

QUALITY OF SERVICE STANDARDS

ANNUAL PERFORMANCE REPORT 2022

April **2024**

ELECTRICITY TRANSMISSION AND DISTRIBUTION SECTOR

Information Document

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EXECUTIVE SUMMARY

The Regulated Industries Commission (RIC) is the economic regulator of the water, wastewater and electricity sectors. It is responsible for, among other things, prescribing and publishing 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 this mandate, the RIC implemented the Quality of Service Standards (QSS) for the Electricity Transmission and Distribution Sector on 7th April, 2004. This Annual Performance Report for 2022 is based on the latest revision of the QSS for the Electricity Transmission and Distribution Sector implemented in June 2021. The data used in this report was provided by T&TEC and reviewed by the RIC for consistency.

Summary of Performance: Guaranteed Electricity Standards

Guaranteed Standards set service levels that T&TEC must meet for each customer. 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 Electricity Standards (GES) and all but the first (GES 1) carry automatic compensatory payments for breaches.¹

The number of breaches under GES 1 (Response and Restoration Times of Supply) in 2022 (4,470) increased by 25.4%. Despite this, the compliance rate was 99.69%. T&TEC achieved full compliance under GES 2 (Billing Punctuality), GES 4 (Making and Keeping Appointments), GES 6 (Responding to Billing and Payment Queries), and the second part of GES 5 (Investigation of Voltage Complaints). Compliance rates were above 99.8% for both GES 3 (Reconnection after Payment of Overdue Amount/ Agreement) and the first part of GES 5. However, T&TEC reported significant challenges with the implementation of the revised GES 7 (Execution of Capital Works and New Connection of Supply) and with the processing of compensatory payments for revised GES 5 and GES 7. The compliance rates for the 14 performance measures under the four major categories of service for GES 7 ranged between 72.46% to 100%. T&TEC's performance under GES 8 (Payments Owed Under Guaranteed Electricity Standards) was very poor with a compliance

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

rate of 0%. A summary of compliance rates for 2022 under the Guaranteed Electricity Standards is presented in table ES1.

Table ES1 - Compliance Rates under the Guaranteed Electricity Standards, 2022

Code	Service Description	Performance Measure	2022 Compliance Rates (%)	2021 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	99.69	99.73
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	100.00 100.00	100.00 97.37
GES3	Reconnection After Payment of Overdue Amounts or Agreement on Payment Schedule	Time to restore supply after payment is made - within 24 hours	99.97	99.98
GES4	Making and Keeping Appointments	Where required, appointments will be made on a morning or afternoon basis.	100.00	100.00
GES5	Investigation of Voltage Complaints A. Single-Phase Voltage Supply outside of the Statutory Range. B. Three-Phase Voltage Supply	 (A1) Complaints to be responded to and rectified within 24 hours, if no visit is required. (A2) Complaints requiring a visit, are to be rectified within 15 working days. (B1) Complaints to be responded to and rectified within 24 hours, if no visit is required (B2) Complaints requiring a visit, are to be rectified within the time mutually agreed with the customer. 	99.80 99.92 100.00	NA(RS) NA(RS) NA(RS)
GES6	Responding to Billing and Payment Queries.	Substantive reply within 15 working days.	100.00	100.0

Table ES1 (continued)

C. J.	Service	Performance	2022	2021
Code	Description	Measure	Compliance Rates (%)	Compliance Rates (%)
GES7	Execution of Capital Works and New Connection of Supply. A- Connection requests within	A: Completion of preliminary survey made within 3 working days.	79.49	NA(RS)
	30 metres, where no construction works on the part of the service provider are required.	A: New connections made within 3 working days of completed survey or agreed date.	99.39	NA(RS)
GES7	B- Connection requests within 100 metres, where construction	B: Completion of preliminary survey made within 3 working days	72.46	NA(RS)
	works on the part of the service provider are required.	B: Provision of estimate within 5 working days of the completed survey and all documents being provided by the customer.	76.13	NA(RS)
		B: Completion of construction works within 15 working of the provision of the estimate and the submission of any required payments and agreements signed by the customer.	73.11	NA(RS)
		B: Meter installed within 3 working days or agreed date, after the completion of construction works and the submission of all payments and documentation.	98.84	NA(RS)
GES7	C- Connection requests greater than 100 metres.	C: Completion of preliminary survey made within 3 working days.	74.60	NA(RS)
		C: Provision of estimate within 7 working days of the completed survey and all documents being provided by the customer.	88.89	NA(RS)
		C: Completion of construction works within the agreed date up to a maximum of 30 working days of the provision of the estimate and the submission of any required payments and agreements signed by the customer.	73.47	NA(RS)
		C: Meter installed within 3 working days or agreed date, after the completion of construction works and the submission of all payments and documentation.	90.91	NA(RS)

Table ES1 (continued)

Code	Service Performance Description Measure		2022 Compliance Rates (%)	2021 Compliance Rates (%)
GES7	D- Industrial connection requests.	D: Completion of preliminary survey made within the time frame mutually agreed to by the customer up to a maximum of 15 working days of the request.	94.29	NA(RS)
		D: Provision of estimate within 15 working days of the completed survey and all documents being provided by the customer.	78.79	NA(RS)
		D: Completion of construction works within the mutually agreed date after the provision of the estimate and the submission of any required payments and agreements signed by the customer.	100.00	NA(RS)
		D: Meter installed within 5 working days or agreed date, after the completion of construction works and the submission of all payments and documentation.	100.00	NA(RS)
GES8	Payments owed under guaranteed electricity standards	Residential	0.00	N/A
		Non- residential	0.00	N/A

N/A – Not Applicable NA(RS) – Not Available (Revised Standard).

There were 4,470 breaches under GES 1, however, customers filed only 13 claims. T&TEC made no compensatory payment due to *Force Majeure* conditions. There were 3,623 breaches under the remaining standards, GES 2 to GES 8, which were eligible for automatic compensation amounting to \$222,530. T&TEC only paid five (5) of these, totalling \$590. T&TEC has indicated that it is their usual practice to credit the customer's account in instances of a breach. However, in the case of GES 7, since an account would not exist for a customer seeking a new service connection, it is unable to make a payment. The RIC is of the view that the payments for GES 7 breaches should be held by T&TEC until such time as the customer obtains an account. T&TEC will be required to report to the RIC on a bi-annual basis of the status of the payments of such claims.

The total number of breaches recorded and the payments made under the Guaranteed Electricity Standards in 2022 are shown in table ES2.

Table ES2 - Breaches and Compensatory Payments under the Guaranteed Electricity
Standards, 2022

Standard	Total Number impacted by Standard	Number of	Total Number of Claims	Total Payments
		Breaches	Submitted*/Processed	made (\$)
GES 1	1,450,438	4,470	13*/0	0
	(customer outage incidents)			
GES 2	6,809	0	0	0
	(new customers connected)			
GES 3	18,543	5	5	590
	(arrangements/ payments)			
GES 4	2,260	0	0	0
	(appointments)			
GES 5	3,788	6	0	0
	(voltage complaints)			
GES 6	3,093	0	0	0
	(queries)			
GES 7	7,554	1,803	0	0
	(requests for new connections)	,		
GES 8	1,790	1,809	0	0
	(payments owed)			
TOTAL	*	8,093	5	590

^{*}Customers must submit claims under GES 1 before they can be processed for payment, while claims under GES2 –GES 8 are processed for payment automatically.

Summary of Performance: Overall Electricity Standards

Overall Standards cover areas of service where it is usually not appropriate or feasible to give individual guarantees. Instead, the utility is expected to provide pre-determined minimum levels of service to customers. These standards generally cover the quality of service affecting a group of customers. A summary of compliance rates for 2022 under the Overall Electricity Standards is presented in table ES3.

Table ES3 - Compliance under Overall Electricity Standards, 2022

Code	Description	Required Performance Units	2022 Compliance Rate (%)	2021 Compliance Rate (%)
OES1	Network Reliability	North SAIFI SAIDI	100.00	NA(RS)
	SAIFI ≤ 4.8 SAIDI ≤ 400 minutes	South SAIFI SAIDI	100.00 100.00	NA(RS)
		Tobago SAIFI SAIDI	0.00	NA(RS)
		East SAIFI SAIDI	100.00	NA(RS)
		Central SAIFI	100.00	NA(RS)
		SAIDI	100.00	, ,
OES2	Responding to Meter Problems	Visit or substantive reply within 10 working days 95% of the time.	100.00	100.00
OES3	Prior Notice of Planned Outages	3 days advance notice of planned outages 100% of the time.	97.58	98.46
OES4	Street Lights Maintenance	Street Lights- within 7 working days.	47.46	50.28
		Highway Lights – within 14 working days.	73.05	91.55
OES5	Response to Customer Queries/Requests (written)	Time to respond after receipt of queries: Initial Response – within 10 working days. Final Position – within 30 working days.	92.91 74.47	94.58 84.24
OES6	Notifying Customers of Receipt of Claim under Guaranteed Electricity Standard GES 1	100% of customers to be notified of receipt of claim within 10 working days.	100.00	100.00

NA(RS) – Not Available (Revised Standard).

Under OES 1 (Network Reliability), T&TEC achieved full compliance in all Distribution areas except Tobago. Full compliance was also achieved under OES 2 (Responding to Meter Problems) and OES 6 (Notifying Customers of Receipt of Claim under Guaranteed Electricity Standard GES

1). There was little change in performance under OES 3 (Prior Notice of Unplanned Outages). However, performance declined under OES 4 (Street Lights Maintenance) and OES 5 (Response to Customer Queries/Requests (written).

SECTION 1 INTRODUCTION

The Regulated Industries Commission (RIC) is the economic regulator of the water, wastewater and electricity sectors. It is responsible for, among other things, 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 this mandate, the RIC first implemented the Quality of Service Standards (QSS) for the Electricity Transmission and Distribution Sector in 2004. These standards have gone through two revisions, the first of which was implemented in April 2010 and the second in June 2021.

1.1 Purpose of Document

This report presents an analysis of the performance of T&TEC with respect to the QSS for the Electricity Transmission and Distribution Sector for the year ending December 31st, 2022. ²

1.2 Structure of Document

The remainder of this document is structured as follows:

- Section 2 presents T&TEC's performance under each of the eight Guaranteed Electricity
 Standards;
- Section 3 reports on the compensatory payments made to customers;
- Section 4 presents the performance of T&TEC under the six Overall Electricity Standards;
 and
- Section 5 provides a summary and conclusion of the report;

² The data used in this report was provided by T&TEC and reviewed by the RIC for consistency.

SECTION 2 PERFORMANCE REVIEW: GUARANTEED ELECTRICITY STANDARDS

2.1 Guaranteed Electricity Standards

Guaranteed Standards specify the service levels that the service provider must meet for each customer. 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 Electricity Standards in the QSS Scheme, GES 1 to GES 8. T&TEC's performance during the year 2022 under each of these standards is documented below.

GES 1: Response and Restoration Times of Supply

This standard requires T&TEC to restore supply 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 T&TEC is required to make a compensatory payment for the breach to the affected customer. Further breaches occur when the supply is not restored within 22 and 34 hours, respectively.

Unplanned outages are caused by a variety of reasons, and some examples are listed below.

- Blown transformer fuses and blown high voltage (HV) fuses
- Damaged transformers
- Tripped circuit breakers
- Feeder trips due to inclement weather
- Tree contact resulting in burst wires and/or blown fuses
- Fallen trees due to water-logged soil
- Burst high tension (HT) wires
- Defective equipment (transformers, cables, insulators and/or cut-outs)
- Damaged transformer due to vehicular accident, and
- Fallen poles due to fallen trees.

In 2022, there were 16% fewer unplanned outages than in 2021, with the number of outages decreasing from 11,102 to 9,316. This reduced the daily average of unplanned outages from 30 to 26, across T&TEC's distribution network.

Table 1 – Number of Unplanned Outages, 2022

Area	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL (2022)	TOTAL (2021)
North	419	575	591	621	2,206	2,196
South	659	793	997	705	3,154	3,592
Tobago	245	339	496	392	1,472	1,835
East	334	521	608	250	1,713	2,722
Central	127	143	211	290	771	757
TOTAL (2022)	1,784	2,371	2,903	2,258	9,316	-
TOTAL (2021)	2,638	2,725	3,141	2,598	-	11,102

Of the 9,316 outages, restoration took longer than the stipulated 10 hours for 47 of them. The quarter in which these outages occurred is shown in table 2.

Table 2 - Number of Unplanned Outages exceeding 10 hours, 2022

Area	1st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL (2022)
North	1	3	2	5	11
South	0	1	1	6	8
Tobago	0	0	0	3	3
East	1	4	5	14	24
Central	1	0	0	0	1
TOTAL	3	8	8	28	47

Some of the reasons supplied by T&TEC for the lengthy delays in restoration times are listed below.

- High number of trouble reports,
- Off-island location, inclement weather, flooding, landslides, bush fires and poor terrain,
- No access to the affected site to conduct repairs,
- Extensive tree trimming and line clearing required,
- Pole relocation and associated works required,
- High crime areas that require support of the Trinidad and Tobago Police Service,

- Additional service crews required. e.g. Daylight crew, line clearing and tree trimming required,
- Complex job, and
- Specialised equipment required to conduct repairs. e.g. Lift trucks.

An unplanned outage experienced by a customer is referred to as an outage incident. It is possible for one customer to experience more than one outage incident over a period, each of which, if not restored within a 10-hour period, would be a breach. Table 3 shows the estimated number of customer outage incidents, and the estimated number of customers who experienced breaches because the supply was restored after the specified time frames of 10 hours, 22 hours and 34 hours. Although there were fewer unplanned outages in 2022, the total number of customer outage incidents increased from 1,305,622 in 2021 to 1,450,438 in 2022. Similarly, the number of breaches increased from 3,564 to 4,470.

Table 3 - Response and Restoration Times of Supply, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of customer outage incidents	196,798	321,181	533,646	398,813	1,450,438	1,305,622
Number of customers restored after 10 hours	280	1,065	992	1,258	3,595	3,270
Number of customers restored after 22 hours	110	0	50	536	696	272
Number of customers restored after 34 hours	110	0	0	69	179	22
Total Number of Breaches	500	1,065	1,042	1,863	4,470	3,564
Percentage non- compliance (%)	0.25	0.33	0.20	0.47	0.31	0.27
Compliance Rate (%)	99.75	99.67	99.80	99.53	99.69	99.73

Of the 3,595 customers who experienced the 4,470 breaches, 13 claims were filed by residential customers. T&TEC did not pay any of these 13 claims since the breaches resulted from circumstances that were beyond T&TEC's control, and were approved as *Force Majeure* conditions by the RIC.

GES 2: Billing Punctuality (New customers)

This standard requires T&TEC to mail the first bill within 60 days to residential customers, and within 30 days to non-residential customers after a new service connection is made.

There were 6,793 new residential customers connected to supply in 2022. Bills were mailed to all of them within the stipulated period and T&TEC was 100% compliant with this standard (See table 4).

Table 4 - Billing Punctuality for Residential Customers, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of new residential customers connected to supply	1,779	1,621	1,599	1,794	6,793	6,610
Number of bills not mailed within 60 days	0	0	0	0	0	1
Percentage Breach (%)	0.00	0.00	0.00	0.00	0.00	0.02
Compliance Rate (%)	100.00	100.00	100.00	100.00	100.00	99.98

There were 16 new non-residential customers connected to supply. Bills were mailed to all of them within the stipulated time. The compliance rate for this section of the standard was also 100% for 2022 (See table 5).

Table 5 - Billing Punctuality for Non-Residential Customers, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of new non- residential customers connected to supply	10	5	1	0	16	38
Number of bills not mailed within 30 days (breach)	0	0	0	0	0	1
Percentage Breach (%)	0.0	0.0	0.0	0.0	0.0	2.63
Compliance Rate (%)	100.0	100.0	100.0	100.0	100.0	97.37

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.

There were 21,076 customers disconnected for non-payment of arrears. Of these, 18,543 customers made payments or arranged payment schedules. As shown in table 6, five customers were not reconnected within 24 hours of making a payment, resulting in a compliance rate of 99.97%. All five customers were compensated within the stipulated timeframe.

Table 6 - Reconnection after Payment of Overdue Amounts or Agreement, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Total Disconnections	876	2,036	9,490	8,674	21,076	13,515
Customers making payments/arrangements	613	1,488	8,515	7,927	18,543	10,889
Number not reconnected within 24 hours	0	1	2	2	5	2
Percentage Breach (%)	0.0	0.07	0.02	0.03	0.03	0.02
Compliance Rate (%)	100.0	99.93	99.98	99.97	99.97	99.98

GES 4: Making and Keeping Appointments

T&TEC makes appointments to visit customers' premises as necessary. If T&TEC does not keep the appointment, the customer 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 2,260 appointments were made in 2022, 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, 2022

Item	1 st	2 nd	3rd	4 th	TOTAL 2022	TOTAL
N. 1 C	Quarter	Quarter	Quarter	Quarter	2022	2021
Number of appointments arranged	643	528	611	478	2,260	2,375
with customers	015	320	011	170	2,200	2,373
Number of appointments not kept within 1hr of appointed time	0	0	0	0	0	0
Number of appointments cancelled or postponed with 24 hours' notice	0	0	0	6	0	2
Percentage Breach (%)	0.00	0.00	0.00	0.00	0.00	0.00
Compliance Rate (%)	100.00	100.00	100.00	100.00	100.00	100.00

GES 5: Investigation of Voltage Complaints

Under the Electricity Supply Rules, of the Electricity (Inspection) Act Chapter 54.72, T&TEC is required to supply its customers at specified nominal voltages. A voltage irregularity occurs when the electricity supply is either outside the statutory voltage range or there is a difference in voltage between phases greater than \pm 2% in the case of a three-phase voltage supply. This may result in a customer's equipment not operating properly or being damaged. The RIC noted in its review of the QSS that timely rectification of voltage variations between phases in the case of a three-phase supply has become very important for customers critically affected by voltage imbalances, and was guided by Standard EN 50160.³ Consequently, this standard was modified in the most recent revision of the QSS.

Single-Phase Voltage Supply outside of the Statutory Range

A. 1. The service provider must evaluate the prevailing conditions within 24 hours of receiving a customer's voltage complaint. In instances where a visit to the customer's premises is not required

 $^{^3}$ Standard EN 50160 - "Voltage Characteristics of Public Distribution Systems", issued by the European Committee for Electrotechnical Standardization (CENELEC) for member countries of the European Union, that prescribes that variations between phases should be maintained within $\pm 2\%$.

the service provider must correct the problem and notify the customer of the corrective action taken within 24 hours of the report.

A. 2. Where a visit is deemed necessary, the service provider must visit within 24 hours of the report, correct the problem within 15 working days and notify the customer of the corrective action taken.

Variation between the phase voltages of a Three-Phase Voltage Supply that adversely affects the customer

B. 1. The service provider must evaluate the prevailing conditions within 24 hours of receiving a customer's voltage complaint. When a visit to the customer's premises is not required the service provider must correct the problem and notify the customer of the corrective action taken within 24 hours of the report.

B. 2. Where a visit is deemed to be necessary, the service provider must visit within 24 hours of the report and correct the problem by a date mutually agreed upon between the service provider and the customer and notify the customer of the corrective action taken.

If the service provider fails to fulfil any one of the aforementioned obligations, a payment of \$60 must be made to residential customers and \$600 to non-residential customers for each breach of a requirement of the standard.

There were 2,541 single-phase voltage supply complaints filed by customers in 2022. T&TEC was required to visit the customers for 2,524 of these, with six visits not made within 24 hours. This resulted in a compliance rate of 99.76% for this component of the standard.

After conducting a visit, T&TEC is required to identify which of the complaints are valid voltage complaints. T&TEC reported that 1,247 were valid, and one of these was not rectified within 15 working days. Thus, the compliance rate for this component of the standard was 99.92%. The performance is presented in table 8.

Table 8 - Correction of Single-Phase Voltage Supply Complaints, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022
Number of single-phase voltage complaints received	510	617	775	639	2,541
Number of complaints where visit was necessary	510	616	765	633	2,524
Number of visits not made within 24 hours	0	0	0	6	6
Percentage Breach (%)	0.00	0.00	0.00	0.79	0.24
Compliance Rate (%)	100.00	100.00	100.00	99.21	99.76
Number of legitimate single- phase voltage complaints	225	282	377	363	1,247
Number of complaints not corrected within 15 working days	1	0	0	0	1
Percentage Breach (%)	0.44	0.00	0.00	0.00	0.08
Compliance Rate (%)	99.56	100.00	100.00	100.00	99.92

T&TEC received 181 three-phase voltage supply complaints, all of which required visits to the customers. All visits were made within 24 hours of receiving the complaint, resulting in 100% compliance with this section of the standard.

T&TEC identified 77 of the 181 complaints as legitimate three-phase voltage complaints. These were all corrected within the date mutually agreed upon between the service provider and the customer. Compliance under this section of the standard was also 100%.

Table 9 - Correction of Three-Phase Voltage Supply Complaints, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022
Number of three-phase voltage complaints received	50	30	64	37	181
Number of complaints where visit was necessary	50	30	64	37	181
Number of visits not made within 24 hours	0	0	0	0	0
Percentage Breach (%)	0.00	0.00	0.00	0.00	0.00
Compliance Rate (%)	100.00	100.00	100.00	100.00	100.00
Number of legitimate three-phase voltage complaints	29	12	23	13	77
Number of complaints not corrected within the date mutually agreed upon between the service provider and the customer	0	0	0	0	0
Percentage Breach (%)	0.00	0.00	0.00	0.00	0.00
Compliance Rate (%)	100.00	100.00	100.00	100.00	100.00

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 34% fewer billing and payment queries in 2022 than in 2021. Of the 3,093 billing and payment queries received in 2022, all were responded to within the required time. Thus, full compliance was achieved, as shown in table 10.

Table 10 - Responding to Billing and Payment Queries, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of billing and payment queries	2,514	199	223	157	3,093	4,669
Number not responded to within 15 working days	0	0	0	0	0	0
Percentage Breach (%)	0.00	0.00	0.00	0.00	0.00	0.00
Compliance Rate (%)	100.00	100.00	100.00	100.00	100.00	100.00

GES 7: Execution of Capital Works and New Connection of Supply

The RIC continued to receive numerous complaints about delays in receiving a new service connection. Hence this standard was revised to address customers' concerns about the inordinate delays in the completing the surveys for new connections, estimating costs and the constructing additional infrastructure (network augmentation works); and to increase T&TEC's accountability in every phase of the process.

Consequently, new connections are classified as either simple or complex depending on the configuration of what is required and the requisite performance measures subdivided into 14 areas under four major categories of service, as outlined below.

Simple connections

Simple connections require no construction work to be carried out by the service provider. This is category A (customers within 30 metres of the network)

<u>Category A required performance</u>:

A. 1. The service provider must complete the preliminary survey for customers who are located within 30 metres of the network, within 3 working days of the request.

A. 2. The service provider must install the service drop and meter after the customer has executed any ancillary works⁴ as directed by the service provider and submitted all payments and documentation, including a valid certificate of inspection from the Electrical Inspectorate Division (EID) of the Ministry of Public Utilities (MPU) within 3 working days. This requirement also applies to arrangements made between the customer and the service provider in which the service drop is to be installed beyond the 3 working days.

⁴ Ancillary works include the installation/relocation of customer's private poles and other adjustments to the customer's installation to ensure the safe and reliable supply of electricity.

Complex connections

Complex connections are subdivided into three categories: residential and commercial connections within 100 metres, designated Category B; residential and commercial connections greater than 100 metres, designated Category C; and industrial connections, designated Category D.

Category B required performance:

- B. 1. In instances where network augmentation works are required, the service provider must complete a preliminary survey for residential and commercial customers who are located within 100 metres of the network, within 3 working days of the request.
- B. 2. The service provider must provide the estimate of costs within 5 working days of completion of the survey and the provision of all required documents by the customer.
- B. 3. Where augmentation works are required, the service provider must complete the construction within 15 working days of the provision of the estimate and the submission of any required payments and agreements signed by the customer.
- B. 4. The service provider must complete the new connection of supply after the completion of construction works and the submission of all payments and documentation, including a valid certificate of inspection from the EID of the MPU within 3 working days. This requirement also applies in instances where the customer and the service provider have mutually agreed upon a date that is beyond the 3 working days.

Category C required performance

- C. 1. In instances where network augmentation works are required, the service provider must complete a preliminary survey for residential and commercial customers who are located greater than 100 metres of the network, within 3 working days of the request.
- C. 2. The service provider must provide the estimate of costs within 7 working days of the completed survey and all documents being provided by the customer.
- C. 3. The service provider must complete the construction of augmentation works within the time frame mutually agreed to by the customer up to a maximum of 30 working days of the provision

of the estimate and the submission of any required payments and agreements signed by the customer.

C. 4. The service provider must complete the new connection of supply within 3 working days after the completion of construction works and the submission of all payments and documentation, including a valid certificate of inspection from the EID. This requirement also applies in instances where the customer and the service provider have mutually agreed upon a date beyond 3 working days.

Category D required performance

- D. 1. The service provider must complete a preliminary survey for industrial customers, within the time mutually agreed to by the customer up to a maximum of 15 working days of the request.
- D. 2. The service provider must provide the estimate of costs within 15 working days of the completed survey and all documents being provided by the customer.
- D. 3. The service provider must complete the construction of augmentation works within the time frame mutually agreed to by the customer from the provision of the estimate and the submission of any required payments and agreements signed by the customer.
- D. 4. The service provider must complete the new connection of supply after the completion of construction works and the submission of all payments and documentation, including a valid certificate of inspection from the EID of the MPU within 5 working days. This requirement also applies in instances where the customer and the service provider have mutually agreed upon a date that is beyond the 5 working days.

If the service provider fails to fulfil any one of the aforementioned obligations, a payment of \$60 must be made to residential and commercial customers and \$600 to industrial (non-residential) customers for each breach of a requirement of the standard.

There was a total of 7,507 requests for new connections across the four categories A, B, C and D. Of these, 93.09% or 6,988 connections were completed in 2022 (See table 11). Of the four categories, Category A (table 11a) was the best performing and Category D (table 11d) the worst.

Table 11 - Execution of Capital Works and New Connection of Supply, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022
Number of new connections requests	1,908	2,049	2,038	1,512	7,507
Number of new connections completed	1,579	2,026	2,001	1,382	6,988
Percentage of Connections completed (%)	82.76	98.88	98.18	91.40	93.09

In category A, there were 7,075 requests made for new connections, of which 6,792 connections were completed (See table 11a).

Table 11a - Category A: Connection requests within 30 metres, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022
Number of new connection requests (Within 30 metres)	1,837	1,960	1,955	1,323	7,075
Number of preliminary surveys not made within 3 working days	457	424	286	284	1,451
Percentage Breach (%)	24.88	21.63	14.63	21.47	20.51
Compliance Rate (%)	75.12	78.37	85.37	78.53	79.49
Number of payments for survey breaches	0	0	0	0	0
Number of completed surveys	1,837	1,960	1,953	1,323	7,073
Number of new meters not installed/connected within 3 working days or agreed date	0	33	3	7	43
Percentage breach (%)	0.0	1.68	0.15	0.53	0.61
Compliance rate (%)	100.0	98.32	99.85	99.47	99.39
Number of payments for connection breaches	0	0	0	0	0
Number of new connections made	1,555	1,959	1,955	1,323	6,792
Percentage of Category A connections completed	84.65	99.95	100.00	100.00	96.00

There were 334 requests for new connections under Category B. T&TEC completed 170 of these (See table 11b).

Table 11b - Category B: Connection requests within 100 metres, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022
Number of new connection requests (Within 100 metres)	42	65	64	163	334
Number of preliminary surveys not made within 3 working days	12	20	22	38	92
Percentage Breach (%)	28.57	30.77	34.38	23.31	27.54
Compliance Rate (%)	71.43	69.23	65.63	76.69	72.46
Number of payments for survey breaches	0	0	0	0	0
Number of completed surveys	40	65	64	162	331
Number of estimates not completed within 5 working days	12	11	17	39	79
Percentage Breach (%)	30.00	16.92	26.56	24.07	23.87
Compliance Rate (%)	70.00	83.08	73.44	75.93	76.13
Number of payments for estimate breaches	0	0	0	0	0
Total number of estimates completed	40	65	63	163	331
Number of construction jobs not completed within 15 working days	26	25	26	12	89
Percentage Breach (%)	65.00	38.46	41.27	7.36	26.89
Compliance Rate (%)	35.00	61.54	58.73	92.64	73.11
Number of payments for construction job breaches	0	0	0	0	0
Number of completed construction jobs	26	53	37	57	173
Number of new meters not installed/connected within 3 working days	0	2	0	0	2
Percentage Breach (%)	0.00	3.77	0.00	0.00	1.16
Compliance Rate (%)	100.00	96.23	100.00	100.00	98.84
Number of payments for connection breaches	0	0	0	0	0
Total number of new connections made	23	55	37	55	170
Percentage Category B connections completed	54.76	84.62	57.81	33.74	50.90

In category C, there were 63 requests for new connections, and 21 of these were completed (See table 11c).

Table 11c - Category C: Connection requests greater 100 metres, 2022

Item	1 st	2 nd	3 rd	4 th	TOTAL
	Quarter	Quarter	Quarter	Quarter	2022
Number of new connection requests (Greater than 100 metres)	20	16	10	17	63
Number of preliminary surveys not made within 3 working days	10	1	0	5	16
Percentage Breach (%)	50.00	6.25	0.00	29.41	25.40
Compliance Rate (%)	50.00	93.75	100.00	70.59	74.60
Number of payments for survey breaches	0	0	0	0	0
Number of completed surveys	20	16	10	17	63
Number of estimates not completed within 7 working days	4	2	1	0	7
Percentage Breach (%)	20.00	12.50	10.00	0.00	11.11
Compliance Rate (%)	80.00	87.50	90.00	100.00	88.89
Number of payments for estimate breaches	0	0	0	0	0
Total number of estimates completed	6	16	10	17	49
Number of construction jobs not completed within the time frame mutually agreed to by the customer	6	4	2	1	13
Percentage Breach (%)	100.00	25.00	20.00	5.88	26.53
Compliance Rate (%)	0.00	75.00	80.00	94.12	73.47
Number of payments for construction job breaches	0	0	0	0	0
Number of completed construction jobs	1	12	8	1	22
Number of new meters not installed/connected within 3 working days	0	1	0	1	2
Percentage Breach (%)	0.00	8.33	0.00	100.00	9.09
Compliance rate (%)	100.00	91.67	100.00	0.00	90.91
Number of payments for connection breaches	0	0	0	0	0
Total number of new connections made	1	11	8	1	21
Percentage Category C connections completed	5.00	68.75	80.00	5.88	33.33

There were 35 requests for new connections under category D. Five connections were completed (See table 11d).

Table 11d - Category D: Connection requests Industrial, 2022

	1 st	2 nd	3 rd	4 th	TOTAL
Item	Quarter	Quarter	Quarter	Quarter	2022
Number of new connection requests (Industrial)	9	8	9	9	35
Number of preliminary surveys not made within the time frame mutually agreed to by the customer	1	1	0	0	2
Percentage Breach (%)	11.11	12.50	0.00	0.00	5.71
Compliance rate (%)	88.89	87.50	100.00	100.00	94.29
Number of payments for survey breaches	0	0	0	0	0
Number of completed surveys	9	8	7	9	33
Number of estimates not completed within 15 working days	6	1	0	0	7
Percentage Breach (%)	66.67	12.50	0.00	0.00	21.21
Compliance rate (%)	33.33	87.50	100.00	100.00	78.79
Number of payments for estimate breaches	0	0	0	0	0
Total number of estimates completed	8	7	7	7	29
Number of construction jobs not completed within the time frame mutually agreed to by the customer	0	0	0	0	0
Percentage Breach (%)	0.00	0.00	0.00	0.00	0.00
Compliance rate (%)	100.00	100.00	100.00	100.00	100.00
Number of payments for construction job breaches	0	0	0	0	0
Number of completed construction jobs	0	1	1	3	5
Number of new meters not installed within 5 working	0	0	0	0	0
Percentage Breach (%)	0.00	0.00	0.00	0.00	0.00
Compliance rate (%)	n/a	100.00	100.00	100.00	100.00
Number of payments for connection breaches	0	0	0	0	0
Total number of new connections made	0	1	1	3	5
Percentage Category D connections completed	0.00	12.50	11.11	33.33	14.29

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 requires T&TEC to pay \$60 to any customer whose account is not credited within the specified timeframe.

Under GES 1, customers must file a claim for the compensatory payment.⁵ However, for the other Guaranteed Electricity Standards, GES 2 to GES 7, T&TEC is required to process and credit payments to customers' accounts automatically. In total, there were 1,809 claims that were not compensated under the standards GES 2 to GES 7, and therefore, these were due for further compensation under GES 8. T&TEC did not make any payments under GES 8, resulting in a compliance rate of 0% (See table 12).

Table 12 - Payments owed under Guaranteed Standards, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of Residential claims not paid within 60 working days	528	523	357	392	1800	0
Number of Residential claims further compensated for late or non-payment	0	0	0	0	0	N/A
Percentage Breach (%)	100.0	100.0	100.0	100.0	100.0	N/A
Compliance Rate (%)	0.0	0.0	0.0	0.0	0.0	N/A
Number of Non-Residential claims not paid within 30 working days	7	2	0	0	9	0
Number of Non-Residential claims further compensated for late or non-payment	0	0	N/A	N/A	0	N/A
Percentage Breach (%)	100.0	100.0	N/A	N/A	100.0	N/A
Compliance Rate (%)	0.0	0.0	N/A	N/A	0.0	N/A

N/A – Not Applicable

⁵ Customers are required to submit a claim for GES 1, as T&TEC is currently unable to identify individual customers that are affected by breaches of this standard. However, T&TEC can identify the area affected and provide an estimate of the number of individual customers within the area.

SECTION 3 COMPENSATORY PAYMENTS

The level of the compensatory payment under the QSS is intended to incentivise 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.

Under GES 1, there were 4,470 breaches. If each affected customer submitted a valid claim, the minimum possible payment for GES 1 alone would have been \$268,200. In 2022, only 13 claims (0.29%) were submitted. However, all of these claims were for breaches which occurred under *Force Majeure* conditions and consequently, no payments were made.

Although the compensatory payment is automatic for the standards GES 2 to GES 8, the payment system is not automated. T&TEC had previously improved it's procedure for processing automatic payments, however, the RIC notes that the system did not work effectively for the modified standards, GES 5 and GES7 (See table 13).

Table 13 – Breaches, Claims and Payments under the Guaranteed Standards, 2022

Standard	Number of Breaches	Number of Claims Submitted*/Processed	Total Payments made (\$)
GES 1	4,470	13*/0	0
GES 2	0	0	0
GES 3	5	5	590
GES 4	0	0	0
GES 5	6	0	0
GES 6	0	0	0
GES 7	1,803	0	0
GES 8	1,809	0	0
Totals	8,093	5	590

^{*13} claims were disallowed due to Force Majeure conditions.

There were 1,814 breaches occurring under GES 3, 5, and 7. T&TEC paid all five claims (totalling \$590) under GES 3. However, no payments were made under the revised GES 5 (6 claims totalling \$360) and GES 7 (1,803 claims totalling \$113,040). This resulted in 1,809 claims under GES 8, totalling \$108,540, which was also not paid. Therefore, T&TEC paid less than 1% of the

compensatory payments owed to customers in 2022. This performance is significantly below acceptable levels and undermines the efficacy of the scheme as a tool for improving service performance.

T&TEC has indicated that its usual practice is to credit the customer's account in instances of a breach. However, in the case of GES 7, since an account would not exist for a customer seeking a new service connection, it is unable to make a payment. The RIC is of the view that the payments for GES 7 breaches should be held by T&TEC until such time as the customer obtains an account. T&TEC will be required to report to the RIC on a bi-annual basis of the status of the payments of such claims

SECTION 4 PERFORMANCE REVIEW: OVERALL ELECTRICITY STANDARDS

4.1 Overall Electricity Standards

Overall Standards 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 quality of service affecting a group of customers.

The RIC removed two of the Overall Electricity Standards (OES), OES1(Frequency of Meter Reading) and OES2 (Billing Punctuality) in the last review of the standards. These standards were no longer needed as the levels of performance under these standards were historically high.

Proceeding from numerous complaints received by the RIC about the reliability of the supply of electricity, the RIC introduced a network reliability standard as the new OES 1. There are now six Overall Electricity Standards under the QSS and T&TEC's performance with respect to each of these is documented below.

OES 1: Network Reliability

The RIC introduced two indicators into the QSS to measure network reliability, namely the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI). T&TEC is required to maintain the yearly network reliability performance for unplanned outages (excluding force majeure events) for each of its distribution areas within limits set in this standard. The current limit for SAIDI is no more than 400 minutes and that for SAIFI is no more than 4.8 interruptions per customer.

SAIFI and SAIDI for each of the distribution areas, North, South, Tobago, East and Central are shown in tables 14 to 18. The indicators for the entire system are presented in table 19. Tobago is the only distribution area which failed to meet the targets set by the RIC. The network reliability in Tobago was adversely affected by four (4) major events in October. These were primarily caused by generation issues which affected a large number of customers. Notwithstanding this, the Overall Distribution System met the targets set.

Table 14 - Network Reliability for North Distribution Area, 2022

Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Target
SAIFI	0.20	0.28	0.19	0.36	0.19	0.26	0.14	0.20	0.37	0.31	0.22	0.15	2.87	4.8
SAIDI	12.5	18.9	13.8	25.6	14.8	18.90	10.5	18.6	27.9	24.4	18.9	14.1	218.9	400

Table 15 – Network Reliability for South Distribution Area, 2022

Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Target
SAIFI	0.15	0.14	0.11	0.23	0.22	0.51	0.17	0.74	0.61	0.41	0.36	0.30	3.95	4.8
SAIDI	10.4	14.4	8.5	19.6	22.5	39.4	15.5	72.0	55.0	40.9	26.8	19.3	344.4	400

Table 16 - Network Reliability for Tobago Distribution Area, 2022

Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Target
SAIFI	0.39	0.14	0.27	0.16	0.55	0.35	0.80	0.51	0.64	3.68	1.06	0.40	8.95	4.8
SAIDI	21.1	11.7	18.7	10.0	56. 7	30.0	71.4	32.8	54.6	237.9	61.7	80.3	686.6	400

Table 17 - Network Reliability for East Distribution Area, 2022

Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Target
SAIFI	0.23	0.19	0.21	0.21	0.20	0.47	0.48	0.54	0.62	0.42	0.11	0.27	3.93	4.8
SAIDI	18.0	14.1	16.4	9.8	12.3	31.1	38.8	43.0	34.2	30.2	10.8	14.4	273.0	400

Table 18 – Network Reliability for Central Distribution Area, 2022

Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Target
SAIFI	0.09	0.27	0.20	0.25	0.20	0.36	0.30	0.42	0.59	0.35	0.57	0.36	3.96	4.8
SAIDI	6.0	14.8	14.5	18.5	16.4	25.2	23.5	24.0	38.0	23.1	42.0	25.8	271.9	400

Table 19 - Network Reliability for Overall Distribution System Trinidad and Tobago, 2022

Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Target
SAIFI	0.20	0.20	0.18	0.25	0.23	0.41	0.31	0.51	0.56	0.58	0.35	0.28	4.06	4.8
SAIDI	12.7	15.1	13.4	17.3	19.3	30.2	25.7	43.1	41.2	43.6	25.8	21.8	309.0	400

The compliance rates for the network reliability indicators are shown in table 20.

Table 20 – Compliance Rates for Network Reliability, 2022

Distribution Area	Compliance Ra	te (%)
Distribution Area	SAIFI	SAIDI
North	100	100
South	100	100
Tobago	0	0
East	100	100
Central	100	100
Overall System	100	100

OES 2: Responding to Meter Problems

OES 2 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 810 reports of meter problems, a reduction of 39% compared to the previous year. Of these reports, T&TEC did not respond to 40 reports or 5 % within 10 working days. The required performance target is 95%, therefore the annual compliance rate for 2022 was 100%.

Table 21 - Response to Meter Problems, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of meter problems reported	224	164	186	236	810	1,326
Number of meters problems not responded to within 10 working days	12	3	13	12	40	46
Percentage responded to within 10 working days (%)	95	98	93	95	95	97%
Percentage Breach (%)	0.00	0.00	2.11	0.00	0.00	0.00
Compliance Rate (%)	100.00	100.00	97.89	100.00	100.00	100.00

OES 3: Prior Notice of Planned Outages

T&TEC routinely performs maintenance or repair work on the transmission and distribution system, which may require the interruption of supply. OES 3 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 2,189 planned outages for the year. This performance resulted in an annual compliance rate of 97.58% in 2022 (See table 22).

Table 22 - Notice of Planned Outages, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of planned outages	535	603	619	432	2,189	1,880
Number of planned outages for which 3 days advance notice was not given	23	10	13	7	53	29
Percentage Breach (%)	4.30	1.66	2.10	1.62	2.42	1.54
Compliance Rate (%)	95.70	98.34	97.90	98.38	97.58	98.46

OES 4: Street Lights Maintenance

OES 5 requires T&TEC to repair 100% of failed street lights (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 14 days after a failure is detected or reported.

T&TEC received marginally fewer reports of failed street lights in 2022. Of the 29,062 reports received, T&TEC repaired 47.46% of them within the required timeframe (See table 23). T&TEC continues to perform below acceptable levels under this standard, and has to increase its efforts to improve the repair rate.

Table 23 - Street Lights Maintenance, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of failed street lights reported	6,930	6,869	8,638	6,625	29,062	31,096
Number of failed street lights not repaired within 7 working days	2,323	4,443	5,073	3,429	15,268	15,460
Percentage Breach (%)	33.52	64.68	58.73	51.76	52.54	49.72
Compliance Rate (%)	66.48	35.32	41.27	48.24	47.46	50.28

There were 1,996 reports of highway light failures. T&TEC was not able to repair 538 of them within 14 working days. The annual compliance rate for repairs to highway lights decreased from 91.55% in 2021 to 73.05% in 2022 (See table 24).

Table 24 - Highway Lights Maintenance, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of failed highway lights reported	308	688	405	595	1,996	1,929
Number of failed highway lights not repaired within 14 working days	81	139	49	269	538	163
Percentage Breach (%)	26.30	20.20	12.10	45.21	26.95	8.45
Compliance Rate (%)	73.70	79.80	87.90	54.79	73.05	91.55

OES 5: 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.

T&TEC received 141 written complaints/requests during 2022, and was unable to respond to ten of them within 10 working days, resulting in an annual compliance rate of 92.91%. With respect to having the final position communicated within 30 working days, T&TEC's annual compliance

rate was 74.47%. T&TEC's performance for each component of this standard is shown in table 25.

Table 25 - Response to Customer's Written Complaints/Requests, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of written complaints/requests received	38	21	30	52	141	203
Number of written complaints/requests not responded to within 10 working days (breach)	5	1	0	4	10	11
Percentage Breach (%)	13.16	4.76	0.00	7.69	7.09	5.42
Compliance Rate (%)	86.84	95.24	100.00	92.31	92.91	94.58
Number of written complaints/requests for which final position was not communicated within 30 working days (breach)	7	7	4	18	36	32
Percentage Breach (%)	18.42	33.33	13.33	34.62	25.53	15.76
Compliance Rate (%)	81.58	66.67	86.67	65.38	74.47	84.24

OES 6: Notifying Customer of Receipt of Claim under Guaranteed Electricity Standard GES 1

This standard requires T&TEC to notify 100% of customers within 10 working days of receipt of a claim under GES 1. Thirteen claims were submitted for breaches of GES 1, and all customers were notified within the required time. Compliance rate remained at 100%.

Table 26 - Customer Claim Notification, 2022

Item	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL 2022	TOTAL 2021
Number of claims made under GES1	12	1	0	0	13	6
Number of claims not acknowledged within 10 working days	0	0	0	0	0	0
Percentage Breach (%)	0.0	0.0	N/A	N/A	0.0	0.0
Compliance Rate (%)	100.0	100.0	N/A	N/A	100.0	100.0

SECTION 5 SUMMARY AND CONCLUSION

The purpose of the Guaranteed Standards Scheme is to establish a minimum level of service that T&TEC must provide to its customers and to encourage T&TEC to focus on improving the quality of service delivered. The standards were reviewed and the revisions were implemented to ensure that they remain relevant and fit for purpose. Although T&TEC faced challenges in returning to normal operation after being impacted by the COVID-19 pandemic, they were able to successfully implement the revised standards.

5.1 Performance of Guaranteed Electricity Standards

Guaranteed Standards set service levels of performance that must be met in providing service to each customer. Failure to meet Guaranteed Electricity Standards requires T&TEC to make compensatory payments to the affected customers. The number of breaches under GES 1 (Response and Restoration Times of Supply) in 2022 (4,470) increased by 25.4%, but T&TEC maintained a compliance rate of 99.69%.

T&TEC achieved full compliance under GES 2 (Billing Punctuality), GES 4 (Making and Keeping Appointments), GES 6 (Responding to billing and payment queries), and the second part of GES 5 (Investigation of Voltage Complaints). Performance under GES 3 (Reconnection after Payment of overdue amount/ agreement) and the first part of GES 5 was good, with compliance rates above 99.50% for both standards. However, T&TEC experienced significant challenges with implementing the revised GES 7 (Execution of Capital Works and New connection of supply). This standard was divided into four major categories of service, with 14 performance levels to be achieved. Performance under this standard was varied with compliance rates ranging from 72.46% to 100%. The revised standards GES 5 and GES 7 presented challenges to T&TEC with respect to processing compensatory payments. As a result, GES 8 (Payments owed under guaranteed standards) was triggered. T&TEC's performance under GES 8 was very poor with a compliance rate of 0%.

Thirteen claims were filed under GES 1. T&TEC made no compensatory payment due to *Force Majeure* conditions. There were 3,623 breaches under the remaining standards, GES 2 to GES 8, which were eligible for automatic compensation. T&TEC paid only five (5) of these. The issue of the non-payment of compensation to affected customers is of concern to the RIC since it undermines the efficacy of the scheme as a tool for improving service performance.

However, in the case of GES 7, T&TEC has been unable to credit compensatory payments to the account of the customer in instances of a breach, since an account would not exist for a customer seeking a new service connection. The RIC is of the view that the payments for breaches under GES 7 should be held by T&TEC until such time as the customer obtains an account. T&TEC will be required to report to the RIC on a bi-annual basis on the status of the payments of such claims. A summary of the breaches and compliance rates is shown in table 27.

Table 27 - Summary of Compliance - Guaranteed Standards, 2022

Standard		Total Nu Brea		Complia	nce Rates
		2022	2021	2022	2021
GES 1 – Response and Restoration Times of Supply after unplanned outages on the distribution system		4,470	3,564	99.69	99.73
GES 2 – Billing Punctuality	Residential	0	1	100.00	100.00
	Non- residential	0	1	100.00	97.37
GES 3 – Reconnection after Pay amount/ agreement	ment of overdue	5	2	99.97	99.98
GES 4 – Making and Keeping A	ppointments	0	0	100.00	100.00
	Single-phase Response	5	N/A	99.80	N/A
GES 5 – Investigation of	Single-phase Rectification	1	N/A	99.92	N/A
Voltage Complaints	Three-phase Response	0	N/A	100.00	N/A
	Three-phase Rectification	0	N/A	100.00	N/A
GES 6 – Responding to billing a	and payment queries	0	0	100.00	100.00
GES 7 - Execution of capital works and new connection of supply.	A: Completion of preliminary survey made within 3 working days	1,451	N/A	79.49	NA(RS)
A- Connection requests within 30 metres, where no construction works on the part of the service provider are required.	A: New connections made within 3 working days of completed survey or agreed date.	43	NA/RS	99.39	NA(RS)

B- Connection requests within 100 metres, where construction works on the part of the service provider are required.	B: Completion of preliminary survey made within 3 working days	92	NA/RS	72.46	NA(RS)
	B: Provision of estimate within 5 working days of the completed survey and all documents being provided by the customer.	79	NA/RS	76.13	NA(RS)
	B: Completion of construction works within 15 working of the provision of the estimate and the submission of any required payments and agreements signed by the customer.	89	NA/RS	73.11	NA(RS)
	B: Meter installed within 3 working days or agreed date, after the completion of construction works and the submission of all payments and documentation	2	NA/RS	98.84	NA(RS)
C- Connection requests greater than 100 metres.	C: Completion of preliminary survey made within 3 working days	16	NA/RS	74.60	NA(RS)
	C: Provision of estimate within 7 working days of the completed survey and all documents being provided by the customer.	7	NA/RS	88.89	NA(RS)
	C: Completion of construction works within the agreed date up to a maximum of 30 working days of the provision of the estimate and the submission of any	13	NA/RS	73.47	NA(RS)

	required payments				
	and agreements				
	signed by the				
	customer.				
	C: Meter installed				
	within 3 working				
	days or agreed date,				
	after the completion	2	NI 4 75 75	00.04	N. (. (.)
	of construction	2	NA/RS	90.91	NA(RS)
	works and the				
	submission of all				
	payments and				
	documentation.				
D- Industrial connection	D: Completion of				
requests.	preliminary survey				
	made within the				
	time frame				
	mutually agreed to	2	NA/RS	94.29	NA(RS)
	by the customer up				
	to a maximum of 15				
	working days of the				
	request.				
	D: Provision of				
	estimate within 15				
	working days of the				
	completed survey	7	NA/RS	78.79	NA(RS)
	and all documents	,			1.11(110)
	being provided by				
	the customer.				
	D: Completion of				
	construction works				
	within the mutually				
	agreed date after the				
	provision of the				
	estimate and the	0	NA/RS	100.00	NA(RS)
		U	CALANI	100.00	MA(NO)
	submission of any				
	required payments				
	and agreements				
	signed by the				
	customer.				
	D: Meter installed				
	within 5 working				
	days or agreed date,				
	after the completion	^	NI 4 75 7	100.00	NIA (D.C.)
	of construction	0	NA/RS	100.00	NA(RS)
	works and the				
	submission of all				
	payments and				
	documentation.				

GES8 – Payments owed under	Residential	1,800	N/A	0.00	N/A
guaranteed electricity standards	Non- residential	9	N/A	0.00	N/A

 $N\!/A-Not\ Applicable$

NA(RS) – Not Available (Revised Standard).

5.2 Performance of Overall Electricity Standards

The RIC revised the Overall Electricity Standards and introduced a network reliability standard as the new OES 1. The former OES 1 (Frequency of Meter Reading) and OES 2 (Billing Punctuality) were discontinued. T&TEC achieved full compliance under OES 1 (Network Reliability) in all distribution areas except Tobago. There was also 100% compliance under OES 2 (Responding to Meter Problems) and OES 7 (Notifying Customers of Receipt of Claim under Guaranteed Standard GES 1). There was marginal change in performance under OES 3 (Prior Notice of Unplanned Outages), but T&TEC's performance declined under OES 4 (Street Lights Maintenance) and OES 5 (Response to Customer Queries/Requests (written). A summary of the compliance rates for 2022 under the Overall Electricity Standards is presented in table 28.

Table 28 - Summary of Compliance - Overall Electricity Standards, 2022

Standard		Compliance	e Rates %
		TOTAL 2022	TOTAL 2021
	North SAIFI SAIDI	100.00 100.00	NA(RS)
OES 1 – Network	South SAIFI SAIDI	100.00 100.00	NA(RS)
Reliability SAIFI ≤ 4.8 SAIDI ≤ 400 minutes	Tobago SAIFI SAIDI	0.00	NA(RS)
	East SAIFI SAIDI	100.00 100.00	NA(RS)
	Central SAIFI SAIDI	100.00 100.00	NA(RS)
OES 2 – Responding to meter problems		100.00	100.00
OES 3 – Prior Notice Of Plan	ned Outages	97.58	98.46
OES 4 – Street Lights	Street Lights	47.46	50.28
Maintenance	Highway Lights	73.05	91.55
OES 5 – Response to Customer Queries/ Requests	Initial Response	92.91	94.58
(written)	Final Position	74.47	84.24
OES 6 – Notifying Customer Guaranteed Electricity Standa	rd GES1	100.00	100.00

NA(RS)– Not Available (Revised Standard)

Generally, T&TEC's performance was good. Understandably, there were some challenges as T&TEC sought to return to normal operations coming out of the pandemic and adjusting to new standards. As always, the RIC remains committed to working with T&TEC to overcome the challenges and improve the quality of service delivered to customers.

APPENDIX

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

Table A1 - Guaranteed Electricity 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	60 days	\$60 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.	\$60 for both residential and non-residential
GES5	Investigation of Voltage Complaints	A. Single-Phase Voltage Supply outside of the Statutory Range. 1. Evaluate the prevailing conditions. Where a visit to the customer's premises is not required, correct the problem and notify the customer of the corrective action or visit the customer's premise and make an assessment of the complaint.	Within 24 hours of receiving the customer's voltage complaint.	\$60 residential \$600 non- residential
		A. 2. Execute corrective action (where necessary) and	Within 15 working days of	\$60 residential

		notify the customer accordingly.	receiving the customer's voltage complaint.	\$600 non-residential
		B. Variation between the phase voltages of a Three-Phase Voltage Supply that adversely affects the customer. 1. Evaluate the prevailing conditions. Where a visit to the customer's premises is not required, correct the problem and notify the customer of the corrective action or visit the customer's premise and make an assessment of the complaint.	Within 24 hours of receiving the customer's voltage complaint.	\$60 residential \$600 non- residential
		B. 2. Execute corrective action (where necessary) and notify the customer accordingly.	Within the time mutually agreed with the customer.	\$60 residential \$600 non- residential
GES6	Responding to billing and payment queries	Provide a substantive reply	Within 15 working days	\$60 for both residential and non-residential
GES7	Execution of capital works and new connection of supply.	1. Completion of preliminary survey.	Within 3 working days of request.	\$60 residential \$600 non- residential
	A. Within 30 metres. (Where no construction works on the part of the service provider are required.)	2. Service drop and meter to be installed.	Within 3 working days or a mutually agreed date.	\$60 residential \$600 non- residential
	Execution of capital works and new connection of supply.	1. Completion of preliminary survey.	Within 3 working days of request.	\$60 residential \$600 non- residential
	B. Within 100 metres. (Where construction works on the part of the service provider are required.)	2. Provision of estimate.	Within 5 working days of the completed survey and all documents being provided by the customer.	\$60 residential \$600 non- residential

	3. Completion of construction works.	Within 15 working of the provision of the estimate and the submission of any required payments and agreements signed by the customer.	\$60 residential \$600 non- residential
	4. Meter to be installed.	Within 3 working days or a mutually agreed date after the completion of construction works and the submission of all payments and documentation.	\$60 residential \$600 non- residential
Execution of capital works and new connection of supply.	1. Completion of preliminary survey.	Within 3 working days of request.	\$60 residential \$600 non- residential
C. Greater than 100 metres. (Where construction works or the part of the service provider are required.	2. I Tovision of estimate.	Within 7 working days of the completed survey and all documents being provided by the customer.	\$60 residential \$600 non- residential
	3. Completion of construction works.	Within the time frame mutually agreed to by the customer up to a maximum of 30 working days of the provision of the estimate and the submission of any required payments and agreements signed by the customer.	\$60 residential \$600 non- residential

	4. Meter to be installed.	Within 3 working days or a mutually agreed date after the completion of construction works and the submission of all payments and documentation.	\$60 residential \$600 non- residential
Execution of cap works and new connection of su D. Industrial		Within the time frame mutually agreed to by the customer up to a maximum of 15 working days of the request.	\$600
	2. Provision of estimate.	Within 15 working days of the completed survey and all documents being provided by the customer.	\$600
	3. Completion of construction works.	Within the time mutually agreed with the customer after the provision of the estimate and the submission of any required payments and agreements signed by the customer.	\$600
	4. Meter to be installed.	Within 5 working days or a mutually agreed date after the completion of construction works and the submission of all payments and documentation.	\$600

GES8	Payments owed under guaranteed electricity standards	Time to credit compensatory payment.	Within 30 working days for non- residential and 60 days for residential.	\$60 for both residential and non-residential
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Table A2 presents a description of the Overall Electricity Standards and the required performance units for each standard.

 $Table \ A2-Overall \ Electricity \ Standards$

Code	Description	Required Performance Units
OES1	Network Reliability	Maintain the yearly network reliability metrics for planned and unplanned outages on the distribution network (excluding force majeure events) of each Distribution Area to within the set limits which will be reviewed and adjusted on an annual basis. Initial targets are: SAIDI to within 400 minutes; and SAIFI to within 4.8.
OES2	Responding to meter problems	Visit or substantive reply within 10 working days 95% of the time
OES3	Prior Notice of planned outages	At least 3 days advance notice of planned outages 100% of the time
OES4	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.
OES5	Response to customer queries/requests (written)	Substantive response within 10 working days and communicating final position within 30 working days.
OES6	Notifying customers of receipt of claim under guaranteed electricity standard GES1.	100% of customers to be notified of receipt of claim within 10 working days.