

QUALITY OF SERVICE STANDARDS

ANNUAL PERFORMANCE REPORT 2018

July 2019

ELECTRICITY TRANSMISSION AND DISTRIBUTION SECTOR

Information Document



TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
SECTION 1 INTRODUCTION	
1.1 Purpose of Document	1
1.2 Structure of Document	1
SECTION 2 PERFORMANCE REVIEW: GUARANTEED STANDARDS	2
2.1 Guaranteed Standards	2
GES 1: Response and Restoration Times of Supply.	
GES 2: Billing Punctuality (New customers).	
GES 3: Reconnection after payment of overdue amounts or agreement.	
GES 4: Making and Keeping Appointments	7
GES 5: Investigation of Voltage Complaints	7
GES 6: Responding to Billing and Payment Queries	8
GES 7: New Connection to Supply	9
GES 8: Payments owed under Guaranteed Standards	9
SECTION 3 COMPENSATORY PAYMENTS SECTION 4 PERFORMANCE REVIEW: OVERALL STANDARDS	
4.1 Overall Standards	
OES 1: Frequency of Meter Reading.	
OES 2: Billing Punctuality	
OES 3: Responding to Meter Problems	
OES 4: Prior Notice of Planned Outages.	16
OES 5: Street Lights Maintenance	16
OES 6: Response to Customer's written Complaints/Requests	17
OES 7: Notifying customer of receipt of claim under Guaranteed Standard GES 1	18
SECTION 5 CONCLUSION	
5.1 Performance of Guaranteed Standards	19
5.2 Performance of Overall Standards	20
APPENDIX 1	22

LIST OF TABLES	PAGE
Table ES1 - Compliance Rates under the Guaranteed Standards, 2018	2
Table ES2 - Breaches and Compensatory Payments due under the Guaranteed Stan	
2018	
Table ES3 - Compliance under Overall Standards, 2018	4
Table 1 - No. of Unplanned Outages, 2018	
Table 2 - No. of Unplanned Outages exceeding 10 hours, 2018	
Table 3 - No. of Customers Restored after 10 hours, 2018	
Table 4 - Response and Restoration Times of Supply, 2018	
Table 5 - Billing Punctuality for Residential Customers, 2018	
Table 6 - Billing Punctuality for Non-Residential Customers, 2018	
Table 7 - Reconnection after Payment of Overdue Amounts or Agreement, 2018	6
Table 8 - Making and Keeping Appointments, 2018	7
Table 9 - Correction of Low/High Voltage, 2018	
Table 10 - Responding to Billing and Payment Queries, 2018	
Table 11 - Connection to Supply, 2018	9
Table 12 - Payments owed under Guaranteed Standards, 2018	10
Table 13 - Breaches and Minimum Payments Due under GES 2 to GES 8, 2018	12
Table 14 - Claims and Payments under the Guaranteed Standards, 2018	12
Table 15 - Frequency of Meter Reading, Residential and Commercial, 2018	13
Table 16 - Frequency of Meter Reading, Industrial, 2018	14
Table 17 - Billing Punctuality, 2018	15
Table 18 - Response to Meter Problems, 2018	15
Table 19 - Notice of Planned Outages, 2018	16
Table 20 - Street Lights Maintenance, 2018	17
Table 21 - Highway Lights Maintenance, 2018	
Table 22 - Response to Customer's written Complaints/Requests, 2018	18
Table 23 - Customer Claim Notification, 2018	
Table 24 - Summary of Compliance – Guaranteed Standards, 2018	
Table 25 - Summary of Compliance – Overall Standards, 2018	
Table A1 - Guaranteed Standards	
Table A2 - Overall Standards	23

EXECUTIVE SUMMARY

The Regulated Industries Commission (RIC) is the economic regulator of the water, wastewater and electricity sectors in Trinidad and Tobago. It's primary functions, which are defined under Section 6 of the RIC Act, include prescribing standards for services, monitoring compliance with these standards, and imposing sanctions for non-compliance. Accordingly, the RIC implemented the Quality of Service Standards (QSS) for the Electricity Transmission and Distribution Sector in 2004, which has since been revised. This report is the assessment of the performance of the Trinidad and Tobago Electricity Commission (T&TEC) under the QSS Scheme for the period January to December 2018. The information utilized in this report was reported by T&TEC and reviewed by the RIC.

Summary of Performance: Guaranteed Standards

Guaranteed Standards are those that set service levels which must be met for each individual 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 eight guaranteed standards for T&TEC, and all but the first (GES 1) carry automatic compensatory payments for breaches¹.

Generally, T&TEC maintained a level of performance across all standards that was similar to that achieved in 2017. The compliance rates are shown in table ES1. However, there was a significant reduction in the number of breaches under GES 1, from 16,576 in 2017 to 3,474 in 2018. The breaches in 2017 were unusually high because of the severe inclement weather experienced during the rainy season that year, which adversely affected T&TEC's ability to carry out repairs and restoration.

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

Code	Service Description	Performance Measure	2018 Compliance Rates (%)	2017 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	99.76	99.08
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	99.90 100.0	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	99.96	99.91
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.	100.0	99.91
		(ii) Rectification- All voltage complaints to be rectified within 15 working days.	99.80	98.40
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.	100.0	99.90
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	0.0 100

Table ES1 - Compliance Rates under the Guaranteed Standards, 2018

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 1^2 . Hence, customers are still required to submit claims for breaches under this standard. Fourteen claims out of an estimated 3,474 were made by

² T&TEC will be able to identify individual customers affected by breaches of GES 1 when the Outage Management System (OMS) module of the Advanced Metering Infrastructure (AMI) is fully implemented by the end of 2019. Implementation has been completed in both the Central and South Distribution areas, and is currently being rolled out in the Distribution East area.

customers, of which ten were determined to be valid, and the customers were compensated. There were 22 breaches under the remaining standards that were eligible for automatic compensation, and T&TEC made payments to all the affected customers totalling \$2,052. The total number of breaches and payments made under the Guaranteed Standards in 2018 is shown in table ES2.

Standard	Total Number impacted by Standard	Number of Breaches	Total Number of Claims Submitted*/Processed	Total Payments made (\$)
GES 1	1,458,201(customers affected by outages)	3,474	14*/10	600
GES 2	8,006(requests for new connections)	7	7	350
GES 3	28,552(arrangements/ payments)	14	14	1,652
GES 4	2,242(appointments)	0	0	0
GES 5	3,475 (voltage complaints)	1	1	50
GES 6	15,103 (queries)	0	0	0
GES 7	11,157(requests)	0	0	0
GES 8	36(payments owed)	0	0	0
TOTAL		3,496	32	2,652

Table ES2 - Breaches and Compensatory Payments under the Guaranteed Standards, 2018

*Claims under GES 1 must be submitted by 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, but where the expectation of the stakeholders is that the utility will provide pre-determined minimum levels of service. These standards generally cover the reliability of service affecting a group of customers. Table ES3 shows the compliance rates for T&TEC's performance under the overall standards in 2018.

Generally, T&TEC's performance improved under the overall standards, with four of the standards showing improvement, two of them maintaining their performance levels and one with a mixed performance. Performance under OES 1 (Frequency of Meter Reading), OES 3 (Responding to Meter Problems) and OES 7 (Notifying Customers of Receipt of Claim under Guaranteed Standard

GES 1) achieved full compliance. There was improvement in the performance under OES2 (Billing Punctuality), OES 4 (Prior Notice of Unplanned Outages) and OES 5 (Street Lights Maintenance). However, there was a decline in performance under OES 6 (Response to Customer Queries/Requests (written) with respect to the initial response, but improvement with respect to the final position.

Code	Description	Required Performance Units	2018 Compliance Rate (%)	2017 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	97.6	94.4
OES3	Responding to Meter Problems	Visit or substantive reply within 10 working days 95% of the time.	100.0	96.8
OES4	Prior Notice of Planned Outages	3 days advance notice of planned outages 100% of the time	96.2	90.9
OES5	Street Lights Maintenance	Street Lights- within 7 working days	49.5	21.3
		Highway Lights – within 14 working days	72.4	57.0
OES6	Response to Customer Queries/Requests (written)	Time to respond after receipt of queries. Initial Response – within 10 working days	85.8	96.7
	. ,	Final Position – within 30 working days	94.8	65.6
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

 Table ES3 - Compliance under Overall Standards, 2018

SECTION 1 INTRODUCTION

The Regulated Industries Commission (RIC) is a statutory body established under the Regulated Industries Commission Act No. 26 of 1998. As economic regulator of the water and electricity sectors, it's responsibilities, as defined under Section 6 of the Act, include establishing principles and methodologies for setting prices; prescribing standards for services; monitoring 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) Scheme 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 2018 on the QSS for the Electricity Transmission and Distribution Sector. The information 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 31, 2018.

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 As at the time of publication of this report, the QSS Scheme was further revised, published in the Gazette and is pending implementation. A copy of the revised standards can be found on the RIC's website 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 individual 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.

The QSS Scheme consists of eight guaranteed standards, GES 1 to GES 8. T&TEC's performance under each of these during the year 2018 is as follows.

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 on the distribution system.

In 2018, there were 10,855 unplanned outages. These are disaggregated by month and distribution areas in table 1. There were approximately 30 unplanned outages per day across T&TEC's distribution network.

Area	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	TOTAL (2018)	TOTAL (2017)
North	152	154	246	286	245	136	155	265	205	181	112	152	2,289	2,909
South	240	169	273	272	296	327	271	329	374	276	324	247	3,398	2,819
Tobago	87	103	133	88	116	140	205	133	156	147	130	133	1,571	550
East	150	131	137	134	148	173	182	216	186	197	203	145	2,002	2,088
Central	157	136	190	112	147	53	160	68	170	150	135	117	1,595	2,320
TOTAL (2018)	786	693	979	892	952	829	973	1011	1091	951	904	794	10,855	
TOTAL (2017)	549	628	627	590	733	1,231	951	971	1,288	1,248	910	960		10,686

Table 1 - No. of Unplanned Outages, 2018

In 2018, unplanned outages occurred for a variety of reasons, some of which are listed below. It should be noted that in certain cases, there may be multiple reasons provided for a specific 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.

There were 135 outages for which restoration took longer than the stipulated 10 hours and the distribution of these outages is shown in table 2.

Area	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	TOTAL (2018)	TOTAL (2017)
North	0	2	2	2	0	2	1	8	1	2	1	0	21	41
South	0	1	1	0	0	0	0	1	12	4	2	1	22	10
Tobago	0	0	0	0	0	0	0	2	0	1	0	2	5	10
East	3	1	1	3	2	6	5	8	8	34	12	1	84	116
Central	0	0	1	1	0	0	1	0	0	0	0	0	3	8
TOTAL	3	4	5	6	2	8	7	19	21	41	15	4	135	185

Table 2 - No. of Unplanned Outages exceeding 10 hours, 2018

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 customer.

A breach of GES 1 occurs when an unplanned outage of electricity supply to an individual is not restored within 10 hours of the report being received by the T&TEC. Further breaches occur when the supply is not restored within 22 hours and 34 hours, respectively.

Table 3 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.

Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL (2018)
No. of customers affected by outages	97,858	120,214	121,367	101,532	152,890	108,256	142,891	133,783	159,789	104,570	123,654	91,397	1,458,201
No. of customers restored after 10 hours (Breach)	44	48	124	170	47	692	274	206	529	614	363	29	3,140
No. of customers restored after 22 hours (Breach)	0	0	0	7	21	0	15	7	15	157	62	0	284
No. of customers restored after 34 hours (Breach)	0	0	0	0	0	0	0	3	0	47	0	0	50
Total No. of Breaches	44	48	124	177	68	692	289	216	544	818	425	29	3,474
Percentage breach (%)	0.04	0.04	0.10	0.17	0.04	0.64	0.20	0.16	0.34	0.66	0.32	0.33	0.24
Compliance Rate (%)	99.96	99.96	99.90	99.83	99.96	99.36	99.80	99.84	99.66	99.34	99.68	99.67	99.76

Table 3 - No. of Customers Restored after 10 hours, 2018

The total number of customers affected by outages decreased from 1,803,401 in 2017 to 1,458,201 in 2018, as did the number of breaches which decreased from 16,576 to 3,474. This is represented in table 4. Of the 3,474 breaches experienced by 3,140 customers during 2018, fourteen claims were filed by residential customers. Four claims were deemed to be invalid by T&TEC, and ten claims were honoured. T&TEC paid \$600 in compensatory payments.

Item	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL 2018	TOTAL 2017
Total no. of customers restored after specific times (Breaches)	216	937	1,049	1,272	3,474	16,576
No. of affected customers	339,439	362,678	436,463	319,621	1,458,201	1,803,401
Percentage non- compliance (%)	0.06	0.26	0.24	0.40	0.24	0.92
Compliance Rate (%)	99.94	99.74	99.76	99.60	99.76	99.08

 Table 4 - Response and Restoration Times of Supply, 2018

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 7,964 new residential customers connected to supply in 2018. Of these, bills were not mailed to seven of them within the stipulated period. T&TEC's performance under this standard was maintained at 99.9% (See table 5). The seven customers were all compensated.

Table 5 - Billing Punctuality for Residential Customers, 2018

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of new Residential customers connected to supply	2,033	2,255	1,887	1,789	7,964	10,641
No. of bills not mailed within 60 days	0	4	3	0	7	7
Percentage Breach (%)	0.0	0.2	0.2	0.0	0.1	0.1
Compliance Rate (%)	100.0	99.8	99.8	100.0	99.9	99.9

There were 42 new non-residential customers connected to supply. Bills were mailed to all of them within the stipulated time. Therefore, full compliance was achieved, resulting in a compliance rate of 100% for 2018 (See table 6).

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of new Non- Residential customers connected to supply	13	11	10	8	42	47
No. of bills not mailed within 30 days (breach)	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

Table 6 - Billing Punctuality for Non-Residential Customers, 2018

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 of overdue amounts, or an agreement is made.

In 2018, there were 35,518 customers disconnected for non-payment of arrears. Of these, 32,678 made payments or arranged a payment schedule. As shown in table 7, fourteen customers were not reconnected within 24 hours, resulting in a compliance rate of 99.96%. All fourteen customers were compensated within the stipulated timeframe.

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
Total Disconnections	8,495	9,339	9,324	8,360	35,518	30,165
Customers making payments/arrangements	7,683	8,624	8,58372	7,788	32,678	25,769
No. not reconnected within 24 hours	2	5	6	1	14	23
Percentage Breach (%)	0.03	0.06	0.07	0.01	0.04	0.09
Compliance Rate (%)	99.97	99.94	99.93	99.99	99.96	99.91

 Table 7 - Reconnection after Payment of Overdue Amounts or Agreement, 2018

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 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 2,243 appointments were made in 2018, and all were kept within 1 hour of the appointed time, resulting in full compliance with this standard (See table 8).

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of appointments arranged with customers	501	572	555	615	2,243	1,618
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	1	1	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

 Table 8 - Making and Keeping Appointments, 2018

GES 5: Investigation of Voltage Complaints

T&TEC is governed by the Electricity Supply Rules under the Electricity (Inspection) Act Chapter 54.72 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 has reported that his supply is outside the permitted voltage range, T&TEC must 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 2018 compared to 2017. Of the 3,475 complaints received, T&TEC determined that 2,922 required a visit, and responded to all within 24 hours. Under this standard, T&TEC is required to identify which of the complaints are valid voltage complaints after the visit. T&TEC reported that 657 were valid. Only

one of these was not rectified within 15 working days. Thus, the overall compliance rate for rectification of voltage complaints in 2018 was 99.8%. The performance is summarized in table 9.

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of voltage complaints received	672	837	1,046	920	3,475	3,479
No. of complaints where visit was necessary	672	669	779	782	2,922	3,199
No. of complaints not responded to within 24 hours	0	0	0	0	0	3
Percentage Breach	0.0	0.0	0.0	0.0	0.0	0.09
Compliance Rate	100.0	100.0	100.0	100.0	100.0	99.91
No. of legitimate voltage complaints	198	173	146	140	657	641
No. of complaints not rectified within 15 working days	1	0	0	0	1	5
Percentage Breach	0.5	0.0	0.0	0.0	0.2	1.6
Compliance Rate	99.5	100.0	100.0	100.0	99.8	98.4

 Table 9 - Correction of Low/High Voltage, 2018

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 15,103 billing and payment queries in 2018, and all were responded to within the required time. Thus full compliance was achieved, as seen in table 10.

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
Number of billing and payment queries	3,225	2,887	4,093	4,898	15,103	16,610
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

 Table 10 - Responding to Billing and Payment Queries, 2018

GES 7: New Connection to Supply

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

There were 11,157 requests for new connections in 2018, and all were connected within the specified time. This resulted in a compliance rate of 100% (See table 11).

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of connection requests	2,797	2,733	2,703	2,924	11,157	12,629
No. of connections not made within 3 working days or by the specified date	0	0	0	0	0	13
Percentage Breach (%)	0.0	0.0	0.0	0.0	0.0	0.1
Compliance Rate (%)	100.0	100.0	100.0	100.0	100.0	99.9

 Table 11 - Connection to Supply, 2018

GES 8: Payments owed under Guaranteed Standards

This standard requires that the prescribed penalty payments 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. T&TEC is required 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 all the other guaranteed standards, GES 2 to GES 7, T&TEC is required to automatically process and credit payments to customers' accounts. All customers that were entitled to compensatory payments under standards GES 1 to GES 7 were compensated within the specified time frame. T&TEC introduced a system to track breaches and the respective compensatory payments which has improved the performance under this standard. The information on breaches of GES 8 is presented in table 12.

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
Number of Residential claims not paid within 60 working days	0	0	0	0	0	5
Number of Residential claims further compensated for late or non-payment	NMI	NMI	NMI	NMI	NMI	0
Percentage Breach (%)	N/A	N/A	N/A	N/A	N/A	100.0
Compliance Rate (%)	N/A	N/A	N/A	N/A	N/A	0.0
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	0
Percentage Breach (%)	N/A	N/A	N/A	N/A	N/A	0.0
Compliance Rate (%)	N/A	N/A	N/A	N/A	N/A	100.0

 Table 12 - Payments owed under Guaranteed Standards, 2018

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 specified standards are not met. 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 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. T&TEC can however, identify the area affected and provide an estimate as to the number of individual customers within the area.

There were 3,474 breaches occurring under GES 1. This amounts to a possible minimum payment of \$208,440 if each affected customer submitted a valid claim. In 2018, fourteen (0.4%) claims out of an estimated 3,474 were made. Ten of these claims were found to be valid and the eligible customers were compensated a total of \$600.

For standards GES 2 to GES 8, the compensatory payment is automatic. The compensatory payments due were calculated based on the amount specified by the standard. In cases where the quantum of the payment differed for the two customer categories, but the applicable category was not distinguishable, the lesser value was used in the computation. Based on the 22 breaches occurring under GES 2 - 8, the total minimum payment due should be \$2,052. A breakdown of these breaches and minimum payments is presented in table 13.

Standard	Number of Breaches	Penalty Payment (\$)	Minimum Payment Due (\$)
GES 2	7	50	350
GES 3	14	118	1,652
GES 4	0	50	0
GES 5	1	50	50
GES 6	0	50	0
GES 7	0	50	0
GES 8	0	50	0
TOTAL	22		2,052

Table 13 - Breaches and Minimum Payments Due under GES 2 to GES 8, 2018

It should be noted that automatic compensation means that the customer does not have 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. T&TEC has significantly improved its performance in this area, by paying 100% (\$2,052) of the amount due to affected customers compared to the 89% in 2017.

In total, compensatory payments were made to 32 customers, totalling \$2,652. This information is presented in table 14.

Standard	Total Number of Claims Processed	Total Payments made (\$)
GES 1	10	600
GES 2	7	350
GES 3	14	1,652
GES 4	0	0
GES 5	1	50
GES 6	0	0
GES 7	0	0
GES 8	0	0
Totals	32	2,652

Table 14 - Claims and Payments under the Guaranteed Standards, 2018

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 predetermined 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 Scheme.

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 483,228 residential and commercial meters installed at the end of 2018. These meters were scheduled to be read six times per year. T&TEC was able to complete 97% of the 2,872,652 scheduled readings for residential and commercial meters as shown in table 15. This is in full compliance with the performance measure of 90% of the meters being read as scheduled.

Item	1 st	2nd	3rd	4th	TOTAL	TOTAL
	Quarter	Quarter	Quarter	Quarter	2018	2017
No. of residential and commercial meters installed at end of period	477,635	479,553	481,363	483,228	483,228	475,655
No. of scheduled readings for residential and commercial meters	722,864	706,567	731,449	711,772	2,872,652	2,814,222
No. of residential and commercial meters readings completed according to schedule	702,399	691,835	712,390	684,926	2,791,550	2,750,095
Percentage of residential and commercial meters read according to schedule	97 %	98%	97%	96%	97%	98%
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

 Table 15 - Frequency of Meter Reading, Residential and Commercial, 2018

There were 3,984 industrial meters installed at the end of 2018 (See table 16). T&TEC achieved 100% compliance for 2018.

Item	1 st Quarter	2 nd Quarter	3rd Quarter	4th Quarter	TOTAL 2018	TOTAL 2017
No of industrial meters at end of period	3,951	3,961	3,975	3,984	3,984	3,932
No. of scheduled readings for industrial meters	11,834	11,858	11,915	11,941	47,548	46,632
No. of actual readings for industrial meters	11,711	11,735	11,771	11,656	46,873	45,450
Percentage of industrial meter readings	99%	99%	99%	98%	99%	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

Table 16 - Frequency of Meter Reading, Industrial, 2018

OES 2: Billing Punctuality.

T&TEC's customers are billed by cycles in each of its five Distribution Areas. Bills are mailed to customers in the respective cycles after the 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 working days after meter reading or estimation.

T&TEC mailed 100% of the bills within the stipulated time frame during the first three quarters. During the fourth quarter, T&TEC had less than the full complement of staff within the relevant department, which contributed to delays, and consequently a decline in performance. This resulted in an annual compliance rate of 97.6% (See table 17).

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of meters read and estimated	704,617	703,570	724,161	696,582	2,838,423	2,795,545
No. of bills not mailed within 10 working days	0	0	0	123,847	123,847	209,474
No. of bills mailed within 10 working days	714,110	703,570	724,161	572,375	2,714,576	2,586,071
Percentage of bills mailed within 10 working days (%)	100%	100%	100%	82%	96%	93%
Percentage breach (%)	0.0	0.0	0.0	16.1	2.4	5.6
Compliance Rate (%)	100.0	100.0	100.0	83.9	97.6	94.4

Table 17 - Billing Punctuality, 2018

OES 3: Responding to Meter Problems

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

There were 1,305 reports of meter problems received in 2018 as shown in table 18. Although twenty-seven of these (i.e. 2 %) were not responded to within 10 working days, T&TEC met the target of 95%. Hence the annual compliance rate was 100% for 2018.

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of meter problems reported	408	232	345	320	1,305	1,110
No. of meters problems not responded to within 10 working days	18	2	6	1	27	89
Percentage responded to within 10 working days (%)	96%	99%	98%	100%	98%	92%
Percentage breach (%)	0.0	0.0	0.0	0.0	0.0	3.2
Compliance Rate (%)	100.0	100.0	100.0	100.0	100.0	96.8

 Table 18 - Response to Meter Problems, 2018

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.

There were 1,221 planned outages for the year. Of these, three days advance notice was not given for 46 of them. This resulted in an annual compliance rate of 96.2% in 2018, compared to 90.9% in 2017 (See table 19).

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of planned outages	287	316	362	256	1,221	1,192
No. of planned outages for which 3 days advance notice was not given	20	8	18	0	46	108
Percentage Breach (%)	7.0	2.5	5.0	0.0	3.8	9.1
Compliance Rate (%)	93.0	97.5	95.0	100.0	96.2	90.9

 Table 19 - Notice of Planned Outages, 2018

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 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 days after surveyed or reported failure.

There was a 3% decrease in the number of failed street lights reported in 2018, compared to 2017. Of the 43,525 reports of failed street lights received, T&TEC was able to repair 49.5% of them within the specified time frame (See table 20). This was also an improvement over the performance of 2017, in which only 21.3% was repaired within the required time. However, T&TEC continues to perform below acceptable levels under this standard, and has to continue efforts to improve its repair rate.

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of failed street lights reported	16,065	6,854	10,829	9,777	43,525	44,831
No. of failed street lights not repaired within 7 working days	4,128	4,050	8,662	5,155	21,995	35,263
Percentage breach (%)	25.7	59.1	80.0	52.7	50.5	78.7
Compliance Rate (%)	74.3	40.9	20.0	47.3	49.5	21.3

 Table 20 - Street Lights Maintenance, 2018

The number of reported highway light failures decreased in 2018. Of the 1,099 reports received, T&TEC was not able to repair 303 of them within 14 working days. The annual compliance rate for repairs to highway lights increased from 57.0% in 2017 to 72.4% in 2018 (See table 21).

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of failed highway lights reported	210	438	109	342	1,099	1,402
No. of failed highway lights not repaired within 14 working days	117	89	16	81	303	603
Percentage breach (%)	55.7	20.3	14.7	23.7	27.6	43.0
Compliance Rate (%)	44.3	79.7	85.3	76.3	72.4	57.0

 Table 21 - Highway Lights Maintenance, 2018

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 within10 working days, and
- (b) Communicate the final position within 30 working days thereafter.

The breaches for each aspect of this standard are shown in table 22. T&TEC received 232 written complaints/requests during 2018, and was unable to respond to 33 of them within 10 working days. This resulted in an annual compliance rate of 85.8%. With respect to having the final position

communicated within 30 working days, T&TEC's performance showed improvement, with the annual compliance rate increasing from 65.6 % in 2017 to 94.8% in 2018.

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of written complaints/requests received	50	49	81	52	232	209
No. of written complaints/requests not responded to within 10 working days (breach)	2	0	26	5	33	7
Percentage Breach (%)	4.0	0.0	32.1	9.6	14.2	3.3
Compliance Rate (%)	96.0	100.0	67.9	90.4	85.8	96.7
No. of written complaints/requests not communicated to with final position within 30 working days (breach)	0	0	12	0	12	72
Percentage Breach (%)	0.0	0.0	14.8	0.0	5.2	34.4
Compliance Rate (%)	100.0	100.0	85.2	100.0	94.8	65.6

 Table 22 - Response to Customer's written Complaints/Requests, 2018

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 14 claims submitted for breaches of GES 1, and all customers were notified within the required time.

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2018	TOTAL 2017
No. of claims made under GES1	7	0	3	4	14	18
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

 Table 23 - Customer Claim Notification, 2018

N/A – Not Applicable

SECTION 5 CONCLUSION

The Guaranteed Standards Scheme is one approach used by the RIC to encourage T&TEC to focus on improving the quality of service through service standards, and is broadly comparable to similar schemes used in other jurisdictions. The service standards are divided into guaranteed and overall standards.

5.1 Performance of Guaranteed Standards

Guaranteed Standards set service levels that must be met in providing service to each individual customer. Failure to meet guaranteed standards requires T&TEC to make a compensatory payment to the affected customer. T&TEC's performance was maintained at previous levels as evidenced by the compliance rates. However, there was a significant reduction in the number of breaches from 16,576 in 2017 to 3,474 in 2018 under GES 1.

There were 14 claims under GES 1, of which ten were determined to be valid and paid. There were 22 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 24.

Standard	Total Nu Brea	mber of ches	Compliance Rates		
Standaru	2018	2017	2018	2017	
GES 1 – Response and Rest Supply after unplanned outa distribution system	3,474	16,576	99.76	99.08	
GES 2 – Billing	Residential	7	7	99.90	99.90
Punctuality	Non- residential	0	0	100.0	100.0
GES 3 – Reconnection after overdue amount/ agreement	GES 3 – Reconnection after Payment of overdue amount/ agreement			99.96	99.91
GES 4 – Making and Keepi	ng Appointments	1	0	100.0	100.0
GES 5 – Investigation of	Response	0	3	100.0	99.91
Voltage Complaints	Rectification	1	5	99.8	98.74
GES 6 – Responding to bill queries	0	0	100.0	100.0	
GES7- New connection of s	0	13	100.0	99.9	
GES8 – Payments owed	Residential	NMI	5	N/A	0.0
under guaranteed standards	Non- residential	NMI	0	N/A	100.0

Table 24 - Summary of Compliance – Guaranteed Standards, 2018

NMI – No measurable instance

N/A – Not Applicable

5.2 Performance of Overall Standards

Generally, T&TEC's performance improved under the overall standards with four of the standards showing improvement, two of them maintaining their performance levels and one with a mixed performance. Performance under OES 1 (Frequency of Meter Reading), OES 3 (Responding to Meter Problems) and OES 7 (Notifying Customers of Receipt of Claim under Guaranteed Standard GES 1) achieved full compliance. There was improvement in the performance under OES2 (Billing Punctuality), OES 4 (Prior Notice of Unplanned Outages) and OES 5 (Street Lights Maintenance). However, there was a decline in performance under OES 6 (Response to Customer Queries/Requests (written) with respect to the initial response and improvement with respect to the final position. A summary of compliance rates for 2018 under the overall standards is presented in table 25.

		Complianc	e Rates %
Si	tandard	TOTAL 2018	TOTAL 2017
OES 1 – Frequency of	Industrial	100.0	100.0
Meter Reading	Residential and Commercial	100.0	100.0
OES 2 – Billing Punctua	lity	97.6	94.4
OES 3 – Responding to meter problems		100.0	96.8
OES 4 – Prior Notice Of	Planned Outages	96.2	90.9
OES 5 – Street Lights	Street Lights	49.5	21.3
Maintenance	Highway Lights	72.4	57.0
OES 6 – Response to Customer Queries/	Initial Response	85.8	96.7
Requests (written)	Final Position	94.8	65.6
OES 7 – Notifying Custo under Guaranteed Standa	omer of Receipt of Claim ard GES1	100.0	100.0

Table 25 - Summary of Compliance – Overall Standards, 2018

In keeping with the holistic approach to monitoring that the RIC utilises, the Guaranteed Standards Scheme has been revised to address some areas of concern. It is anticipated that the revised Quality of Service Standards for the Electricity Transmission and Distribution Sector will be implemented in 2019. The revised standards would also benefit from improved monitoring and data collection based on the findings of a joint process mapping exercise conducted by the RIC and T&TEC. This will improve the accuracy of data reported, and enhance the RIC's ability to effectively monitor performance and compliance.

APPENDIX 1

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

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	60 days	\$50 for both residential and non-residential
GES3	Reconnection of service after payment of overdue amounts or agreement on payment schedule	(b) Non-Residential Time to restore supply after payment is made (All customers)	30 days 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 A1 - Guaranteed Standards

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

Code	Description	Required Performance Units
OES1	Frequency of meter reading	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.	100% of failed street lights with the exception of highway lighting repaired within 7 working days.
		100% of failed highway lighting repaired within 14 working days.
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.

Table A2 - Overall Standards