

**PUBLIC UTILITIES COMMISSION**

**In the matter of the Public Utilities Commission reviewing the Guyana Power and Light Inc. (GPL) Operating Standards and Performance Targets for 2016.**

**ORDER NO 1/ 2017**

**Representatives of the Public Utilities Commission:**

Justice Prem Persaud, CCH	Chairman
Mr. Maurice Solomon	Commissioner
Ms. Dela Britton	Commissioner
Mr. Vidiahar Persaud	Secretary/Legal Officer
Mr. Moorsalene Sankar	Financial Analyst 1

**Representatives of the Guyana Power and Light Inc.:**

Mr. Renford Homer	Deputy Chief Executive Officer -Administration
Mr. Elwyn Marshall	Deputy Chief Executive Officer -Technical
Mr. Loris Nathoo	Divisional Director –Finance
Mr. Parsram Persaud	Divisional Director –Loss Reduction

The Licence granted to Guyana Power and Light Inc. (GPL) was amended on October 4<sup>th</sup>, 2010 to provide for GPL to submit annually, with effect from calendar year 2011, and for all subsequent years its Operating Standards and Performance Targets (OSPT) on a one and five year basis, and which will be included in its Development and Expansion Programme to be submitted for the approval of the appropriate Minister.

The Operating Standards and Performance Targets which are included in the approved Development and Expansion Program constitute the standards and quality of service that GPL is required to provide in accordance with section 25 (2) of the Public Utilities Commission Act No. 10 of 1999. It is binding on GPL, and enforceable by the Commission as provided for in paragraph 16 (b) (IV) of the GPL's amended Licence. These standards and targets are eight in number and are as follows:

1. Customer Interruptions
2. Voltage Regulation
3. Meter Reading
4. Issuing of Bills
5. Accounts Payable
6. Accounts Receivable

7. System Losses and
8. Average Availability

Provision has been made that by March 30<sup>th</sup> in each year commencing from the year 2012, the PUC shall review GPL's performance for the previous calendar year with respect to the OSPT for such year and shall determine whether GPL has failed to achieve and /or reach the targets, and if there is failure in any of the targets what was the impact of such failures on the consumer and on the company.

Should the Commission find that the Licencee has failed to meet its Operating Standards and/or Performance Targets as provided for in subparagraph (a), it may impose monetary penalties on the company in an amount not to exceed **25%** of the total value of the dividends payable to the company's shareholder(s) for such calendar year in accordance with the Licencee and applicable law.

In determining the amount of any penalty to be imposed within the parameters set forth in subparagraph (b), the Commission shall take into account the extent to which the company has failed to meet its Operating Standards or Performance Targets and the impact of any such failure(s) upon the its Customers.

On March 27<sup>th</sup> 2017 the Commission held a public hearing at Cara Lodge, Quamina Street, Georgetown. The object of the hearing was to afford GPL an opportunity to inform whether the standards for 2016 were achieved and if not, why not.

**We herein set out what are the standards and targets with explanations by GPL for the Standards achieved and not achieved.**

## **1. CUSTOMER INTERRUPTIONS:**

### **(a) System Average Interruption Frequency Index: (SAIFI)**

The intent of this standard is to limit the average number of outages a consumer would have received during the year to no more than 75.

The average number of outages a consumer experienced in 2016 was 118. The standard was not met. The explanations offered by GPL for this failure are:

- That the submarine cable that transferred power from the Vreed En Hoop power station to the Demerara interconnected system malfunctioned resulting in approximately 16 megawatts of power being lost to the Demerara system. The loss of power resulted in the company operating without reserve capacity in the Demerara Interconnected System and forced the company to revert to older stations that are not always reliable. Failure therefore of any one station would result in a shortfall of power to the service area resulting in temporary load shedding.
- Feeder trips - GPL had reported that should the protective device detect a fault in the transmission network it would trip the system. The standard practice is to wait for ten minutes and if there is no report of a fault, the system would be re-energized. These transient trips increased the number of outages albeit for short periods. It was explained that the company is

in the process of upgrading its lines with technologies that would ameliorate albeit for shorter periods, trips on the lines.

**(b) System Average Interruption Duration Index (SAIDI)**

The intent of this standard is to limit the average duration of outages that a consumer would have received during the year to no more than 90 hours. The average duration experienced by consumers during the year was 125.8 hours.

The company's explanation in not meeting this target was the same for not attaining SAIFI; namely that the loss of power as a result of the Demerara River cable failure that resulted in the loss of 13 megawatts of power meant longer period of outages when there was a generation failure in the Demerara system. As already mentioned the company operated without any reserve capacity during this period.

**2. VOLTAGE REGULATIONS:**

(a) Part 1 of the standard states:

“GPL shall seek to maintain in stable conditions, voltages of  $\pm 5\%$  of the nominal voltage and  $\pm 10\%$  following a system disturbance”.

The company has maintained from the inception that it would be difficult to monitor and report on the voltage supplied to each customer. This standard as in previous years was not measured.

It was however stated that when the planned program for the installation of AMI meters is completed country wide, the company would be able to randomly access data from the registry of these meters that would inform on voltage fluctuations. The information provided from these random samples should inform whether the company is delivering a quality of voltage consistent with the standard.

Part 2 of the standard requires:

“GPL to complete 100% of customer voltage complaints due to network reconfigurations, vegetation upgrade of lines, additional transformer, etc. in no more than 30 days. GPL has reported that this target was marginally not met.

It was explained that at times the job may require extensive network reconfiguration and there may be problems with material availability resulting in a temporary postponement until the materials are sourced.

Sometimes addressing a voltage problem may require a feeder line to be de-energized that will result in load shedding to consumers supplied with electricity from the said line. In some instances the company may postpone the job until such time as maintenance is due on the line. The voltage complaint is then addressed when maintenance work on the line commences.

### **3. METER READING:**

This standard is aimed at reducing the number of annual estimated billings based on actual meter readings. For 2016 GPL was required to read 97% of maximum demand consumers and 90% of non-maximum demand consumers.

The standard with respect to both was not achieved. For non-maximum demand consumers, 94 % of the bills were read; and for maximum demand consumers, 88 % of the bills were read.

GPL's explanations in not meeting the operating standard with respect to non-maximum demand consumers were:

- Failure to have access to the premises.
- Changes in personal lifestyles. The proliferation of housing schemes throughout the country coupled with the fact that very often no one is at home during the day when the meter readers visit make it difficult to have access to the meters.

The company has indicated that it has introduced a number of measures to overcome these difficulties. However these measures have, to date, not met with the company's expectations.

GPL's explanation in not meeting the operating standard with respect to its maximum demand consumers were the occasional failures by the hand held devices to read the data stored in some of the meters. The company has attributed two reasons for this. The first is that the hand held device with radio frequencies to communicate with the meter was unable to access some of the data that sit in the registry of the meter and the second is that the meter itself may be defective.

It is the policy of the company that when there is a failure to read, the modules are changed and if the failure persists, then the meter itself is changed. It is this policy GPL, posited, that has led to an improvement of the percentage of meters read over the previous year. The company noted that a shortage of meters during the year had frustrated the process and had it not been for that the standard would have been achieved.

### **4. ISSUING OF BILLS:**

GPL is required to issue maximum demand bills within 7 (seven) days after the reading of the customer's meter and within 10 (ten) days after the reading of non-maximum demand meters. GPL reported that on average maximum demand bills were issued within 5 days after the meters were read and non-maximum bills within 8 days after the meter was read. The standard with respect to both was therefore met.

### **5. ACCOUNTS PAYABLE:**

This standard commits GPL to settle in full with its creditors within 26 days.

GPL reported that it took on average 25 days to settle its indebtedness with its creditors. The standard was therefore achieved.

## **6. Accounts Receivable:**

This standard commits GPL to a 30 days cash collection cycle.

GPL reported that its average cash collection cycle was 37 days. This standard was therefore not met. GPL however maintained that their collection cycle has improved over the previous year as a result of the efficient dispatch of bills to consumers and more timely payments by customers that were traditionally in default. It noted however that there continues to be issues with payments from the neighbourhood Democratic Council with respect to Street Lighting and the Municipality of the Mayor and City Council.

It was conceded by the company that the Standard would be very challenging to attain since the company gives a twenty one days credit period and a further seven days grace period before taking such action to enforce compliance.

## **7. System Losses:**

The standard sets system losses at 28.6% of dispatched power for 2016.

For the reporting period GPL has stated that the system losses were 29.2% of dispatched power. The standard was therefore not met. The explanations offered by the company in not meeting the standard were the closure of the Loss Reduction Division for approximately three months at the insistence of the shareholder to facilitate an investigation of the Division. It was noted that during this period there were no activities by the company in the continuance of investigations undertaken by the Division. A shortage of meters to complement the work of the Loss Reduction Division was given as a secondary reason resulting in the target not being achieved.

## **8. Average Availability:**

For 2016 GPL was required to achieve an average availability of 80%. The company reported that average availability was 84%. The standard was therefore met.

## **PUC's REVIEW OF STANDARDS NOT ACHIEVED**

### **(1) Customer Interruption:**

The performance of the company with respect to both indicies deteriorated significantly when compared to the previous year. This no doubt would have been distressing to consumers. In reviewing the performance of this standard the Commission considered whether the failure of the cable to deliver electricity from the Vreed-en-Hoop power station constituted a force majeure and whether redundancy should have been in place for such eventualities. We feel that the latter, though ideal, may have been too costly to the company at this time. We do, however, wish to place on record our disapproval of the time taken by the company to have the cable fully functional.

**(2) Voltage Regulation:**

We have noted the company's reasons for marginally not meeting the stipulated timeline with respect to voltage complaints. We will however suggest that the company refrain from commencing a job unless it is certain that it has all of the materials on hand. Overall, we believe the inconvenience suffered by the consumers to be marginal.

**(3) Meter Reading:**

**(a) Non Maximum Demand Consumers:**

In reviewing the standard set for the meter reading of non maximum demand consumers the Commission found the company's performance to be satisfactory, and noted the reasons for the company not attaining the standard as acceptable.

**(b) Maximum Demand Consumers:**

The company's failure to meet the standard and the reasons given for the failure were noted. GPL has consistently not been achieving this standard even though the population of this class of consumers is approximately 675. The reason for not achieving the standard over the years is the recurring problems of malfunctioning hand held sets to retrieve readings from the meters. Further the stock out of meters experienced by the company during the year seems to be as a result of poor planning. This is a reflection on the ability of management and is unacceptable. We note the company's resolve in attaining the standard in 2017 and trust that the company would be successful in its endeavors.

The Commission, however, is of the opinion that the impact, if any, on consumers and on the company, as a result of not attaining the operating standard to be negligible.

**(6) Accounts Receivable**

The Commission notes the company's explanation in not achieving the standard. We are in agreement with the company that disconnections of essential services should only be as a last resort after all avenues of reaching a resolution have been exhausted. The failure by the company to collect its monies from these customers in a timely manner seems not to have had any significant impact on the operations of the company.

**(7) System Losses**

The Commission attaches significant weight to this standard and in the circumstances is disappointed that the standard that could hardly be described as challenging was not met. By the company's own admission a system loss of 1% translates to approximately \$200 million. The increase loss of 0.6 of 1% over 2015 translates to a loss of \$120 million.

We have noted the company's explanation for not meeting the target, namely that there was a closure of the loss reduction department at the insistence of the shareholder to carry out an investigation into alleged malpractices.

The statement by GPL at the hearing casts a damning indictment on the employees of the company. When an admission is made that workers have to be monitored, condign actions should have been taken to have them not only disciplined but dismissed from the service.

We are yet to be convinced that the closure of the loss reduction department is the main reason for the target not being met. The reason for the failure may have more to do with the inability of the company to commence its metering program envisaged in its 2016 to 2020 Development and Expansion Program. The metering of consumers as planned in the D & E Program should in theory significantly reduce commercial losses and by extension reduce the overall percentage of system losses. We trust that for 2017, GPL will report positively on this standard.

## **General**

The Commission recognizes that the operating standards are set within the framework of the company's existing infrastructure and cash flow limitations. However some of the standards fall far short of what generally constitute an efficient utility. There remains much work to be done and we can only hope that there continue to be annual incremental improvements in the quality of service to consumers.

## **DECISION:**

The Commission in reviewing the company's performance took into consideration the resources available to it during the period under review as well as other factors that may have had an impact on the company's overall performance. We find the company's efforts creditable, but for system losses. Our earlier comments indicate that with greater commitment, the loss could have been lower than the previous year. Given the weight that should be attached to this standard an under par performance casts a shadow on the overall performance of the OSPT. Having regard to all we have heard and noted and taking into consideration the explanations offered by the officials of GPL we do not think it appropriate at this time to make any award of monetary penalty on the Company. Their failure to meet certain targets as adumbrated was mitigated by the fact that they were not excessive and the impact on consumers was not inordinately burdensome.

We do not, however, wish for it to be held as a precedent for the current performance of the Company, but we expect our comments herein will excite their interest and obligation owed to the public at large and get on with the business of fulfilling their mandate in providing a safe service at reasonable prices.

Dated this 28<sup>th</sup> day of April, 2017.

Prem Persaud, CCH –**SGD**-Chairman.

Maurice Solomon –**SGD**-.Member.

(Ms) Dela Britton –**SGD**- Member.