted with the expectation that GWI would be properly positioned to recover its losses in revenue via the procurement of 42,000 meters and its imminent roll out by the end of 2021. The Commission took the opportunity to reiterate its 2018 position regarding the reduction in non-revenue water and the metering of all unmetered consumers to ensure 100% across the consumer database.

Central to the functions of the PUC is its Complaints Division. This unit is tasked with the responsibility to investigate consumer complaints and scrutinize the operations of the Service Providers to ensure compliance with the regulations. For the reporting year 2021, we saw a marginal increase of 4% in the filing of complaints against the Electricity Sector as one hundred and twenty-seven (127) complaints were filed in 2021 as opposed to one hundred and twenty-two (122) for the year 2020. Technical and tampering issues accounted for the bulk of the electricity complaints.

For the Water Sector, the Commission noticed a 5% decrease in the filing of complaints with only fifty-three (53) complaints filed in 2021 when compared to fifty-six (56) filed in the previous year.

PUC ANNUAL REPORT 2021

For the Telecommunications sector, the number of consumers who contacted the Commission to file complaints declined by 6% from 365 in 2020 to 344 in 2021. Technical issues, which represent 68%, accounted for the majority of complaints filed against this sector.

The mobile subscriber base has increased by 7% contrasting the position of a 2% increase in 2020. Mobile minutes of use increased by 9% after a less than 1% increase in 2020 which came after five years of continuous decline. For the landline service, the minutes of use continue to decline and 2021 was no different with a decline of 14% when compared to the year 2020. This may have been attributed to the fact that an increased number of consumers embraced Over-the-top (OTT) Communications and Fibre. OTT refers to the delivery of real-time communications solutions such as audio, video, and other media over an IP network (such as the internet) bypassing the traditional operator's network. Similarly, the introduction of Fibre allows for broadband connection and consumers benefit from an improved quality of service.

As an offshoot, of the COVID-19 pandemic and the continued restrictions on in-person workshops and inter-sector collaboration, PUC sought alternative avenues to maintain its public/private engagements and to fulfill its Public Relations mandate.

In an effort to ramp up its social media platform as a vehicle of dissemination, on June 11, 2021, PUC launched its webinar series with the inaugural moot of "Telecommunications Liberalization and Consumer Expectations". The panel consisted of industry leaders from Telecommunications Agency, Guyana; local Telecommunications Providers; and Consumer Rights Advocates. All presenters, recognizing the importance of improved accessibility and infrastructural development for the greater good of Guyana, gave their collective commitment to the enhancement of the telecommunications sector. Fodder was provided on spectrum management, quality of service, ensuring consumer welfare and protection, and the reduction of the regulatory stronghold.

Our "Energy and Electricity – What We Should All Know" webinar which was held on July 16, 2021, with participants drawn from the CARICOM Secretariat, Guyana Energy Agency, Guyana Power and Light Inc., and Consumer Advocate provided the viewing public with a thought-provoking conversation on the impact of oil and gas on electricity generation; service efficiency; accessibility; and sustainable energy.

Our last webinar in October 2021 themed "What's in your pipe - Water Conservation, Quality of Service and more", was moderated by Dr. Marsha Atherley-Ikechi- CEO of the Fair Trading Commission (FTC) Barbados. The esteemed panelists included the National Water Commission (NWC) Jamaica, Head of Transmission and Distribution (GWI), Manager, South East Distribution Water and Sewerage Authority (WASA), Trinidad and Tobago and Consumer Advocate. Provision of clean and potable water for consumers; water treatment; meter installation; achieving WHO water standards; and service quality reliability and availability formed part of the engaging discussion.

PUC's 2021 webinar series garnered over 200 participants and reached over 3,700 persons via live streaming on Facebook. PUC is mindful that every sphere of the industry is saturated with webinars and the like, as such the Commission is of the view that in order to sustain interest in our work, innovative perspectives need to be considered for 2022 and beyond.

In May 2021, the Commission welcomed Dr. Nanda Gopaul as the 4th Commissioner to the PUC. Dr. Gopal holds a Ph.D. in Industrial and Business studies and he has served in several leadership capacities including Minister of Labor for Guyana. Dr. Gopaul brings a wealth of experience in both the private and public sectors, especially in procurement issues. His presence now brings the full complement of Commissioners and lends to the richness of our deliberations.

As the Commission sets its sights with renewed vigor on the prospects for 2022, we look forward to our continued collaboration with all of the operators under our purview; improved and robust monitoring; and the realization of Number Portability which will ultimately lead to improved quality of service for all sectors and all of Guyana.

10

May 2021.



Engineering Division

Mr. Nikita Somwaru, Engineer

The Telecommunications Sector

On October 5, 2020, under sections 23 and 93(4)(b) of the Telecommunications Act No. 18 of 2016, licences were issued to the Guyana Telephone & Telegraph Co. Ltd (GTT), U-Mobile (Cellular) Inc. (Digicel) and E-Networks Inc., for the provision of public telecommunications services. These licences paved the way for open and competitive markets with an expectation that it will attract new operators and investors, ultimately beneficial to all stakeholders.

Two (2) of the early key deliverables for the new sector were the preparation of Reference Interconnection Offers (RIO) by GTT and Digicel and the preparation by the Commission for number portability in the sector.

Reference Interconnection Offer (RIO)

The main thrust of the Reference Interconnection Offer (RIO) is to provide prospective entrants to the telecommunications market with sufficient information regarding the technical core of the existing service providers' networks and their offered services. The RIO serves as the basis for the negotiation of an interconnection agreement and in essence, is the business contract between the telecommunications service providers for interconnection.

On December 30, 2020, GTT and Digicel submitted their draft RIOs to the Commission. After a collaborative internal examination by the Commission, the RIO was approved on February 16, 2021.

Number Portability

Number Portability is one of the key competitive tools in the telecommunications service for mobile and fixed line services. The functionality of number portability allows subscribers the choice to retain their mobile/fixed numbers if exercising the option to migrate to another network.

Section 21(1)(i) of the Telecommunications Act 2016 instructs that the Commission is mandated to regulate number portability. Whereas, the Telecommunications (Interconnection and Access) Regulations 2020, 7(2) (b) directs that the dominant service providers shall configure their public telecommunications networks and services to facilitate and provide number portability.

In preparation for number portability, the Commission held several consultations with sister regulators in the Caribbean, including the Office of Utility Regulations (OUR) in Jamaica and the Eastern Caribbean Telecommunications Authority (ECTEL) in St Lucia. In these consultations, the Commission was able to learn from the experiences and challenges from the regulators' perspective in the implementation of number portability. The Commission also benefited from the sharing of information and relevant documentation from these regulators.

Number Portability Working Group

On July 1, 2021, the Honorable Prime Minister issued the Telecommunications (Commencement of Number Portability Obligations) Order 14 of 2021 bringing the number portability obligations specified in regulation 7 (2) (b) of the Telecommunications (Interconnection and Access) Regulations 2020 into force.

On the 5th day of August 2021, the PUC established its Number Portability Working Group (NPWG) headed by the Commission and comprising of representatives from the telecommunications providers and the Telecommunications Agency. The NPWG was given the charge to ensure that the framework and procedures are in place for the seamless implementation of the number portability service in Guyana.

PUC ANNUAL REPORT 2021

Achievements and Projections for the Implementation of Number Portability

The Number Portability Working Group (NPWG) commenced one of its key deliverables with the development and review of the business rules for the sector. These directions set out the rules and conditions which apply concerning the provisioning of the porting process. As of December 31, 2021, the rules were completed in the draft and were required to be finalized.

The second key deliverable was the development and finalizing of the request for proposals for the provisioning of number portability administration service in Guyana. Following the publication of the request for proposals, the Commission received four (4) proposals from international providers and as of December 31, 2021, the evaluation of those bids had commenced.

Telecommunications Development in Guyana

• Essequibo submarine Fibre and 5G network expansion

In July 2021, E-Networks Inc. commenced the expansion of its service to the Essequibo Coast and surrounding islands by landing a submarine cable on the coast to provide internet service to the residents of Essequibo Coast from the Pomeroon to Supenaam. This cable allows for connectivity through a cable station which is linked to networking radios and which is routed and mounted in fixed positions on the river bed. The cable not only provide internet service but also enable the transmission of voice service. The Commission welcomes this initiative by the company which allows for other alternative services in this region.

• Submarine cable from Suriname

E-Networks Inc. was granted approval from the Government of Guyana to land a fibre optic submarine cable from Suriname in August 2021. This cable, which is linked to Guyana, allows for the provision of redundancy connectivity which is a parallel link to their existing submarine cable from Barbados to Guyana. In the event of a loss of signal from the existing link, this cable will continue to provide seamless signal and internet service.

• 4G, 5G and OnFibre internet services in Linden

E-Networks Inc. which provides DreamTV satellite television services in Linden, in September 2021 expanded its fibre optic backbone to the mining town and launched its internet service (4G, 5G and OnFibre). The ten (10) areas in Linden to benefit from this enterprise are Amelia's Ward, Central McKenzie, Speightland, Wismar, Silvertown, Silver City, The Valley, Half-Mile, One-Mile, and Blueberry Hill. It is expected that the residents of these areas will be able to enjoy a fast and reliable service similar to that which is enjoyed in the capital city of Georgetown.

Gigabyte Passive Optical Network (GPON)

Some of the areas in which GTT provides Digital Subscriber Line (DSL) internet service via its copper network in the areas of Vreed-en-Hoop, Linden, Non-Pariel and New Amsterdam among other areas, in October and December 2021, rolled out its Gigabyte Passive Optical Network (GPON). The service to these areas facilitates both broadband and fixed line voice services. Consumers will now benefit from faster bandwidth over the fibre network as compared to the copper network.

The Electricity Sector

The Guyana Power & Light Inc. (GPL) was incorporated as a private limited company in 1999 under the Electricity Sector Reform Act 1999 of Guyana. The Government of Guyana issued an exclusive licence to the company to generate, transmit and distribute electricity for sale to consumers within selected areas in the country. This license precludes the company from providing service to areas where there are existing public suppliers of electricity.

One of the statutory requirements is for the power company to submit annually to the Commission its development and expansion programme for the Commission's reviews and comments. The Engineering Division reviews the technical programs as specified in the company's programme inclusive of how consumers will benefit from the implementation of the programs.

Developments in the Electricity Sector

Protection of the GPL's Submarine Cable

GP&L installed a 69 kV submarine cable in 2012 which links the Vreed-en-Hoop and Kingston power stations in order to provide an equitable distribution of power to the residents connected to the Demerara Berbice Interconnected System (DBIS). This cable has been damaged on numerous occasions mainly by ships traversing the Demerara River, resulting in the loss of approximately 14 MW of power on the DBIS. This constant disruption has impacted consumers mainly in the region three (3) (Wales to Parika) where load shedding had to be introduced during peak hours.

In an effort to mitigate the recurring disruptions to the cable, the Government of Guyana, through the Public Works Ministry, has installed navigational beacons which will transmit radio wave signals and provide sufficient visibility and signal as to the cable location as it relates to shipping vessels using the Demerara River.

Substation Upgrade

The GPL's Canefield substation which was in existence for a number of years was upgraded to provide a more reliable supply of electricity to residents in the surrounding areas of Canje (East Berbice) region six (6). By virtue of this upgrade the substation now has a fully automated Supervisory Control and Data Acquisition System (SCADA), a modern monitoring capability installation which allows the GPL's Systems Engineering Division to remotely monitor the operations of the substation. The remote monitoring provides for the detection of discrepancies (such as increases in transformer temperature, overloaded feeder circuit and the isolation of circuits) in the operation of this substation and the deployment of control mechanisms.

Grid Tied Solar Photovoltaic Systems

In 2020, the Guyana Power and Light Inc. (GPL) under the Technical Assistance Programme for Sustainable Energy in the Caribbean (TAPSEC) in collaboration with Integrated Utility Services (IUS), CARICOM and Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) commenced a pilot project with the aim to promote renewable energy, energy efficiency and electric vehicles.

The Commission, in July of 2020, was updated via a presentation by GPL on a summary of its Integrated Utility Services (IUS). The IUS is intended to support clean energy transition goals by the promotion of renewable energy, energy efficiency and electric vehicles, providing affordable financing for customers to access services as required to lower electricity bills/fuel. The IUS program commenced three pilot projects and the following entities joined the program:

- 1. OAS/IICA
- 2. UMAMI INC.
- 3. GPL Projects

In October 2021, the local offices of the Inter American Institute for Cooperation on Agriculture (IICA) and the Organization of American States (OAS) commissioned its 30 kilowatts PV power system, which will provide power to their offices and the excess power will be delivered to the Demerara Berbice Interconnected System (DBIS) through net billing. The cost of this project at the offices of IICA/OAS is approximately \$6.3 million dollars.

Operating Standard & Performance Targets (OSPT)

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

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

PUC ANNUAL REPORT 2021

- 1. Customer Interruption The indices implemented to monitor customer interruptions are the System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI).
- 2. Voltage Regulations This standard requires GPL to maintain ±5 % of nominal voltage in stable conditions and ±10 % of nominal voltage after system disturbances.
- 3. System Losses this is the power generated and distributed for sale by GPL for which no revenue is garnered and which impacts heavily on the company's financial profile. These losses comprise two components (i) technical losses electrical energy which is dissipated in the conductors used for transmission and distribution of power and heat losses from transformers, and (ii) non-technical (commercial) losses nonpayment, incorrect meter readings and electricity theft.
- **4. Average Availability** is the performance target which is in place to measure the company's generation capacity at any given time. It indicates that its generating plants produce power efficiently and also that the company has the capacity to meet its demands for electricity, especially during its peak hours when there is maximum use of power.

The Division has examined the following OSPT targets for the first, second, third and fourth quarters of 2021:

All 2021 targets were obtained from GPL's Development and Expansion Plan 2021 – 2025.

1. Customer Interruptions

OSPT	2021	Targets		20	021 Ach	ieveme	nts	
Customer Interruptions	Units	Annual	Qtr.	1 st Qtr.	2 nd Qtr.	3 rd Qtr	4 th Qtr	Total
SAIFI	No.	90	22.50	23.00	28.00	29.00	22.00	102.00
SAIDI	Hrs.	95	23.75	18.91	26.74	23.60	23.09	92.34

Table 1: GPL's 2021 OSPT achievements for SAIFI and SAIDI

SAIFI

This index is commonly used as an indicator by power utilities to calculate the number of outages a customer will experience, for example - if a feeder supplies ten thousand (10,000) customers and there are three (3) outages for the month and the number of customers that were affected was six thousand (6,000) then the failure rate is [3x6000]/10000 = 1.8 interruptions per customer.

SAIFI = <u>Total Number of Customer Interruptions</u> Total Customers Served

The 2021 target for SAIFI is 90. Therefore, the average number of outages which a customer should experience per quarter is about 22.5. Customers, however, experienced an average of 102 outages at the end of the fourth quarter. The company did not achieve its target.

Failure of the Company to achieve its SAIFI targets may have been a result of the following:

Fault Type	2021
Planned Maintenance	260
Capital Projects	15
Emergency Line Maintenance	255
Line trips	537
Generation Shortfall	535
Switching	343
Total	1945

SAIDI

This index is commonly used as a reliability indicator by power utilities to calculate how many hours/minutes a customer experiences power outage. An example of this is if a feeder supplies ten thousand (10,000) customers and there are three (3) outages for the month and each outage lasts for one (1) hour each and it affected six thousand (6,000), seven thousand (7,000) and nine thousand (9,000) customers respectively; then the index will be [1x6000 + 1x7,000 + 1x9,000]/10, 000 = 2.2 hours per customer.

SAIDI = <u>Total Customer Hours of Interruptions</u> Total Customers Served

The SAIDI target for 2021 is 95 hours. This means that on average a consumer should not experience more than 23.5 hours of outages for 2021. At the end of the fourth quarter in 2021, the average duration of outages was approximately 92.34 hours. GPL achieved its target.

2. Voltage Regulation

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

Year (End of the Third Quarter)	2021
Complaints Responded to in 30 days	1999
Complaints Completed in 30 Days	1854

Table 3: Voltage Complaints

GPL continues to utilize consumers' complaints to determine achievement for this standard. Table 3 above shows that for the end of the third quarter the company had received 1999 complaints and of which 1854 were resolved within a 30-day period.

At GPL's 2020 OSPT review, GPL had informed the Commission that it intends to implement the infrastructure platform for the current Advance Metering Infrastructure (AMI) which will then be configured to provide connectivity for the direct monitoring of individual consumers' voltage levels. The Commission welcomes the introduction of remote monitoring by GPL of the voltage supply to its consumers which will readily detect the specific sections of their network with issues and in turn, allow for resolution and remedy. This AMI platform will be able to aid the company in the correct reporting of the voltage level that consumers receive from the Company.

PUC ANNUAL REPORT 2021

The company in its efforts to provide a stable supply of voltage to consumers has been continuously upgrading its voltage conductors and installing the required Volt-Ampere transformers in a number of areas which will see improvements to the load balancing in the distribution network.

3. Losses

OSPT	2021 Targets		2021 Achievements				
System Losses	Units	Annual	1st Qtr.	2 nd Qtr.	3 rd Qtr.	4 th Qtr.	Total
System Losses	%	25.0	25.8	25.8	26.1	26.3	26.0

Table 4: GPL's 2021 OSPT achievements for System Loss.

System losses refer to the power lost during the generation and distribution for resale where revenue is not obtained.

The company projected system losses for 2021 to be 25% (16.4% technical and 8.6% non-technical). For the previous year 2020, the company had projected losses to be 25.85%, which represents a 0.85% decreased target for the year 2021. At the end of the reporting year for 2021, the company achieved 26.0% as shown in table 4 above. The company did not achieve the set projected target of 25%.

The company at the OSPT review presentation indicated that there is a trend where their technical losses are not reducing and this is due to increases in net generation capacity that would have caused the increase in the technical component of the system losses. The company during the reporting year 2021 installed new transformers, relocated existing transformers to specific nodes of their network to reduce losses, and upgraded 78km of transmission conductors to the required size which in turn would aid in the reduction of the technical losses.

Year	2019	2020	2021
Net Loss %	27.62	26.11	26.47
Technical Loss factor %	10.52	10.82	11.48
Non - Technical loss factor %	17.1	15.28	14.99
Net Generation Increase %	6.1	2.7	6.2

Table 5: GPL's 2019 to 2021 loss trend for system loss.

The company would have shown a reduction in the non–technical losses from the year 2019 to 2021 as seen in table 5 and this may be mainly attributable to the replacement of 67,684 meters through the Public Utilities Upgrade Program (PUUP). The company would have as stated in their OSPT presentation that they back-billed 1,027 accounts for theft of electricity which is equivalent to 12.7GWh at a total revenue of \$731 million dollars.

4. Average Availability

The average availability of a power distribution company is the target which measures the company's generating capacity at any given time in order to ascertain that its generating plants are efficiently producing and to ensure that the company has the capacity to meet its demand for electricity, especially during its peak hours. For the year 2021, GPL set a target of 80% for the availability of its generating capacity. The company achieved its target at the end of the reporting period for 2021 with 83.2% of availability.

The Water Sector

In exercise of the powers conferred on the Minister, by section 49 of the Water and Sewage Act of 2002, Order 26 of 2003 was made on the 31st day of July 2003, directing the Commission to be tasked with the responsibility of the setting and regulation of the rates for the company; the enforcement of service quality and the resolution of consumers' complaints.

Paragraph 14 of the GWI's Licence makes provision for the service standards for water and sewage services for public purposes, whereas, Schedule 2 of their Licence, specifies the standards which are required by the company, to achieve the World Health Organization (WHO) bacteriological standards for coastal and hinterland water supplies.

The WHO standards further outline the acceptable level of pH, turbidity, iron, aluminum, 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 specifies the WHO water quality levels.

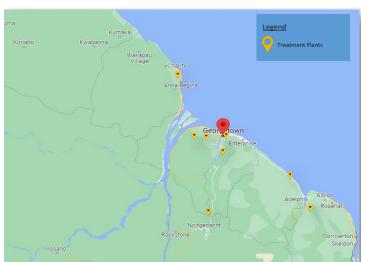
WHO Values	pН	Turbidity (NTU)	lron (mg/l)	Al (mg/l)	Colour (TCU)	Chlorine (mg/l)
	6.5 - 8.0	≤ 5.0	< 0.3	≤ 0.2	< 15	5.0

Table 6: WHO water quality levels

Review of Water Quality

GWI submits quarterly reports to the Commission on the water quality tests that are conducted at its treatment plants countywide.

The Engineering Division has reviewed the quarterly submissions of GWI reports for the period January to December 2021 to ascertain whether the Company is in compliance with the standards as set out by the WHO. GWI provided water quality reports for twenty-six (26) treatment plants and it was observed that the company achieved the required standard for ten (10) of those plants. These plants are located at Lima on the Essequibo Coast, Pouderoyen, Uitvlugt and Vergenoegen, all located on the western coastline of the Demerara River, Better Hope, Great Diamond and Mon Repos all located on the Eastern side of the Demerara River, Cotton Tree, West Berbice and Port Mourant all located on the Eastern side of the Berbice River and Central Ruimveldt located in Georgetown.



Map showing 8 of the 26 GWI Treatment Plants

PUC ANNUAL REPORT 2021

The company has however failed to achieve the WHO standards in sixteen (16) of the treatment plants which are Fellowship, Covent Garden, Eccles, Friendship and Grove all located on the Eastern bank of the Demerara River, Amelia's Ward, LPC, McKenzie, West Watooka and Wisroc (old and new plants) all located on the southern part of Guyana, Shelter Belt and Sophia located in central Georgetown, New Amsterdam and Sheet Anchor located on the Eastern side of the Berbice River and the Bartica facility.

The following represents the review of GWI treatment facilities for the year 2021:

Region 3

Target	6.5-8.5	≤ 5.0
Treatment Facility	рН	Turbidity (NTU)
Fellowship	9.14	29.60

The region three (3) treatment facility shows that the pH and turbidity levels at the treatment facility are not within the WHO requirements.

Region 4

T			
Target	6.5-8.5	≤ 5.0	<0.3
Treatment Facilities	рН	Turbidity (NTU)	Iron (mg/L Fe)
Covent Garden	6.20	11.1	2.52
Eccles	6.54	5.25	3.48
Grove	6.05	15.7	1.68
Shelter Belt	5.79	3.700	0.22
Sophia	6.87	0.947	0.45
Friendship	6.51	62.0	

In the region four (4) treatment facilities at Covent Garden and Grove, the pH, turbidity and iron levels are not within the WHO levels.

Region 5

Target	6.5-8.5	≤ 5.0
Treatment Facilities	рН	Turbidity (NTU)
Bartica	5.58	9.35

The region five (5) treatment facility shows that the pH and turbidity levels at the treatment facility are not within the WHO requirements.

Region 6

Target	6.5-8.5
Treatment Facilities	рН
New Amsterdam	6.09
Sheet Anchor	6.47

Region 10

Target	6.5-8.5	≤ 5.0	<0.3
Treatment Facilities	рН	Turbidity (NTU)	Iron (mg/L Fe)
Amelia's Ward	5.64	1.49	1.05
LPC	4.93	13.90	0.24
McKenzie	4.42	5.35	0.18
West Watooka	4.51	6.46	0.28
Wisroc (New Plant)	4.69	3.34	0.27
Wisroc (Old Plant)	5.05	1.91	0.25

The region ten (10) treatment facilities show that the pH, turbidity and iron levels are not within the WHO requirements.

Metering

In the year 2021, the Government in their presentation of the country's national budget announced that there will be a 5% reduction in water rates as charged by GWI. The company on April 13, 2021, applied to the Commission requesting its consideration for a decrease in rates, and a public hearing was convened on April 28, 2021. The Commission by Order 2 of 2021 approved the application and mandated that the company meters all of its unmetered consumers by the 31st of December 2024. This was further to Order 2 of 2018 which had ordered GWI to incrementally meter almost 100% of its unmetered consumers from 2018 to 2020 and onwards.

In its 2021-2025 Strategic Plan, the company has projected that by the end of 2025, the percentage of metered consumers will increase by 85% and outlined their projected yearly metering rollout as shown in the table below:

	2021	2022	2023	2024	2025
Yearly Metering	14,066	13,933	13,933	12,191	5,225

Table 7: GWI's Metering roll-out

On August 26, 2021, the company reported to the Commission that of its 175,163 consumers, 87,283 (49.82%) were metered and that it had installed a total of 3,820 meters as of August 26, 2021. The company is expected to install at least 10,246 more meters for the 2021 target.

Developments in the Water Sector

Georgetown Network Upgrade

In 2020, the company had commenced the installation of network pipes in Newtown to the Shelterbelt distribution plant. This project was completed in the third quarter of 2021 and it is expected to benefit consumers in the Newtown and Kitty environs. The company also implemented another upgrade to their pipe networks in the Cemetery Road area to the Shelterbelt. The existing network is estimated at around 60 years of

PUC ANNUAL REPORT 2021

existence. Corrosion has heavily impacted the pressure flow of water along with the brittleness of those pipes which results in regular major leaks affecting residents of South Georgetown.

Rural Area Development

- In the early period of 2021 as reported in the media, the Lusignan well which was in existence for over 10 years collapsed, and the residents of Enmore, Mon Repos, Lusignan, Annandale, Good Hope, and Enterprise were all affected. To mitigate the effects, the company linked the Friendship Water Treatment Plant to the Lusignan pipe network. Attempts to resuscitate the Lusignan well were to no avail and a subsequent decision was made to drill a new well to service those communities.
- The residents of Free and Easy and Noitgedacht of Wakenaam have been experiencing a poor level of water supply which was due to the degradation of the existing well which serves over 4000 residents. The company responded by cleaning and rehabilitating the well to increase water production.
- In early June 2021, approximately 3500 households were affected when the Fellowship water treatment plant encountered technical difficulties causing the residents of the communities to receive reduced water pressure. GWI was in a position to resolve this technical difficulty within nine (9) days and the water supply to the affected consumers returned to normalcy.

Unserved Areas

A new housing scheme was developed in the village of De Willem on the West Coast of Demerara, region three (3) which lacked the supply of potable water. The Ministry of Housing, with the aid of GWI, installed six-inch pipes linking the existing Uitvlugt water treatment plant to some 300 residents who benefited from this initiative.

Conclusion

GWI is to be commended for its interventions in improving water supply to consumers by way of upgrading its aging infrastructure, the remedial works done on its wells, and the linking of treatment plants with unserved areas. The company is not close to achieving the water quality standards level as that of the WHO and this is noticeable from the water quality reports that were summitted to the Commission. Further, it must be noted that the company is also not on target with regards to the metering of un-metered consumers, this area is urgently in need of vast improvements.

On the other hand, the telecommunications sector having been liberalized in 2020 holds the potential in pivoting the sector in a new and exciting direction. The Commission is cognizant that with the commencement of the number portability implementation process, there is an expectation that towards the last quarter of 2022 consumers will be able to exercise greater choice in the sector. The Commission is also particularly pleased that consumers in the Essequibo region can now enjoy internet service that is on par with what exists in other parts of Guyana and is optimistic that there will soon be a reliable fixed voice service.

The Commission has also noted the deployment of competitive high-speed broadband services which is expected to be expanded in unserved areas in the years ahead.

The electricity sector continues to face demands from consumers daily for improvements in its quality of service. The company at the end of the fourth quarter of the reporting year has shown progress in its system losses, mainly the non-technical component. This improvement is attributed to the replacement of meters through the Public Utilities Upgrade Program (PUUP) and the electricity theft back-billing. The technical losses continue to not improve although the transmission and distribution lines were upgraded along with the installation of correct volt-ampere transformers to reduce the technical component of the losses. The Commission expects that the company will show some improvements as it relates to its technical losses.



Finance Division

Ms. Yogwattie Sookram, Financial Analyst II

THE ELECTRICITY SECTOR

The Guyana Power & Light Inc. (GPL), which has an exclusive licence to supply electricity in Guyana, in this reporting year, continued the upgrading of its generating capacity with the commissioning of a 46MW generating farm at its Garden of Eden facility. This upgrade allows for an increase in the electricity supplied through the Demerara Berbice Interconnection System (DBIS) and is a key highlight in the company's operations as it has augmented its generating capacity from 153.69 MW to 200.09 MW as of December 30, 2021. It is also the intent of the company to replace its aged generating sets which demonstrates its commitment to increasing the reliability of its service. This is a welcome move on the part of the company to meet the electricity demands of an oil economy that is projected to grow in the foreseeable future. The following is a brief overview of the company's operational activities for 2021.

22

PUC ANNUAL REPORT 2021

ORDER 1 OF 2021

Operating Standards and Performance Targets

On March 30, 2021, the Commission, entered into a Public Hearing for the review of GPL's 2020 Operating Standards and/or Performance Targets (OSPT).

This review is in keeping with the October 4th, 2010, amendments to the license granted to GPL, which stipulates that the Commission is to publicly report on the company's performance no later than March 30th in each calendar year.

Should the Commission determine that GPL has failed to meet its Operating Standards and Performance Targets as provided for in its Development and Expansion Plan, it has the statutory power to impose monetary penalties on the company in an amount that should not exceed 25% of the total value of the dividends payable to the company's shareholder(s) for such calendar year. A description of each operating standards and performance targets and a snapshot of GPL's reported achievement of each standard for the year 2020 is shown in Table 1 below.

OPERATING STANDARDS AND GP&L'S PRESENTATION PERFORMANCE TARGETS Customer Interruption The company had a set target of 65 for SAIFI and 75 for SAIDI, however, its actual The company is required to report on achievements were 99 and 81 respectively. The two elements of customer interruptions, targets set with respect to both categories were that is, on the index of the average not met. number of interruption frequency (SAIFI), which measures the number of power outages, and the index on the average hours of duration of the interruptions (SAIDI), which measures the number of hours each power outages are expected to last. **Voltage Regulation** For the year 2020, the Company reported that 97% of its voltage complaints were rectified The company is required to report within a 30-day timeframe. annually on the level of voltage supplied to each consumer in adhering to the standard 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. **Meter Readings** GPL was required to read 97% of maximum demand consumers and 90% of non-The company is required to report on maximum demand consumers for the year the number of maximum and non-2020. The company reported that for nonmaximum meters read within a given maximum demand consumers, 88% of the month. meters were read: and for maximum demand consumers, 90% of the meters were read. The target was not achieved.

Issuing of Bills

The company is required to report on the time it takes to issue bills to both its maximum demand and non-maximum demand consumers. GPL is required to issue maximum demand bills within seven (7) days, and non-maximum demand bills within ten (10) days, after the meters have been read. The company has reported that on average, maximum demand bills were issued within five (5) days, and non-maximum demand bills within eight (8) days after the meters were read. The targets set with respect to both categories of consumers were met.

Accounts Receivable

The company is required to report on the number of days its debtors take to pay the company during the reporting year. This standard commits GPL to a 30-day cash collection cycle. The company reported that its actual cash collection cycle for the year under review was one hundred and nine (109) days. The standard was therefore not met. GPL further reported that had it not been for the Guyana Water Inc.'s outstanding arrears, their accounts receivable days would have been twenty-nine (29) days, and they would have met the thirty (30) days target.

Accounts Payable

The company is required to report on the number of days it takes to settle payments with its creditors during the reporting year. This standard commits GPL to pay its creditors within twenty-six (26) days. The company reported that it took an average of twenty (20) days to settle its indebtedness with its creditors. The standard was therefore achieved.

System Losses

The company is required to report on the level of both technical and nontechnical (commercial) losses incurred by the company during the reporting year. The standard sets system losses which include technical and non-technical losses at 23.89% of dispatched power for year 2020. For the reporting period, system losses were 25.86% of dispatched power. The standard was therefore not met.

Average Availability

For the year 2020, GPL was required to achieve an average generation availability of 80%. The company reported that average

PUC ANNUAL REPORT 2021

The Commission has reviewed GPL's performance in the context of the company's restrictive operations vis-a-vis the COVID-19 pandemic, which would have affected targets related to meter reading retrievals, installations, and investigations.

The Commission expects that the challenges which the company experienced during the reporting year 2020 are to be aligned with the improved safety measures for staff in the critical areas which affected its achievement of the targets. This in turn will translate to consumers receiving quality service and the achievement of the targets and standards.

Commission's Comment on Customer Interruptions and System Losses

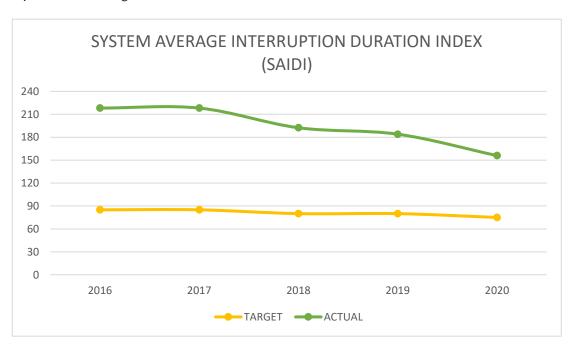
The Commission would like to highlight two (2) areas of the company's inability to achieve its targets though it was still in a position to incrementally decrease its actual achievements year on year. These are (i) Customer Interruptions and (ii) System Losses.

(i) Customer Interruptions.

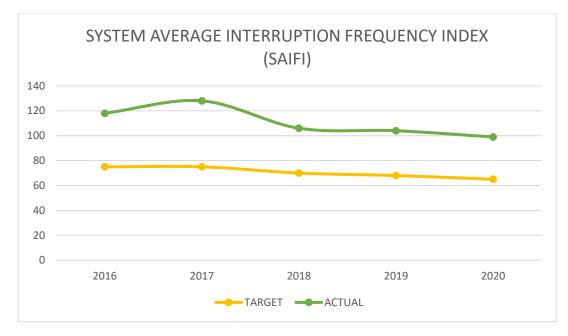
Customer interruption which measures the frequency of power outages and the duration for which each outage lasted, is an incremental measurement to record the reliability of the company's generating, transmission, and distribution network. The power company from its inception has been plagued with an unacceptable level of power outages and therefore the company must be monitored from a regulatory perspective. Such scrutiny intends to ensure that the company implements efficient systems and models to combat the level of power outages experienced by its consumers

The company's inability in the last five years to achieve its target as set for both the SAIFI and SAIDI standards is illustrated in the graphs below.

However, the company achieved an incremental reduction of the index as measured for both performance targets.



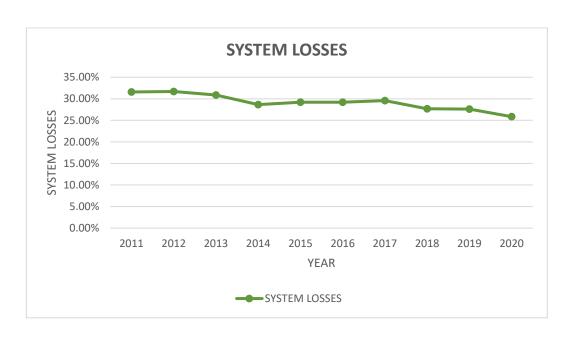
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The Commission recognizes that consumers continue to be dissatisfied with the duration and the frequency of power outages despite the efforts by the company and urges that it continues to upgrade its generating, transmission, and distribution infrastructure to reduce both targets to an acceptable level.

(ii) System Losses

From the inception of the company, system losses at both the technical and non-technical levels have severely impacted the company's finances. At a non-technical level, electricity theft is a challenge whilst at a technical level the aged transmission and distribution channels require enormous financial investments. The Commission recognizes that since the amendment to the License granted to the company which established the requirement of the OSPT reporting, the company has incrementally reduced its overall system losses year on year. The graph below shows the company's reported system losses for the past eleven (11) years, from the date of the first OSPT in 2011 through to 2020.



PUC ANNUAL REPORT 2021

It is to be noted that though there was a sharp decrease from 30.90% in 2013 to 28.65% in 2014, with a subsequent rise from 2014 to 2017, the years following have shown a decrease. This may be attributed to the loss reduction programmes implemented by the company which includes the rollout of the Advance Metering Infrastructure (AMI) meters, the upgrade of the company's distribution and transmission network and the commissioning of new substations in areas such as Sophia and Good Hope on the East Coast of Demerara. In the latter part of 2021, the company commissioned a new substation at its Onverwagt Berbice location. The benefits of having substations at key locations throughout Guyana is in an effort to offset the length of the company's transmission network, thereby reducing the amount of electricity that may be lost due to long transmission lines. This, coupled with the rollout of the AMI meters, which is also intended to combat commercial losses, may prove instrumental to the decreases in the overall system losses to the company.

Final Return Certificate (FRC)

The Guyana Power and Light Inc. is mandated by the First Schedule of the Licence with the Government of Guyana to Supply Electricity for Public Purposes granted to the company by the Government of Guyana to prepare and submit to the Commission by the 28th of January of each year its Interim Return Certificate (IRC) and its Final Return Certificate (FRC) by the 30th of April each year. The Company in compliance with this mandate submitted to the Commission its Interim Return Certificate which sets out the results of the company's unaudited financial operations for the year 2020. The Interim Return Certificate showed that the company made a surplus of \$4.074 billion for the year 2020 signaling that the company has a projected decrease in tariff in 2021. The Company sought the approval of the Commission on March 23, 2021, to discontinue the 15% fuel rebate which is a credit applied to consumers' accounts during the year 2020, and to reduce the tariff structure of the company by 15%. The fuel rebate is a credit applied to consumers' billings during periods of low oil prices. This approval was granted by the Commission and made effective on April 11, 2021. The company subsequently submitted its Final Return Certificate, which shows the company's audited financial position, for the year 2020 on April 30, 2021, together with its certificate of compliance from the Independent Accountants. The company's Interim Return Certificate submission in January 2022, reflects that the company had a deficit of \$5.510 billion for the year 2021, which indicates that the company may be inclined to increase its tariff during the year 2022 to recover this deficit.

Development & Expansion Programme

GP&L submitted to the Commission its five-year Development and Expansion Program for the period 2022-2026. Contained therein, is its one-year plan (2022), a five-year plan (2022-2026), and a commitment to the manner in which it intends to meet the demand for electricity over the next fifteen years.

Upon careful review of this Program, the Commission noted that the Company has projected that from the year 2023 it will realize a net profit at the end of each year and by the end of the year 2026, the company should have a net profit of \$25,826,000 together with a tariff reduction of 18%. This projection is premised on:

- 1. Growth in sales demand by approximately 264% over the five-year period.
- 2. Reduction of system losses by approximately 6.6% (from 24.17% to 18.1%) over the five-year.
- 3. Reduced generation costs due to the use of natural gas for the generation of electricity from the year 2025, which will account for more than 80% of the company's generated power.
- 4. The possibility of converting GP&L's debt burden to the Government of Guyana to equity.

The projected decrease in tariff over the five years, though optimistic, is contingent on the completion of two major projects, that is, the Amalia Falls Hydropower Plant, which is intended to use water to generate electricity, and the Gas-to-Shore pipeline, which will be used to transport natural gas from the offshore rigs to onshore, where gas will be used as an alternative to fossil fuel for electricity generation. While it is projected that these projects will be onstream before the end of the life of this development and expansion program, the Commission wishes to issue a note of caution that these projects may not be completed due to exogenous factors such as delay in the procurements of raw material and the commencement of constructions of the infrastructure and therefore, the realization of the projected reduction in tariff may not materialize within the timeframe.

In addition, the company is expected to expend approximately US\$3.187 billion to facilitate the continued development of its generating and transmission network of which approximately US\$92.91 million will be

The 6.6% intended reduction in system losses during the program's life may not be achievable given the trends of the losses over the last ten years which shows that on average the company has reduced these losses by less than 1% annually. Notwithstanding that this may be largely ambitious it remains to be seen whether further innovations will produce the desired state of affairs for the company by the year 2026.

THE WATER SECTOR

The Guyana Water Inc. (GWI) is responsible for providing potable water to more than 75% of the households in Guyana which include the outlying and hinterland regions. On average, GWI produces approximately 160 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. At the end of 2021, GWI consumer base stood at 175,163.

The company's capitalization programme continues to be significantly funded by both International Donor Agencies and the Government of Guyana as outlined in its 2021-2025 strategic plan. The company has been consistently extending services to unserved and underserved areas, which is a prerequisite towards achieving universal access to potable water and this has continued in 2021 which resulted in some outlying areas receiving potable water for the first time. Commendable as this may be, the aggressive metering of un-metered services and sustained reduction of non-revenue water are the twin pillars that will ensure the company's long-term viability, which was taken into consideration in the company's new five-year strategic plan.

Throughout 2021, the Commission continued its quarterly review of critical components of the company's operations which included inter alia the issuance of Order 2 of 2021 and a review of the Company's strategic plan.

ORDER 2/2021

The Government of Guyana through its National Budget for the fiscal year 2021 had announced an intended 5% reduction on water tariffs. By virtue of section 38 of the PUC Act No. 19 of 2016, the company applied to the Commission for its approval in the reduction of the water tariff by 5%. The 5% mandated by the Government was only applicable to the water consumption rate and therefore the rates for fixed and auxiliary charges which were fixed by the Commission in Order 2 of 2018, remain extant.

The Commission is concerned about the financial impact that the reduction of the water tariffs will have on the company. However, the company in its presentation ably convinced the Commission, of its ability to recoup lost revenues in the long run through its operational and infrastructural plans and that the funding to bring the company to a cost-effective position will be done by the Government of Guyana and developing partners.

The Commission as a prerequisite to granting the 5% reduction, reiterated its position in Order 2 of 2018 as it relates to reducing the level of non-revenue water by fixed amounts and working towards a metered database for all consumers.

Five Year Strategic Plan 2021 To 2025

In keeping with section 28 of the Public Utilities Act No. 19 of 2016, the Guyana Water Inc., in April 2021, submitted to the Commission its Five-Year Strategic Plan from the year 2021 to 2025. The key indicators of the Strategic Plan are as follows:

- 1. The improvement of its operational efficiency and productivity.
- 2. Financial viability and sustainability within the medium to long-term operational activities.
- 3. Enhancement of quality of service.
- 4. Achievement of the United Nations Sustainability Development Goal 6 Clean Water and Sanitation for All, by 2030.

PUC ANNUAL REPORT 2021

The company has projected that by the end of 2025 it will achieve the following strategic targets:

PROGRAMME AREAS	PERFORMANCE MEASURES
Water Production	24 Hour Availability
Water Quality	WHO Standards (100%)
Water Supply	5 Meters – First Floor Level
Population and Community Access	Population and Community Coverage [99%]
Metering	Percentage of Accounts Metered [85%]
Organization and Management	Staff/Customer Ratio [5:5]
Non-Revenue Water Reduction	55% [of system input volume]
Finance and Customer Service	Collection Efficiency [90%]

Table 2: GWI's Strategic Targets for 2021-2025

The Commission, in its review, has noted with concern that the successful completion of the strategic investments programs as outlined in the plan are contingent on the company's ability to obtain the necessary finances, which are primarily at the discretion of the Government of Guyana and development partners. The company has embarked on commendable dialogues with the Government of Guyana and development partners to ensure the realization of this strategic plan in its achievements of Goal 6 of the United Nations Sustainable Development Goals, which seeks to ensure the availability and sustainable management of water and sanitation for all.

The Commission has registered its concern with the company's inability to achieve the mandated metering rollout during the five-year period, as set out in the PUC's Order 2 of 2018. This Order had directed that there is to be incremental annual rollout of meters and which rollout would have realized 100% metering in 2025, as opposed to 85%. The Commission is now hopeful that post Order 2/2021 decisions, 100% metering becomes a reality as it significantly impacts reduction of non-revenue water to a level less than the projected 55%, which will contribute to an increased cashflow for the company.

There appears to be a lacuna in its strategic plan regarding the financial impact of the plan, and as such, the Commission cannot provide a solid financial forecast at this time. The Commission urges that in the future the company includes in its plans such projections which will serve as an advisory tool to the company and its stakeholders on the feasibility of the plan and its ability to fund its investment programs from internally generated revenue which may reduce the debt burden of the company.

THE TELECOMMUNICATIONS SECTOR

The telecommunications sector in 2021 continues to evolve and as projected, the expectation of a liberalized environment has begun to materialize. The players within the sectors, in an effort to capture market share in underserved and unserved areas, have expanded their services, more so, the Fibre services to these areas.

The latter part of 2021 had witnessed the continuous expansion of internet services through the Fibre networks in Essequibo, Linden, and Berbice regions. The residents of Essequibo Coast now have access to a telecommunication network that provides seamless and faster internet access with the ability to afford voice calls through a similar network as to the traditional wireline. The Commission is hopeful that the service providers will soon implement this feature on their networks.

The Government of Guyana in its 2020 Budget, had approved the removal of the Value Added Tax which was applied to the residential internet and mobile data usage and has resulted in residential consumers benefiting

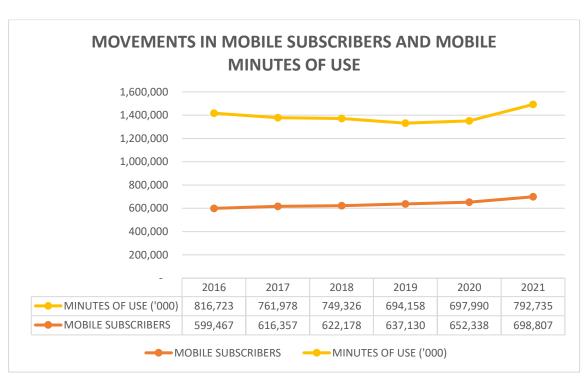
from a reduced rate for both their home internet and mobile data plans. This move, coupled with the drive for competition, will result in consumers enjoying affordable internet service with an improved quality of service.

Overview of The Telecommunications Sector For 2021

Mobile Services

Mobile services during the year 2021 continued to be offered by Guyana Telephone & Telegraph Limited (GTT) and U-Mobile (Cellular) Inc. (Digicel). E-Networks Inc. is licensed to provide both commercial and residential mobile services however, at the time of this report, the company has not launched this service. It is hopeful that with the implementation of number portability, E-Networks Inc. will be in a position to offer this service, thereby increasing competition within the sector. The sector has enjoyed a growth in mobile subscribers for the year, from 652,338 in 2020 to 698,809 in 2021, reflecting a 7% increase in subscribers. The Commission is of the opinion that this rise in subscribers may be attributable to the inflow of foreign oil and gas workers into the country and not to an increase in the populace, thereby perhaps, confirming that telecommunications usage is linked with the growth or decline of an economy.

An examination of the minutes of use for mobile voice, which has declined over the last ten (10) years, has seen an increase of 9% in 2021 when compared to the year 2020. The graph below shows the movements in subscribers and minutes of use on the mobile network for the last six (6) years, which shows the gap between an increased subscriber base and the minutes of use in the country prior to the year 2020 and post 2020.



Data usage on the mobile networks continued to increase, with a combined total of approximately 10 billion megabytes sold in the year 2021, reflecting an increase of 43% when compared to the year 2020. This increased sale of mobile data reflects the consumers' choice of over-the-top (OTT) technologies via WhatsApp and Facetime messenger services for voice services as opposed to the traditional voice on the mobile network.

Wireline Voice Services

The liberalization of the telecommunications sector has resulted in the loss of GTT's monopoly on the wireline voice services; however, the company continues to be the only player in this segment of the telecommunications sector in Guyana. The company, at the end of 2021, had a total of 110,682 active wireline, reflecting a decrease

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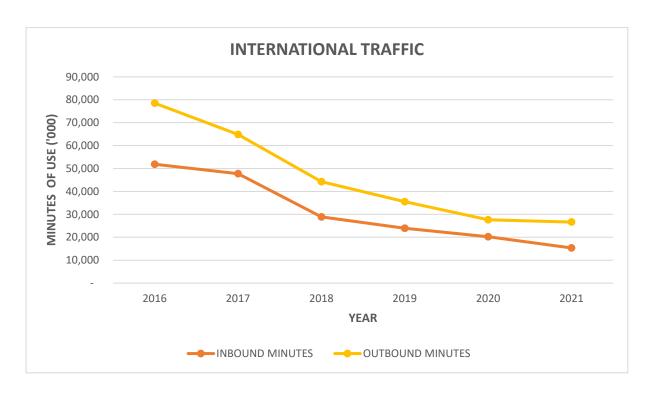
of 5% when compared to the year 2020. GTT in its rollout of its Fibre to the home (FTTH) service, offers voice services to consumers who are desirous of utilizing same. At the end of 2021, the company had a total of 35,530 subscribers to its FTTH service however, the Commission at this time cannot make a definitive conclusion as to the number of FTTH subscribers who utilizes the voice feature offered on the network.

The Commission, in its analysis of the movements in minutes of use in the wireline services, has included the minutes of use on both the traditional (copper line) wireline service and the Fibre to the home service. Minutes of use for wireline voice services continues to decline year on year, and this continued in the year 2021 with a decrease of 14%, when compared to the year 2020, despite the use of the voice service facility of the FTTH network.

International Traffic

Minutes of use on the international gateway over the years had shown a steady decline due to the prevalent use of over-the-top technologies. However, at the end of 2021, outbound minutes of use had increased by 52% when compared to the year 2020. This increase in minutes of use may be due to the increased presence of international companies within the oil and gas sector. This was not the same for inbound minutes of use though which had decreased by 24% in the year under review.

The graph below illustrates the trends of international minutes for the last six (6) years.



Internet Services

The post-liberalization era has seen a steady race to capture the market share within the internet segment of the telecommunications sector by both GTT and E-Networks Inc., with the offering of new internet packages and the expansion of the Fibre to the Home network to underserved and unserved areas.

Digital Subscriber Line (DSL)

The Digital Subscriber Line is internet access that 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. GTT continues to be the only service provider of this type of internet service and at the end of 2021, had a total of 48,652 subscribers, reflecting a decrease of 4% when compared to 2020.

PUC ANNUAL REPORT 2021

Fibre to the Home (FTTH)

All through 2021, both GTT and E-Networks Inc. have continued to roll out their FTTH network in underserved and unserved areas. The sector has seen both operators competing with the different package offerings, such as increased download and upload speed and, one may assume that with this competition, subscribers to both networks will be rewarded with better quality of service and higher download speed.

At the end of the year, it had a total of 52,134 subscribers to the FTTH network of both service providers.

Conclusion

The Commission recognizes the necessity of having access to the essential services offered by the public utilities under its purview and the impact on the citizens of Guyana. It is also cognizant that a reliable and efficient service is heavily reliant on upgrades to the current infrastructure which is contingent on the availability of financial resources. The commitment by the Government of Guyana and International Donor Agencies, to the financing of integral infrastructures upgrades and expansion for both the power and water sectors, will result in the citizens of Guyana not only having access but also ensuring there is a reliable network, cost-efficacy, and a better service experience.

However, the Commission wishes to caution that the infrastructural upgrades and expansion can only be achieved by both utilities committing to the implementation of their proposed strategic and development and expansion programmes respectively. We wish to urge the companies to continue to implement new measures to combat system losses and non-revenue water which continues to negatively impact the company's financial integrity.

As the telecommunications sector adapts and evolve in this new era of liberalization, the Commission is hopeful that consumers can benefit from the evolution of technologies and the competition which comes with the removal of a monopolistic environment. We are cognizant that the geo-terrain of Guyana may prevent telecommunications infrastructural developments in the hinterland regions due to a high investment cost, but with the timely implementation of the Universal Service Fund, access to telecommunication in these regions will become a reality.

32



Complaints Division

Ms. Destra Bourne, Complaints Manager

The Complaints Division has the charge of resolving complaints between consumers and the regulated service providers, monitoring the Quality of Service (QoS) standards of the operators in the telecommunications, electricity, and water sector, and providing information on the PUC's mandate to consumers through its public relations activities.

Following the closure of the offices for more than one (1) year due to the COVID-19 pandemic, the Commission in August 2021, reopened its offices to accept the in-person filing of complaints. This was done in accordance with the National COVID-19 guidelines to ensure the safety of our staff and customers.

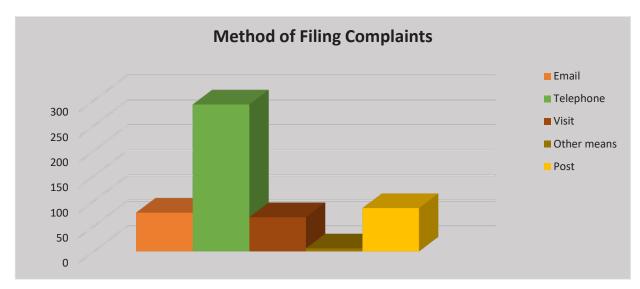
In the same month of August 2021, the Commission launched its WhatsApp services. Consumers can now file complaints, enquire on matters filed and/or provide supporting evidence to our WhatsApp number +592 623 3222.

It is worthy to note that on January 27, 2021, the Commission held its first meeting with the new entrant, E-Networks Inc. Discussions were held as it relates to the Commission's expectations of E-Networks Inc. and a presentation was conducted by the Commission on the complaints' procedures which include the filing and processing of complaints. The company indicated that it is committed to working with the Public Utilities Commission and the Commission looks forward to fruitful engagements with E-Networks Inc.

Overview of Complaints Received

During the reporting year, the number of complaints received has been marginally reduced from five hundred and forty-six (546) to five hundred and twenty-nine (529).

A review of the medium by which complaints were received revealed that 55% of the complaints were received by telephone, followed by 16% received by mail, 15% of the complaints were filed via electronic mail, and 12% of complaints by 'walk-in' consumers. The remaining complaints were received via other means such as the Commission's website and WhatsApp. This is illustrated in the bar graph below.



The Commission believes that the rise in the number of consumers contacting the Commission electronically may be attributed to the COVID-19 pandemic and the practice of social distancing coupled with the Commission's increased public relations activities on its social media platform.

A review of the complaints received by the Commission indicates that the majority of the complaints are related to technical issues, followed by billing issues. The pie chart below illustrates the types of complaints received by the Commission

TYPE OF ISSUES

Technical Issue Termination of Service Transfer of Service Misc Allegation of Tampering Application for Service Disconnection Claim for Compensation Billing Query

As shown in the pie chart, technical issues represented 53% of all complaints filed with the Commission in 2021; billing issues represented 20%, and applications for service represented 10%. The remaining 17% represents claims for wrongful disconnection, tampering, reconnection of service, transfer of service, compensation for damage to equipment, tariff issues, and issues relating to the request for the termination of service.

The Commission, over the years, has received a substantial number of complaints against the Guyana Telephone & Telegraph Services Co. Ltd (GTT) and the Guyana Power and Light Inc. (GPL), and the year 2021 was no

PUC ANNUAL REPORT 2021

different. In the reported year, the Commission received three hundred and forty-four (344) complaints against GTT and one hundred and twenty-seven (127) complaints against GPL. The remaining number of complaints were fifty-three (53) against Guyana Water Inc. and five (5) against Digicel. There were no complaints received against E-Networks Inc.

Complaints by Region

The table below shows the types of complaints received by regions.

Issue	Regions						
Issue	#2	#3	#4	#5	#6	#10	Total
Allegation of Tampering	1	10	15		2		28
Application for New Service		2	20	5	29	1	57
Billing Issue	6	12	63		14	10	105
Claim for Compensation		1	7		2		10
Wrongful Disconnection		2	6		2		10
Reconnection of Service		1	3	2	15		21
Tariff Issue					1		1
Technical Issue	2	29	75	14	149	11	280
Termination of Service			2				2
Transfer of Service			7		7		14
Miscellaneous			1				1
Total	9	57	199	21	221	22	529

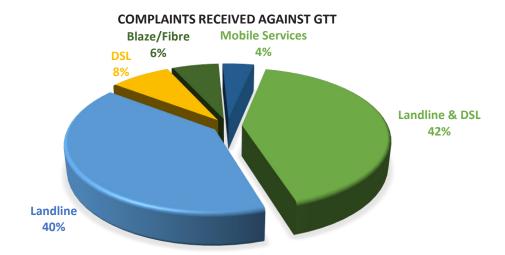
Table 1: Complaints by Region

A review of the complaints received by regions indicated that 42% of all complaints received were from consumers in region 6 (East Berbice Corentyne) of which 67% of these matters were for technical issues with the service. This was followed by region 4 (Demerara-Mahaica) with 38% of all complaints, of which 38% were technical issues, and 32% were for billing issues. Consumers in region 3 (Essequibo Islands-West Demerara) which represents 11% of all complaints filed were concerned mainly with technical issues with their services. The remaining 9% of complaints were received from consumers in regions 2, 5, and 10 (Pomeroon-Supenaam, Demerara-Mahaica, and Upper Demerara-Berbice) respectively.

Complaints Received Per Sector

The Telecommunications Sector

The Commission received three hundred and forty-four (344) complaints from consumers of GTT and five (5) complaints from consumers of Digicel during the year under review. A review of the complaints received against GTT revealed that 42% of these complainants reported issues with both the landline and Digital Subscriber Line (DSL) services, 40% reported issues with the landline service, and 8% issues with the DSL service, 6% were for issues with the Blaze/Fibre service and 4% as it relates to the company's mobile service. This is represented in the pie chart below.



It is to be noted that 44% of the total number of complaints received in 2021 (529) were against GTT for technical problems with the services whilst only thirteen (13) of the three hundred and forty-four (344) complaints received against GTT were for issues relating to the mobile service.

Monthly meetings held between the PUC and GTT were productive, allowing for the timely resolutions of complaints filed against the company in 2021 and the elimination of the backlogged unresolved matters, which at the start of 2021 amounted to two hundred and nine (209) complaints. In addition to these meetings, GTT assigned representatives to respond to the Commission's queries and to collaborate with PUC's Complaints Officers to ensure that complaints were amicably resolved. With this initiative, the Commission was able to successfully resolve ninety (90) complaints expeditiously via the telephone which reduced delays. At the end of the reporting period, there were twelve (12) unresolved complaints, which were filed against GTT. The company is to be commended for its efforts in the timely resolution of the complaints received.

For the reporting year 2021, the Commission received five (5) complaints against Digicel (Guyana). The Commission is of the opinion that this may be attributed to either that Digicel's consumers are satisfied with its services and or perhaps Digicel has developed efficient internal controls to effectively resolve consumer complaints.

The Commission recognises that complaints filed regarding mobile services are usually low and for the reporting period only eighteen (18) complaints regarding mobile services were filed with the Commission.

The Electricity Sector

Complaints received against the Guyana Power & Light Inc. (GPL), totaled one hundred and twenty-seven (127) complaints. These complaints indicated that consumers were largely concerned with the actual billing of their accounts, technical issues with the service, and billings to their accounts based on claims of electricity theft.

The Commission in 2021 was able to successfully resolve eighty (80) backlogged complaints with regards to the billing for electricity theft through collaborative meetings with representatives of the power company and the Commission. In addition, these meetings provided an opportunity to discuss and devise ways in which the company could interface and bill consumers as it relates to electricity theft.

The Commission was also able to resolve thirty-one (31) complaints that were filed against GPL with representatives of the company via the telephone. As of December 31, 2021, there were sixty (60) complaints against GPL which were pending resolution.

PUC ANNUAL REPORT 2021

The Water Sector

The complaints received by the Commission against Guyana Water Inc. revealed that billing and technical issues were the main issues faced by the company's consumers. These two types of matters accounted for 85% (billing 55% and technical 30%) of the complaints received against the company. An examination of the billing issues signaled to the Commission that consumers were delinquent in the required monthly bill payments and that consumers were seeking adjustments for amounts due based on estimated readings and leakages. Consumers who approached the Commission were informed of the importance to report and fix leakages as the consumer is responsible for the payment as it relates to the wastage of water on their premises.

The Commission was able to successfully resolve thirty-four (34) of the fifty-three (53) complaints filed with the Commission against GWI by communicating with representatives of the company via the telephone. At the end of 2021, there were four (4) complaints against GWI pending resolution.

Credits Awarded

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

Credits amounting to \$4,272,347.00 were awarded to the accounts of consumers who filed complaints with the Commission during the period under review. However, credits totaling \$53,407,551.00 were awarded to consumers' accounts during the period January 1 – December 31, 2021, which quantum included settlements pending from previous years.

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

Service Providers	Georgetown Office	Berbice Office	Linden Office	Essequibo Office	Total
DIGICEL	\$ -	\$ -	\$ -	\$ -	\$ -
GP&L	\$ 1,200,009.00	\$ 1,159,843.00	\$ -	\$ 3,430.00	\$ 2,363,282.00
GTT	\$ 697,707.00	\$ 706,696.00	\$ 89,996.00	\$ -	\$ 1,494,399.00
GWI	\$ 245,038.00	\$ 131,592.00	\$ 38,036.00	\$ -	\$ 414,666.00
TOTAL	\$ 2,142,754.00	\$1,998,131.00	\$128,032.00	\$ 3,430.00	\$4,272,347.00

Table 2: Credits awarded

Public Relations

Despite the challenges of the COVID-19 pandemic, the Commission was able to continue with its mission to sensitize the public about their rights and responsibilities and the requirements of the Commission when filing a complaint with the aid of electronic means. During the year, the Commission had weekly broadcasts of its advertisement on both radio and television to consumers throughout Guyana. In addition, the Commission ensured that consumers were kept updated with information as it pertains to consumers' rights and responsibilities on both its website and social media platform along with notices from the service providers using our Facebook page. The Commission also continued its poster campaign with the placement of posters at prominent places in East Canje Berbice, New Amsterdam to Rose Hall Town Corentyne and, Charity to Anna Regina on the Essequibo Coast.

Due to the restrictions of the COVID-19 pandemic, the Commission was unable to conduct face-to-face meetings with its stakeholders and as such, elected to conduct its meetings and webinars utilizing its Zoom platform.

The Commission on February 15, 2021, met with representatives of the Essequibo Chamber of Commerce and the Anna Regina Town Council. Discussions were held with the Mayor and Town Clerk of Anna Regina, Essequibo, the President of Essequibo Chamber of Commerce and their respective staff. The Commission's complaints procedures were communicated, and the Commission was informed of the concerns of consumers in the jurisdiction. The Commission reached out to the respective service providers and assisted with the resolution of the issues raised.

The Commission agreed to work with the parties to assist with the resolution of unresolved issues that consumers in the region may have with the regulated service providers.

To strengthen public awareness on issues related to the telecommunication, water and electricity sectors on topics relevant to the PUC's mandate, the Commission held three (3) webinars which were dubbed Telecommunication and Consumer Expectations; Energy and Electricity – What you should all know; and What's in your pipe – Water conservation, Quality of Service and more on June 11, July 16 and October 12, 2021 respectively.

The Prime Minister of Guyana gave the keynote address declaring the series of webinars open on June 11, 2021. The panelists were from local, regional, and international agencies and regulatory bodies. There were approximately 200 attendees and approximately 3,700 persons were reached via live streaming on Facebook. On October 2, 2021, a mini-expo was held by the Competition and Consumers Affairs Commission (CCAC), which provided consumers with the opportunity to learn more about their Legal Protections and Rights. Officers of the Commission, who were in attendance, responded to several consumers on the queries raised as it relates to the services of the regulated service providers.

Telecommunications Liberalization and Consumer Protection Monitoring

The liberalization of the telecommunications sector on October 5, 2020, has considerably enlarged the Commission's mandate, with the enforcement of the Telecommunications Act of 2016 on October 5, 2020. This was accompanied by the enactment of several regulations, including the Telecommunications (Consumer Protection) Regulations 2020 which expanded the regulatory landscape for consumer protection. These regulations set out the objectives regarding the protection of users of telecommunications services and networks in Guyana and provide for the confidentiality of information and the establishment of minimum QoS standards to be met by the service providers. The regulations include provisions relating to standards set for the QoS as it relates to fixed and mobile public telecommunications services, the principles governing the resolution of consumers' complaints, and the obligations of service providers to consumers. The regulations also mandate that the service providers submit reports quarterly to the Commission detailing their performance and to maintain performance logs that records the QoS data as it relates to the telecommunications services offered.

The Complaints Division has established a monitoring unit that is tasked with tracking areas in the regulations to ensure conformity with same as it relates to the QoS and includes the confirmation of publication of information, provision of information to consumers, service contracts, billing information, security deposits, and complaint processes.

As part of this initiative, the Commission has reviewed the bill format of the service providers and worked with a service provider to ensure that the file format of the bill includes all the requirements as indicated by the regulation and that consumers could enjoy a bill that is user-friendly and easy to read.

In addition, the Commission was able to flag the publication of QoS standards and notices of planned and unplanned maintenance for which letters were dispatched to the service providers informing them to be compliant with the regulations.

PUC ANNUAL REPORT 2021

Performance Report

In keeping with the provisions of regulation 14 of the Telecommunications (Consumer Protection) Regulations, each telecommunications undertaking has supplied to the Commission its quarterly quality of service achievement. Below is a synopsis of the reports which were submitted to the Commission.

E-Networks reported that the company has met the required QoS standards, as set out in schedule 1 of the telecommunications (Consumer protection) regulations 2020, for the broadband internet services to residential consumers.

Digicel reported that the company has met the standards of the QoS parameters identified by the Telecommunications (Consumer Protection) Regulations 2020 except for the percentage of calls set up within five (5) seconds.

Digicel informed that they are working to reduce the transition time. Whilst the regulation required a standard of 90%, Digicel has reported improvements from 84.75 to 85.56 in 2021.

GTT reported that phonebooths owned by the company gradually fell into disrepair due to historic vandalism and also became obsolete due to the wide usage of mobile services and penetration. The company has indicated that the standards were achieved except for the supply time for the initial connection of services; the clearing of faults and the resolution of billing complaints for their residential narrowband (voice) access. For the broadband internet service for residential customers, the company was unable to meet the standard required for the supply time for the initial connection of service, resolution of technical complaints, and the resolution of billing complaints. GTT met with the Commission and discussions were held on the company's procedures for faults resolution and service installations. The company also provided reasons for not attaining the standards. The standards which were not met are currently under review by the Commission.

Conclusion

The Complaints Division has successfully resolved 88% of all complaints received during this reporting period and 96% of those matters which were pending from previous years.

The liberalization of the telecommunication sector has not impacted the number and quality of complaints received by the PUC during the reporting period. However, we have noticed the increased efforts by the regulated service providers to resolve matters in a timely manner and look forward to collaborating with the service providers and our consumers to have a greater percentage of complaints resolved efficiently and amicably.

In 2022 the Division will increase our public relations efforts in the areas beyond our Berbice and Georgetown offices to increase the level of awareness of the PUC. We intend to continue our radio and television advertisements and poster distributions, and webinars will be held to provide information on the sectors we regulate.





Accounts Division

Mr. Elroy Halley, Senior Officer, Accounts Division

n keeping with section 64 of the Public Utilities Commission Act, No. 19 of 2016, the Commission's financial operations are maintained by assessment fees which are levied on the public utilities and telecommunications undertakings. The Act was made effective on October 5, 2020, and these service providers are required to fund the Commission's annual budget.

Assessments fees are currently calculated as provided for in the Act which states that the annual assessment fees imposed should not exceed one percent of the gross revenue derived from services, or one hundred million dollars, whichever is less. This amount is prorated to ensure that each service provider contributes to the Commission's budget. With the increase in assessment fees, the Commission is in a position to create new modules and explore its capacity-building objectives to ensure that it conforms with the new competitive telecommunications sector and requirements in the other sectors.

The Act further mandates that the Commission is required to submit to its subject Minister its annual budget projections for approval by the National Assembly. For the year 2021, the National Assembly approved a total of \$225,804,000 to meet the Commission's expenditures which included employment costs, public awareness activities, and other expenses associated with its day-to-day operations.

A significant portion of the Commission's 2021 budget was allocated toward the execution of public awareness, training, and other exercises. In view of the COVID-19 pandemic restrictions, the Commission was innovative in utilizing the radio, television, and online platforms to host webinars, disseminate information, and conduct public relations exercises.

40

The following are the audited Financial Statements for the year ended December 31, 2021.

PUBLIC UTILITIES COMMISSION Statement of Financial Position As at December 31, 2021

•	2021 G\$	2020 G\$
Assets Non-Current Assets		
Property/Plant/Equipment Total Non-Current Assets	103,286,099	110,295,769
Total Non-Current Assets	103,286,099	110,295,769
Current Assets		
Receivables	15,540	211,306
Prepayments	306,564	277,464
Cash and Cash Equivalents Total Current Assets	361,457,135	94,200,433
Total Carrent Assets	361,779,239	94,689,203
TOTAL ASSETS		
	465,065,338	404,984,972
EQUITY AND LIABILITIES		
EQUITY		
Retained Earnings	452,574,877	394,498,732
Revaluation Reserves	10,361,800	10,361,800
Total Equity	62,936,677	404,860,532
Current Liabilities		
Payables	1,992,825	-
Accruals	95,836	124,440
Deferred Income	40,000	-
Total Current Liabilities	2,128,661	124,440
	2,120,001	127,770
TOTAL EQUITY AND LIABILITIES	465,065,338	404,984,972

PUBLIC UTILITIES COMMISSION Statement of Profit and Loss For the year ended December 31, 2021

	2021 G\$	2020 G\$	
Income			
Assessment Fees	225,804,00	150,000,000	
Interest Earned	6,429,621	7,762,300	
Total Income	232,233,621	157,762,300	
Expenses Employment Cost	142,756,602	143,135,146	
Training Conference and Official Visits	213,574	126,000	
Administration Expenses	8,974,125	30,051,094	
Utility Charges	4,761,246	4,658,544	
Legal Fees	1,315,000	-	
Security Charges	4,979,520	5,004,144	
Rent Charges Repairs and Maintenance	2,460,000 1,233,174	2,460,000 1,807,077	
Bank Charges	49,625	132,650	
Depreciation	7,182,922	7,070,988	
Rate and Taxes	231,688	231,688	
Total Expenses	174,157,476	194,677,331	
Net Surplus/(Deficit)	58,076,145	(36,915,031)	

PUBLIC UTILITIES COMMISSION

Statement of Changes in Equity
For the year ended December 31, 2021

	Retained Earnings	Revaluation Surplus G\$	Total Accumulated Fund 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)
Balance as at December 31, 2020	394,498,732	10,361,800	404,860,532
	G\$	G\$	G\$
Balance as at January 1, 2021	394,498,732	10,361,800	404,860,532
Net surplus for the period	58,076,145	-	58,076,145
Balance as at December 31, 2021	452,574,877	10,361,800	462,936,677

PUBLIC UTILITIES COMMISSION Statement of Cash Flows For the year ended December 31, 2021

	2021 G\$	2020 G\$
Cash Flow from Operating Activities		
Net Surplus/(Deficit) Adjustments to reconcile net income to net cash provided by operating activities:	58,076,145	(36,915,031)
Depreciation	7,182,922	7,070,988
(Increase)/decrease in accounts receivable	195,766	953,021
Increase/(decrease) in accounts payables	1,992,825	(384,317)
(Increase)/decrease prepayments	(29,100)	(20,948)
Increase/(decrease) in accruals	(28,604)	(666,908)
Deferred Income	40,000	-
Net cash and cash equivalents from operating activities	67,429,954	(29,963,195)
Cash flows from Investing Activities		
Purchase of equipment	(173,252)	(1,995,205)
Purchase of furniture		(440,000)
Net cash used in investing activities	(173,252)	(2,435,205)
Net increase/(decrease) in cash and cash equivalents	67,256,702	(32,398,400)
Cash and cash equivalents at beginning of period	294,200,433	326,598,833
Cash and cash equivalents at end of period	361,457,135	294,200,433



The Commission

he PUC Act No. 19 of 2016 defines '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:

- the production, generation, storage, transmission, sale, delivery, furnishing or supplying, directly or indirectly, to or for the public, of electricity.
- 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. 18 of 2016 defines 'telecommunications undertaking' as any operator, service provider or any other person whose activities are subject to this Act.

The Commission is responsible for ensuring that all services provided by the service providers under its mandate are cost-effective, offers affordable rates, that quality of service (QoS) is optimal, and that the service providers' financial viability is sustained. Additionally, the Commission has the power to conduct investigations into the operations of operators and to verify that the operators adheres to all Orders and directives as issued by PUC.

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The Commission has the authority to impose consequential penalties for any failure or breach by the operators. The Commission further aims to create a policy for the speedy resolution of inter-telecoms operator disputes.

The Commission continues to enhance its resolution of the complaints process and collaborates with the operators in an effort to ensure an efficient Complaints Division.

Filing a Complaint

Any consumer who has a complaint against a public utility or telecommunications undertaking should firstly engage with the service provider. After exhausting all avenues at the provider level, the consumer may file a complaint with the Commission.

In support of its filing complainants are required to provide all relevant information/documentation in support of their complaints, such as bills, reference numbers and investigation reports.

Contact Us

MONDAY – THURSDAY – 8:00 hrs. to 16:30 hrs. FRIDAY: 8:00 hrs. to 15:30 hrs.

Georgetown Office: Lot 106, New Garden Street, Queenstown, Georgetown

Telephone - 592-226-7042 or 592-227- 2182

Berbice Office: Lot AV, Free Yard, Port Mourant, Corentyne, Berbice

Telephone - 592- 336-6077 or 592-336-6192

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.puc.org.gy

Email Address: pucommission@gmail.com

Facebook: www.facebook.com/pucguyana

Whatsapp: +592-623-3222

+592-624-6000

PUC Website

he Commission's user-friendly website – **www.puc.org.gy** allows for the 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:

- The Complaints' Procedures.
- Rules for Determining Consumers' Complaints.
- Presentations.
- · Publications.
- Notices, presentations, publications, notices and documents pertaining to Public Hearings.
- Annual Reports
- Orders of the Commission.





First, engage the Utility to have the matter resolved.



If outcome is unsatisfactory, then lodge a complaint with the Commission

3

Submit all supporting documents such as bills, reference number and photographs to the Commission.



- **©** GEORGETOWN
- BERBICE
- UNDEN
- ESSEQUIBO COAST

- C 227-3204 / 227-3534
- 336-6192/336-6077
- 444-2045/444-2046
- 624-6000

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Lot AV, Free Yard, Port Mouran Corentyne, Berbice Telephone-592- 336-6077 or 592-336-6192 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

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