

**QUALITY OF SERVICE
STANDARDS**

**ANNUAL PERFORMANCE
REPORT
2019**

**ELECTRICITY TRANSMISSION
AND DISTRIBUTION SECTOR**

November
2020

Information
Document

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EXECUTIVE SUMMARY

The Regulated Industries Commission (RIC) is the economic regulator of the water, wastewater and electricity sectors in Trinidad and Tobago. Its primary functions include prescribing standards for services, monitoring compliance with these standards, and imposing sanctions for non-compliance, as defined under Section 6 of the RIC Act. Accordingly, the RIC first implemented the Quality of Service Standards (QSS) for the Electricity Transmission and Distribution Sector in 2004. This report is based on the current 2009 edition of the QSS, which was implemented in April 2010. It is the assessment of the performance of the Trinidad and Tobago Electricity Commission (T&TEC) under the QSS for the period January to December 2019. The performance data used in preparing this report was reported by T&TEC and reviewed by the RIC.

Summary of Performance: Guaranteed Standards

Guaranteed Standards set service levels that must be met for each customer by the service provider. Under these standards, the utility is required to make compensatory payments to the affected customers if it fails to provide the level of service stipulated. There are eight Guaranteed Electricity Standards (GES) and all but the first (GES 1) carry automatic compensatory payments for breaches¹.

Generally, there was very little change in the compliance rates in 2019 when compared to 2018. However, there was a significant increase (330%) in the number of breaches under GES 1 from 3,474 in 2018 to 14,958 in 2019. This increase was due to the passage of Tropical Storm Karen in September, which severely affected T&TEC's ability to carry out repairs and restoration because its main compound in Scarborough, Tobago was severely flooded.

¹A breach occurs when the service provider fails to achieve the stipulated level of performance for a standard.

Table ES1 - Compliance Rates under the Guaranteed Standards, 2019

Code	Service Description	Performance Measure	2019 Compliance Rates (%)	2018 Compliance Rates (%)
GES1	Response and Restoration Time after unplanned (forced) outages on the distribution system.	Time for restoration of supply to affected customers - within 10 hours	99.04	99.76
GES2	Billing Punctuality (new customers)	Time for first bill to be mailed after service connection: (a) Residential – within 60 days (b) Non-Residential –within 30 days	99.90 92.10	99.90 100.0
GES3	Reconnection After Payment of Overdue Amounts or Agreement on Payment Schedule	Time to restore supply after payment is made - within 24 hours	99.94	99.96
GES4	Making and Keeping Appointments	Where required, appointments will be made on a morning or afternoon basis	100.0	100.0
GES5	Investigation of Voltage Complaints	(i) Response - All voltage complaints to be responded to within 24 hours. (ii) Rectification- All voltage complaints to be rectified within 15 working days.	99.97 99.83	100.0 99.80
GES6	Responding to Billing and Payment Queries.	Substantive reply within 15 working days.	100.0	100.0
GES 7	New Connection of Supply	Service drop and meter to be installed within 3 working days.	99.99	100.0
GES 8	Payments Owed under Guaranteed Standards	Time to credit compensatory payment: (i) Residential – within 30 working days (ii) Non-Residential – within 60 working days	N/A N/A	N/A N/A

N/A – Not Applicable

T&TEC can identify areas affected by outages and provide an estimate as to the number of customers within each area. However, the utility is currently unable to identify the individual customers who are affected by breaches of GES 1². Hence, customers are still required to submit claims for breaches under this standard. Twelve claims out of an estimated 14,958 were made by customers, of which nine were determined to be valid by T&TEC, and those customers were

² T&TEC will be able to identify individual customers affected by breaches of GES 1 when the Outage Management System (OMS) is fully implemented. Implementation of the OMS has been completed in both the Central and South Distribution areas, and is currently being rolled out in the East Distribution area.

compensated. There were 31 breaches under the remaining standards, GES 2 to GES 8, that were eligible for automatic compensation. T&TEC made payments to all the affected customers totalling \$3,114. The total number of breaches and payments made under the Guaranteed Standards in 2019 is shown in table ES2.

Table ES2 - Breaches and Compensatory Payments under the Guaranteed Standards, 2019

Standard	Total Number impacted by Standard	Number of Breaches	Total Number of Claims Submitted*/Processed	Total Payments made (\$)
GES 1	1,563,971(customers affected by outages)	14,958	12*/9	540
GES 2	7,114(requests for new connections)	5	5	250
GES 3	41,521(arrangements/ payments)	23	23	2,714
GES 4	2,302(appointments)	0	0	0
GES 5	3,449 (voltage complaints)	2	2	100
GES 6	16,055 (queries)	0	0	0
GES 7	10,451(requests)	1	1	50
GES 8	40(payments owed)	0	0	0
TOTAL		14,989	40	3,654

*Claims under GES 1 must be submitted by the customer before they can be processed, while claims under GES2 –GES 8 are generated automatically.

Summary of Performance: Overall Standards

Overall standards cover areas of service where it is usually not appropriate or feasible to give individual guarantees. Instead, stakeholders expect that the utility will provide pre-determined minimum levels of service. These standards generally cover the quality of service affecting a group of customers. Table ES3 shows the compliance rates for T&TEC’s performance under the overall standards in 2019.

T&TEC achieved full compliance under OES 1 (Frequency of Meter Reading), OES 2 (Billing Punctuality), and OES 7 (Notifying Customers of Receipt of Claim under Guaranteed Standard GES 1). There was some improvement in performance under OES 5 (Street Lights Maintenance)

and OES 6 (Response to Customer Queries/Requests (written)). There was a decline in performance under OES 3 (Responding to Meter Problems), while performance under OES 4 (Prior Notice of Unplanned Outages) was maintained at previous levels. A summary of compliance rates for 2019 under the overall standards is presented in table ES3.

Table ES3 - Compliance under Overall Standards, 2019

Code	Description	Required Performance Units	2019 Compliance Rate (%)	2018 Compliance Rate (%)
OES1	Frequency of Meter Reading	(a) 90% of industrial meters should be read every month	100.0	100.0
		(b) 90% of residential and commercial meters read according to schedule	100.0	100.0
OES2	Billing Punctuality	98% of all bills to be mailed within ten (10) working days after meter reading or estimation	100.0	97.6
OES3	Responding to Meter Problems	Visit or substantive reply within 10 working days 95% of the time.	97.6	100.0
OES4	Prior Notice of Planned Outages	3 days advance notice of planned outages 100% of the time	96.8	96.2
OES5	Street Lights Maintenance	Street Lights- within 7 working days	53.9	49.5
		Highway Lights – within 14 working days	73.3	72.4
OES6	Response to Customer Queries/Requests (written)	Time to respond after receipt of queries. Initial Response – within 10 working days	99.0	85.8
		Final Position – within 30 working days	97.1	94.8
OES7	Notifying Customers of Receipt of Claim under Guaranteed Standard GES 1	100% of customers to be notified of receipt of claim within 10 working days.	100.0	100.0

SECTION 1 INTRODUCTION

The Regulated Industries Commission (RIC), a statutory body, is the economic regulator of the water, wastewater and electricity sectors. It is responsible for establishing principles and methodologies for setting prices, prescribing standards for services, monitoring the performance of the service providers under its purview to ensure compliance, and imposing sanctions for non-compliance. In keeping with its mandate, the RIC implemented the Quality of Service Standards (QSS) for the Electricity Transmission and Distribution Sector on April 7th, 2004. These standards were subsequently revised and the new standards were implemented from April 2010³. This is the Annual Performance Report for 2019 on the QSS for the Electricity Transmission and Distribution Sector. The data used in this report were supplied by T&TEC and verified by the RIC.

1.1 Purpose of Document

This report presents an analysis of the performance of T&TEC with respect to the QSS for the year ending December 31st, 2019.

1.2 Structure of Document

The remainder of this document is structured as follows:

- Section 2 is a presentation of T&TEC's performance under each of the eight guaranteed standards;
- Section 3 is a report on the compensatory payments made to customers;
- Section 4 presents the performance of T&TEC under the seven overall standards;
- Section 5 provides a summary and conclusion of the report; and
- In Appendix 1, tables of the guaranteed and overall standards, and the compensatory payment levels for the guaranteed standards, are presented.

³ At the time of publication of this report, the QSS Scheme was further revised, published in the Trinidad and Tobago Gazette in 2019 and is pending implementation. A copy of the revised standards can be found on the RIC's website at www.ric.org.tt

SECTION 2 PERFORMANCE REVIEW: GUARANTEED STANDARDS

2.1 Guaranteed Standards

Guaranteed standards specify the service levels that must be met for each customer by the service provider. Under these standards, the utility is required to make compensatory payments to affected customers if it fails to provide the level of service stipulated. There are currently eight guaranteed standards in the QSS Scheme, GES 1 to GES 8. T&TEC's performance under each of these during the year 2019 is documented below.

GES 1: Response and Restoration Times of Supply.

This standard was designed to ensure that T&TEC responds promptly to any unplanned outage and restores supply in the shortest time possible. Accordingly, this standard requires that supply be restored to affected customers within 10 hours after an unplanned outage is reported on the distribution system. Failure to do so is a breach of the standard and the affected customer receives a compensatory payment for the breach. Further breaches occur when the supply is not restored within 22 hours and 34 hours, respectively.

In 2019, there were 10,950 unplanned outages, which mean there were approximately 30 unplanned outages per day across T&TEC's distribution network. Unplanned outages occur for a variety of reasons, and some examples are listed below. Inadequate vegetation management sometimes leads to multiple factors contributing to a single outage.

- Blown transformer fuses and blown high voltage (HV) fuses,
- Tree contact resulting in burst wires and/or blown fuses,
- Fallen trees due to inclement weather,
- Burst high tension (HT) wires,
- Defective equipment (transformers, cables),
- Broken poles due to vehicular accidents, and
- Burnt poles due to bush fires.

Of the 10,950 outages, there were 118 outages for which restoration took longer than the stipulated 10 hours, and the distribution of these outages is shown in table 1.

Table 1 - No. of Unplanned Outages exceeding 10 hours, 2019

Area	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	TOTAL (2019)	TOTAL (2018)
North	1	1	0	0	0	2	0	0	9	1	1	3	18	21
South	1	0	1	1	1	0	2	1	2	0	1	1	11	22
Tobago	0	0	0	0	1	1	1	0	40	0	2	0	45	5
East	1	4	4	2	2	6	6	1	3	4	5	5	43	84
Central	0	0	0	0	0	0	0	0	1	0	0	0	1	3
TOTAL	3	5	5	3	4	9	9	2	55	5	9	9	118	135

Just as there may be multiple reasons for outages, the delays in restoration may also be caused by a combination of events. T&TEC supplied the following reasons for the lengthy restoration times.

- High number of trouble reports,
- Remote location, flooding, landslides and poor terrain,
- Limited crews are diverted to higher priority jobs,
- Additional service crews required. e.g. Daylight crew, line clearing and tree trimming required,
- Inclement weather,
- Bush fires,
- Complexity of the job,
- Lack of appropriate equipment to conduct repairs. e.g. Wajax, Lift trucks.
- Security issues or high risk areas,
- Bee infestation, and
- Inability to contact the customer.

Table 2 shows the estimated number of customers affected by outages, and the estimated number of customers whose supply was restored after the specified time frames of 10 hours, 22 hours and 34 hours.

Table 2 - No. of Customers Restored after 10 hours, 2019

Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL (2019)
No. of customers affected by outages	103,925	78,982	49,368	91,177	119,336	168,573	126,895	125,404	191,684	204,922	172,818	130,887	1,563,971
No. of customers restored after 10 hours (Breach)	44	201	167	65	31	110	685	30	5,445	112	529	485	7,904
No. of customers restored after 22 hours (Breach)	0	150	15	0	0	0	0	15	4,533	0	0	185	4,898
No. of customers restored after 34 hours (Breach)	0	150	0	0	0	0	0	0	2,006	0	0	0	2,156
Total No. of Breaches	44	501	182	65	31	110	685	45	11,984	112	529	670	14,958
Percentage breach (%)	0.04	0.63	0.37	0.07	0.03	0.07	0.54	0.04	6.25	0.05	0.31	0.51	0.96
Compliance Rate (%)	99.96	99.37	99.63	99.93	99.97	99.93	99.46	99.96	93.75	99.95	99.69	99.49	99.04

The total number of customers affected by outages increased from 1,458,201 in 2018 to 1,563,971 in 2019, as did the number of breaches, which increased from 3,474 to 14,958 (See Table 3). This spike was due to Tropical Storm Karen in September, which severely affected 4,793 customers in Tobago. Of the 7,904 customers who experienced 14,958 breaches, only twelve claims were filed by residential customers. In total, T&TEC deemed three claims to be invalid; two due to the lack of supporting evidence and one because restoration occurred within the 10 hour time frame. Nine claims were honoured, and T&TEC paid \$540 in compensatory payments.

Table 3 - Response and Restoration Times of Supply, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
Total no. of customers restored after specified times (Breaches)	727	206	12,714	1,311	14,958	3,474
No. of customers affected by outages	232,275	379,086	443,983	508,627	1,563,971	1,458,201
Percentage non-compliance (%)	0.31	0.54	2.86	0.26	0.96	0.24
Compliance Rate (%)	99.69	99.46	97.14	99.74	99.04	99.76

GES 2: Billing Punctuality (New customers).

This standard seeks to ensure a prompt and efficient billing process. It requires that the first bill be mailed after a new service connection to residential customers within 60 days, and to non-residential customers within 30 days.

There were 7,076 new residential customers connected to supply in 2019. Of these, bills were not mailed to two of them within the stipulated period. T&TEC's performance under this standard was maintained at 99.97% (See table 4). The two customers were compensated.

Table 4 - Billing Punctuality for Residential Customers, 2019

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2019	TOTAL 2018
No. of new Residential customers connected to supply	1,723	1,727	1,619	2,007	7,076	7,964
No. of bills not mailed within 60 days	1	1	0	0	2	7
Percentage Breach (%)	0.06	0.06	0.0	0.0	0.03	0.1
Compliance Rate (%)	99.94	99.94	100.0	100.0	99.97	99.9

There were 38 new non-residential customers connected to supply. Bills were mailed to all but three of them within the stipulated time. This delay resulted in a compliance rate of 92.1% for 2019 (See table 5).

Table 5 - Billing Punctuality for Non-Residential Customers, 2019

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2019	TOTAL 2018
No. of new Non-Residential customers connected to supply	6	7	11	14	38	42
No. of bills not mailed within 30 days (breach)	1	1	0	1	3	0
Percentage Breach (%)	16.7	14.3	0.0	7.1	7.9	0.0
Compliance Rate (%)	83.3	85.7	100.0	92.9	92.1	100.0

GES 3: Reconnection after payment of overdue amounts or agreement.

T&TEC disconnects customers for the non-payment of arrears. Once these accounts have been settled, or an agreement has been reached on a payment schedule, T&TEC is required to restore the service within 24 hours after either payment or agreement is made.

In 2019, there were 44,495 customers disconnected for non-payment of arrears. Of these, 41,521 made payments or arranged a payment schedule. As shown in table 6, twenty-three customers were not reconnected within 24 hours of making a payment, resulting in a compliance rate of 99.94%. However, all 23 customers were compensated within the stipulated timeframe.

Table 6 - Reconnection after Payment of Overdue Amounts or Agreement, 2019

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2019	TOTAL 2018
Total Disconnections	10,525	9,819	12,992	11,159	44,495	35,518
Customers making payments/arrangements	9,569	9,321	12,041	10,590	41,521	32,678
No. not reconnected within 24 hours	9	1	6	7	23	14
Percentage Breach (%)	0.09	0.01	0.05	0.07	0.06	0.04
Compliance Rate (%)	99.91	99.99	99.95	99.93	99.94	99.96

GES 4: Making and Keeping Appointments.

It is sometimes necessary for T&TEC to make appointments to visit customers' premises. If T&TEC does not keep the appointment, it is the customer who experiences the greater inconvenience. The standard requires that T&TEC give at least 24 hours' notice to the customer of its inability to keep an appointment. T&TEC is considered to be in breach of the standard if an appointment is not kept within 1 hour of the agreed time.

T&TEC reported that 2,302 appointments were made in 2019, and all were kept within 1 hour of the appointed time, resulting in full compliance with this standard (See table 7).

Table 7 - Making and Keeping Appointments, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
No. of appointments arranged with customers	550	610	630	512	2,302	2,243
No. of appointments not kept within 1hr of appointed time	0	0	0	0	0	0
No. of appointments cancelled or postponed with 24 hours' notice	0	0	0	0	0	1
Percentage Breach (%)	0.0	0.0	0.0	0.0	0.0	0.0
Compliance Rate (%)	100.0	100.0	100.0	100.0	100.0	100.0

GES 5: Investigation of Voltage Complaints

Under the Electricity Supply Rules under the Electricity (Inspection) Act Chapter 54.72, T&TEC is required to supply its customers at specified nominal voltages. Supply voltage shall not vary beyond six percent above or below the nominal supply voltage. Where a customer reports a problem with his voltage supply, T&TEC is required to visit within 24 hours, where a visit is deemed necessary, and rectify the problem within 15 working days. A breach occurs if the service provider fails to visit or correct the problem within the respective periods specified.

There was very little change in the number of voltage complaints received in 2019 compared to 2018. Of the 3,449 complaints received, T&TEC determined that 3,172 of them required a visit,

and visited all but one within 24 hours. This performance resulted in a compliance rate of 99.97% for this section of the standard.

After the visit, T&TEC is required to identify which of the complaints are valid voltage complaints. T&TEC reported that 586 were valid, and only one of these was not rectified within 15 working days. Thus, the overall compliance rate for rectification of voltage complaints in 2019 was 99.83%. The performance is summarized in table 8.

Table 8 - Correction of Low/High Voltage, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
No. of voltage complaints received	740	726	1,063	920	3,449	3,475
No. of complaints where visit was necessary	709	624	923	916	3,172	2,922
No. of complaints not responded to within 24 hours	1	0	0	0	1	0
Percentage Breach	0.1	0.0	0.0	0.0	0.03	0.0
Compliance Rate	99.9	100.0	100.0	100.0	99.97	100.0
No. of legitimate voltage complaints	141	130	193	122	586	657
No. of complaints not rectified within 15 working days	0	0	0	1	1	1
Percentage Breach	0.0	0.0	0.0	1.9	0.17	0.2
Compliance Rate	100.0	100.0	100.0	98.1	99.83	99.8

GES 6: Responding to Billing and Payment Queries

This standard requires T&TEC to provide a substantive response to customers' billing and payment queries within 15 working days.

T&TEC received 16,055 billing and payment queries in 2019, and all were responded to within the required time. Thus full compliance was achieved, as seen in table 9.

Table 9 - Responding to Billing and Payment Queries, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
Number of billing and payment queries	4,454	4,972	2,079	4,550	16,055	15,103
Number not responded to within 15 working days	0	0	0	0	0	0
Percentage Breach (%)	0.0	0.0	0.0	0.0	0.0	0.0
Compliance Rate (%)	100.0	100.0	100.0	100.0	100.0	100.0

GES 7: New Connection to Supply

This standard focuses on the delays by T&TEC in completing new connections after the customer completes all necessary procedures. It states that T&TEC must complete a new supply connection within three (3) working days after submission of all payments and documentation or by a mutually agreed upon date.

There were 10,451 requests for new connections in 2019. One connection was not made within the specified time. This performance resulted in a compliance rate of 99.99% (See table 10).

Table 10 - Connection to Supply, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
No. of connection requests	2,320	2,297	2,810	3,024	10,451	11,157
No. of connections not made within 3 working days or by the specified date	0	0	1	0	1	0
Percentage Breach (%)	0.0	0.0	0.04	0.0	0.01	0.0
Compliance Rate (%)	100.0	100.0	99.96	100.0	99.99	100.0

GES 8: Payments owed under Guaranteed Standards

Compensatory payments must be made to the customer’s account within 30 working days for non-residential customers and 60 days for residential customers, after the claim has been accepted by T&TEC. This standard seeks to ensure that payments are made on time and requires T&TEC to pay \$50 to any customer whose account is not credited within the specified timeframe.

Under GES 1, customers must file a claim for the compensatory payment. However, for the other guaranteed standards, GES 2 to GES 7, T&TEC is required to process and credit payments to customers' accounts automatically. The system T&TEC introduced to track breaches and the respective compensatory payments continues to work well and has improved the timeliness of compensatory payments. All customers who were entitled to compensatory payments under standards GES 1 to GES 7 were compensated within the specified time frame, hence there was no instance in which GES 8 had to be initiated (See table 11).

Table 11 - Payments owed under Guaranteed Standards, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
Number of Residential claims not paid within 60 working days	0	0	0	0	0	0
Number of Residential claims further compensated for late or non-payment	NMI	NMI	NMI	NMI	NMI	NMI
Percentage Breach (%)	N/A	N/A	N/A	N/A	N/A	N/A
Compliance Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A
Number of Non-Residential claims not paid within 30 working days	0	0	0	0	0	0
Number of Non-Residential claims further compensated for late or non-payment	NMI	NMI	NMI	NMI	NMI	NMI
Percentage Breach (%)	N/A	N/A	N/A	N/A	N/A	N/A
Compliance Rate (%)	N/A	N/A	N/A	N/A	N/A	N/A

NMI – No Measurable Instance

N/A – Not Applicable

SECTION 3 COMPENSATORY PAYMENTS

The QSS for the Electricity Transmission and Distribution Sector is a guaranteed standards scheme that imposes a penalty on the service provider when the specific standards are not met. The penalty is in the form of a compensatory payment to affected customers. However, the level of the compensatory payment is intended to incentivize T&TEC without being unduly punitive. In assessing the effectiveness of the guaranteed standards scheme, the number of breaches must be determined, as well as the quantum of the payments due for these breaches. Payment is automatic for all guaranteed standards, except GES 1. Customers are required to submit a claim for GES 1, as T&TEC is currently unable to identify individual customers affected by breaches of this standard. However, T&TEC can identify the area affected and provide an estimate as to the number of individual customers within the area.

There were 14,958 breaches that occurred under GES 1. If each affected customer submitted a valid claim, the minimum possible payment for GES 1 alone would be \$897,480. However, in 2019, only twelve (0.08%) claims were submitted. Nine of these claims were found to be valid and the eligible customers were compensated a total of \$540.

As previously stated, for standards GES 2 to GES 8, the compensatory payment is automatic, which means that the customer no longer has to apply for the payment. However, the payment system is not automated. Hence, there is a procedure to be followed for these payments to be processed. The compensatory payments due are calculated based on the amount specified by the standard.

Based on the 31 breaches occurring under GES 2 - 8, the total minimum payment due should be \$3,114. T&TEC has maintained its improved performance in this area, by paying 100% (\$3,114) of the amount due to affected customers. In total, compensatory payments were made to 40 customers, totalling \$3,654. This information is presented in table 12.

Table 12 - Claims and Payments under the Guaranteed Standards, 2019

Standard	Total Number of Claims Processed	Total Payments made (\$)
GES 1	9	540
GES 2	5	350
GES 3	23	2,714
GES 4	0	0
GES 5	2	100
GES 6	0	0
GES 7	1	50
GES 8	0	0
Totals	40	3,654

SECTION 4 PERFORMANCE REVIEW: OVERALL STANDARDS

4.1 Overall Standards

Overall standards are those which cover areas of service where it is usually not appropriate or feasible to give individual guarantees, but where the expectation is that the utility will provide pre-determined minimum levels of service. These standards generally relate to the reliability of service affecting a group of customers. There are seven such standards under the QSS and T&TEC's performance with respect to these overall standards is documented below.

OES 1: Frequency of Meter Reading.

The purpose of the standard is to have all meters read when scheduled. The performance measures are as follows:

- 90% of all residential and commercial meters be read when scheduled, and
- 90% of all industrial meters be read every month.

There were 489,861 residential and commercial meters installed at the end of 2019. These meters were scheduled to be read six times per year. T&TEC was able to complete 97% of the 2,901,571 scheduled readings for residential and commercial meters as shown in table 13. This achievement is in full compliance with the performance measure of 90% of the meters being read as scheduled.

Table 13 - Frequency of Meter Reading, Residential and Commercial, 2019

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2019	TOTAL 2018
No. of residential and commercial meters installed at end of period	477,635	486,313	487,976	489,861	489,861	483,228
No. of scheduled readings for residential and commercial meters	722,864	716,804	740,680	721,223	2,901,571	2,872,652
No. of residential and commercial meters readings completed according to schedule	702,399	700,734	721,137	703,794	2,828,064	2,791,550
Percentage of residential and commercial meters read according to schedule	97 %	98%	97%	98%	97%	97%
Percentage breach (%)	0.0	0.0	0.0	0.0	0.0	0.0
Compliance Rate (%)	100.0	100.0	100.0	100.0	100.0	100.0

T&TEC read 98% of the 4,058 industrial meters installed, resulting in an annual compliance rate of 100% (See table 14).

Table 14 - Frequency of Meter Reading, Industrial, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
No of industrial meters at end of period	3,998	4,013	4,028	4,058	4,058	3,984
No. of scheduled readings for industrial meters	11,925	11,975	12,011	12,075	47,986	47,548
No. of actual readings for industrial meters	11,726	11,849	11,882	11,891	47,348	46,873
Percentage of industrial meter readings	98%	99%	98%	98%	98%	99%
Percentage breach (%)	0.0	0.0	0.0	0.0	0.0	0.0
Compliance Rate (%)	100.0	100.0	100.0	100.0	100.0	100.0

OES 2: Billing Punctuality.

T&TEC’s customers are billed by cycles in each of its five (5) Distribution Areas. Bills are mailed to customers in the respective cycles after their meters have been read or estimated according to the schedule. This standard seeks to ensure timely billing and requires that 98% of all bills be mailed to customers within ten (10) working days after meter reading or estimation.

T&TEC mailed all of the bills within the stipulated time frame during 2019, resulting in an annual compliance rate of 100% (See table 15).

Table 15 - Billing Punctuality, 2019

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2019	TOTAL 2018
No. of meters read and estimated	704,617	728,779	752,691	733,298	2,919,385	2,838,423
No. of bills not mailed within 10 working days	0	0	0	0	0	123,847
No. of bills mailed within 10 working days	704,617	728,779	752,691	733,298	2,919,385	2,714,576
Percentage of bills mailed within 10 working days (%)	100%	100%	100%	100%	100%	96%
Percentage breach (%)	0.0	0.0	0.0	0.0	0.0	2.4
Compliance Rate (%)	100.0	100.0	100.0	100.0	100.0	97.6

OES 3: Responding to Meter Problems

Overall Standard, OES 3 is designed to ensure that T&TEC responds to customers' meter problems within ten (10) working days 95% of the time, either by visit or with a substantive response.

T&TEC received 1,681 reports of meter problems, but did not respond to 123 of these (i.e. 7 %) within ten (10) working days. This performance resulted in an annual compliance rate of 97.6% for 2019.

Table 16 - Response to Meter Problems, 2019

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2019	TOTAL 2018
No. of meter problems reported	408	538	364	371	1,681	1,305
No. of meters problems not responded to within 10 working days	18	8	21	76	123	27
Percentage responded to within 10 working days (%)	96%	99%	94%	80%	93%	98%
Percentage breach (%)	0.0	0.0	0.8	16.3	2.4	0.0
Compliance Rate (%)	100.0	100.0	99.2	83.7	97.6	100.0

OES 4: Prior Notice of Planned Outages.

T&TEC routinely performs maintenance or repair work on the transmission and distribution system, which may involve the interruption of supply. This standard requires T&TEC to give at least three days' notice of planned outages to customers 100% of the time.

Three days' advance notice was not given for 53 of the 1,679 planned outages for the year. These 53 were emergency situations that had to be planned and attended to in less than three days, hence there was not enough time to give notifications. This performance resulted in an annual compliance rate of 96.8% in 2019 (See table 17).

Table 17 - Notice of Planned Outages, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
No. of planned outages	287	418	507	467	1,679	1,192
No. of planned outages for which 3 days advance notice was not given	20	9	10	14	53	46
Percentage Breach (%)	7.0	2.2	2.0	3.0	3.2	3.8
Compliance Rate (%)	93.0	97.8	98.0	97.0	96.8	96.2

OES 5: Street Lights Maintenance

OES 5 is designed to ensure that T&TEC repairs 100% of failed streetlights (except highway lights) under its control, within seven (7) working days after receiving notification. T&TEC is also required to establish a monthly schedule to monitor highway lighting and must repair 100% of failed highway lighting within fourteen (14) days after surveyed or reported failure.

There were 41,151 reports of failed street lights received, and T&TEC was able to repair 53.9% of them within the specified time frame (See table 18). This performance was an improvement over 2018, in which 49.5% was repaired within the required time. However, T&TEC continues to perform below acceptable levels under this standard, and has to increase its efforts to improve the repair rate.

Table 18 - Street Lights Maintenance, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
No. of failed street lights reported	16,065	8,193	9,119	7,774	41,151	43,525
No. of failed street lights not repaired within 7 working days	4,128	6,111	4,452	4,271	18,962	21,995
Percentage breach (%)	25.7	74.6	48.8	54.9	46.1	50.5
Compliance Rate (%)	74.3	25.4	51.2	45.1	53.9	49.5

The number of reported highway light failures increased by 58% from 1,099 in 2018 to 1,731 in 2019. T&TEC was not able to repair 463 of them within fourteen (14) working days. The annual compliance rate for repairs to highway lights was 73.3% (See table 19).

Table 19 - Highway Lights Maintenance, 2019

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2019	TOTAL 2018
No. of failed highway lights reported	210	602	608	311	1,731	1,099
No. of failed highway lights not repaired within 14 working days	117	277	0	69	463	303
Percentage breach (%)	55.7	46.0	0.0	22.2	26.7	27.6
Compliance Rate (%)	44.3	54.0	100.0	77.8	73.3	72.4

OES 6: Response to Customer’s written Complaints/Requests

This standard is intended to improve the service provider’s response to customer’s written complaints/requests. Under OES 6, T&TEC is required to:

- (a) Respond to written complaints within 10 working days, and
- (b) Communicate the final position within 30 working days thereafter.

T&TEC received 208 written complaints/requests during 2019, and was unable to respond to two (2) of them within ten (10) working days, resulting in an improved annual compliance rate of 99%

when compared to 2018. With respect to having the final position communicated within 30 working days, T&TEC's performance also improved, with an annual compliance rate of 97.1%. The breaches for each aspect of this standard are shown in table 20.

Table 20 - Response to Customer's written Complaints/Requests, 2019

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2019	TOTAL 2018
No. of written complaints/requests received	50	62	38	58	208	232
No. of written complaints/requests not responded to within 10 working days (breach)	2	0	0	0	2	33
Percentage Breach (%)	4.0	0.0	0.0	0.0	1.0	14.2
Compliance Rate (%)	96.0	100.0	100.0	100.0	99.0	85.8
No. of written complaints/requests not communicated to with final position within 30 working days (breach)	0	0	0	6	6	12
Percentage Breach (%)	0.0	0.0	0.0	10.3	2.9	5.2
Compliance Rate (%)	100.0	100.0	100.0	89.7	97.1	94.8

OES 7: Notifying customer of receipt of claim under Guaranteed Standard GES 1

This standard requires T&TEC to notify 100% of customers within ten working days of receipt of a claim under guaranteed standard GES 1. There were 12 claims submitted for breaches of GES 1, and all customers were notified within the required time.

Table 21 - Customer Claim Notification, 2019

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2019	TOTAL 2018
No. of claims made under GES1	7	0	3	2	12	14
No. of claims not acknowledged within 10 working days	0	0	0	0	0	0
Percentage Breach (%)	0.0	0.0	0.0	0.0	0.0	0.0
Compliance Rate (%)	100.0	100.0	100.0	100.0	100.0	100.0

SECTION 5 CONCLUSION

The RIC has been using the Quality of Service Standards to encourage T&TEC to focus on improving the quality of service through guaranteed and overall standards, and is committed to ensuring that T&TEC continues to improve the quality of service delivered to its customers. To this end, the RIC continues to make every effort to have the revised Quality of Service Standards for the Electricity Transmission and Distribution Sector implemented. The RIC also continues to work with T&TEC to standardize monitoring and data collection, which will enhance the RIC's ability to effectively monitor performance and compliance.

5.1 Performance of Guaranteed Standards

Guaranteed Standards set service levels that must be met in providing service to each customer. Failure to meet guaranteed standards requires T&TEC to make a compensatory payment to the affected customer. There was very little change in the compliance rates in 2019 when compared to 2018. However, there was a 330% increase in the number of breaches under GES 1 from 3,474 in 2018 to 14,958 in 2019. This increase was due to Tropical Storm Karen which severely affected Tobago.

There were 12 claims under GES 1, of which nine were determined to be valid and paid. There were 31 breaches under the remaining standards, GES 2 to GES 8, which were eligible for automatic compensation, and T&TEC paid all of these. A summary of the breaches and compliance rates is shown in table 22.

Table 22 - Summary of Compliance – Guaranteed Standards, 2019

Standard		Total Number of Breaches		Compliance Rates	
		2019	2018	2019	2018
GES 1 – Response and Restoration Times of Supply after unplanned outages on the distribution system		14,958	3,474	99.04	99.76
GES 2 – Billing Punctuality	Residential	2	7	100.0	99.90
	Non- residential	3	0	92.10	100.0
GES 3 – Reconnection after Payment of overdue amount/ agreement		23	14	99.94	99.96
GES 4 – Making and Keeping Appointments		0	1	100.0	100.0
GES 5 – Investigation of Voltage Complaints	Response	0	0	99.97	100.0
	Rectification	1	1	99.83	99.80
GES 6 – Responding to billing and payment queries		0	0	100.0	100.0
GES7- New connection of supply		1	0	99.99	100.0
GES8 – Payments owed under guaranteed standards	Residential	NMI	NMI	N/A	N/A
	Non- residential	NMI	NMI	N/A	N/A

NMI – No measurable instance

N/A – Not Applicable

5.2 Performance of Overall Standards

T&TEC’s performance under OES 1 (Frequency of Meter Reading), OES 2 (Billing Punctuality), and OES 7 (Notifying Customers of Receipt of Claim under Guaranteed Standard GES 1) achieved full compliance. There was some improvement in performance under OES 5 (Street Lights Maintenance) and OES 6 (Response to Customer Queries/Requests (written)). There was a decline in performance under OES 3 (Responding to Meter Problems), while performance under OES 4 (Prior Notice of Unplanned Outages) was maintained at previous levels. A summary of compliance rates for 2019 under the overall standards is presented in table 23.

Table 23 - Summary of Compliance – Overall Standards, 2019

Standard		Compliance Rates %	
		TOTAL 2019	TOTAL 2018
OES 1 – Frequency of Meter Reading	Industrial	100.0	100.0
	Residential and Commercial	100.0	100.0
OES 2 – Billing Punctuality		100.0	97.6
OES 3 – Responding to meter problems		97.6	100.0
OES 4 – Prior Notice Of Planned Outages		96.8	96.2
OES 5 – Street Lights Maintenance	Street Lights	53.9	49.5
	Highway Lights	73.3	72.4
OES 6 – Response to Customer Queries/ Requests (written)	Initial Response	99.0	85.8
	Final Position	97.1	94.8
OES 7 – Notifying Customer of Receipt of Claim under Guaranteed Standard GES1		100.0	100.0

APPENDIX 1

Table A1 presents a description of the Guaranteed Standards, the required performance units, and the compensatory payment levels for each standard.

Table A1 - Guaranteed Standards

Code	Service Description	Performance Measure	Required Performance Units	Payments per Customers *
GES1	Restoration of supply after unplanned outage on the distribution system.	Time for restoration of supply to affected customers	Within 10 hours	\$60 (residential) \$600 (non-residential) For each further 12 hr period \$60 (residential) \$600 (non-residential)
GES2	Billing Punctuality .Time for first bill to be mailed after service connection.	Time for first bill to be mailed after service connection: (a) Residential (b) Non-Residential	60 days 30 days	\$50 for both residential and non-residential
GES3	Reconnection of service after payment of overdue amounts or agreement on payment schedule	Time to restore supply after payment is made (All customers)	Within 24 hours	Refund of reconnection fee for both residential and non-residential
GES4	Making and keeping appointments	Where required, appointments will be made on a morning or afternoon basis	24 hours notice of inability to keep an appointment with customers.	\$50 for both residential and non-residential
GES5	Investigation of Voltage Complaints	Time to visit, correct problem and notify affected customers	Within 24 hours, Correct within 15 working days.	\$50 (residential) \$600 (non-residential)
GES6	Responding to billing and payment queries	Provide a substantive reply	Within 15 working days	\$50 for both residential and non-residential
GES7	New Connection of supply	Service drop and meter to be installed	Within 3 working days	\$50 for both residential and non-residential
GES8	Payments owed under guaranteed standards	Time to credit compensatory payment.	Within 30 working days for non-residential and 60 days for residential.	\$50 for both residential and non-residential

Table A2 presents a description of the Overall Standards and the required performance units for each standard.

Table A2 - Overall Standards

Code	Description	Required Performance Units
OES1	Frequency of meter reading	<ul style="list-style-type: none"> a. 90% of industrial meters should be read every month b. 90% of residential and commercial meters read according to schedule
OES2	Billing punctuality	98% of all bills to be mailed within ten (10) working days after meter reading or estimation
OES3	Responding to meter problems	Visit or substantive reply within 10 working days 95% of the time
OES4	Prior Notice of planned outages	At least 3 days advance notice of planned outages 100% of the time
OES5	Street lights maintenance.	<p>100% of failed street lights with the exception of highway lighting repaired within 7 working days.</p> <p>100% of failed highway lighting repaired within 14 working days.</p>
OES6	Response to customer queries/requests (written)	Substantive response within 10 working days and communicating final position within 30 working days.
OES7	Notifying customers of receipt of claim under guaranteed standard GES1.	100% of customers to be notified of receipt of claim within 10 working days.